INVESTIGATIVE INTERVIEWING

Research &Practice

A Special Bilingual Issue

Entrevista de investigación: Evidencia empírica y práctica
profesional. Número especial bilingüe.

**Bilingual Eyewitness
Memory**

**A Coordinated Global
Approach to Interviewing**

**Rapport Building in Virtual
Interviews**

**First Conversations in
Cases of Child Sexual Abuse**

**Public Perceptions of Police
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**Executive Summaries in
Spanish**

iIIRG

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A Note From the Editors

Hello everyone! I'm thrilled to announce the very first bilingual issue of *Investigating Interviewing: Research & Practice.* By embracing multilingualism, we can truly reflect the international nature of II:RP and ensure that research findings are disseminated to broader audiences worldwide.

In this special issue, we have five peer-reviewed articles in English, along with executive summaries translated into Spanish. It is estimated that 600 million people speak Spanish worldwide, with around 498 million being native speakers. We hope that this bilingual edition helps to include new readers and foster global collaborations among our diverse community of interviewing researchers and practitioners.

This edition is packed with cutting-edge research from authors across the world. It includes a commentary article from 28 researchers (representing 18 different countries) that outlines a coordinated global approach to investigative interviewing. It presents one of the first systematic reviews on bilingual eyewitness memory. The edition also includes fascinating research on rapport-building in virtual interviews; public perceptions of police interviewing; and guidance on first conversations in cases of suspected child sexual abuse in schools.

This edition would not be possible without the fantastic work of our reviewers. I express my sincere gratitude to members of our editorial board and other reviewers who have taken the time to provide comprehensive and constructive reviews on the articles this year.

Thank you as well to the certified translator, Cintia Lee, who completed the Spanish translations for this edition.

I am also coming to the end of my term as Editor-in-Chief of II:RP so I would like to take this opportunity to thank the iIIRG for giving me this wonderful opportunity. It has been a pleasure to stay up to date on groundbreaking research in this field and help shape the journal. Thank you to Dr. Cody Porter and Wayne Thomas for your support. I look forward to working with the new Editor and ensuring a smooth transition. Please stay tuned for some exciting new developments!

As always, we regularly share articles on our social media pages, so please follow us on LinkedIn and BlueSky to keep up to date with the latest news and articles on investigative interviewing. Sharing articles on social media is a great way to receive more views and citations.

Please get in touch with us if you have any questions or suggestions for the journal. We look forward to receiving your submissions and working together to advance the field of investigative interviewing!

Best wishes,

Dr. Gemma Hamilton

Editor-in-Chief

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"From theory *and* practice, to inclusion through bilingualism"

Hello everyone and welcome to this edition of II-RP. The articles in this edition (as well as the bilingual format) show how the practice and dissemination of ethical, evidence-based investigative interviewing continues to be a vital endeavour. What happens in the interview room will eventually end up in the courtroom. If a justice system is to gain the trust of the people it serves, we not only need to be effective in obtaining information, the methods used must also stand up to public scrutiny. Two articles in this issue directly address this. The implementation of the Mendez principles represents the creation of a standard while the examination of public perceptions of police interviewing methods reinforces the need for such standards.

On a personal note, since the last issue I (Wayne) have had the pleasure to work with some excellent people who are furthering the cause of science-based interviewing. In California we have seen legislative changes that now protect the vulnerable from coercive interview methods. I'd like to thank Prof. Lorraine Hope, Dr. Kirk Luther and Prof. Fiona Gabbert for their efforts in putting together the evidence base that supported this change. El Dorado District Attorney Vern Pierson and his team as well as the California Commission on Peace Officer Standards and Training (CAPOST) have been tireless in taking on the huge task of providing the training to support this change. Training I have been fortunate to play a part in as it gave me the opportunity to work with Prof. Laurence Alison, Emily Alison and Dr. Frances Surmon-Bohr.

Meanwhile on the East Coast of the United States we have seen equally impressive change. Limitations of space prevent me from thanking everyone, but special mention must be made to the following for their support in the cause of science-based interviewing: Assistant District Attorney Linda Ford from the New York County District Attorney's Office, Captain Don Dartez from the Special Investigation Division, East Baton Rouge Sheriff's Office Brian DiSalvo from the New York State Division of Criminal Justice Services. It has been a pleasure working with you all.

Given the vital role of investigative interviewing, it is essential that our methods are not only rigorous, transparent, and ethical, but accessible across languages, cultures, and communities. As scholars and practitioners, we must refine our science of interviewing in ways that respect linguistic diversity, and ensure it remains robust under scrutiny everywhere it is used.

This issue carries that mandate forward in multiple dimensions. Grounded in the Méndez Principles and broader frameworks of science-based interviewing, it includes empirical and conceptual work that helps define what constitutes a "gold standard" in investigative practice. To our academic readers: we hope this issue stimulates new lines of inquiry—whether methodological, theoretical, or translational. To our practitioner and policymaker audience: may it offer evidence you can lean on in reform, training, or institutional design. And across both domains: may it further the bridging of research and real-world impact.

Wayne Thomas

Deputy Journal Editor (Practitioner)
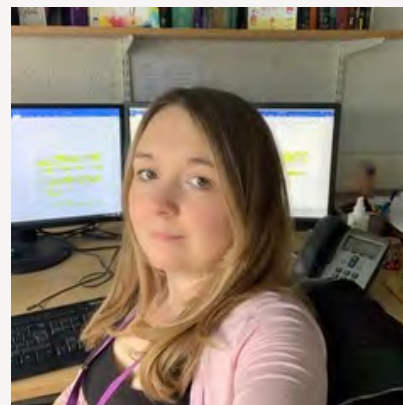
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Submission Guidelines

Given the multi-disciplinary nature of the International Investigative Interviewing Research Group (iIIRG), the worldwide circulation of this Journal and practitioner focus, a wide range of articles will be considered for inclusion.

These may include individual research papers in relation to the following specialist areas:

- Investigative interviewing of suspects, witnesses or victims
- Expert advice to interviewers
- Interview training and policy
- Interview decision-making processes
- False confessions
- Detecting deception
- Forensic linguistics

The list of topic areas is purely indicative and should not be seen as exhaustive. The Editor will also accept other papers including case studies, reviews of previous bodies of literature, reviews of conference or other specialist events, opinion papers, topical commentaries and book reviews. However, all articles, regardless of topic, should have either historic or contemporary relevance to Investigative Interviewing. All submissions must adhere to internationally recognised ethical guidelines. If you are unsure whether your article is suitable, please contact the Editor directly at journal.editor@iiirg.org

As a general guide, articles should not exceed 8,000 words, although the Editor retains discretion to accept longer articles where it is considered appropriate. If you are an academic, it is expected that, prior to submission, your article will be formatted to the standards of the Publication Manual of the American Psychological Association (APA). If you are not an academic, there is no requirement for your work to conform to the format standards of the APA, however, you must reference your article (where appropriate) and the Editor will format it prior to publication (should it be required).

The Editor retains the discretion to accept or decline any submitted article and to make minor amendments to all work submitted prior to publication. Any major changes will be made in consultation with the author/s.

Please make sure that all acronyms are clearly defined in brackets the first time they are used. All articles must be submitted online via https://iiirg.org/ii-rp-journal/

iIIRG

A Co-ordinated Global Initiative to Enhance Interview Practice

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ABSTRACT

Interviews with suspects, victims, and witnesses are among the most important and regular tasks undertaken by police/law enforcement agencies to progress criminal investigations. The present article addresses a critical gap both in the literature and practice of investigative interviewing—namely, the lack of a coordinated global action to establish and implement a universal standard. While countries like England and Wales, Norway, and Australia have successfully adopted rapport-based practices, these efforts remain largely confined to individual national contexts. Broader collective efforts involving academics, activists, and practitioners worldwide—focused on expanding the adoption of investigative interviewing—are scarce. To address this gap, the article outlines developments in the last few years that have attempted to provide a more universal approach to investigative interviewing and introduces a pioneering global action to support its implementation. The initiative and action are justified by their potential to improve global consistency, fairness, and effectiveness in investigative practices while fostering international collaboration. Its significance lies in broadening the reach of investigative interviewing, improving justice outcomes globally, and establishing a framework for sustained cooperation and knowledge exchange.

Key Words: Mendez Principles, ImpleMéndez, Investigative Interviewing; Coercive interrogation; Criminal investigation

EXECUTIVE SUMMARY IN SPANISH

Una iniciativa global coordinada para mejorar la práctica de las entrevistas

Resumen

Las entrevistas realizadas por la policía y otros organismos de seguridad a personas sospechosas, víctimas y testigos son fundamentales para el buen funcionamiento del sistema de justicia penal. Las metodologías empleadas en estas entrevistas pueden influir de manera decisiva en la calidad de la información obtenida y en la equidad procesal. Sabemos que, a nivel mundial, se identifican esencialmente dos enfoques contrapuestos para llevar a cabo esta tarea, lo que constituye un punto crucial de divergencia en las prácticas policiales. En el presente documento de posición se analiza la evolución del panorama en este ámbito clave de la labor policial y se aboga por la adopción del marco ético promovido por los Principios Méndez, que instan a abandonar técnicas tradicionales, a menudo coercitivas, aún vigentes en muchas jurisdicciones del mundo.

El primer enfoque, conocido como *entrevista de investigación*, ha ganado terreno en diversos países y se fundamenta en el respeto de los derechos humanos y las normas éticas. Este modelo hace hincapié en la necesidad de obtener información fiable y precisa mediante métodos no coercitivos y respetuosos. En consecuencia, es apropiado para todo tipo de entrevistas, ya sean con víctimas, testigos o personas sospechosas de haber cometido un delito. El marco que sustenta este enfoque se recoge en la publicación de 2021 titulada *Principios de la entrevista eficaz*, comúnmente conocidos como Principios Méndez en honor al exrelator especial de la ONU, el profesor Juan Méndez. Estos principios fueron elaborados durante tres años por un comité de expertos internacionales de los ámbitos jurídico, psicológico-forense, criminológico y de la sociedad civil. Su objetivo es alinear las prácticas de investigación con las pruebas científicas, las normas éticas y el derecho internacional, garantizando que las entrevistas se desarrollen respetando la dignidad y los derechos de todas las personas implicadas, al tiempo que se maximiza la fiabilidad de la información recabada.

Los Principios Méndez buscan garantizar investigaciones justas y transparentes, promoviendo la justicia a través de métodos respetuosos de los derechos humanos. Abogan por el uso de preguntas abiertas, técnicas de creación de condiciones de confianza (*rapport-building*) y un firme compromiso con la protección de las personas entrevistadas, ya sean sospechosas, víctimas o testigos, frente a presiones indebidas, manipulaciones o intimidaciones. Al centrarse en obtener información completa, precisa y pertinente, y no confesiones forzadas, la entrevista de investigación contribuye a reducir el riesgo de errores judiciales y mejora la precisión de las investigaciones penales.

Pese al creciente reconocimiento de la importancia de prácticas éticas de investigación, muchas jurisdicciones siguen empleando métodos anticuados y coercitivos, más orientados a obtener confesiones que a recabar información veraz. Estas prácticas, que parten a menudo de la presunción de culpabilidad e incluyen manipulación psicológica, intimidación e incluso tortura física, están profundamente arraigadas en determinadas culturas policiales. Estas técnicas pueden culminar en confesiones falsas, errores judiciales e investigaciones fallidas. Su persistencia suele atribuirse a la falta de formación, de concienciación o de comprensión de los principios que sustentan una entrevista de investigación eficaz, así como a una resistencia institucional al cambio.

Las consecuencias de estas prácticas contrarias a la ética son de gran alcance e

incluyen desde condenas erróneas y violaciones de derechos humanos hasta graves daños a las personas sometidas a técnicas abusivas de interrogatorio. La falta de adopción de métodos de entrevista fundamentados en la ética y la ciencia no solo ha generado injusticias, sino que también ha erosionado la confianza ciudadana en las instituciones policiales. Este documento sostiene que es necesario un cambio de paradigma en las prácticas de la entrevista policial, uno que priorice los derechos humanos y el rigor científico por encima de la búsqueda de confesiones ilegítimas, testimonios poco fiables o admisiones de culpa obtenidas mediante coacción.

Este cambio se materializa en el surgimiento de un movimiento global denominado ImpleMéndez, que actualmente reúne a más de 340 miembros de 58 países, en su mayoría provenientes de los campos de la investigación, el derecho y diversas disciplinas académicas.

La estrategia se centra en la creación de redes internacionales integradas por investigadores, profesionales, responsables políticos y otras partes interesadas clave que colaboran para promover la adopción generalizada de técnicas de entrevista basadas en normas éticas. A través de este enfoque colaborativo, ImpleMéndez busca erradicar las prácticas inhumanas de interrogatorio e impulsar la integración de normas éticas en las actuaciones policiales y en los sistemas de justicia penal a escala mundial. Aprovechando el conocimiento especializado de múltiples partes interesadas y promoviendo reformas normativas, ImpleMéndez aspira a garantizar que las entrevistas de investigación se lleven a cabo con respeto a los derechos humanos, con equidad y con mayores probabilidades de obtener información veraz y fiable. En última instancia, esta estrategia busca construir un sistema de justicia penal global más justo y eficaz, en el que las entrevistas de investigación se fundamenten en principios éticos y generen resultados precisos y equitativos.

En conclusión, el documento subraya la necesidad urgente de reformar la manera en que los organismos de seguridad llevan a cabo entrevistas con personas sospechosas, víctimas y testigos. Aunque los Principios Méndez ofrecen una base sólida para la realización de entrevistas éticas y eficaces, aún queda un largo camino por recorrer para lograr su adopción e implementación a gran escala. Sostenemos que ImpleMéndez representa una estrategia oportuna y necesaria para alcanzar este objetivo, y constituye el motor de un movimiento global orientado hacia unas prácticas de investigación en el ámbito de la justicia penal más justas, humanas y con fundamento científico.

Introduction

Over the last 20 to 30 years, our understanding has grown substantially concerning how interviewing and interrogation practices conducted by the police and other investigative agencies can lead to (i) false confessions from suspects; (ii) inaccurate testimonies and involuntary statements from victims and witnesses; and (iii) miscarriages of justice. Over a similar period, the growing research evidence has enlarged our awareness of what is effective practice in gathering complete and detailed accounts from suspects, victims and witnesses. Such coupling of knowledge from science and practice has prompted changes in practice and policy in several countries. For example, in England and Wales, miscarriages of justice triggered changes in law, policy and practice during the late 20th Century (Gudjonsson, 2018). Since 1986 a legal requirement in this country is that interviews with suspects must be electronically recorded. Analyses of such interviews conducted in this country in the late 1980s found that the interviewing often was not skilled (Milne & Bull, 1999). These changes included the introduction and implementation of an investigative interviewing model that moves away from an aim of seeking confession and towards a goal of the gathering of accurate and detailed information/evidence from suspects, victims and witnesses.

The embracing of such a model by the police service in England and Wales (and the outlawing and removal from practice of interview techniques associated with false testimony/confessions) led to better criminal justice outcomes. For example, there have been no quashed convictions emanating this country's Court of Appeal based on unlawful interviewing techniques following the introduction of this interviewing model (Poyser, Nurse & Milne, 2018). This is in contrast to the situation prior to both introduction of (i) legislation in the mid-1980s; (ii) electronic recording of interviews from the turn of the 1990s; and (iii) training for law enforcement officers in newly introduced interviewing techniques from 1992 onwards that emphasise, among other things, the importance of building and maintaining rapport between interviewer and interviewee. That is, prior to these various developments, people were found to have confessed to crimes they had not committed largely as a result of their own vulnerability and police pressure, particularly relating to techniques found in a body of research likely to prompt such false admissions (for an overview, see Gudjonsson 2003; 2018).

Moreover, various studies of actual interviews conducted in England and Wales (e.g., Clarke & Milne, 2001; Soukara et al., 2009), which have been undertaken after the new techniques had been adopted, have each found an absence of malpractice that was often prevalent in interviews conducted at the turn of the 1980s (Irving, 1980; Softley et al., 1981). Walsh and Bull (2010) also found interviews were being ethically conducted, while also finding that in those interviews where British investigators employed the techniques more skilfully also were those interviews where more information was provided by interviewees.

Despite this progress, evidence via the media, human rights organisations, NGO reports and extensive research finds that in many parts of the world cruel, inhumane, coercive, and unethical practices continue (Walsh, Bull, &

Areh, 2025; Walsh, Oxburgh, Redlich, & Myklebust, 2016a, 2016b). Those rapport-based practices in countries such as England and Wales, Norway and Australia (described by the term 'investigative interviewing') have repeatedly and consistently been found in both scientific research and in actual cases to be not only more ethical and respectful of human rights, but also more effective in gaining detailed and reliable information from suspects, victims, and witnesses, providing the basis for sound decision-making by authorities conducting investigations and information-gathering processes and avoiding miscarriages of justice (Alison et al., 2013, 2014; Gabbert et al., 2021; Kelly, Redlich & Miller, 2015; Walsh & Bull, 2012).

These rapport-based interviewing models recognise and respect all interviewees' human rights during custodial interviews/interrogations. Appropriate safeguards are provided through measures such as the electronic audio/video recording of police interviews with suspects and vulnerable or intimidated victims/witnesses (such as minority groups, children, those with mental or developmental disorders and those reporting being victims of human trafficking and sexual crimes, such as rape) (Bull, 2010). Furthermore, legal protections for suspects ensure that they are provided, inter alia, with accessible information concerning their rights, access to legal representation/advice and have access to parents or guardians; as well as outlawing certain interrogative tactics (such as police interviewers using aggressive questioning or exaggerating/lying about evidence).

The present article outlines developments in the last few years that have attempted to

provide a more universal standard of rapport-based investigative interviewing (henceforth investigative interviewing) and focusses on a particular project that aims to support the introduction into practice, policy and law of a standard of practice that is in line with science, ethics and international legal norms.

A global initiative towards improving investigative interviews

The road towards improving investigative interviews, as a global initiative, began almost ten years ago when the United Nations' then Special Rapporteur on torture and other cruel, inhuman or degrading treatments, Professor Juan Méndez, submitted a report that was then transmitted by the UN Secretary-General to the UN General Assembly. In this report, its summary stated that:

"The Special Rapporteur... advocates the development of a universal protocol identifying a set of standards for non-coercive interviewing[1] methods and procedural safeguards that ought, as a matter of law and policy, to be applied at a minimum to all interviews by law enforcement officials, military and intelligence personnel and other bodies with investigative mandates." (Méndez, 2016, p.2).

When mentioning this "universal protocol" in 2016, the UN Special Rapporteur noted that:

"Encouragingly, some States have moved away from accusatorial, manipulative and confession-driven interviewing models with a view to increasing accurate and reliable information and minimizing the risks of unreliable information and miscarriages of justice" and that *"[t]he essence of an alternative information-gathering model was*

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[1] While the term used here by Professor Mendez is non-coercive interviewing, we refer to those methods which we now know as those alluded to

by Professor Mendez *as rapport based investigative interviewing* (or more efficiently as *investigative interviewing*).

first captured by the PEACE model of interviewing adopted in 1992 in England and Wales... [I]nvestigative interviewing can provide positive guidance for the protocol..." (Méndez, 2016, p.2).

Background

In early 2018, after consultations with key stakeholders, the Anti-Torture Initiative (ATI) at the American University Washington College of Law partnered with the Geneva-based Association for the Prevention of Torture (APT) and the Norwegian Center for Human Rights (NCHR) to establish a collaborative effort – led by experts from multiple fields – to promote and coordinate the development of such a document. The Steering Committee for the initiative consisted of specialists in law, psychology, criminology, intelligence gathering and human rights protection. The Committee also consulted with NGOs, policing practitioners and civil society representatives. They aimed to encompass practices beyond traditional policing and include all information gathering contexts such as intelligence agencies, immigration officials, and military personnel. The committee spent over three years integrating information across disciplines into one concise document covering the science, law and ethics of interviewing/interrogating. The finalised version built on consensus was published in June 2021 and was entitled the 'Principles on Effective Interviewing for Investigations and Information Gathering'. The Principles offer a clear and unique set of expectations (including minimum international requirements) relating to law enforcement interviewing practices.

The 2021 document states that: *"Robust research supports the efficacy of an information-gathering approach to interviewing. Rapport-based, non-coercive*

methods offer effective techniques that can be successfully applied by trained professionals to gather criminal and intelligence information from interviewees. Establishing and maintaining rapport is an adaptive skill that helps create a working relationship between persons and enables better communication." (Steering Committee on Effective Interviewing, 2021).

The 'Principles' document notes that an effective interview process will typically involve the following:

- Undertaking thorough preparation and planning, ensuring relevant safeguards are applied throughout;

- Keeping an open mind and creating a non-coercive environment;

- Establishing and maintaining rapport;

- Using scientifically supported questioning techniques;

- Actively listening to interviewees and enabling them to speak freely and completely;

- Skilfully/calmly contrasting what the interviewee says with what the interviewer already knows (or has already been said by the interviewee - where contradictions appear to have arisen within or between various accounts);

- Assessing and analysing both the information gathered from interviewees and of the interviewing itself (Walsh et al., 2025)

The elimination of torture and inhumane treatment by the police (and more generally law enforcement) during their investigations is central to ethical and fair legal procedures worldwide – and the science is revealing that it makes our societies safer (Méndez, 2016). In recognition of this, a recent and

important step towards encouraging fuller implementation of the Méndez Principles has been the launch of the joint UN Operations Manual in 2024. While principally directed at UN personnel, this Manual may well become equally useful to all practitioners who undertake investigative interviews as it succinctly spells out the practical steps recommended to be undertaken when conducting investigative interviews (UNoDC, 2024). This document is important as it sets out operational alternatives to coercive interviewing styles which persist, in our view, largely because investigators in many countries are unaware of other methods of interviewing people. Such perseverance with practices continues in ignorance of the rapport-based investigative interviewing approach - or they may not sufficiently understand this alternate approach (see for example, Gates et al., 2025; May et al., in press).

Toward an effective interviewing style

The Méndez Principles, alongside the UN operational manual, provide a normative framework to the international community for conducting interviews that avoid human rights abuses, including torture and ill-treatment, as well as making the investigation of crime more effective and consistent. Intrinsic to the Méndez Principles is the use of rapport-based investigative interviewing. Such principles, policies and procedures have been accepted and adapted into practices and legal frameworks in several other countries (e.g., New Zealand) with positive effects on criminal investigations and case outcomes (Walsh et al., 2016a; 2016b). Other countries (e.g., Sweden, Belgium, Ireland, and The Netherlands) have also recently adopted (or are beginning to adopt) investigative interviewing practices, or at the very least have taken initial steps to incorporate

investigative interviewing into policies. Yet, it remains understood from research and NGO reports that many countries are still undertaking less effective coercive and unethical interrogations and in contrast to the foregoing named countries are yet to implement such practices, whether operationally or in their policy making (Barela et al., 2020).

How forensic research has helped inform interview practice

Since it is known that the goal of obtaining accurate and reliable information requires interviewees (whether victims, witnesses or suspects) to trawl from their memory details as to what happened, interviewers should be mindful of the challenges in obtaining a description of events that is as free as possible from error or defect. Of particular concern in this regard, is the now well-established scientific finding that memory can be fragile, imperfect, incomplete and may degrade quickly (Howe, Knott, & Conway, 2017). Therefore, interviewers must adapt their tactics in contemplation of these vulnerabilities and should seek to gather and record an account of what occurred during an event under examination which is as factual and complete as possible without omissions or distortion. Since the purpose of interviews/interrogations is to achieve information that can progress investigations, attempts therefore to obtain relevant and accurate information from those deliberately placed under duress during interrogations have been established as counterproductive due to the extreme effects of stress and anxiety has on the brain, impacting adversely on the ability to retrieve accurate recall (O'Mara, 2015).

These well-established coercive practices (e.g., offering inducements, deploying complex questions or confusing syntax) are

now widely understood to prompt false confessions from those interviewed as suspects of crime and/or elicit tainted information, leading to flawed decision-making, wrongful convictions, miscarriages of justice and ruined lives (Gudjonsson, 2018). In the USA, it has been reported that 27% of overturned convictions, involved innocent suspects earlier making false confessions, largely under the duress of harsh and unfair police interrogation (see https://innocenceproject.org/). Nevertheless, beliefs that coercive treatment in interviews is effective are known to persist, involving practices of intimidation and mistreatment (Walsh et al., 2025; 2016b). Yet this is a known misconception since such interview practices are not only ineffective, but also the relevant scientific research has found them counterproductive, putting at risk victims, perpetrators, institutions, and society at large (Vrij et al., 2017; Meissner et al., 2012). Furthermore, ill-treatment (such as torture, cruel, inhuman or degrading treatment) transgresses international law. At the same time, research has found that ethical interviewing practices more likely lead to suspects making true confessions (Cleary & Bull, 2019), as well as them providing more reliable information (Walsh & Bull, 2012).

To add further evidence as to the importance of adopting modern investigative interviewing practices, studies in forensic linguistics have found that interviewees occupy a less powerful speaking role in the interview because of the status granted to investigators (Heydon, 2005). The opportunity for interviewees to provide information or to access their legal rights, such as the right to remain silent or the right to legal representation, is substantially reduced when there is any communication barrier between participants (see Erlich, Eades & Ainsworth, 2016). Additionally, linguistic research has

demonstrated that when investigators control the talk during the interview, interviewees are less able to provide detailed accounts, which undermines the central purpose of an interview, being the elicitation of reliable and accurate information (Heydon, 2005). The investigative interviewing practices endorsed in the Méndez Principles provide a discourse framework that is better suited to safeguarding the linguistic rights of individuals being interviewed by the police than the coercive and dominating discursive behaviour promoted by guilt-presumptive and confession-focused interrogation practices. Thus, the Méndez Principles, based on science, law and ethics, represent an invaluable opportunity to help eradicate malpractices involved in harsh and hostile interrogations, especially where the resources needed to effect change are in short supply (Barela et al., 2020; Delahunty & Howes, 2017).

Effective interviewing while ensuring legal and procedural safeguards

Beyond this, the Méndez Principles endorse the application of legal and procedural safeguards when suspects, victims and witnesses are being interviewed. Together, such ethical practices, when understood and operationalised in light of both EU Directives and decisions of the European Court of Human Rights (such as those establishing the right to legal advice) reduce risks of ill-treatment, produce more reliable information and help ensure that investigations have just and lawful outcomes.

Legal and procedural safeguards grounded in international legal norms are an essential component of the interviewing process (and of the Méndez Principles). Their effective implementation before, during, and after the interview contributes to the success of the process, by ensuring respect for human rights

and enhancing the reliability and evidentiary value of the information obtained. These safeguards also increase the likelihood of fair treatment throughout the judicial processes and the attaining of legally sound outcomes. Various UN resolutions and EU directives have been issued that cover the arrest, detention and questioning of suspects to ensure ethical and effective interviewing is protected by international human rights law. For example, the right to silence is not specifically mentioned in the European Convention on Human Rights (ECHR), but the European Court of Human Rights has held that this right under police questioning and the privilege against self-incrimination are generally recognized international standards which lie at the heart of the notion of a fair procedure under Article 6. Furthermore, affirmed by the UN Human Rights Committee, the UN General Assembly, and the ECHR (under Article 5), a person has the right to be informed of reasons for their arrest and why they are being deprived of their liberty. Additionally, those whose language is not that of the country in which they are being questioned by policing agencies have the right to free access to an interpreter under ECHR Article 6(3)(e). Further safeguards are those that provide the right (i) to notify a relative or third party of one's detention; (ii) of access to legal advice; and (iii) of access to a doctor. Meanwhile UN resolution 43/173 Principle 23 relates to the electronic recording of each interview a person undergoes as a suspect of crime.

The European Court of Human Rights has thus emphasised that legal systems should be based upon the rule of law and that evidence obtained through interviews should not be obtained through forms of ill treatment but in accordance with police procedural due process (see Barela et al., 2020). The Méndez Principles represent a clear statement of

expected practices. In this regard, these practices are defined as humane and being reflective of respecting human rights. Yet they have not so far been underpinned by any global strategy to positively affect practices in those many countries still known to be adhering to unethical practices, described in the Méndez Principles as 'cruel and inhumane'.

Action to help implement the Méndez Principles

In light of the foregoing, an initiative was taken that aims to form and develop sustainable networks in countries and regions that lay the foundations of actionable strategies to underpin the introduction and implementation of the Méndez Principles, mindful of the continuing advancement of the science that underpin them. In October 2023, the authors of the present article were part of a team that were successfully awarded funding from the European Co-operation in Science and Technology (COST) Association. The COST Action project was called ImpleMéndez (where its aim was to help *implement* the Méndez Principles, hence the project's title). ImpleMéndez was built on established and developing networks of researchers, policing and legal practitioners and human rights organisations around the world.

These various partnerships, collaborations and networks underpin the development of mutual long-term, intra- and inter-country, regional and global networks between researchers, practitioners, and policy makers. These efforts aim to advance research, policy and practice by fostering scientific, and practical developments and supporting the implementation of the Méndez Principles in interviews with suspects, victims, and witnesses. As such, ImpleMéndez aims to create a network of researchers and

practitioners that will help reduce practices likely to lead to adverse outcomes, such as obtaining unreliable evidence or confessions through coercive interviewing. Enhancing the accuracy and reliability of information gathered during interviews serves civil societies' rightful expectations toward their criminal justice systems. Globally, ImpleMéndez aims to undergird a commonality of interviewing/interrogation methods that will improve cross-jurisdictional cooperation, aiding the effective policing and investigation of transnational crimes. Moreover, the project also supports the broader aims of the Méndez Principles to include ethical information-gathering by intelligence agents, immigration officials, and all other investigative entities.

Despite research establishing the benefits of the investigative interviewing approach, more research is required in certain areas. ImpleMéndez also aims to facilitate networking of researchers examining these matters to fuel the achieving of a larger scientific evidence base to further underpin the Mendez Principles, for example, we know that interviews do not exist in isolation. That is, whether conducted with suspects, victims or witnesses, they are part of evidence and information-gathering processes conducted throughout investigations. Decisions, such as whether to follow certain lines of enquiry and those concerning the generation of single or multiple hypotheses, impact upon police interviews. Furthermore, how humanely or otherwise people are treated upon arrest and how they are treated in custody may also have impact upon subsequent interviews (Skinns et al., 2020), though this matter has been barely covered in the extant research.

Moreover, central to many miscarriages of justice is a vulnerable interviewee, whether they are a witness, a victim or a suspect, and it is especially important to safeguard against inappropriate interviewing methods within this realm. Whereas all persons interviewed by the police find themselves in a vulnerable position because of the inevitable power imbalance and inherent stressful situation, some are understood to be in position of heightened vulnerability due to factors such as age, having a mental or developmental disorder, not speaking the same language as their interviewers (and thus requiring an interpreter), or other external factors (e.g., being victims of war crimes/ sexual offences). Such contexts require interviewers who are highly skilled, well trained, and are specialists at both dealing with complex cases and being able to adapt flexibly within the interview environment. A particular vulnerable group of interviewees is children. Despite the emergence of various interviewing models around the world (e.g. the NICHD protocol[2]), research findings here have converged in revealing, for example, that the questioning strategies of interviewers have a major impact on what children report, the amount and quality of the information they report, as well as the perceived reliability of the disclosure (Brubacher & Powell, 2025; Korkman et al., 2024; Lamb et al., 2018). Researchers have also identified clear gaps in the research literature. For example, more research is needed on the developmental needs of adolescents in the investigative interviewing context, interpreter-mediated interviews and rapport-building (Talwar et al., 2024). Thus, the importance of appropriate, research-based training for investigative interviewers cannot be overestimated (Lahtinen, 2022).

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[2] The National Institute of Child Health and Human Development Protocol covers the essential phases of investigative interviews with (amongst others) children (see La Rooy et al., 2015 for a review).

A further area requiring more research concerns language diversity. That is, the Méndez Principles document (now available in many languages) encourages dissemination of the investigative interviewing method to police and other law enforcement officers in countries around the globe. However, a key challenge for agencies in various countries is likely to be ensuring the consistency of investigative interviewing when it is implemented in countries that have diverse linguistic, cultural and legal contexts (Hope et al., 2021). For instance, using precisely worded questions is at the centre of interviewing training promoted by the Méndez Principles. The specific impact of appropriately worded questions can, however, be lost in translation without careful consideration of how the interviewing principles will function in local languages and in situations where cross-cultural and multilingual interviewing is undertaken through interpreters (Tipton, 2019). Such challenges may well be a barrier to successful implementation, requiring more research that helps enable a resolution. Similarly, cultural and legal contexts that affect the effective implementation of ethical interviewing practices must be understood and assessed and relevant research findings applied to any programme of implementation (Muniroh & Heydon, 2022).

Despite advances made in the forensic sciences (e.g., DNA testing), the outcome of most criminal cases and investigations remains highly dependent on personal interactions, such as interviews/interrogations of suspects, victims and witnesses. ImpleMéndez builds on the prior efforts within countries around the globe to implement the Méndez Principles, while introducing strategies to those countries who have made little or no progress towards such implementation. Our

aims are consistent with the UN's Sustainable Development Goal (SDG) 16, that promotes peaceful and inclusive societies for sustainable development, and the building of effective, accountable and inclusive institutions at all levels, and particularly SDG 16.3, that refers to the importance of observing laws relevant at national and international level and ensuring access to justice for all.

In recognition of this, we draw upon wide disciplinary expertise in the ImpleMéndez research network: psychologists, psychiatrists, lawyers, linguists, political scientists, criminologists, sociologists; social workers etc. This mix of expertise is believed to be particularly important when formulating solutions to adapt the Méndez Principles (without significant distortions of their original intent) and to provide an increased scientific base for any modified adoption. These aims will be undertaken through increasing networking arrangements to bring together researchers, practitioners and policy makers both from within the same country and from the same global regions, to work alongside ImpleMéndez to provide a platform for transformation.

Adaptation without distortion of the Principles might well be one of the key challenges of their wider implementation. We learn from members of the original steering committee that it was intended to keep the Principles to a document of no more than 40 pages upon its publication. As their work progressed, at one point 100 pages had been compiled. In meeting their original goals, the final document condensed what had been written and edited out other sections. Such re-work inevitably leads to concerns over perceived or actual gaps that might provide challenges for their implementation. For example, the matter of whether the Principles

dovetail with both inquisitorial and adversarial criminal justice systems is barely covered. Moreover, the evidence base presently relies heavily on research largely (but not exclusively) on that conducted in Western countries. Nevertheless, despite these seemingly demanding challenges, it is still argued that the Principles are compatible with international ethical, legal and scientific standards. Indeed, ImpleMéndez through its large cohort of researchers from around the world is well positioned to help identify whether and how the existing knowledge base is more widely applicable.

Progressing beyond the state of the art and crossing barriers

We plan to build on and extend the application of the Principles to other investigative and information-gathering contexts, guided by the shared principles of science, ethics, and law. ImpleMéndez has already convened several national/international networks and organised training of practitioners, where the Méndez Principles have been the guiding tenet of educational activities for police and law enforcement agencies in those countries where the network/partnerships have been initiated (e.g. Portugal, Finland and Poland). ImpleMéndez members are not naïve to the challenges that lie ahead, recognising that some countries may display a greater willingness and institutional commitment to embracing the Méndez Principles, but that there may also be resistance elsewhere that may manifest (for example) in the denial of the existence of unethical interviewing and interrogation tactics. Such denials may emerge from a lack of recognition of interrogational practice that fall short of outright physical torture but are also known to be psychologically coercive and, as such, conflict with the Méndez Principles.

Furthermore, ImpleMéndez members have found during our earlier research that such a standpoint is often conceived through a misunderstanding as to the precise nature of what effective interviewing entails (May et al., in press; Walsh et al., 2015; 2016). The experiences of the authors in many countries have also demonstrated that law enforcement agencies are more likely to embrace an investigative interviewing approach when they are able to identify (i) the negative effects of the established coercive interviewing techniques on their investigations and institutional goals; and (ii) the now known benefits of an investigative interviewing approach (Bull & Rachlew, 2019). Indeed, this is the process by which many countries have moved on from coercive and largely unskilled approaches to interviewing that involves evidence-based and scientifically driven, systematic and, above all, *ethical* interviewing training and practices.

Gaining momentum for transformation can be tackled in various ways. For example, we have made inroads with certain agencies and countries in working with key (usually either mid-ranking or senior) practitioners who can become either advocates or agents for change. In other contexts, appealing for change might be more successful in demonstrating the economic costs of failed investigations, while in others we have observed in certain countries how frontline officers aspire to enhance their professionalism through these more skilful rapport-based interviewing techniques, once they have been introduced to them (May et al., in press).

Furthermore, during recent visits the first author has made to certain countries and meetings held with others, in addition to the insight gained from chapters in a recent international handbook (see Walsh et al.,

2025), beliefs held that the country is "fully compliant" with the Méndez principles tend to stem from a legal perspective only. That is, criminal procedures and laws are regarded as in line with the Méndez Principles. However, such a viewpoint, in the absence of any evaluation, overlooks the matter that practice may tell a very different story.

Our groundwork with certain countries across Europe has provided a proof of concept of how to inform key players (such as practitioners and policy makers), guide them through processes of policy, organisational and operational changes, and deliver a plan of implementation (and then help these countries undertake that plan). Such experience of working with countries has demonstrated that practices have evolved from generation to generation without the undertaking of any critical appraisal of these outdated techniques. However, at the same time as dispensing learning, we recognise that there is also opportunity for learning from those countries in, say, understanding better the challenges involved in any country implementing the Méndez Principles. This will, in turn, help shape future training programmes, while further developing the scientific base.

We also recognise that managing expectations will be an important matter that will require attention. That is, the employment of investigative interviewing methods will, for some, necessitate the mastering of new skill sets and attitudes, in moving away from unethical methods that some may have employed for many years. Support measures need to be in place to discourage interviewers from returning to those coercive methods/ ensuring that they do not turn back to problematic practices when, for example, experiencing resistance by 'difficult' interviewees (such resistance

often being caused by the nature of the interrogating/interviewing itself though – see Alison et al., 2013; 2014). Among these measures is the requirement to support supervisors so that they are given the skills and understanding of the Principles and, in turn, ensure they have the support and conviction of all senior ranks. Such learning will better reinforce lessons learned by front-line officers in the training and ensure that they are embedded into common practices. As such, in a programme of transformation we contend that the first tier of training should be directed towards senior and at least supervisor-ranked officers so that they can support their front-line counterparts as they in turn learn new practices.

Our deliverables

By June 2025, in three countries new 'Méndez Centres of Investigative Interviewing' (i.e., Portugal, Norway and Ireland) had been introduced with plans in the next two years for several others. These Centres are intended as repositories and forums for ideas exchange within and between practitioner, academic researcher, and policy-making communities and circles, and with other countries through the ImpleMéndez network, encouraging cross-border research, idea-sharing and collaborations. The Centres will also be those places where conditions are cultivated as part of the action for further research, either conducted by ImpleMéndez members with in-country experts or by in-country stakeholders independently. Regardless, such Centres will provide opportunities where research can be undertaken and thus provide scope for scientific advancements. As such, the Centres can bolster a resilience model that will sustain scientific developments beyond the life-cycle of ImpleMéndez, undertaken locally to create evidence bases, allowing

stakeholders hitherto inexperienced with the scientific research process to become familiar and more expert. As part of building longer term capacity, we also plan to deliver training schools where, for example, key policing decision makers and trainers will attend in efforts to build a networking structure that creates 'an ecosystem for learning' to help implement the Méndez Principles. This ecosystem of learning would possess these following elements;

- Legal frameworks and bases (such as the right to legal representation in interviews with suspects and adequate anti-torture regulation)

- Policies that support ethical interviewing, ensuring standards are transparent and accountable (such as mandatory audio/video recording of such interviews and those policies which incorporate measures to assist those viewed as vulnerable interviewees

- Senior management in policing creating, where previously they do not exist, and adopting institutional policies that support the implementation of the Méndez Principles, and foster conditions that prevent coercive practices)

- Understanding by police and law enforcement institutions (that adopt/adapt the methods of effective investigative interviewing)

- Training materials and educational support (including those in native languages) to help practitioners (with officers learning the methods of effective investigative interviewing through appropriate training materials, curriculum, supervision policies and

instruments of assessment and evaluation, alongside the implementation of performance indicators that denote progress)

- Professional support and coaching (that relates to sufficient numbers of suitably qualified trainers in addition to a meaningful training regime that allows resources to learn and apply the learning)

- Research (undertaken to find methods that function effectively given local contexts involving police organisations providing sufficient access to interview data and facilities to undertake such research). The data sets will arise from scientific missions, meetings, training events and other interfaces with researchers, policy makers, practitioners and other professionals, all subject to strict ethical clearances, conditions of participation, and data protection.

From these elements, ImpleMéndez, working with stakeholders aims to create a matrix of implementation plans based (among other matters) on the countries' respective exposure to the Méndez Principles. Such plans will underpin 'ImpleMéndez Strategic Frameworks for Implementation of the Mendez Principles (or ISF-IMP), adapted and extending existing models of 'Frameworks for Investigative Transformation' (Fahsing & Rachlew, 2025; Griffiths & Milne, 2018). Each ISF-IMP will be agreed through collaboration with networks of researchers, practitioners and policy makers in countries that are yet to adopt or fully endorse those Principles (see Figure 1).

ImpleMéndez Strategic Framework for Implementation of the Mendez Principles (ISF-IMP)

Effective supervisory, peer, and self assessment policies/practice

| Ongoing training and development | Tiered/tailored approach to training |

Understanding and developing existing and ongoing evidence base of 'what works'

Identification and understanding and appropriate treatment of vulnerabilities

| Audio/Video Recording of Interviews and other technological innovations | Acknowledgment of false confessions |

Integrating, possessing and demonstrating an investigative mindset

Training of Police, Lawyers and Judiciary

| Ethical, human rights-based, information gathering model | Organisational leadership, values, culture and commitment |

Legislation and/or policy

Left side vertical labels: Internal inspection and remedial measures | External independent Inspection regimes

Right side vertical labels: Free and independent media | Independent Prosecution Mechanism

FIGURE 1: *The ISF-IMP model*

The ISF-IMP model, as depicted in Figure 1, illustrates among other matters, that no single country at present is likely to be completely compliant with the Méndez Principles. The model also serves to depict that for some countries, the scale of the challenge of becoming fully compliant is not least in terms of resources but also in terms of fundamental changes in culture, practices, policies and systems that are necessary if full compliance is to be achieved. For some countries, this may well take many years. However, the model does suggest the strategies that are necessary to underpin change and begins to answer the question often posed to us "What steps do we need to take to effect change?". The ISF-IMP model also acts as a suitable riposte to those comments we frequently confront that relate to beliefs received from those who contend that their country is already fully compliant. As we have already noted, we have found in our previous work (see Walsh et al., 2025) that

such beliefs are probably predicated on the basis that (often well established) criminal procedure codes for any nation state have been fashioned robustly over several decades. However, how these procedural codes are followed is unknown, but often found (through research and case studies, for example) to be of concern as they are some distance from the intention of the Principles – and frequently understood to be in contradiction of them. Our earlier point relating to adaptation without distortion of the Mendez Principles further resonates here too. It is in this regard that the capabilities and the range of experience and expertise of ImpleMéndez can provide support.

ImpleMéndez aims to offer fresh insights to strengthen the pillars of the ecosystem while recognising and taking into account previous relevant implementation efforts by any country or region. Further, amongst the

members of ImpleMéndez are those who have experience training lawyers who represent suspects interviewed by the police, and experience informing magistrates and judges about investigative interviewing best practices. Such experience will be vital in providing criminal and civil justice professionals with the essential tools and skills they need to undertake their roles, while increasing their awareness and understanding of the Méndez Principles. Such an ecosystem will be supported by the 'Méndez Centres of Investigative Interviewing', being the hubs for stakeholders to advance science, policy and practice during and beyond the project life-cycle.

When we first learned that we had succeeded in obtaining funding for the project in May 2023, ImpleMéndez had a membership numbering 36 from 20 countries. By its first anniversary, the numbers have grown to over 250 from 54 countries and as of June 2025 has a membership of around 340 from 58 countries. Among those countries are all those 25 countries that the funder; COST, has designated as Inclusiveness Target Countries (ITCs). Those countries termed as ITCs are those where resources are generally known to be limited that may inhibit networking. Fifty eight percent of our current members are female. In the first year of ImpleMéndez, our members had already been involved in the authoring of 24 chapters in a highly relevant book (Walsh et al., 2025) alongside published articles (e.g., Kvanvig, Barela, & Daly, 2024; May et al., in press; Pavalek & Soldov, 2024). Finally, to demonstrate our commitment to building capacity among ImpleMéndez members is the presence of our Young Researchers and Innovators (i.e., as defined by COST, those aged under 40 at the time of their initial involvement). These make up around one-third of the membership. Funding not only supports meetings and attendance at Training Schools but also provides support to attend high level international scientific conferences, as well as offering opportunities for members to attend such conferences for the dissemination of ImpleMéndez related research. Finally, we offer funding for so-called Short Term Scientific Missions. These are visits (of one week to six months' duration) made by one member to another's host institution to develop their skills and knowledge relative to ImpleMéndez.

DISCUSSION

The 2021 Méndez Principles document, emergent from three years' work by the scientific and legal communities, represents a golden opportunity to introduce widescale policy, procedural and cultural change, but this can only be achieved with the momentum of a global network providing expertise and support in-country. These Principles, when read in light of UN instruments and emergent Strasbourg jurisprudence, are a game-changer. Globally, civil society has an increased intolerance regarding the use of torture, errors of justice and failed trials/investigations. However, even if some countries individually commence considering developments that may eventually lead to the adoption there of the 'Principles', no global strategy existed to assist such transitions. In ImpleMéndez, we have developed a strategic plan of international engagement. ImpleMéndez will step into the lacuna to provide facilitation for the necessary change. While some countries will inevitably be more eager or able than others to embrace these changes, without such leadership directly assisting those based in countries and regions of the world where practices remain unethical/inhumane, any progress towards change will be either very slow or fail to develop at all.

The effects of such inertia include continued miscarriages of justice, alongside imbuing little public confidence in the police (and other investigative organisations) whose low ethical and professional standards would continue to be questioned and compromised by the undertaking of unethical and ineffective practices. The criminal justice system's entire legitimacy is thereby called into question. A more strategic and encompassing approach is required that in each country convenes networks of researchers from a range of academic disciplines, policy makers, and practitioners to collaborate with each other to prompt changes (possibly for the first time in some countries) with policymakers, practitioners and researchers from elsewhere in the world to assist them.

As such, ImpleMéndez will act as a basis for joint learning and co-produced transitional strategies over and beyond the project's four years' life-cycle. ImpleMéndez recognises that in many countries this duration would be insufficient to ensure a permanent transition to effective interviewing, but it will lay a strong foundation on which future ones can be built, to progress our mission on a more long-term, sustainable basis. This is not a weakness of ImpleMéndez, but rather a strength as we seek to break new ground and effect genuine change. It is a change that is urgent and overdue.

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A Systematic Review of the Literature on Bilingual Eyewitness Memory

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ABSTRACT

The frequency of interactions between investigators and bilingual witnesses is expected to increase as international migration increases. Understanding whether and how speaking multiple languages impacts eyewitness memory is therefore important for developing empirically-supported methods of interviewing this population. In this paper, we systematically reviewed the literature on bilingual autobiographical memory. Articles were identified by searching PsycINFO, PubMed, and Web of Science databases. Our goal was to synthesize available experimental research on bilinguals' ability to provide accurate reports and resist suggestion. Results suggest that bilinguals rated as highly proficient in their second language are able to provide accurate, detailed recall and resist suggestibility in that language. Lower levels of proficiency were associated with sparser recall and higher acceptance of post-event misinformation. Limitations of the current studies and directions for future research are discussed.

Key Words: *bilingual witnesses, cultural differences, investigative interviewing, language proficiency, second language, vulnerable populations*

EXECUTIVE SUMMARY IN SPANISH

Revisión sistemática de la literatura sobre la memoria de testigos bilingües El bilingüismo constituye una experiencia habitual en todo el mundo; sin embargo, la investigación acerca de cómo influye el hecho de hablar dos idiomas en la memoria de los testigos sigue siendo limitada. Estudios previos han demostrado que el bilingüismo incide en procesos fundamentales de la memoria autobiográfica, como la codificación, el almacenamiento y la recuperación. Se prevé que la frecuencia de las interacciones entre investigadores y testigos bilingües aumente en consonancia con la intensificación de la migración internacional. Comprender si hablar varias lenguas afecta la memoria de los testigos y en qué medida lo hace resulta, por tanto, de gran importancia para diseñar métodos de entrevista con respaldo empírico dirigidos a esta población. En este trabajo se presenta una revisión sistemática de la literatura sobre la memoria autobiográfica en personas bilingües. Para ello, se localizaron artículos mediante búsquedas en las bases de datos PsycINFO, PubMed y Web of Science, empleando una variedad de términos de búsqueda amplios. Asimismo, se examinaron las secciones de referencias de los artículos que se descargaron de estas bases de datos con el fin de identificar publicaciones adicionales para su inclusión. Los estudios identificados se evaluaron atendiendo a su calidad metodológica y posibles sesgos, y se sintetizaron sus hallazgos. El objetivo fue reunir la evidencia experimental disponible sobre la capacidad de las personas bilingües para ofrecer relatos precisos y resistir preguntas sugestivas. La búsqueda de la literatura permitió identificar once estudios en diez publicaciones. En todos ellos se analizaron participantes adultos con niveles generalmente altos de competencia tanto en su primera lengua (L1) como en su segunda lengua (L2). Los hallazgos replicaron muchos de los resultados obtenidos en la literatura general sobre la memoria; en concreto, las personas bilingües mostraron mayor precisión en el recuerdo libre que en el recuerdo con claves, evocaron más detalles generales que detalles literales del suceso y presentaron errores de memoria tras la exposición a información engañosa posterior al evento. Asimismo, los resultados sugieren que las personas con alta competencia en L2 pueden ofrecer relatos detallados y precisos, además de resistir la sugestión en esa lengua. Por el contrario, niveles más bajos de competencia lingüística se asociaron con un recuerdo más limitado y con una mayor aceptación de información engañosa posterior al suceso. Aunque no se hallaron pruebas de que los bilingües presenten un rendimiento intrínsecamente inferior como testigos en L2, varios estudios señalaron que los bilingües expresan sentir mayor incomodidad al rememorar un suceso en esa lengua. En conjunto, los hallazgos de esta revisión sugieren que los investigadores pueden aplicar eficazmente las buenas prácticas de entrevista recomendadas al entrevistar a testigos bilingües con alta competencia en L2. Finalmente, se analizan las limitaciones de los estudios revisados y se proponen futuras líneas de investigación, entre ellas: ampliar las metodologías para mejorar la generalización de estos hallazgos, incluir testigos bilingües de diferentes edades, evaluar el impacto de la competencia lingüística, analizar métodos alternativos de entrevista a testigos, identificar diferencias culturales en el recuerdo e investigar cómo evocan las personas bilingües acontecimientos emocionales en distintas lenguas.

Introduction

Many people worldwide speak more than one language. While approximately 22% of individuals over the age 5 in the United States speak a language other than English at home (Dietrich & Hernandez, 2022), 84.4% of adults ages 25-64 in the European Union know at least one foreign language (Eurostat, 2024). Despite the prevalence of multilingualism, there is limited experimental research available about how bilinguals perform in eyewitness memory contexts. Bilingual witnesses are of interest to eyewitness researchers and legal professionals because the experience of acquiring and utilizing two language systems fundamentally changes the encoding, storage, and retrieval of personally-experienced events (for reviews, see Itzhak et al., 2017; Perez & Yang, 2025). Given the significant role of eyewitness testimony in case outcomes (Toglia & Bermann, 2021), gaining a clear understanding of the best ways to support bilingual witnesses is crucial for developing empirically-supported interview protocols and educating truth-finders (e.g., jurors, judges) about the unique aspects of bilingual testimony.

According to the broader literature on bilingual autobiographical memory, whether a bilingual witness is able to provide detailed, forensically-relevant information is contingent on a number of factors. First, since greater language proficiency (i.e., the ability to use and comprehend language across different domains and modalities, such as speaking, listening, reading, and writing;

ACTFL, 2024), is generally associated with a larger vocabulary (Hellman, 2011), the quality

of bilingual memories provided in a single language should be dependent on their mastery of that language. Indeed, researchers report bilinguals tend to provide longer, more detailed memories in their more dominant language (Javier et al., 1993) but struggle to construct narratives in their less proficient language (Young, 1995). These findings highlight the importance of assessing individual differences in language abilities prior to questioning because bilinguals vary widely in their proficiency and degree of dominance in each language (Hammer et al., 2014; Pavlenko, 2012; Wei, 2013), which can also evolve throughout the lifespan as use of each language changes (de Bot & Makoni, 2005; De Cat, 2020).

Second, recall is best when the language used during encoding and at the time of retrieval match (Calvillo & Mills, 2020; Schrauf, 2000; Schroeder & Marian, 2014). That is, there is evidence to support encoding specificity effects (Tulving & Thomson, 1973) and state-dependent memories (Weingartner, 1978) among bilinguals. These findings have major implications for how bilingual witnesses are questioned. If an individual witnesses a crime while using one language but has to be interviewed in another language, should investigators expect to miss a significant amount of forensically-relevant information? The present review attempts to answer this

question using available research on bilingual eyewitness memory.

Bilingual witnesses' susceptibility to suggestive questioning also remains unclear. Deficits in language proficiency may result in higher levels of suggestibility. According to eyewitness memory research using child samples, for instance, witnesses with higher language abilities tend to resist suggestions more readily (Bruck & Melnyk, 2004; Klemfuss & Olaguez, 2018; Perez et al., 2022). At the same time, advantages in executive functioning and episodic memory associated with the use of two languages may help bilingual witnesses better resist suggestive influence (Perez & Zhang, 2025).

Finally, being raised within two distinct cultural backgrounds can influence the way some bilingual individuals remember past events. Cultural values associated with each language may guide bilinguals' attention to specific details during encoding and consequently influence what they recall (e.g., Han et al., 1998; Marian & Kaushanskaya, 2004; Masuda & Nisbett, 2001). Bilinguals who speak languages associated with contrasting cultures (e.g., English and Mandarin) may recall a single event differently depending on which language they are speaking.

While researchers have previously published overviews of the bilingual memory literature and its application to eyewitness settings (e.g., Itzhak et al., 2017; Perez & Yang, 2025), we are unaware of any systematic reviews of research on bilingual autobiographical memory and their forensic implications. The primary goal of the present review was to summarize available research on how bilingualism affects autobiographical memory accuracy and suggestibility. We were especially interested in identifying studies comparing monolinguals and bilinguals or studies comparing bilingual recall in their first language (L1) versus their second language (L2). A secondary goal of the present review was to identify any factors unique to being bilingual (e.g., cultural correlates of each language, degree of L1 and L2 language proficiency, and differences in language used at encoding versus at retrieval) that may impact their autobiographical memory.

METHODS

Before conducting our search of the literature, we developed a protocol for screening articles using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Shamseer et al., 2015) guidelines. PsycINFO, PubMed, and Web of Science databases were used to identify articles for potential inclusion. The following search terms were used: ("bilingual" OR "bilingualism" OR "second language learners" OR "English as a second language" OR "multilingual" OR "multilingualism") AND ("memory" OR "autobiographical memory" OR "eyewitness memory" OR "episodic memory" OR "eyewitness" OR "recall"). We also examined the references of relevant publications to identify eligible articles and identified 6 additional articles for review. The final search was conducted in June 2024. Figure 1 summarizes the results of our database search.

Figure 1.

Summary of database search.
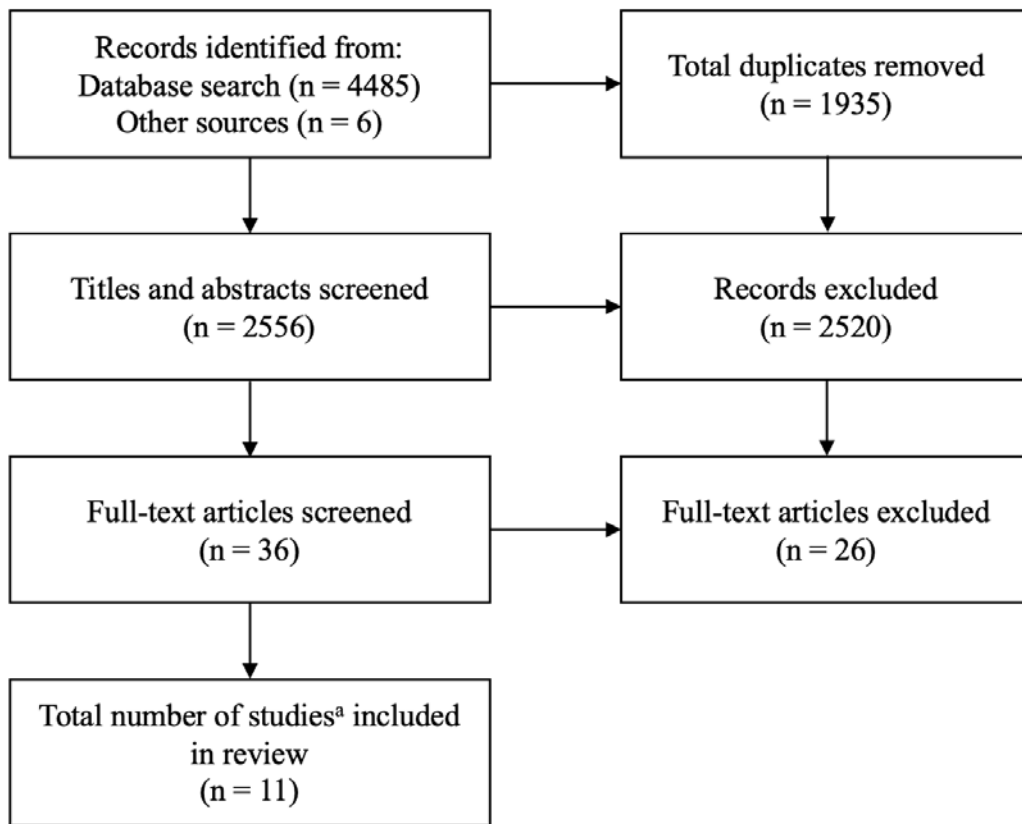
ᵃ Our review included 11 studies across 10 published articles.

Inclusion Criteria

Titles, abstracts, and full-texts were screened for eligibility by both authors. Articles were selected for inclusion if they met the following criteria: (i) The article was published in a peer-reviewed journal and available in English. (ii) The article summarized primary research findings. Case reports, reviews, meta-analyses, commentaries, and editorials were excluded. (iii) Bilingual participants were verbal and did not have any medical conditions or physical disabilities that impaired their language or memory abilities. (iv) The article included a measure of bilingual participants' episodic memory for a verifiable event (i.e., the target event). We excluded articles in which the ground truth of an event was unknown because experimenters could not verify the accuracy of participants' memory. We also excluded articles that included other measures of memory, such as memory for word lists, because of their limited generalizability to eyewitness contexts. The time-stamped review protocol, which serves as pre-registration, can be accessed at https://osf.io/uca6y/?view_only=e1d6b5249 3c24e17b071e09cfbe9bccc.

RESULTS

Our search yielded 11 studies across 10 publications (Table 1) including a total of 938

bilingual participants. The following information was extracted from each article selected for inclusion: sample size, sample characteristics (e.g., age, language background), type of target event, and type of memory measure(s).

Study Characteristics

The 11 studies included in our review were highly homogenous in their samples and methodology. First, all studies examined adult participants, with most studies ($n = 7$; 64%) examining only young adults between 18 and 27 years old. Four studies (36%) included participants in middle- and late-adulthood (46-71 years old). Second, participants across all studies were generally highly proficient in both L1 and L2. Finally, almost all studies used a video of a crime (9 mock crimes, 1 real crime) as the target event. Bilgin et al. (2023), however, asked participants to read two fictional stories about characters partaking in specific events (i.e., a road trip for camping, attending a music festival). There were no significant delays between the target events and memory interviews in any of the studies. Only one study (Wylie & Evans, 2023) directly compared responses on the memory interview between separate groups of native ($n = 63$) and non-native English speakers ($n = 48$). All studies identified in our review examined participants' memory accuracy (i.e., free recall, cued recall, forced-choice questions; $n = 11$, 100%), while only six (55%) also included measures of suggestibility (i.e., misinformation effects, misleading questions). Most studies examining memory accuracy ($n = 7$, 64%) examined participants' responses to prompts asking them to freely recall the target event (e.g., "Tell me everything that happened."). Two studies (29%) used cued recall (i.e. direct, non-leading questions) and two studies (29%) used forced-choice

questions in which participants had to select between two options. One study (Dolgoarshinnaia & Martin-Luengo, 2021) measured participants' ability to recognize whether an item or detail about the target event was previously mentioned in an English or Russian post-event narrative, or if it did not appear in either narrative.

Studies measuring participants' suggestibility most often utilized a misinformation paradigm ($n = 4$, 67%). In these paradigms, participants witnessed a to-be-remembered event, received false information about the target event, and were then questioned about their memory. Misinformation effects are defined as instances where participants incorporate the false information into their memory for the target event. Two studies (33%) measured participants' suggestibility as their ability to accurately respond to questions that probed about inaccurate or distorted details in the target event (i.e., misleading questions). One study (Raver et al., 2023) examined participants' tendency to change their initial responses following negative interviewer feedback.

Risk of Bias

Given that the included articles employed mixed methodologies, we adapted the Quality Assessment of Controlled Intervention Studies by the National Heart, Lung, and Blood Institute (NHLBI, 2021) to assess study quality and potential risks of bias. The adapted assessment tool included ten questions assessing the randomization, inclusion & exclusion, potential confound, measurement reliability, and analytic flexibility. Both authors independently coded the 11 studies included in our review.

TABLE 1 *Summary of studies included in review.*

Study	n^a	Age (years)[b]	First Language (L1)	Second Language (L2)	Target Event	Memory and Suggestibility Measures	Study Purpose(s)
Allison et al. (2017)	17	25	Varied	English	Mock crime video	Free recall, cued recall	Recall in L2
Alm et al. (2019)	51	19–49	Swedish	English	Mock crime video	Free recall, misleading questions	Recall and suggestibility in L1 vs L2
Bilgin et al. (2023)	137	18-24	Turkish	English	Fictional stories	Free recall	Language-dependent recall
Calvillo & Mills (2020)	157	18–46	Spanish or English[c]	Spanish or English[c]	Mock crime video	Forced-choice, misinformation effects	Suggestibility in L1 vs L2
Dolgoarshinnaia & Martin-Luego (2021)	56	24	Russian	English	Real crime video	Misinformation effects, source-monitoring	Suggestibility in L1 vs L2
Ernberg & Mac Giolla (2022)	128	19-71	Arabic	Swedish	Mock crime video	Free recall	Recall in L1 vs L2
Hu & Naka (2022)	59	27	Chinese	Japanese	Mock crime video	Free recall	Recall in L1 vs L2
Raver et al. (2023, Study 1)	121	18–60	Swedish	English	Mock crime video	Free recall, cued recall, misleading questions, shifting	Recall and suggestibility in L1 vs L2
Shaw et al. (1997, Study 2)	104	22	Spanish or English[c]	Spanish or English[c]	Mock crime video	Forced-choice, misinformation effects	Language-dependent recall and suggestibility
Shaw et al. (1997, Study 3)	60	20	Spanish or English[c]	Spanish or English[c]	Mock crime video	Cued recall, misinformation effects	Language-dependent recall and suggestibility
Wylie & Evans (2023)	48	23	Varied	English	Mock crime video	Free recall	Recall in L1 vs L2

[a]Values in this column only reflect the number of bilingual participants in each study. [b]Mean age is listed for studies where the author(s) did not report the age range of participants. [c]Participants' first and second languages were not specified.

Interrater reliability, measured as percent agreement, ranged from 82-100% for items on the checklist. Disagreements were resolved via communication. We found all 11 studies used validated and reliable measures. Among studies with between-participant factors, all of them used randomization to assign participants. With regard to sample planning and prespecified hypotheses, more than half of the studies reported sample planning (n = 6, 55%) and pre-registration (n = 6, 55%).

Memory Accuracy

All studies identified in our database searches assessed bilingual participants' ability to accurately recall a to-be-remembered event using free recall, cued recall, forced-choice questions, or source-monitoring prompts. We present an overview of their findings below.

First, two studies replicated findings from the general memory literature. Allison et al. (2017) found bilingual participants interviewed in English (L2) about their memory for a video of a theft were significantly more accurate in response to open-ended questions than when they were asked direct questions. Participants also provided fewer incorrect details during free recall than cued recall. This finding is consistent with previous research that has found higher accuracy in free recall than cued recall (e.g., Fisher et al., 2009). Hu and Naka (2022) found Chinese-Japanese bilinguals, regardless of the language used during recall, provided significantly more information about the gist of what occurred in a video of a non-violent mock theft (main information) than verbatim details (descriptive information). Previous researchers have similarly found better memory for gist-level information than verbatim-level details (e.g., Murphy &

Shapiro, 1994; Sekeres et al., 2016; Thorndike, 1977).

Second, the six studies that assessed whether bilinguals' memory accuracy differs when recalling an event in L1 or L2 were inconclusive. While participants generally provided more accurate information in their native language, half the studies reported this did not reach statistical significance (Alm et al., 2019; Raver et al., 2023, Study 1; Wylie & Evans, 2023). Similarly, there were no significant differences in memory errors (i.e., inaccurate recall) across languages (Alm et al., 2019; Raver et al., 2023, Study 1). Three studies, however, *did* report significant differences between L1 and L2. Dolgoarshinnaia and Martin-Luengo (2021) examined the impact of post-event information provided in bilingual participants' native (Russian) and non-native (English) languages. All participants watched a video of a car robbery and then read two reports (1 Russian, 1 English) containing misleading details provided by witnesses of the crime. Participants' source-monitoring ability was then measured as their ability to correctly identify whether items on a recognition test were previously mentioned in the Russian narrative, English, or neither. Participants were significantly more likely to incorrectly attribute items from the English narrative to the Russian narrative, although no significant differences emerged for items from the Russian narrative.

Ernberg and Mac Giolla (2022) compared bilingual participants' recall for a mock crime video when interviewed face-to-face in L1 (Arabic) with an interpreter present, when interviewed face-to-face in L2 (Swedish) without an interpreter present, or when they completed the Self-Administered Interview (SAI; Hope et al., 2011) in L1. Participants

provided significantly fewer correct details in the SAI than in the other interview conditions. Exploratory analyses revealed participants who were less proficient in L2 provided more details overall about the video when being interviewed in L1, both in the interpreter-mediated interview and SAI conditions.

Hu and Naka (2022), on the other hand, found that significant differences in L1 and L2 memory accuracy depended on the type of detail examined. Participants who watched a video of a mock theft provided significantly more correct information about main agents, objects, and actions in Chinese (L1) but significantly more correct information about main locations in Japanese (L2). The authors attributed this L2 advantage for main locations to the inherent differences between Japan and Chinese cultural norms. While Chinese individuals provide vague descriptions of locations, Japanese individuals tend to describe locations in greater detail.

While there were mixed results regarding differences across languages, we did find evidence for a link between L2 language proficiency and memory. Bilgin et al. (2023) found L2 proficiency scores were significantly correlated with more correct details, higher narrative complexity, and stronger coherence. Similarly, Calvillo and Mills (2020) found participants correctly recognized details from a mock crime video significantly more when tested in their more proficient language (English) than their less proficient language (Spanish). findings suggest mastery of language, as opposed to order of language acquisition (i.e., L1 vs L2), is a more appropriate indicator of bilingual witnesses' ability to accurately recall crimes.

Finally, there was some evidence that differences in the language used during

encoding and retrieval hinders bilingual witnesses' accurate recall. Bilgin et al. (2023) had bilingual participants read two stories about characters engaging in specific events (a road trip for camping and a music festival) and were then asked to recount each story. Participants read and narrated the stories in either Turkish (L1) or English (L2). This resulted in two matched conditions (Turkish reading-Turkish recall, English reading-English recall) and two mismatched conditions (Turkish reading-English recall, English reading-Turkish recall). Participants in the matched groups were significantly more accurate than participants in the mismatched groups. Shaw et al. (1997, Study 2) similarly reported significantly higher accuracy for participants who read a post-event narrative in Spanish and completed a forced-choice recognition test in Spanish (i.e., matched condition) than participants in mismatched conditions (Spanish narrative-English test; English narrative-Spanish test). In a follow-up study, however, Shaw et al. (1997, Study 3) found no significant effect of language combination (matched, mismatched) on participants' accurate responses to cued recall questions. Despite the limited amount of evidence, these results provide some support for language-dependent recall and underscore the importance of considering the language spoken at the time of a witnessed crime prior to questioning bilingual witnesses.

Suggestibility

Participants' ability to resist suggestion was measured in six studies. In this section, we summarize findings regarding the effects of post-event misinformation, misleading questions, and negative feedback on participant's memory for videos of real or mock crimes.

Every study that used a misinformation paradigm in which participants were given false post-event information about the video they watched reported participants incorporated the misinformation into their memory for the video (Calvillo & Mills, 2020; Dolgoarshinnaia & Martin-Luengo, 2021; Shaw et al., 1997, Study 2 and Study 3). Moreover, two studies provided insight into how low language proficiency increases bilinguals' susceptibility to the misinformation effect. Calvillo and Mills (2020) reported participants were more susceptible to misinformation effects when tested in their less proficient language (Spanish) than their more proficient language (English) regardless of language the misinformation was provided in. Dolgoarshinnaia and Martin-Luengo (2021), by contrast, found no differences in misinformation acceptance between participants' first (Russian) and second (English) languages. Note that this discrepant finding may be explained by the fact that participants in Dolgoarshinnaia and Martin-Luengo's sample possessed more similar levels of proficiency in both languages whereas the participants examined by Calvillo and Mills were less balanced in their proficiency across languages. As participants reach similar levels of mastery in each language, we can then expect no interaction between language of post-event information and language at retrieval.

However, Dolgoarshinnaia and Martin-Luengo (2021) did present evidence that degree of *second* language proficiency influences misinformation acceptance. They compared false alarm rates, or the amount of information from the post-event narratives incorrectly recognized as being in the original video, between participants with Intermediate and High English proficiency.

They found higher English proficiency was associated with *more* misinformation acceptance in L2.

Given the possibility that bilingual witnesses may encounter information about an event in one language (e.g., when discussing a crime with co-witnesses) and then recall the original event in another language, three studies (Calvillo & Mills, 2020; Shaw et al., 1997, Study 2 and Study 3) explored how differences in the languages used during post-event information and recall affected participants acceptance of misinformation. None of the studies reported a significant effect of language combination on participants' acceptance of misinformation. These findings suggest that although post-event information can yield misinformation effects, the languages used during encoding and retrieval do not appear to affect participants' suggestibility.

Two studies reported contradictory findings on participants' resistance to misleading questions in their native and non-native languages (Alm et al., 2019; Raver et al., 2023, Study 1). In both studies, Swedish-English bilinguals watched a video of a mock crime and responded to a modified version of the Gudjonsson Suggestibility Scale (GSS; Gudjonsson, 1984, 1997) in either Swedish (L1) or English (L2). Participants' yield scores were calculated as the number of misleading questions participants answered incorrectly. Raver et al. (2023, Study 1) asked the misleading questions twice, thereby resulting in two separate yield scores (Yield 1, Yield 2). Alm et al. (2019) found participants yielded significantly more when questioned in English (L2) than Swedish (L1). Raver et al. found higher Yield 1 scores for participants questioned in English (L2) and higher Yield 2 scores for participants questioned in Swedish

(L1), but these did not reach statistical significance.

A single study compared shifting in participants' native and non-native languages. Recall that shifting refers to the number of initial responses participants change when questions are repeated. Raver et al. (2023, Study 1) reported shifting was slightly higher in Swedish than English, but this difference was not statistically significant.

Perceived Cognitive Effort and Confidence

Results from six studies suggest participants perceive their eyewitness performance as weaker in L2. Alm et al. (2019) and Raver et al. (2023, Study 1) found significantly more negative self-perceptions among participants questioned in their non-native language. Participants in both studies rated the likelihood their memory for a mock crime video would be judged as trustworthy (i.e., perceived credibility) when provided in either Swedish (L1) or English (L2). Perceived credibility was higher for participants in the Swedish interview condition for both studies, but this difference only reached statistical significance in Alm et al. (2019). Raver et al. also found participants were significantly more confident in their memory accuracy when questioned in L1 than L2. Wylie & Evans (2023) found non-native English-speakers rated themselves as significantly less comfortable recalling a video of a theft using only English than native English-speakers. Shaw et al. (1997, Study 2 and Study 3) found mismatches between post-event misinformation and memory tests (e.g., Spanish information-English test, English information-Spanish test) had no effect on participants' confidence ratings. Taken together, the findings from these studies suggest bilingual witnesses may feel recall in

their non-native language is subpar despite limited empirical evidence to support this.

DISCUSSION

The present review is the first, to our knowledge, to aggregate published experimental research on bilingual eyewitness memory. Despite the broad nature of our search terms, we identified only 11 published studies that provide insight into the memory and suggestibility of bilingual witnesses. Due to the variability in study design, we were unable to conduct a meta-analysis and therefore presented our findings descriptively. One of our main goals in conducting a systematic review of the literature was to obtain an understanding about the degree to which bilingual witnesses could provide accurate eyewitness accounts and resist suggestion as compared to monolingual witnesses. We were unable to identify any published study directly comparing monolinguals and bilinguals, therefore the findings reviewed here only speak to bilingual eyewitness performance when interviewed in their first and second languages.

Findings from the studies reviewed here were consistent with previous memory research: bilinguals were more accurate during free recall than cued recall, reported more gist-level details than verbatim details about a target event, and experienced memory errors following exposure to post-event misinformation. We also found no evidence to suggest proficient bilinguals interviewed in their second language cannot provide accurate eyewitness accounts or are at higher risk of suggestibility. The current literature therefore indicates investigators do not need to deviate from established best-practice recommendations and can proceed with

questioning proficient bilinguals in L2. This is promising given investigators are more likely to question highly proficient bilinguals in their second language and reserve alternative methods (e.g., interpreter-mediated interviews) for less proficient bilinguals (Shaffer & Evans, 2018; Wylie & Evans, 2023). However, the findings that participants felt less secure in their eyewitness performance when questioned in L2 may signify even highly proficient bilinguals would prefer being interviewed in their first language if given the option.

Directions for Future Research

In trying to understand what we currently know about the eyewitness performance of bilinguals, we discovered how much actually remains unknown. Fortunately, there appears to be increased interest and awareness in exploring this topic as most studies included in our review (*n* = 7, 64%) were published within the past five years. In the following sections, we consider additional avenues for expanding the current literature on bilingual witnesses.

Expanding Methodologies

Future research should focus on addressing the methodological limitations of the studies included in our review. First, the to-be-remembered events used in all studies (i.e., videos of crimes, fictional stories) do not fully parallel the experiences of witnesses observing a crime *firsthand.* Factors like the viewing conditions (e.g., lighting, exposure time), presence of a weapon, and heightened stress levels can all impact encoding at the time of a crime (Morgan et al., 2004; Sharps et al., 2007). The absence of language from many of the videos utilized by studies also limits their ecological validity as linguistic information (e.g., conversations) are likely

present in real crimes. We encourage researchers to explore methods and paradigms (e.g., witnessing a crime in virtual reality, see Herman et al., 2024 for an example) that more closely simulate the types of crimes eyewitnesses would be questioned about in real-world settings.

Researchers should also implement longer delays between target events and memory interviews to more closely approximate the conditions under which witnesses would be questioned. None of the studies included in our review implemented a delay between the target event and when participants were questioned about their memory, yet there are often delays between witnessing a crime, being questioned by investigators, and testifying at trial in real investigations. Bilinguals may outperform monolinguals on measures of memory accuracy following long delays due to bilingual advantages in executive functioning believed to stem from the act of maintaining two language systems (Akhtar & Menjivar, 2012; Bialystok, 2009; Schroeder & Marian, 2014). The process of searching for specific memories, structuring recall, and selecting details to share is cognitively demanding and relies heavily on executive functioning abilities (Guler & Mackovichova, 2019; Nieto et al., 2018; Williams et al., 2006, 2007). As such, we may expect bilinguals will outperform monolinguals.

Exploring Bilingualism across the Lifespan

A limitation of the current review is its limited generalizability to the general population as we were unable to identify any studies examining children or adolescents. Evaluating bilinguals of different ages is important because language abilities can fluctuate throughout the lifespan based on age of acquisition and usage of each language

(Akhtar & Menjivar, 2012; de Bot & Makoni, 2005; de Cat, 2020). This research would be especially useful for addressing challenges child advocacy center (CAC) directors and forensic interviewers encounter when questioning bilingual children (Fontes & Tishelman, 2016). These challenges may be driven by language deficits observed in bilingual children communicating in a single language (for reviews, see Akhtar & Menjivar, 2012; Bialystok et al., 2009; Hammer et al., 2014). Since language usage is often context-specific (e.g., Mandarin at home, English at school), deficits in vocabulary knowledge could reflect children's isolated use of each language (Bialystok et al., 2010; Pena & Halle, 2011; Umbel et al., 1992). Given language abilities are strong predictors of children's eyewitness memory and suggestibility (Bruck & Melnyk, 2004; Klemfuss & Olaguez, 2018, Perez et al., 2022), it is crucial to understand how bilingual language deficits in childhood may translate to investigative interviewing contexts.

Testing Bilinguals Across Levels of Proficiency

As it stands, we can only draw conclusions about eyewitness memory and suggestibility in highly L2 proficient bilinguals. Yet bilinguals vary significantly in their proficiency and dominance across languages (i.e., mastery of and preference for a language, respectively; Hammer et al., 2014; Pavlenko, 2012; Wei, 2012). We found some evidence that lower language proficiency decreased the overall amount of information provided (Wylie & Evans, 2023) and increased the acceptance of post-event misinformation (Calvillo & Mills, 2020). More data is necessary to determine at what level of proficiency we can expect a bilingual eyewitness to still reliably provide accurate information to investigators.

Proficiency in L2 can perhaps have an effect on bilingual eyewitness memory through multiple mechanisms. First, higher proficiency may predict stronger encoding of a target event and yield more accurate, detailed descriptions during recall. Alternatively, higher language proficiency could make bilinguals more suggestible to spontaneous false memories because of the stronger associations between concepts (Otgaar et al., 2019; Roediger et al., 1998). Recall, for instance, Dolgoarshinnaia and Martin-Luengo's (2021) finding that participants with higher English proficiency had higher false alarm rates. This is consistent with studies examining false memories in bilinguals using the Deese/Roediger–McDermott (DRM; Deese, 1959; Roediger and McDermott, 1995) paradigm (for a review, see Suarez & Beato, 2021). Without empirical data, however, we are unable to draw any firm conclusions.

Assessing Alternatives to Traditional Interviews

Extant research has demonstrated the challenges associated with identifying and using an interpreter when questioning eyewitnesses (for a review, see Goodman-Delahunty et al., 2020). Findings from two studies underscore the importance of exploring alternative methods of overcoming language barriers to obtain accounts from eyewitnesses. Ernberg and Mac Giolla (2022) demonstrated that although a self-administered interview may not be universally beneficial for all bilingual witnesses, it may be an ideal alternative to interpreter-mediated interviews for witnesses with limited proficiency in their second language. Wylie and Evans (2023) found native and non-native English-speakers were similarly accurate and detailed when

questioned across standard interviews and interviews modeled after the cognitive interview (CI, Fisher & Geiselman, 1992). Future research should explore other methods of interviewing that may help address language deficits or the heightened cognitive load associated with speaking in L2 (Ardila, 2003).

Identifying Cultural Differences in Recall

Cultural correlates of the languages bilinguals speak may impact the structure and quality of their eyewitness accounts (for a review, see Perez & Zhang, 2025). During an event, the cultural values associated with the language being spoken determine what details are focused on and encoded into memory (Han et al., 1998; Marian & Kaushanskaya, 2004; Masuda & Nisbett, 2006). Cross-cultural differences emerge in the amount and type of information later recalled. For example, participants from collectivistic cultures tend to provide shorter, less detailed memory narratives than participants from individualistic cultures (Han et al., 1998, Millar et al., 2013, Wang & Ross, 2005). The types of details a bilingual witness will recall may therefore be influenced by the language used both at the time of a crime and during questioning. Indeed, we identified one study during our search that provided evidence for this. Hu and Naka (2022) reported Chinese-Japanese bilinguals were significantly more accurate in recalling details about locations in Japanese (L2) than in Chinese (L1). They argued this difference may reflect Japanese cultural norms which expect speakers to be precise in their descriptions of locations. Future research should extend this work by considering various cultures and their norms.

Cultural orientation may also determine how comfortable a witness feels disclosing information to investigators. When examining memory for photographs of crimes, Anakwah et al. (2020) found participants from Ghana (i.e., a collectivistic culture) provided less information and were more likely to say "I don't know" than participants from the Netherlands (i.e., an individualistic culture). The authors argued Ghanian participants only reported details they confidently remembered and avoided guessing because of collectivistic norms surrounding humility (e.g., Matsumoto et al., 2008; Wise et al., 2010). Cultural norms surrounding modesty may also present as reluctance to discuss certain crimes, such as child sexual abuse (Fontes & Plummer, 2010). Work on this topic should therefore consider manipulating the types of crimes witnesses are asked to recall as well.

Investigating Recall of Emotional Events across Languages

Eyewitnesses are frequently questioned about crimes in which they were victimized (Albright, 2017), therefore we can surmise investigative interviews require many witnesses to recount highly distressing experiences. Emotional-distancing effects, where a bilingual experiences decreased emotionality in L2, have been reported in the broader bilingualism literature (for a review, see Perez & Zhang, 2025). Questioning proficient bilinguals about a distressing event in L2 may therefore be an effective option for reducing witness reluctance, such as in cases of commercial sexual exploitation, and minimizing levels of state-anxiety during investigative interviews. The effectiveness of this strategic language-switching has already been demonstrated in studies of bilingual patients discussing negative emotional events in clinical settings (Altarriba & Santiago-Rivera, 1994; Ortigosa-Beltrán et al., 2023; Santiago-Rivera & Altarriba, 2002; Santiago-

Rivera et al., 2009; Schrauf, 2000). Before implementing language-switching in investigative interviews for this purpose, however, we must determine if doing so would limit the amount and accuracy of forensically relevant details participants recalled. This is important given the evidence that memory is better for negative stimuli than neutral stimuli (e.g., Burke et al., 1992; Kensinger & Corkin, 2003).

CONCLUSION

In conclusion, the findings presented in this review serve as an important first step in advancing empirically-supported methods for questioning bilingual eyewitnesses. Our synthesis of the literature revealed proficient bilinguals are capable of providing accurate reports and resisting suggestive questioning in their second language. Therefore, investigators may use established best-practice recommendations when questioning proficient bilinguals in L2. We call on eyewitness researchers, however, to expand upon some of the gaps in the literature such as the effect of language proficiency and age on bilingual recall, cultural differences in memory, and bilinguals' memory for emotional events.

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Smile for the Webcam: Nonverbal Behaviours and Rapport Building in Virtual Interviews
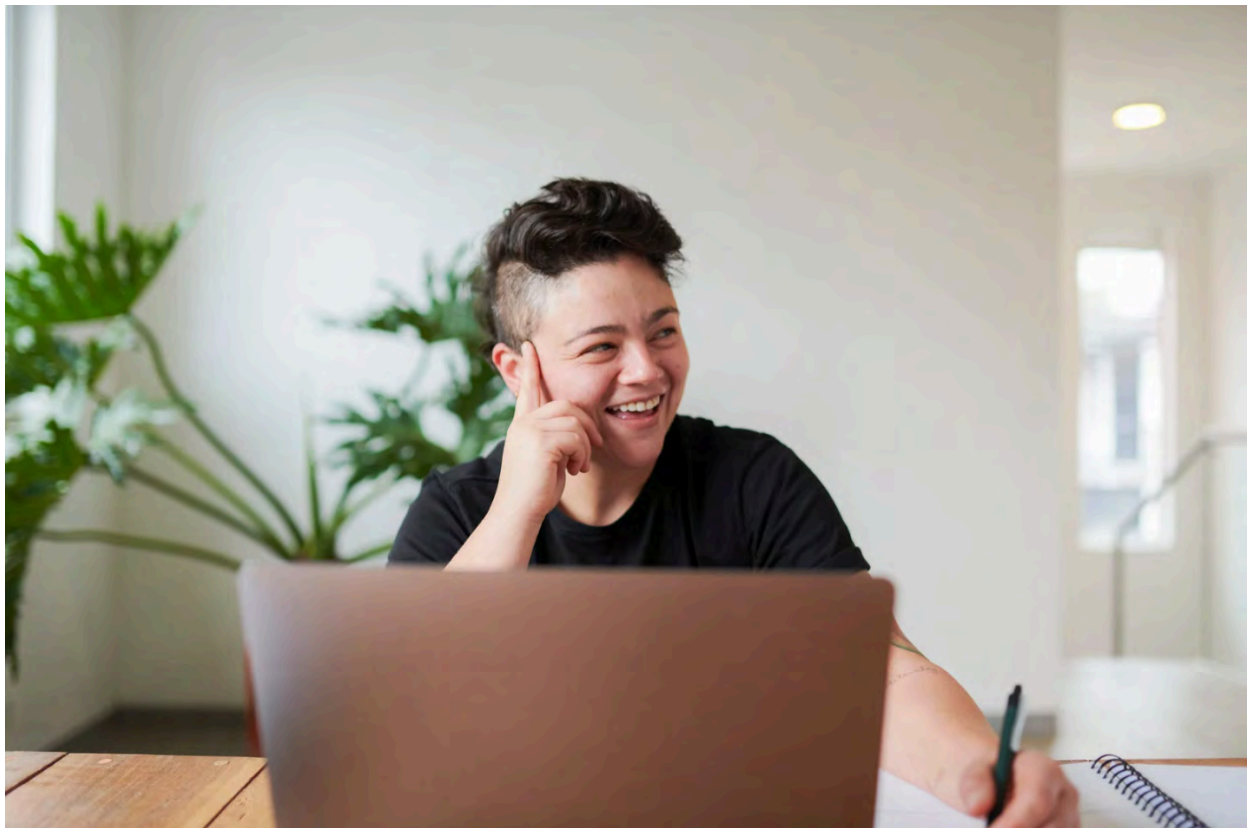
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ABSTRACT

This exploratory research aimed to examine nonverbal behaviours exhibited by interviewers within a virtual interviewing context and (1) their relation to interviewees' perception of rapport and subsequent information disclosure, and (2) external observers' perception of rapport. Participants (N = 66) were shown a sexual education video and then questioned about the video in a live virtual interview using either a Rapport (e.g., smiling, nodding, looking towards the screen) or Limited Rapport (e.g., no smiling, looking away) approach. In Study 1, we coded the interviews for five interviewer nonverbal behaviours (i.e., smiling, nodding, looking away, shaking the head, and touching hair or face) and examined whether they were associated with increased information disclosure from interviewees and their perception of rapport. In Study 2, we showed the substantive phase of 19 of these interviews to six research assistants,

blind to the study, to examine if external observers' ratings of rapport match that of the interviewee and what information these external observers report using in generating their rapport ratings. Study 1 suggests that interviewees detected interviewers' nonverbal behaviours, with nodding linked to higher perceptions of rapport and both smiling and nodding linked to greater information disclosure, though nodding was also related to increased incorrect details. Study 2 suggests that external observers used nonverbal cues to rate rapport, but their ratings only moderately matched interviewees', underscoring the role of context and perspective in rapport assessment. Implications regarding the role of nonverbal behaviours in virtual investigative interviews are discussed.

Key Words: Virtual Interviews; Investigative Interviews; Rapport; External Observers; Information Disclosure; Nonverbal Behaviours

EXECUTIVE SUMMARY IN SPANISH

Sonría para la cámara: comportamientos no verbales y establecimiento de rapport en entrevistas virtuales

Antecedentes

El rapport es ampliamente reconocido como un elemento fundamental de la comunicación eficaz, en especial en contextos como las entrevistas investigativas. Existe un consenso general de que las conductas eficaces para crear rapport comprenden tanto los comportamientos verbales como los no verbales. A pesar de que las conductas no verbales suelen incluirse en las definiciones de rapport, la mayoría de las investigaciones en entrevistas investigativas se ha centrado principalmente, o incluso exclusivamente, en los comportamientos verbales. Asimismo, el interés por las entrevistas investigativas virtuales se incrementó a raíz de la pandemia de la COVID-19, lo que ha limitado la percepción de los comportamientos no verbales y ha dificultado los esfuerzos para establecer rapport. La presente investigación exploratoria tiene como objetivo analizar los comportamientos no verbales que los entrevistadores muestran en un contexto virtual, y (1) su relación con la percepción de rapport por parte de los entrevistados y la posterior divulgación de información, y (2) la percepción del rapport por parte de observadores externos. En concreto, en el Estudio 1 se examinó si los comportamientos no verbales de los entrevistadores se asociaban con una mayor divulgación de información y con la percepción de rapport por parte de los entrevistados. En el Estudio 2 se examinó si las valoraciones de rapport realizadas por observadores externos coincidían con las de los entrevistados originales.

Método

A los participantes (N = 66) se les mostró un video sobre educación sexual, seleccionado por ser un tema que podría generar incomodidad o ser difícil de abordar. Posteriormente, se los entrevistó en una sesión virtual en vivo a través de Zoom, en la que los entrevistadores utilizaron una guía flexible con dos enfoques: uno con rapport (por ejemplo, sonreír, asentir, mirar a la pantalla) y otro con rapport restringido (por ejemplo, no sonreír, desviar la mirada). Por un lado, en el Estudio 1 se utilizó BORIS, un software de observación conductual, para codificar la frecuencia y duración de cinco comportamientos no verbales del entrevistador, es decir, sonreír, asentir, desviar la mirada, negar con la cabeza y tocarse el cabello o rostro. Se analizó si estos comportamientos estaban asociados con la cantidad de información revelada por los entrevistados y con su percepción autoinformada del rapport. Por otro lado, en el Estudio 2 se presentó la fase sustantiva de 19 entrevistas (es decir, las respuestas a la pregunta 'Cuénteme todo lo que recuerde del video que vio') a seis asistentes de investigación que no estaban al tanto del propósito del estudio, con el objetivo de analizar si sus valoraciones de rapport coincidían con las de los entrevistados y qué elementos consideraron para emitir dichas valoraciones.

Resultados

Los resultados del Estudio 1 sugieren que los entrevistados percibieron los comportamientos no verbales de los entrevistadores, y que estos pueden influir tanto en su percepción del rapport como en la cantidad de información que revelan. A modo de ejemplo, la frecuencia de sonrisas mostró una correlación moderada con una mayor cantidad de detalles correctos, pero se correlacionó de forma débil y negativa con la percepción del rapport, lo que sugiere que pudo haberse percibido como incongruente con la naturaleza del tema tratado. La frecuencia y duración del asentimiento

mostraron una fuerte asociación con una mayor cantidad total de detalles revelados, pero también con una mayor cantidad de detalles incorrectos. Esto indica que, si bien el asentir puede alentar la elaboración, podría comprometer la precisión. El Estudio 2 sugiere que los observadores externos utilizaron señales no verbales para valorar el rapport, cuyas valoraciones se correlacionaron fuertemente con las sonrisas y asentimientos de los entrevistadores. No obstante, estas valoraciones solo coincidieron en cierta medida con las percepciones de los propios entrevistados. Esto muestra una discrepancia entre el rapport experimentado y el observado, y sugiere que las evaluaciones externas pueden pasar por alto factores contextuales, como la incomodidad de hablar sobre contenidos delicados.

Discusión

Los hallazgos del Estudio 1 indican que los comportamientos no verbales asociados al rapport por parte de los entrevistadores pueden influir tanto en la percepción del rapport como en la cantidad de información que los entrevistados revelan en entrevistas investigativas virtuales. Sin embargo, dado que las correlaciones entre los comportamientos no verbales y los resultados no fueron lineales, se requiere considerar el contexto en su análisis. El Estudio 2 amplió estos hallazgos al concluir que, si bien las valoraciones del rapport por parte de los observadores externos se correlacionaron estrechamente con los comportamientos no verbales visibles, en particular las sonrisas y los asentimientos, y reflejaron los patrones encontrados en la revelación de información por parte de los participantes, estas valoraciones solo coincidieron en cierta medida con las percepciones de los propios entrevistados. Esta discrepancia podría deberse a la limitada comprensión de los

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observadores sobre el malestar que puede provocar el contenido de la entrevista. A modo de ejemplo, lo que puede parecer cálido y acogedor para un observador podría no ser percibido así por un participante, especialmente si se trata de un tema sensible.

Implicancias prácticas

Los resultados de ambos estudios indican que la formación en entrevistas debería incluir una sección sobre el uso eficaz de los comportamientos no verbales para establecer rapport. Los entrevistadores deberían recibir capacitación para supervisar y adaptar sus comportamientos no verbales según el contexto y las respuestas individuales de los entrevistados, teniendo en cuenta cuidadosamente la idoneidad de cada comportamiento en distintos contextos culturales y situacionales. Por ejemplo, la naturaleza sensible del tema tratado o las limitaciones propias de una entrevista virtual pueden dificultar la percepción de ciertos comportamientos relacionados con el rapport. La discrepancia entre las percepciones de rapport de los entrevistados y las de los observadores plantea consideraciones importantes para la evaluación de entrevistas. Las personas encargadas de revisar grabaciones de entrevistas con fines formativos, de supervisión o de investigación deben tener en cuenta que los comportamientos no verbales observables no siempre reflejan con precisión la experiencia interpersonal de la interacción. Incorporar la retroalimentación y los comentarios del entrevistado, cuando sea posible, podría ayudar a cerrar esta brecha y apoyar evaluaciones más completas del rapport. En general, este estudio contribuye a un creciente cuerpo de investigación sobre entrevistas investigativas virtuales y resalta el papel complejo de los comportamientos no verbales en la creación del rapport

Introduction

Investigative interviews are a crucial component of police investigations (Fisher et al., 2011; Milne & Bull, 1999; Lassiter, 2004). Most interviewing guidelines recommend that this interaction be characterized by rapport, defined as a productive working relationship between the interviewer and interviewee (e.g., Cognitive Interview, NICHD protocol, PEACE model, Reid technique; Geiselman & Fisher, 2014; Inbau et al., 2013; Lamb et al., 2007; Milne & Bull, 1999; Snook et al., 2010). There is a general acknowledgement that effective rapport building behaviours consist of both nonverbal and verbal behaviours (Abbe & Brandon, 2014; Tickle-Degnen & Rosenthal, 1990). Despite the general inclusion of nonverbal behaviours in definitions of rapport, most research on rapport within investigative interviews has focused primarily or solely on verbal behaviours. Additionally, interest in virtual investigative interviews increased due to the COVID-19 pandemic and has limited the perception of nonverbal behaviours and complicated rapport building efforts. The purpose of the current research was to explore the potential impact of nonverbal behaviours on rapport within virtual investigative interviews. Specifically, in Study 1, we examined whether interviewers' nonverbal behaviours are associated with increased information disclosure and interviewees' perception of rapport. In Study 2, we examined whether external observers' ratings of rapport matched that of the original interviewees.

Nonverbal Behaviours and Rapport Building

Rapport is widely recognized as a foundational element of effective communication, particularly in settings such as investigative interviews. One of the most influential definitions describes rapport as involving three interconnected components: mutual attention, positivity, and coordination (Tickle-Degnen & Rosenthal, 1990). In practice, mutual attention refers to the shared engagement between interviewer and interviewee, often reflected in verbal and nonverbal behaviours that indicate active listening. Positivity captures the interpersonal tone of the exchange, marked by warmth, respect, and empathy. Coordination refers to the smooth, reciprocal flow of interaction, including turn-taking and conversational timing that foster a sense of alignment between the two people in conversation. In the investigative interviewing context, rapport has also been characterized by Gabbert et al. (2020) as the interviewer's ability to tailor the interaction to the individual and the situation, maintain a friendly and open demeanour, and respond thoughtfully to what the interviewee is saying.

Nonverbal communication is broadly defined as communication that occurs with means other than words (Knapp et al., 2014), using, for example, environment, touch, interpersonal distance, but also nonverbal behaviours such as facial and body movements. Nonverbal behaviours are studied by a worldwide community of researchers with over 30,000 peer-reviewed publications on the subjects from fields spanning from psychology and communication to ethology and computer sciences (see Plusquellec & Denault, 2018). Nonverbal behaviours serve a wide array of functions in interactions ranging from "displaying affect" and "revealing attitudes" to

"revealing mental and physical conditions" and "exerting interpersonal control" (Hall et al., 2019, p.273). While in the field of forensic psychology, nonverbal behaviours are discussed most frequently in the context of deception and deception detection, such behaviours are an important aspect of all communication – including the context of investigative interviews, where rapport building increases the probability of gathering information from the interviewee.

For example, in their systematic searchable map (SSM), Gabbert and colleagues (2020) found that over 90% of the 35 studies they examined reported a positive effect of rapport on information disclosure. Although the specific definition of rapport building varies according to the context in which it is established, one widely accepted definition suggests that it involves a productive working relationship based on mutual attention, positivity, and coordination – using verbal and nonverbal behaviours (e.g., self-disclosure, smiling; Gabbert et al., 2020; Tickle-Degnen & Rosenthal, 1990). More specifically pertaining to investigative interviewing, Gabbert and colleagues (2020) have broken down professional rapport building into three different aspects: personalizing the interview to the context and the interviewee, presenting an approachable demeanour, and paying attention to what is being said to respond appropriately.

While the verbal aspects of rapport (e.g., rapport behaviours such as active listening, showing personal interest, use of self-disclosure, empathic response and use of the interviewee's name) and the paraverbal aspects of rapport (such as tone of voice) are

more commonly referred to, the nonverbal aspects of rapport (which include nonverbal behaviours such as smiling, open "body language"[3], eye contact and head nodding) seem to be accorded a lesser degree of importance when it comes to studying the concept. Many studies examining rapport include nonverbal rapport behaviours when establishing rapport, but do not consider them as variables or control for them. For example, only 10 of the 35 studies examined in Gabbert and colleagues' (2020) SSM featured at least one nonverbal rapport component, and only one study featured all four (i.e., smiling, open body language, eye contact, and head nodding). In addition, smiling was featured in 14% of studies, while open body language, eye contact and head-nodding were separately featured in 11% of studies.

While research in the area is limited, some attempts have been made to identify and assess nonverbal behaviours in investigative interviews. For example, Nahouli and colleagues (2021) sought to isolate the nonverbal aspects of rapport from the verbal aspects of rapport in an experimental setting. They examined the difference between mock witnesses (N = 80) who were interviewed either with verbal rapport only, nonverbal rapport only or with both verbal and nonverbal rapport techniques. The nonverbal rapport behaviours included greeting interviewees with a handshake, relaxed posture, hand gestures, eye contact, facial movements such as smiling and nodding and dynamic tone of voice (Nahouli et al., 2021). They found that nonverbal rapport techniques used by interviewers not only led interviewees to view the interview more

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[3] It should be noted that, although widely used, "body language" is a misnomer. There is no "language" of the body (see Patterson et al., 2023).

positively but also led them to provide more correct information ($\eta p2$ = .12) about the mock-crime (i.e., bar fight video). Importantly, interviewers in the study reported that the nonverbal rapport techniques were easier to employ than verbal techniques, and researchers found that the nonverbal rapport techniques were more effective than verbal rapport techniques alone in facilitating information provision. Dando and colleagues (2022) also found that participants interviewed in a virtual environment (i.e., using virtual reality) by an avatar voiced by an interviewer following a rapport protocol provided more correct and fewer incorrect details than participants interviewed without rapport building, including those interviewed face to face. The authors suggest that interviews conducted in the virtual environment provide a cognitive benefit that can aid recall by limiting the demand from physical co-presence (Dando et al., 2022).

In an applied study, Vallano and colleagues (2015) surveyed law enforcement officers about their use of rapport building techniques in real-world suspect and witness interviews. The authors found that, of those who reported using at least one rapport building technique (N = 91), only 2% reported using smiling, 20% reported using open body language, and 11% reported using eye contact. Taken together, these studies suggest that while the nonverbal components of rapport are present in the definitions of rapport and seem to benefit the rapport building and information-gathering processes, they seem to be given less attention in the literature and practice than verbal rapport building techniques.

External Observers of Rapport

The aim of rapport building in an investigative interview is for the interviewee to perceive it and, in turn, be influenced by it. Thus, for interviewers, the ability to determine whether they have succeeded in building rapport with the interviewee is significant in assessing if they are optimizing factors that help increase information disclosure and accuracy (Richardson & Nash, 2022). However, as members of the interaction who are actively making efforts to build this working relationship, interviewers may not always accurately assess the degree of rapport they have built. Richardson and Nash (2022) refer to this discrepancy as "rapport myopia". Having individuals external to the interaction observe the interview and assess (or monitor) the degree of rapport achieved may allow for a more complete perspective on the development of rapport as well as aid in the interview evaluation process.

Harrigan and colleagues (1985) conducted one of the few studies to examine external observers' perceptions of nonverbal rapport in a medical context. The authors found that nurses rated physicians more positively and thus felt they developed greater rapport with patients when the physician maintained moderate eye contact, positioned their body toward the patient, had uncrossed legs, and positioned their arms in a symmetrical side-by-side position. Likewise, in a study by Heintzman and colleagues (1993), observers' perceptions of rapport in a supervisor-subordinate interaction were examined as a function of variations of nonverbal rapport building behaviours. Findings from this study suggest that external observers perceived supervisors more positively in interactions with a subordinate when they smiled, touched the subordinate's arm, had an open

body posture, and engaged in head nodding and eye contact.

Few studies have examined how individuals external to the interaction perceive rapport in investigative interviews. This is especially important given that interviewers may overestimate their ability to build rapport with interviewees. Walsh and colleagues (2017) compared rapport ratings between a lead interviewer and an expert observer (i.e., an experienced former police trainer). Their findings revealed that the lead interviewer provided a greater rapport rating than the expert observer ($d = 0.66$). In a recent paper, Richardson & Nash (2022) examined whether interviewers could determine whether they had successfully built rapport with the interviewee. They compared four different external observers' (i.e., the lead interviewer, the secondary interviewer, the suspect in the mock interview, and an expert observer who was a retired detective) ratings of achieved rapport within a mock suspect interview. The authors examined 133 mock suspect interviews and found general agreement of rapport ratings between observers, except for the lead interviewers, who tended to be weakly correlated with the others. Richardson & Nash (2022) hypothesize that this may be attributed to the situational or cognitive demands related to interviewing on the interviewers, making it difficult for them to appraise the success of their efforts to build rapport. These studies highlight the potential benefits of external observation as they suggest that there are limitations to the currently available means of determining if and how rapport is developed in an interview.

The purpose of the current research was to explore the potential relationship between nonverbal behaviours and perceived rapport within virtual investigative interviews. In Study 1, we examined whether interviewers'

nonverbal behaviours were associated with increased information disclosure and interviewees' perception of rapport. In Study 2, we investigated whether external observers' ratings of rapport aligned with those of interviewees and which nonverbal behaviours these observers relied on.

Current Research

Nonverbal behaviours are commonly considered to be a part of building rapport; however, because most research on rapport in investigative interviews has focused mainly or exclusively on verbal behaviours, the extant literature does not provide evidence for the importance or influence of these nonverbal behaviours in building rapport. This gap is even more apparent when it comes to research on virtual interviewing. Precipitated by the COVID-19 pandemic, many investigative interviews have shifted to an online setting making use of virtual platforms (e.g., such as Zoom, Microsoft Teams or similar videoconferencing software; Vieth et al., 2020). In a virtual interview where both the interviewer and interviewee have access to a webcam and a microphone, nonverbal behaviours they can perceive from each other are limited. While the camera allows for the interviewers to smile, nod, and perhaps show open posture depending on what portion of their body is in the frame of the camera, virtual interview settings undoubtedly modify the use of eye contact, haptics (touch), proxemics (interpersonal distances), environment. Virtual interviews can also complicate the interviewer's efforts to cater to the interviewee's needs, which can be another essential part of rapport building (Vallano et al., 2015).

Some research has suggested that rapport can be established in virtual interviews (Dando et al., 2022; Dion Larivière et al., 2022;

Meijer et al., 2021), but it remains unclear (1) whether and which nonverbal behaviours in virtual interviews are associated with increased information disclosure and (2) with interviewees' perceptions of rapport. Therefore, the first study sought to examine the impact of interviewer nonverbal rapport behaviours on interviewee information disclosure and the impact of interviewer nonverbal rapport behaviours on the interviewee's perceptions of rapport. Few studies have investigated whether external observers who view part of an online interaction can accurately rate the level of rapport, matching the interviewee's perception, and what information these observers use to make their assessments. In an effort to expand on the role of nonverbal behaviours within virtual interviewing, in a second study, we sought to examine (1) the correlation between external observers' ratings of rapport and the interviewer's nonverbal behaviours and (2) the correlation between external observers' ratings of rapport and the interviewees' perception of rapport.

Study 1 – Interviewees' Perception of Nonverbal Behaviours

The first study sought to examine the effect of interviewers' nonverbal behaviours on interviewees' perceptions of rapport and subsequent information disclosure about a sexual education video within virtual mock-investigative interviews. This study is exploratory, and as such, we made no hypotheses; however, we sought to answer the following research questions:

1. What is the relationship between interviewer nonverbal rapport behaviours and interviewee information disclosure in virtual interviews?

2. What is the relationship between interviewer nonverbal rapport behaviours and interviewee perceptions of rapport in virtual interviews?

METHODOLOGY

The interviews used in both Study 1 and 2 were collected as part of a previous study (see Dion Larivière et al., 2022). The procedure is reiterated below to provide context along with the specific demographic information pertaining to the specific subset used in these studies.

Design

Study 1 employed a between-subjects experimental design with participants randomly assigned to one of two conditions: Rapport or Limited Rapport. Interviewer behaviour was manipulated using structured interview guides that emphasized or restricted verbal and nonverbal rapport behaviours. The primary dependent variables included participants' information disclosure (i.e., total, correct, and incorrect details recalled about the stimulus video) and their self-reported perception of rapport. Nonverbal behaviours displayed by interviewers were also coded and analyzed in relation to both disclosure and rapport ratings.

Participants

Participants consisted of 66 undergraduate students (M_{age} = 20 years old, Range = 17-39 years old; 36 female and 30 male) from a Canadian university. The self-report demographic breakdown was as follows: Aboriginal (1.5%), Arab (3%), Black (13.6%), White (35%), Chinese (3%), Filipino (3%), West Asian (4.5%), South Asian/East Indian (31.8%), Southeast Asian (1.6%), and Person of Mixed Origin (3%). Participants were assigned

randomly to one of two conditions: Rapport (33 participants) or Limited Rapport (33 participants).

Materials

Participants responded to an online questionnaire created using the Qualtrics survey software. The survey consisted of three demographic questions (i.e., age, gender and ethnicity), the embedded stimulus video (i.e., sexual education video), the link for the Zoom virtual meeting room followed by a question asking participants to indicate their degree of perceived rapport with the interviewer using a slider (0-100) and an open textbox asking them to justify their answer. Participants answered questions about their perceptions of rapport with the interviewer after the Zoom interview. See the Open Science Framework (OSF) portal for the questions and prompts included in the Qualtrics questionnaire (https://osf.io/564ms).

Stimulus Video

The stimulus video used in this study consisted of a Catholic sexual education video from the 1980s. The video was 2 minutes and 24 seconds in length. The Irish woman in the video briefly describes male and female genitalia and explains how sexual intercourse occurs to an intended audience of children or adolescents. The stimulus video was chosen because of its sexual nature in an effort to mimic a target event that was awkward and inherently uncomfortable to discuss. See the OSF portal for the stimulus video links and a storyboard (https://osf.io/564ms).

Interview Guides

The Rapport and Limited Rapport interview guides were developed based on the model of rapport proposed by Tickle-Degnen and Rosenthal (1990) (i.e., mutual attention, positivity, and coordination) and Gabbert et al.'s (2020) application of it to investigative interviews. Both of these models informed our selection of behaviours.

Rapport Condition. Interviewers utilized a number of verbal, paraverbal and nonverbal elements of rapport (Gabbert et al., 2021) to build rapport with the interviewee. Interviewers were instructed to attempt to show empathy and self-disclose throughout the interview. They were also instructed to address the participant by their first name, use a gentle tone, smile, and attempt to keep their gaze toward the screen and the webcam when possible (Quas & Lench, 2007). The interviewer was also instructed to sit upright in a visibly relaxed and open posture. These behaviours were to be maintained throughout the entire interview. See the OSF portal for the specifics of the interview guide for both conditions (https://osf.io/564ms).

Limited Rapport Condition. Interviewers were instructed to avoid the use of any aforementioned elements of rapport. They were also instructed to use a flat tone of voice, avoid smiling and attempt to keep their gaze away from the screen and the webcam (Quas & Lench, 2007). The interviewer was sitting upright and was facing slightly offscreen.

The label 'Limited Rapport' reflects our intended manipulation, guided by a structured protocol instructing interviewers to minimize rapport behaviours, rather than a guarantee of their complete absence. Some nonverbal behaviours (e.g., brief smiles or head movements) still occurred, as can be seen in the results of this study. Thus, the term 'Limited Rapport' is used here to denote a restricted rapport condition rather than a

literal absence of rapport, either in behaviour or perception[4].

Procedure

Participants were sent the link to access the Qualtrics survey. After they read the consent form, participants were asked to complete the first part of the survey, which included the stimulus video. Participants were instructed to view the video in its entirety once and asked to pay careful attention and view it with headphones and in a quiet area. Participants then clicked on the link embedded within the survey to begin the live interview in Zoom (i.e., an online video conference platform). Participants were met in the live virtual meeting by either the first or second author. Both interviewers were trained and there were minimal differences between interview outcomes[5]. Participants were randomly assigned to either the Rapport or Limited Rapport condition. The interviewer then worked through the flexible interview guide (i.e., Rapport or Limited Rapport interview guide) with the participant and gathered their recall of the stimulus video. The substantive phase of the interview consisted of a simple free recall question: "Tell me everything that you can remember about the video that you watched". Following the interview, participants returned to the Qualtrics survey and completed the remaining portion of the questionnaire. Participants were granted one credit in an undergraduate psychology course for their participation in the study.

Measures and Coding

Information Disclosure and Perceptions of Rapport[6]**.** The interviews coded in the current research were screen and audio recorded using the Zoom videoconferencing software. These recordings were later transcribed verbatim by the first author. To analyze the data, a coding guide was developed through an iterative process. Coders received training and feedback. Initially, the first author thoroughly read through the substantive phase of each interview, which involved participants freely recalling the target event. From this, an extensive list of unique individual details mentioned by the participants was compiled. The coding guide, comprising 369 variables, was then used by the first author as well as a research assistant to code each participant's recall of the stimulus video. Each mentioned detail was categorized as correct or incorrect. As was reported by Dion Larivière et al. (2022), Cohen's Kappa was used to measure inter-rater reliability, and the final value was K = 0.731 (% agreement = 96%), suggesting substantial agreement between the two coders (Landis and Koch 1977).

To measure interviewees' perceptions of rapport with the interviewer, interviewees were provided with a definition of rapport[7] and asked to rate their perceived rapport on a slider scale from 0 to 100. Additionally, participants were given an open textbox to explain their rating.

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[4] Note that this condition was originally labelled as "No-Rapport" in Dion Larivière et al (2022).

[5] The interviewer training as well as minimal differences between the two interviewers are described in Dion Larivière et al (2022).

[6] The coding and inter-rater reliability methods described in this section were also described in Dion Larivière et al (2022).

[7] The rapport definitions provided to interviewees comprised a more general definition from Merriam-Webster dictionary (i.e., Merriam Webster defines rapport as: " a relationship characterized by agreement, mutual understanding, or empathy that makes communication possible or easy.") and another specific to investigative interviewing adapted from by Kieckhaefer (2014) (i.e., In the context of this interview, rapport also involves how comfortable you felt with the interviewer, whether you trusted the interviewer, and whether you liked/disliked the interviewer.)

Behavioural Observation Research Interactive Software (BORIS). Volunteer research assistants coded for five behaviours in this study: smiling, touching face or hair, nodding, head shaking and looking away from the webcam or screen. We chose these five behaviours after pilot coding a longer list of behaviours because (1) some are part of Gabbert and colleagues' (2020) definitions of nonverbal rapport behaviours (i.e., smiling and nodding), (2) they are frequently mentioned in the nonverbal communication literature, explicitly pertaining to the development of rapport (le May, 2004) and (3) they are behaviours that can be captured by the screen recording and the computer webcam in their entirety (e.g., hand gestures were included in the piloted list of behaviours, however, they were not consistently captured in the screen recording).

Nonverbal behaviours exhibited by interviewers were coded using BORIS (Behavioral Observation Research Interactive Software; https://www.boris.unito.it/). BORIS is an open-source behavioural observation and coding software created by Friard and Gamba (2016). In order to begin coding for behaviours, the user must first create a 'project' in which they can indicate the behaviours that will be observed and keys that will be used to indicate either the beginning and end of an event (i.e., state event) or the simple occurrence of an event (i.e., point event). Users may also assign a key to indicate which subject is being observed. Once the project is created, the user may upload the video data into BORIS and begin an observation. The video plays within BORIS, and the coder can view the video, pause the video and code for behavioural observation using the determined keys. Users can upload multiple videos to BORIS.

For the current study, the observed behaviours were all entered as 'state events,' meaning that they had a beginning and an end, which allowed us to measure the duration of behaviours exhibited. The behaviours and corresponding keys were assigned as follows: "s" for smiling, "n" for nodding, "l" for looking away, "h" for head shaking and "q" for the substantive phase of the interview. The subjects were set as "i" for the interviewer and "p" for the interviewee/participant, although only the nonverbal behaviours of the interviewer were coded in this study.

As detailed in the coding instructions, smiling was coded from the moment a smile began to form to when the facial expression was neutral or not smiling. Smiling also included smirks and could occur when the interviewer was speaking or smiling without showing teeth. Looking away was coded every time the interviewer's eyes were not facing the screen until the eyes were facing the direction of the screen. Touching face or hair was coded every time the interviewer touched their face, hair, or neck until the hand(s) were back in a resting state. Nodding was coded to begin when the head moved up and stop when the head was still. Head shaking was coded when the interviewer's head began to move side to side and stopped when the head was still. The substantive phase was also coded to start when the interviewer asked the interviewee to recall everything they could remember about the stimulus video. The coding ended once the interviewee stopped speaking after being asked to recall everything else they could remember about the video.

In terms of output, users can export BORIS data in multiple formats. For this study, data were exported in two different formats.

The first one is a plot depicting the occurrence of the behaviours on a timeline where the y-axis indicates the different behaviours/phases of the interview and the x-axis indicates time and, thus, provides a visual representation of the duration of each behaviour. This plot was not used in the analysis of the results in the following section; however, we still feel it is relevant to mention, given the possibility it holds in terms of comparing the timelines or reciprocity between the interviewer and interviewee behaviours. BORIS also allows the user to export data in the form of a spreadsheet which contains a log of each behaviour's "start" and "stop" times. See the Open Science Framework (OSF) portal for an example plot and an example spreadsheet (https://osf.io/564ms). Using this spreadsheet, we were able to calculate the duration in seconds (i.e., by subtracting the "start" time from the "stop" time for each occurrence of the behaviour and totalling the duration of every occurrence) as well as the frequency (i.e., by computing the total appearance of each behaviour and dividing by two to account for the "start" and "stop" entry) for each behaviour. This is by no means an exhaustive list of what BORIS enables users to do, but rather only the functions used for the first study.

Inter-Rater. Given the exploratory nature of this study, it was important to establish inter-rater reliability. To that end, two laboratory volunteers blind to the research questions were trained by the first author to code the interviews. Intraclass Correlations Coefficients (ICC) were used to measure inter-rater reliability. The final values across comparisons indicated an excellent correlation between coders for all behaviours, except for the duration of head shaking, which had moderate inter-rater reliability (Shrout & Fleiss, 1979). The relatively low interrater reliability for head shaking suggests that this behaviour may be more difficult to capture consistently in virtual interview settings. In our recordings, head shaking was subtle and occurred infrequently, which likely contributed to discrepancies between coders. Findings relating to headshaking should be interpreted with this in mind. See Table 1 for a table of all ICC values.

RESULTS & DISCUSSION

We analyzed the data separately for the Rapport and Limited Rapport conditions, given the difference in interviewer instructions and length of interviews. Furthermore, given that instructions given to the interviewers were different for each condition, the frequency of each nonverbal behaviour was considerably different between conditions, with the rapport condition having a greater frequency and duration of all five nonverbal behaviours.

As is described in Dion Larivière et al. (2022), in the overall sample, participants in the Rapport condition perceived a greater level of rapport with the interviewer compared to those in the Limited Rapport condition and the effect size was very large (Cohen's d = 1.47, CI [1.01–1.93]).

TABLE 1. *Intraclass correlation values for Study 1. Values are interpreted according to Shrout & Fleiss (1979).*

	ICC
Frequency of looking away	0.952
Frequency of nodding	0.931
Frequency of head shaking	0.883
Frequency of smiling	0.909
Frequency of touching face	0.848
Duration of looking away	0.824
Duration of head shaking	0.397
Duration of smiling	0.784
Duration of touching face	0.989
Duration of nodding	0.746

Given the tendency for nonverbal behaviours to co-occur, we conducted exploratory regression analyses to examine their combined effects. However, high multicollinearity among predictors limited interpretability, and no behaviours emerged as unique predictors. As such, the correlational findings should be interpreted with caution, as they may not reflect the independent contribution of each behaviour. The strength of the effect sizes (i.e., Pearson's correlations), are interpreted according to Cohen's guidelines (Cohen, 1992). See Table 2 for the mean and standard deviation for frequency and duration for each nonverbal behaviour.

Rapport Condition

Research Question #1. *What is the relationship between interviewer nonverbal rapport behaviours and interviewee information disclosure?*
Participants in the Rapport condition reported an average of 29.94 (SD = 12.12, 95% CI [25.64 - 34.24]) total details, .79 (SD = .78, 95% CI [.51 – 1.06]) incorrect details and 27.30 (SD = 11.24, 95% CI [23.32 - 31.29]) correct details about the video. Overall, all nonverbal rapport behaviours coded for were positively correlated with total, correct and incorrect details. The weakest correlations across outcome variables were with time spent touching their face. The nonverbal behaviours most strongly correlated with total details reported by interviewees were time spent nodding (r =.487; moderate to strong correlation), frequency of smiling (r =.474; moderate to strong correlation) and frequency of nodding (r =.368; moderate correlation).

The frequency of smiling had the strongest correlation with correct details (r =.474; moderate to strong correlation). In contrast, time spent nodding had the strongest correlation with incorrect details (r =.503; strong correlation), followed by the frequency of touching their face (r =.446; moderate to strong correlation).

Time spent touching their face had the weakest correlation between nonverbal rapport behaviours and both total details reported, and incorrect details (*r* =.094 and *r* = -.027, respectively; both weak correlations). Time spent smiling had the weakest correlation with correct details reported

(*r* =.091). See Table 3 for Pearson's correlations between interviewer nonverbal behaviours and total details, correct details, incorrect details and perceived rapport in the Rapport condition.

TABLE 2. *Mean and Standard Deviations for Frequency and Duration of Nonverbal Behaviours in the Rapport and Limited Rapport Conditions*

	Rapport			Limited Rapport		
	N	Mean	SD	N	M	SD
Frequency of looking away	33	52.00	47.16	33	22.09	20.09
Frequency of smiling	33	22.24	11.70	33	3.52	7.75
Frequency of touching face	33	12.30	7.51	33	1.88	1.71
Frequency of nodding	33	41.58	19.30	33	10.82	4.41
Frequency of head shaking	33	14.33	9.72	33	0.76	1.03
Duration of looking away	33	97.75	88.28	33	64.81	60.24
Duration of smiling	33	151.58	110.87	33	17.94	91.54
Duration of touching face	33	70.60	68.21	33	13.33	24.30
Duration of nodding	33	74.16	49.62	33	7.83	5.04
Duration of head shaking	33	21.17	42.44	33	0.45	0.86

Note: The measurement unit for nonverbal behaviour duration is seconds.

TABLE 3. *Rapport Condition: Pearson's Correlations Between Nonverbal Behaviours and Total Details, Correct Details, Incorrect Details and Perceived Rapport*

	Total Details Reported	Correct Details	Incorrect Details	Perceived Rapport (out of 100)
Frequency of looking away	.192	.149	.395	.207
Frequency of nodding	.368	.296	.396	.121
Frequency of head shaking	.362	.336	.230	-.010
Frequency of smiling	.474	.439	.321	-.102
Frequency of touching face	.163	.091	.446	.179
Duration of looking away	.246	.199	.343	.163
Duration of nodding	.487	.402	.503	.222
Duration of head shaking	.330	.235	.293	.087
Duration of smiling	.127	.063	.258	-.148
Duration of touching face	.094	.118	-.027	-.051

Research Question #2. *What is the relationship between the interviewer nonverbal rapport behaviours and interviewee perceptions of rapport?*

On average, participants in the Rapport condition perceived rapport in their interaction with the interviewer at 87.94/100 (SD = 14.75, 95% CI [82.71 - 93.17]). Both the frequency of smiling (r = -.102) and time spent smiling (r = -.148) were negatively, though weakly, correlated with interviewees' perceptions of rapport. Although smiling is typically encouraged as a way to build rapport, its presence in interviews involving sensitive topics may have had the opposite effect. In these contexts, smiling might have been perceived as incongruous. For example,

participants may have found it odd or inappropriate if the interviewer smiled while they were uncomfortably describing sexual anatomy. Smiling could also have come across as overcompensatory or disingenuous, potentially undermining the interviewer's perceived empathy and reducing the interviewee's feeling of comfort during the interaction.

The nonverbal behaviours most strongly correlated with interviewees' perceptions of rapport were time spent nodding (r =.207) and frequency of looking away from the screen (r =.207); however, it is important to note that these correlations are weak in strength. The weakest correlations were with the frequency of head shaking (r =-.010) and time spent

touching their face (r =-.051), and both were weak correlations. See Table 3 for Pearson's correlations between interviewer nonverbal behaviours and total details, correct details, incorrect details, and perceived rapport in the Rapport condition.

Open-Ended Responses. Participants were asked to provide an explanation for the rapport rating that they reported feeling with the interviewer. Few participants (n = 2) in the Rapport condition mentioned one or more elements pertaining to nonverbal behaviours. Specifically, they mentioned nodding (i.e., *The interviewer was very friendly, nodding her head as I was speaking, which made me feel more comfortable speaking with her*) and smiling (i.e., *She never made me feel awkward because of her smile that made me feel welcomed*).

Limited Rapport Condition
Research Question #1. *What is the relationship between interviewer nonverbal rapport behaviours and interviewee information disclosure?*

Participants in the Limited Rapport condition reported an average of 21.18 (SD = 8.82, 95% CI [18.05 - 24.31]) total details, .30 (SD = .68, 95% CI [.06 – .55) incorrect details and 20.00 (SD = 8.42, CI [17.01 - 22.99]) correct details about the video. The nonverbal behaviours most strongly correlated with total details reported by interviewees were time spent smiling (r =.357; moderate correlation), and frequency of head shaking (r =.321; moderate correlation). The frequency of head shaking had the strongest correlation with correct details (r =.315; moderate correlation). In contrast, the frequency of smiling had the strongest correlation with incorrect details (r =.506; strong correlation), followed by the

time spent smiling (r =.446; moderate to strong correlation) and the frequency of touching their face (r =.462; moderate to strong correlation). The weakest correlation between nonverbal rapport behaviours and total details reported was with the time spent looking away (r = .020; weak correlation). Time spent looking away and frequency of nodding had the weakest correlations with correct details reported (r =.005 and r = -.005, respectively; both very weak correlations). The weakest correlation with incorrect details was with time spent head shaking (r = -.049; weak correlation). See Table 4 for Pearson's correlations between interviewer nonverbal behaviours and total details, correct details, incorrect details, and perceived rapport in the Limited Rapport condition.

Research Question #2. *What is the relationship between the interviewer nonverbal rapport behaviours and interviewee perceptions of rapport?*

On average, participants in the Limited Rapport condition perceived rapport in their interaction with the interviewer at 60.55/100 (SD = 28.37, 95% CI [50.49 - 70.60]). Overall, the interviewer's nonverbal behaviours coded were generally weakly and negatively correlated with interviewees' perceptions of rapport. The strongest correlations were with the time spent and frequency of looking away from the screen (r = -.281 and r = -.212, respectively) and time spent smiling (r = -.204); however, it is important to note that these correlations are weak in strength. The weakest correlations were with the frequency of smiling (r = -.031; weak correlation) and time spent touching their face (r = -.071; weak correlation). See Table 4 for Pearson's correlations.

TABLE 4. *Limited Rapport Condition: Pearson's Correlations Between Nonverbal Behaviours and Total Details, Correct Details, Incorrect Details and Perceived Rapport*

	Total Details Reported	Correct Details	Incorrect Details	Perceived Rapport (out of 100)
Frequency of looking away	-.120	-.149	.246	-.212
Frequency of Nodding	-.012	-.005	.170	.039
Frequency of head shaking	.321	.315	.166	-.047
Frequency of smiling	.110	-.006	.506	-.031
Freq. Touching face	.211	.165	.462	-.083
Duration of looking away	.020	.005	.413	-.281
Duration of nodding	.133	.143	-.073	.156
Duration of head shaking	.209	.215	-.049	.112
Duration of smiling	.357	.266	.498	-.204
Duration of touching face	.086	.045	.529	-.071

Open-Ended Response. Participants were asked to provide an explanation for the rapport rating that they reported feeling with the interviewer. Several participants (n = 12) in the Limited Rapport condition mentioned one or more elements pertaining to nonverbal behaviours. Specifically, they referred to general body language (e.g., *I did not feel a lot of rapport because their body language felt a little intimidating, however, I assumed that is how an interviewer's body language should be during a research study*), neutral facial expression and tone of voice related to the inability to determine what the interviewer felt or thought (e.g., *As soon as the video chat started, she looked very serious and started reading things fast at me. Her facial expression and tone of voice was not welcoming or friendly, I could not read her emotions. Felt a bit intimidated*) and the absence of smiling or nodding (e.g., *There was no nods of agreement or any feeling from him to make me comfortable*).

Overall, in Study 1, we found support for the idea that the use of nonverbal rapport behaviours by the interviewer can affect the amount of information interviewees disclose as well as their perceptions of the rapport they feel with the interviewer. Specifically, we found that certain interviewer nonverbal rapport behaviours, such as smiling and nodding, were positively associated with the amount of information interviewees disclosed, particularly in the Rapport condition, where participants reported higher perceived rapport and provided more details

overall. Specific behaviours like nodding and smiling showed moderate to strong correlations with both total and correct details reported, although some behaviours (e.g., nodding) were also associated with an increase in incorrect details. Interestingly, the relationship between nonverbal behaviours and perceived rapport was generally weak, and in some cases, unexpectedly negative (e.g., smiling), suggesting that the presence of certain rapport behaviours does not always translate into higher perceived rapport from the interviewee's perspective.

Study 2 – External Observers

Results from Study 1 suggest that, for both Rapport and Limited Rapport conditions, the use of nonverbal rapport behaviours by the interviewer had an impact on the interviewee's information disclosure (i.e., the number of details provided about the stimulus video) and perceptions of rapport. In particular, in the Rapport condition, the use of nodding and smiling was most strongly correlated with total details disclosed. In the Limited Rapport condition, smiling and head shaking were most strongly correlated with total details disclosed. These findings suggest that nonverbal rapport behaviours can play a significant role in the effectiveness of investigative interviews and that interviewers should be mindful of their nonverbal behaviours when interacting with interviewees, even in virtual contexts.

However, while the participant's perception of rapport matters to the success of the virtual interview (Dion Larivière et al., 2022), the interviewer's perception of whether they are successful in building rapport is essential to their ability to adapt to the interviewee and optimize the effectiveness of the interview. Having supported the idea that interviewees

do perceive nonverbal behaviours from interviewers in virtual interviews, this raises the question of the ability of external observers to correctly predict the degree of rapport perceived by the interviewee and whether they base their predictions on the nonverbal behaviours displayed by the interviewer.

Although prior work has relied on professional observers (e.g., Richardson & Nash, 2022), Study 2 examines whether non-expert external observers, undergraduate research assistants in this case, can detect rapport and identify relevant nonverbal behaviours in virtual interviews. This approach is relevant because, in many real-world settings, non-expert observers (e.g., trainers, supervisors, peers) may be tasked with reviewing recorded interviews. If these raters can detect and meaningfully interpret nonverbal rapport behaviours, their judgments could support interview quality monitoring. Thus, examining non-expert observer accuracy can provide insight into how rapport is interpreted across perspectives and expertise levels.

In this second study, we sought to answer the following research questions about external observers' perception of rapport using undergraduate research assistants as external observers of virtual mock-witness interviews instead of professionals (e.g., retired detectives) observing mock-suspect interviews.

1. What is the relationship between external observers' ratings of rapport and the interviewer's nonverbal behaviours?
2. What is the relationship between external observers' ratings of rapport and the interviewee participants' perception of rapport?

METHODOLOGY

Design

Study 2 used a within-subjects observational design in which six external observers, blind to the study purpose, rated rapport across a set of 19 interview videos (each of which was either an interview in the Rapport or Limited Rapport conditions). Each observer provided a rapport rating (0–100) for every video. Interviewer nonverbal behaviours were coded for each interview and used as predictor variables. Correlational analyses examined the relationship between external observers' rapport ratings, interviewers' nonverbal behaviours, and interviewees' self-reported rapport ratings.

Participants

Participants, the external observers in this study, were six undergraduate research assistants (M_{age} = 21.7 years old, 50% female, 33% male and 17% preferred not to say), blind to the purpose of the study. Undergraduate research assistants were used in this study for convenience.

Materials

Videos
Participants viewed the substantive phase (i.e., starting when the interviewer asked the interviewee to report everything that they can remember to when the interviewee stopped speaking) for a sample of 19 interviews chosen at random from the given conditions full sample (10 Rapport and 9 Limited Rapport interviews). 9 instead of 10 Limited Rapport videos were included in this sample given that the 10th Limited Rapport video selected was not completed by all observers due to time constraints. On average, these videos were 108 seconds long.

Participants were shown the audio and video for each of the substantive phases, as Grahe & Bernieri (1999) found that external observers who saw both audio and video were most accurately able to judge rapport in an interaction.

Online Questionnaire and Measures
The questionnaire administered to participants was hosted on the Qualtrics survey software. This questionnaire consisted of 79 pages. The first two pages contained a consent form (page 1), and a demographic form (page 2). The remainder of the questionnaire contained the following four pages for each interview video viewed by participants: a space to indicate the unique video interview number, a slider scale ranging from 0 (absence of rapport) to 100 (an extremely high level of rapport), which aimed to capture the observer's level of predicted rapport, an open-ended question asking participants to explain their rapport rating (i.e., "Please explain why you think the interviewee perceived that level of rapport"), and an open-ended question asking participants which nonverbal behaviour(s) they used to make their rapport prediction (e.g., "Please indicate any nonverbal behaviours(s) exhibited by the interviewer that led to your rapport rating"). The last page of the questionnaire contained a debriefing letter informing the participants of the purpose of the study.

Procedure

Participants came to a research laboratory at a Canadian university at the time and date scheduled with the researcher. Upon arrival, they were seated at a desktop computer with a 21-inch monitor, provided with headphones and instructed to read and sign the consent form and begin completing the demographic portion of the Qualtrics questionnaire.

Participants then reviewed a set of paper instructions that were provided to them, which included their participant number and the study procedure. The researcher verbally reminded each participant of the study's use of confidential interviews and asked them to sign a confidentiality form. A researcher then prepared the first video for them to view. After viewing the substantive phase for each interview, participants returned to the Qualtrics questionnaire to rate the degree of rapport that they felt was experienced by the interviewee. Participants also provided open-ended responses explaining their rapport ratings and describing nonverbal behaviours they observed. Once participants completed the questions about a given interview video, the researcher would prepare the following video for them to view. Each participant completed this procedure until they had viewed all 19 videos. They were then debriefed and left the lab.

RESULTS & DISCUSSION

Participants from Study 2 will be referred to as external observers for the remainder of this paper. External observer's rapport ratings were averaged for each interview. We conducted Pearson's correlation coefficients between the average external observer rapport rating, the nonverbal behaviours (both in frequency and duration) and the interviewee's perceptions of rapport.

Research Question #1. *What is the relationship between external observers' ratings of rapport and the interviewer's nonverbal behaviours?*

External observers' rapport ratings were moderately to highly correlated with the different rapport nonverbal behaviours coded for in the present research, as well as with the interviewees' perceptions of rapport. The strongest correlations with external observers' rapport ratings are with time spent nodding ($r =.867$), frequency of smiling ($r =.858$) and time spent smiling ($r =.853$); importantly, these correlations were very strong in magnitude. There were weaker yet moderate correlations between external observers' rapport ratings and time spent looking away ($r =.358$; moderate correlation) and frequency of looking away ($r =.416$; moderate correlation).

Research Question #2. *What is the relationship between external observers' ratings of rapport and the interviewees' perception of rapport?*
External observers' rapport ratings were moderately correlated to interviewees' perceptions of rapport ($r =.415$). See Table 5 for Pearson's correlation coefficients for correlations between external observers' rating of rapport, interviewers' nonverbal behaviours, and interviewees' perceptions of rapport.

Open-Ended Response. External observers were asked to explain their rapport rating, just as interviewees in the original study were, as well as to mention any nonverbal behaviours they might have relied on in providing these ratings. Across the 228 open-ended responses provided by external observers (6 external observers X 19 interviews X 2 open-ended questions), the interviewers smiling was mentioned a total of 70 times. Nodding was mentioned 38 times, and the interviewers touching their faces was mentioned three times. The interviewers shaking their heads was not mentioned by external observers in any of their open-ended responses. Lastly, the interviewer looking away was mentioned 12 times, while the interviewer looking toward or at the

interviewee participant was mentioned 36 times. External observers also pointed to several behaviours not coded for in the present research, such as facial expressions other than smiling (e.g., "straight face" = 8 times). They also mentioned paraverbal aspects of rapport, such as tone and pace of speech, as well as other behaviours, such as laughing (26 times) and hand gestures. Overall, in Study 2, we found that behaviours such as smiling and nodding were strongly correlated with external observers' rating of rapport, suggesting that external observers may rely on certain nonverbal behaviours to evaluate rapport within an interaction. These findings were supported by the external observers' answers to the open-ended questions in which many mentioned the specific nonverbal behaviours coded in this study. In addition, we found only a moderate correlation between external observers' ratings of rapport and interviewee perceptions of rapport, suggesting that external observers may not experience qualities of the interview (e.g., the awkwardness of discussing sexual anatomy) the same as interviewees themselves do.

TABLE 5. *Pearson's Correlation Coefficients for Correlations Between External Observers' Rating of Rapport, Interviewers' Nonverbal Behaviours, and Participants' Perceived Rapport*

	External Observer Rapport Rating (/100)
Participant Perceived Rapport (/100)	.415
Frequency of looking away	.416
Frequency of Nodding	.779
Frequency of head shaking	.684
Frequency of smiling	.858
Freq. Touching face	.635
Duration of looking away	.358
Duration of nodding	.867
Duration of head shaking	.662
Duration of smiling	.853
Duration of touching face	.473

GENERAL DISCUSSION

The purpose of the first study was to examine the effect of interviewers' nonverbal behaviours on interviewees' perceptions of rapport and subsequent information disclosure within virtual investigative interviews by examining whether (1) interviewees can detect nonverbal behaviours in virtual interviews (2) if so, whether and which of these behaviours will lead to an increase in information disclosure and (3) interviewees' perception of rapport.

The results of this study indicate that the use of nonverbal rapport behaviours by the interviewer can affect the interviewee's perceptions of rapport and the amount of information they disclose. In the Rapport condition, nodding and smiling were found to be most strongly correlated with the total number of details disclosed. This is consistent with the nonverbal rapport behaviours described in the literature and the association of rapport building and increased information disclosure (Collins et al., 2002; Gabbert et al., 2020). Although interviewers in the Limited Rapport conditions were instructed to avoid smiling and not explicitly instructed to use head shaking, smiling and head shaking were the nonverbal rapport behaviours most strongly correlated with total details disclosed in the Limited Rapport condition. However, we must consider that these behaviours were infrequent and that the head shaking had lower inter-rater reliability than other behaviours. See Table 2 for the mean and standard deviation for frequency and duration for each nonverbal behaviour.

Interestingly, nodding was moderately correlated with incorrect details in the Rapport condition. This suggests that nodding could lead the interviewee to feel

that they are expected to continue speaking, potentially leading them to report confabulated or inaccurate information. This also suggests that, while nodding may be associated with greater perceptions of rapport, investigative interviewers should be mindful of its potential relationship to the accuracy of the information disclosed during interviews. The reasons for this are understudied. Nahouli and colleagues (2021), however, suggest that nonverbal rapport behaviours are effective in increasing disclosure in investigative interviews as they allow the interviewee to assess the relationship that they are developing with the interviewer more easily, which in turn, decreases the cognitive resources used, leaving more for retrieval. Our findings suggest that the magnitude of this increase is different across nonverbal behaviours, with some potentially having the opposite effect.

Concerning the open-ended explanations given by participants, even though the correlations between the interviewer's nonverbal behaviours and interview outcomes (i.e., perceptions of rapport and information disclosure) were stronger in the Rapport condition compared to the Limited Rapport condition, the Rapport condition interviewees (3%) seldom mentioned nonverbal behaviours. This is unsurprising, considering the impact of nonverbal behaviours largely happens outside of conscious awareness (Patterson, 2019). There is also the possibility that interviewers in the Rapport condition behaved in a way the interviewees expected them to, thus making nonverbal rapport behaviours not particularly salient. Interviewees may have had experience participating in research where the researchers were more likely to be friendly to them, thus informing their expectations. Limited Rapport participants

mentioned nonverbal behaviours much more frequently, perhaps because the interviewer was not behaving how they expected, making the interaction jarring. Those who did refer to nonverbal rapport behaviours in the Rapport condition mentioned nodding, which is consistent with the study's findings. Interestingly, despite the negative correlation of smiling with perceptions of rapport, participants in this condition also mentioned smiling as a behaviour that made them feel a greater degree of rapport with the interviewer. This discrepancy may, once again, be associated with participants' expectations or beliefs regarding what behaviours enhance rapport, which is congruent with External Observer's reliance on smiling, among other nonverbal behaviours, to predict rapport. As was suggested in an article by Bernieri and Gillis (1995) examining participant predictions of rapport in videotaped interactions, participants may have underestimated impactful cues that may be less from an outside perspective (e.g., mutual silence). Open-ended responses from participants in the Limited Rapport condition are consistent with Study 1's findings. 18.2% of participants mentioned one or more nonverbal or paraverbal (e.g., tone of voice; Gabbert et al., 2020) rapport behaviours. At least one participant explicitly mentioned the lack of smiling or nodding in explaining their low rapport rating.

The purpose of the second study was to examine (1) whether external observers who view a portion of the online interaction can provide ratings for the level of rapport they believe was achieved that will match up with that of the interviewee and (2) what information these external observers report using in generating their rapport ratings. We found that behaviours such as smiling and nodding were strongly correlated with external observers' rating of rapport. This finding was supported by the external observers' answers to the open-ended questions. Findings from this study also suggest that external observers rely, at least partially, on nonverbal behaviours when assessing the level of rapport in an interaction.

We were also interested in examining how the external observers' ratings of rapport matched that of interviewees. Interestingly, although there were behaviours negatively correlated with interviewees' perceptions of rapport (e.g., looking away), all nonverbal rapport behaviours included in our research were positively correlated with external observers' perceptions of rapport. We found only a moderate correlation between external observers' ratings of rapport and interviewee perceptions of rapport. This may be because external observers were not direct participants in the interaction and, therefore, were not negatively or positively affected by the interviewer's behaviours, making them less salient. Furthermore, although the external observers viewed the substantive part of the interview and thus became aware of the content of the video, they did not view the video of the woman briefly describing male and female genitalia. External observers may not have accurately grasped the magnitude of the discomfort interviewees had to overcome, thus leading them to underestimate or overestimate rapport. This may have also contributed to the discrepancy between their rapport ratings and that of the interviewees, further highlighting how context is pivotal in the perception of nonverbal behaviours (Patterson et al., 2023).

Overall, we believe our findings hold broader implications in the field of investigative

interviewing pertaining to interviewing training and technology use. First, this findings across Study 1 and 2 suggest that interviewing training, in discussing rapport building, should include a section on the effective use of nonverbal behaviours. This section should be adapted depending on the cultural context within which training and interviewing are taking place. In our experience, discussions of rapport focus more on verbal and active behaviours, and increased awareness of the impact of nonverbal behaviours on rapport may enable interviewers to improve their interviewing skills and ultimately obtain more accurate and detailed information. Second, our findings support the use of visual modality (e.g., video conferencing using webcams) when conducting investigative interviews, as it can capture nonverbal behaviours and potentially improve the interviewer's ability to build rapport with the interviewee. In the context of online interviews, it is thus essential to consider how specific features of video conferencing software and hardware may impact nonverbal communication, which could, in turn, impact rapport building (e.g., absence of webcam, poor video quality, screen size). Investigators seeking to conduct virtual interviews should ensure that both they and the interviewee have the necessary equipment (e.g., high-definition webcam) and technology (e.g., high-speed internet) to optimize the use and perception of nonverbal behaviours in online investigative interviews.

Limitations

The main limitations of this research pertain to our inability to disentangle the effects of verbal and paraverbal rapport building techniques from that of nonverbal. We lacked conditions in which these different components of rapport were isolated.

Nonetheless, findings from the current research align with research conducted by Nahouli and colleagues (2021), in which the authors examined verbal and nonverbal rapport techniques independent from one another in mock witness interviews. Furthermore, the current research was conducted using virtual mock-interviews. The role of nonverbal rapport behaviours may differ when real-life witnesses or victims are being interviewed by the police. Additionally, it is important to consider potential cultural differences in perceptions of rapport and the nonverbal behaviours that may contribute to or hinder its development. Research has suggested that individuals from different cultures perceive and interpret certain nonverbal behaviours differently. For instance, Matsumoto and Hwang (2016), in the APA handbook of nonverbal communication, describe cultural differences in the meaning and acceptability of eye contact. More specifically pertaining to rapport, Bernieri and Gillis (1995) and Matsumoto and Hwang (2021) have examined how culture may affect external judgements of rapport. Bernieri and Gillis (1995) found that Greek and American participants considered similar nonverbal rapport behaviours in assessing rapport in a videotaped interaction. Additionally, Matsumoto and Hwang (2021), in a discussion of the implications of their findings on culture as a moderating variable in the relationship between various components of rapport, suggested that differences in a culture's context dependency may be related to differences in external judgements or perceptions of rapport. The participants in our research all resided in North America, and although they identified with a range of different ethnicities, this may limit the application of the findings beyond North America.

One additional limitation of the current research is that rapport was measured using a single-item slider scale ranging from 0 to 100. While this approach was chosen for practical reasons and to capture participants' overall impression of rapport, it does not allow us to distinguish between the different components of rapport as outlined in multidimensional frameworks (e.g., Tickle-Degnen & Rosenthal, 1990). Future research would benefit from incorporating multi-item, validated scales to assess distinct dimensions of rapport and better understand how specific behaviours contribute to each. Methodologically, another limitation of this research is the use of undergraduate student samples in both studies. In Study 1, interviewees were primarily university students, which may limit the generalizability of the findings to other populations. In Study 2, external observers were also undergraduate research assistants, and only a subset of interviews (n = 19) was used due to practical constraints. These factors may restrict the external validity of the findings, and future research should replicate these studies using more diverse participant pools and larger, more representative interview samples. Furthermore, although videos were presented in randomized order to reduce order effects, it is important to note that we did not formally assess rater concentration or attention during the task. While the number of videos was limited to minimize cognitive load, fluctuations in attention could have impacted rating consistency. Future research may consider incorporating brief attention checks or collecting self-reported measures of fatigue or engagement to monitor this.

Despite these limitations, our findings provide valuable insight into the role of nonverbal behaviours in investigative interviews to improve rapport building skills

and elicit more accurate and detailed information from interviewees.

CONCLUSION

Given this study's exploratory nature, we cannot offer a definitive list of nonverbal behaviours for rapport building in online interviews. Nonetheless, our results support the idea that interviewees perceive the interviewers' nonverbal behaviours in virtual interviews, which is important for practitioners to know. In other words, our results encourage the inclusion of visual modality (e.g., webcams) in such interview settings when relevant and possible (i.e., over the use of phone or audio-only interviews). Without the inclusion of visual modality, perceptions of nonverbal behaviours will be missed entirely, potentially reducing the likelihood of developing rapport.

Our results also highlight areas of nonverbal rapport that require further research. For example, more research is needed regarding what aspects of rapport are linked explicitly to greater information disclosure. Our research found that, while some nonverbal behaviours, such as nodding, were associated with greater disclosure, they were also linked to the provision of incorrect details. As such, these behaviours should be used strategically, with attention to timing, context, and the nature of the information being elicited. More research is needed to help produce more straightforward recommendations to practitioners regarding how to build rapport while minimizing accuracy trade-offs. Further research should also focus on examining the timing of nonverbal behaviours in investigative interviews relative to the different phases of the interview. This may include looking at the timing of nodding, smiling, and other nonverbal behaviours to determine the optimal times (e.g., at the

beginning of the interview) to use them to build rapport and to elicit accurate and detailed information from interviewees. Additionally, examining the interview timeline in terms of the synchronization of nonverbal behaviours between the interviewer and interviewee, and subsequent information disclosure, could provide insight into the mimicry components of rapport building behaviours and how interviewers adapt their nonverbal rapport behaviours to the interviewee's reactions. Future research should also examine how cultural norms may shape the interpretation of nonverbal behaviours and their relationship to perception of rapport in interviewing contexts.

Nonverbal communication is ubiquitous, and most interviewers likely use nonverbal rapport behaviours by default, sometimes without even knowing it, throughout interactions during in-person interviews. Our research suggests that if nonverbal rapport behaviours are employed more strategically or intentionally, they can potentially facilitate positive interview outcomes and perceptions. Ultimately, we hope that the methodology, and open-access resources we used will foster new avenues to examine the nonverbal rapport building components and shed light on their role in virtual and in-person interviews.

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Public Perceptions of Police Interviewing Tactics: The Suitability of Rapport-Based Approaches

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ABSTRACT

For the information elicited within an investigative interview to be admissible in court in many Western countries, the methods used to obtain it must not violate fundamental principles of justice or fairness (i.e., "shock the conscience of the community"). Despite the frequent application of this principle in judicial systems globally, little research exists in which public perceptions of interviewing tactics have been examined. The current research therefore sought to fill this gap in the literature by examining how the public perceives various tactic types (rapport-based, overt, psychological) and if this may differ depending on the type of interview (i.e., investigative vs. intelligence-gathering).

Across two studies, participants (N = 122, N = 133) read transcripts in which a crime had occurred in the past or was believed to occur in the future (the same day or in a week), then provided ratings regarding the effectiveness and appropriateness of various tactics characteristic of three different approaches (overt, psychological or rapport-based). Across perceptions of effectiveness and appropriateness, findings indicated a clear preference for rapport-based tactics. Implications for the "shock the conscience" principle and suspect interviewing more broadly are discussed.

Key Words: Investigative interview, shock the conscience, intelligence gathering, rapport, public perceptions

EXECUTIVE SUMMARY IN SPANISH

Percepción pública de las tácticas de entrevista policial: la idoneidad de los enfoques basados en una relación de confianza (*rapport*)

Antecedentes

En contextos de investigación, las entrevistas a personas sospechosas suelen clasificarse en dos categorías principales: entrevistas de investigación (centradas en hechos pasados) y entrevistas de obtención de información (orientadas a la prevención de delitos futuros). Para recabar información en ambos tipos de entrevista, los investigadores han empleado una variedad de enfoques, entre ellos los basados en el establecimiento de una relación de confianza o *rapport* (como la escucha activa o el interés personal), los de carácter psicológico (como culpar a otros del delito o normalizar la conducta delictiva) y los coercitivos (como el maltrato físico o verbal).

En muchos sistemas judiciales occidentales, para que las pruebas sean admitidas en un tribunal, los métodos empleados para obtener dicha información deben cumplir ciertos requisitos (como la ausencia de coacción y la protección de los derechos de las personas sospechosas) y no deben conmocionar la conciencia de la comunidad. Sin embargo, investigaciones previas indican que la aceptación de determinadas tácticas de entrevista varía según factores como la gravedad del delito y el contexto en que se realiza la entrevista. Pese a la importancia de la percepción pública en la configuración de las prácticas policiales y en la admisibilidad de las pruebas, los estudios sobre este tema siguen siendo escasos.

Métodos

La presente investigación consistió en dos estudios cuyo objetivo fue analizar cómo percibe el público distintos tipos de tácticas de entrevista (basadas en *rapport*, psicológicas y coercitivas) y si estas percepciones varían en función del tipo de entrevista (de investigación o de obtención de información). En el estudio 1, participaron 122 estudiantes universitarios que leyeron transcripciones detalladas de escenarios delictivos relacionados con un secuestro y homicidio que supuestamente había ocurrido en el pasado (contexto de investigación) o que se temía que ocurriera en el futuro (ese mismo día o una semana después; contexto de obtención de información). A continuación, se les presentaron diversas tácticas que podrían aplicarse durante una entrevista a la persona sospechosa y evaluaron su eficacia e idoneidad percibidas mediante escalas de siete puntos. Para mejorar la posibilidad de generalización de los resultados, el estudio 2 replicó esta metodología con 133 miembros del público general reclutados a través de la plataforma Prolific.

Resultados

En ambos estudios, el tipo de entrevista (de investigación u orientada a la obtención de información) no influyó en las percepciones de los participantes. Es decir, independientemente de la finalidad de la entrevista (resolver un delito pasado o prevenir uno futuro), el público mostró una preferencia constante por los enfoques basados en una relación de confianza, en comparación con las tácticas más agresivas o manipuladoras. En términos de eficacia percibida, las tácticas basadas en *rapport* obtuvieron, de forma generalizada, las puntuaciones más altas (M ≈ 5,2), superando ampliamente a las tácticas psicológicas (M ≈ 4,1) y coercitivas (M ≈ 2,8). Este mismo patrón se repitió en las valoraciones sobre la idoneidad percibida de las tácticas, que arrojaron puntuaciones similares: tácticas basadas en *rapport* (M ≈ 5,2), psicológicas (M ≈ 3,8) y coercitivas (M ≈ 1,9). Los tamaños del efecto fueron amplios (todos los d > 0,85) en todas las comparaciones entre las tácticas basadas en *rapport* y los demás tipos de

tácticas evaluadas, lo que refuerza la solidez y fiabilidad de estas preferencias.

Discusión

Este estudio examinó la percepción pública de distintas tácticas de entrevista en contextos de investigación y de obtención de información, comparando tres enfoques: tácticas coercitivas, psicológicas y basadas en una relación de confianza o *rapport*. Los resultados mostraron que las tácticas basadas en *rapport* fueron percibidas de manera más favorable, tanto en términos de idoneidad como de eficacia, mientras que las tácticas coercitivas obtuvieron las valoraciones más bajas. Cabe destacar que estas preferencias se mantuvieron constantes independientemente de si la entrevista se realizaba para investigar delitos pasados o prevenir amenazas futuras. A pesar de la gravedad del delito examinado (secuestro y homicidio), los participantes mantuvieron su preferencia por enfoques basados en la creación de una relación de confianza, en contraposición con estudios anteriores que apuntan a una preferencia por parte del público por tácticas más severas en casos de delitos graves.

Los participantes del presente estudio demostraron un conocimiento relativamente sofisticado sobre la dinámica de las entrevistas. En sus respuestas abiertas, señalaron con frecuencia que los enfoques basados en establecer una relación de confianza crean un entorno más propicio para la obtención de información, y reconocieron que las tácticas agresivas pueden generar declaraciones falsas. Asimismo, muchos de los participantes manifestaron ser conscientes de los riesgos legales asociados a los métodos coercitivos. Estos hallazgos sugieren que, cuando se conoce la existencia de alternativas éticas como el establecimiento de *rapport*, es más probable que la población rechace el uso de métodos coercitivos.

Implicaciones prácticas

Los resultados de esta investigación ofrecen varias implicaciones prácticas de relevancia para el sistema judicial y la formación policial. Por ejemplo, a medida que la población se informa más sobre las técnicas de entrevista (ya sea a través de medios de comunicación o campañas educativas), parece aumentar su respaldo a los enfoques basados en el *rapport*. Además, incluso en situaciones de alta gravedad (como entrevistas relacionadas con delitos graves), el público sigue percibiendo estos métodos como los más adecuados y eficaces para obtener información de personas sospechosas.

Este estudio pone de relieve que, al conocer la existencia de enfoques éticos de entrevista, la población tiende a rechazar el uso de métodos coercitivos. Por tanto, al evaluar los métodos de entrevista conforme al principio de si conmocionan la conciencia de la comunidad, los jueces deberían tener en cuenta la variedad de tácticas disponibles para los investigadores, así como el claro respaldo del público a los enfoques basados en el establecimiento de una relación de confianza, incluso en casos de delitos graves.

En lo que respecta a la formación policial en técnicas de entrevista, los resultados respaldan la necesidad de un cambio fundamental hacia tácticas centradas en el *rapport* que promuevan un entorno cómodo para la persona entrevistada mediante un trato respetuoso y empático por parte del entrevistador (por ejemplo, a través de la escucha activa o demostrando interés personal). Alinear las prácticas policiales con las expectativas del público mediante una formación basada en la evidencia puede contribuir tanto a mejorar la relación con la comunidad como a incrementar la eficacia de las investigaciones.

Introduction

Within an investigative context, there are two broad types of suspect interviews: investigative and intelligence-gathering. While both aim to generate information related to criminal activity, investigative interviews focus on events that have already occurred, whereas intelligence-gathering interviews are concerned with preventing future events (Evans et al., 2010; Hartwig et al., 2014). Regardless of the interview type, for the information obtained to be admissible in judicial proceedings in most Western countries, the interview must meet various criteria, including the absence of oppression, proper notification of legal rights, and the interviewee's cognitive ability to understand their situation (Dufraimont, 2011).

Another critical criterion is that police conduct, including the tactics used to elicit information, must not "shock the conscience of the community" (Her Majesty the Queen vs. Rothman, 1981; Carson, 1994). This general principle for assessing the admissibility of evidence is applied across many Western countries, including Canada, the United States, Germany, and Australia. However, perceptions of what constitutes effective or appropriate interviewing tactics are not fixed, as public opinions often vary depending on the severity of the crime and other contextual factors. Despite this complex relationship, and the significance of public perceptions of police practices, there is a dearth of literature examining these important issues (see Hall et al., 2020 for one example). The current research therefore sought to provide a further understanding of how members of the public perceive the effectiveness and appropriateness of the interviewing tactics

that police may utilize when questioning suspects.

Investigative Interviewing

Interviews with suspects are a critical part of the investigative process, allowing police to obtain information such as confessions or inconsistencies that can be used as evidence in legal proceedings (Leo, 2009). However, suspects often resist cooperation due to a fear of consequences or a distrust of the police. Historically, police employed harsh "third-degree" tactics, including physical and psychological abuse to extract information. These methods were largely abandoned due to ethical concerns and doubts about the reliability of the information they produced (Leo, 2009; Vrij et al., 2017). In response, psychologically-based persuasive interviewing techniques that focused on eliciting confessions were developed (Vrij et al., 2017). However, the use of such techniques has raised concerns about false confessions and wrongful convictions (Russano et al., 2005; Kaplan et al., 2020). As a result, many police organizations have shifted toward more inquisitorial, information-gathering models like the PEACE Model, which prioritize empathy, respect, and rapport-building (Snook et al., 2014). Research has indicated that these supportive approaches are more effective in obtaining accurate confessions and comprehensive information compared to traditional confession-oriented methods (see Meissner et al., 2014).

Rapport-building, specifically, is widely recognized as an effective and ethical technique in suspect interviews, designed to foster trust and cooperation, and thereby, facilitate the gathering of reliable information

(Bull & Soukara, 2010). This approach emphasizes creating an environment where the suspect feels comfortable sharing details. However, some practitioners have expressed concerns that rapport-based tactics are "too soft", arguing that it is insufficiently forceful to effectively elicit confessions or relevant inculpatory information (Snook et al., 2014). Despite these concerns, there is limited research into how the *public* perceives rapport-building in this context. Specifically, it remains unclear whether the general public would view it as an appropriate or overly "soft" strategy for obtaining critical information from suspects.

Intelligence-Gathering Interviewing

As a response to an increase in organized crime during the 1990s, police organizations around the world began developing units or teams specifically to combat these issues (e.g., organized crime or gang related departments; Sheptycki, 2004). Although policing is typically considered reactive in nature, to suppress highly sophisticated criminal activity, police have begun deploying more proactive strategies, which can include intelligence-gathering suspect interviews (Darroch & Mazerolle, 2015; Sanders et al., 2015). These interviews involve an interaction between an investigator and a person suspected of possessing information related to a future criminal occurrence (Evans et al., 2010). The goal of an intelligence gathering interview, regardless of context (i.e., national security or local authority), is to generate information that can then be used to guide the allocation of resources to most effectively prevent or suppress future criminal activity.

Like investigative interviews, the interviewee in intelligence interviews may be reluctant to provide the sought-after information (Dando & Omerod, 2020). In the past, to overcome

such interviewee reluctance from high value detainees (i.e., individuals detained by law enforcement or intelligence agencies who are believed to possess significant intelligence value due to their suspected leadership roles, operational knowledge, or connections to terrorist organizations; Kleinman, 2006; Fallon, 2017), professionals in these contexts have resorted to rather unsavory strategies, sometimes called "enhanced interrogation" methods, which involved waterboarding, sexual humiliation and food/sleep deprivation, amongst others (Dando & Omerod, 2020; Carlsmith & Sood, 2009). Due to concerns regarding the veracity of the information elicited and the ethicalness of these practices, researchers and practitioners alike have since attempted to develop less invasive and more psychological-based tactics (e.g., persuasion, rapport building; Meissner et al., 2017; Wells & Brandon, 2019). For example, the Mendez Principles – which have been adopted by the U.N. as recognized current best interviewing practices – recommend that effective interviewing 1) is informed by science; 2) prioritizes gathering reliable information; 3) addresses the needs of interviewees; 4) is conducted by those with specialized training; 5) requires transparency and accountability from the involved institutions; and 6) requires strong national safeguards (Mendez & Arehi, 2021).

Perceptions of Interview Tactics

Across many Western countries (e.g., Canada, United States, Germany, and Australia) when judges make determinations regarding the admissibility of a statement made by a suspect, an important concept considered is whether the actions engaged in to elicit this statement violate fundamental rights or offend societal norms (i.e., "shock the conscience of the community;" Carson, 1994;

Hall et al., 2020). In the U.S., Rochin v. California (1952) excluded evidence obtained through physically coercive methods, declaring such actions violated the 14th Amendment as they "shock the conscience." Similarly, Canada's R. v. Oickle (2000) excluded confessions obtained through coercive tactics, ruling these practices contravened the Charter's protections of fundamental justice. The U.K.'s *R. v. Mason* (1987) and Australia's *R. v. Swaffield* (1998) excluded evidence due to deceptive or unfair police tactics, emphasizing procedural fairness. However, the specific threshold for what constitutes inadmissible evidence varies between jurisdictions, with some countries like Canada applying a more flexible "totality of circumstances" test, while others like Germany maintain stricter exclusionary rules based on constitutional rights. These differences reflect varying legal traditions and societal values, with some jurisdictions prioritizing crime control and others emphasizing due process protections.

Additionally, perceptions of what constitutes coercion or deception—and thus what "shocks the conscience"—may be influenced by cultural values, which can vary across jurisdictions. For example, these perceptions can be shaped by cultural schemas—cognitive structures that help individuals organize and interpret information based on shared cultural experiences and values (Boutyline & Soter, 2021). These cultural schemas influence social cognition, affecting how individuals perceive and interpret interrogation practices. Consequently, what is deemed coercive or deceptive in one culture may not be perceived the same way in another, underscoring the importance of cultural context in legal decision-making.

Results from research by Hall and colleagues (2020) - in which public perceptions of interviewing tactics were examined - indicated that overt tactics (e.g., physical or verbal abuse) were viewed as less appropriate and effective than psychological tactics (e.g., attempting to reduce the suspect's feelings of guilt, appealing to the suspect's conscience). Interestingly, however, these perceptions were not fixed but varied as a function of contextual factors such as the severity of the crime and confidence in the suspect's guilt (Hall et al., 2020). Specifically, as severity and confidence increased, perceptions of overt tactics became more positive while perceptions of psychological tactics became more negative.

Research conducted from an intelligence-gathering perspective has also indicated that perceptions of tactics are not fixed. For example, Carlsmith and Sood (2009) found that the severity of the interrogation tactics recommended by participants depended on both the amount of knowledge the suspect was believed to possess and the suspect's criminal history. Specifically, as these factors increased (i.e., the more knowledge the suspect was believed to possess, the worse his criminal history was), so too did the severity of the tactics recommended by participants for use within the interview. Additionally, it has been suggested by Janoff-Bulman (2007) that, when it comes to intelligence-gathering interviews, people often imagine a "ticking-time bomb" scenario (i.e., the need for immediate information to avoid an impending threat), which, in turn, results in a preference for harsher tactics (e.g., torture) over more ethical means (e.g., rapport-building). This assumption, however, has yet to be empirically investigated.

Current Research

Despite the relatively high frequency that the "shock the conscience" standard or its equivalent, has been mentioned within judicial proceedings globally, and the major impact that investigative interviewing and intelligence-gathering practices can have on relevant police-related public perceptions, there exists little research on how the tactics employed within these interactions are viewed by the public. To address this gap in the literature, we sought to answer the following:

1. Do public perceptions of the appropriateness and effectiveness differ between interviewing tactics (overt, psychological, or rapport-based)?

2. Does the type of interview (intelligence-gathering v. investigative) influence public perceptions of interview tactic effectiveness and appropriateness?

METHOD

Participants

The original sample for the current study was composed of 133 university students enrolled in introductory psychology courses. After removing participants who did not complete the entire survey ($n = 13$) a sample of 120 remained. Of the final sample, 52 identified as male, 66 as female and 2 neglected to answer. Participant age ranged from 18 – 46 years, with an average of approximately 20. In terms of ethnicity, participants identified as the following: South Asian ($n = 35$), White/Caucasian ($n = 34$), Asian/East Asian ($n = 15$), Black/African ($n = 13$), Arab/North African ($n = 8$), Mixed/Other ($n = 15$).

Materials and Design

We utilized a 3 (Interview Tactic: Rapport vs. Psychological vs. Overt) by 3 (Interview Type: Investigative vs. Intelligence-Gathering-Imminent vs. Intelligence-Gathering-Delayed) Mixed Design, with Interview Tactic as a Within-Participant variable and Interview Type as a Between-Participants variable. This resulted in a total of 3 conditions.

Vignettes. All participants were presented with an overview of a crime that had recently occurred; was believed to occur later the same day; or was believed to occur in the near future.

Investigative. In this scenario, the daughter of a businessman had been kidnapped by local gang members. The gang members requested monetary compensation for the daughter to be returned alive. The businessman could not meet the demands within the timeframe (i.e., 24 hours) put forth by the gang and his daughter was therefore murdered.

Intelligence-Gathering-Imminent (IGI). In this scenario, the police had received information from surveillance and criminal informants that a local gang was planning to abduct the daughter of a wealthy businessman and hold her for ransom. It was also noted that this specific gang had been involved in similar incidents, and when their demands were not met, the person kidnapped had been murdered. At the end of the crime overview, a statement outlining that the police believed this crime would occur later the same day was provided.

Intelligence-Gathering-Delayed (IGD). This condition was identical to the Intelligence-Gathering-Imminent, with one change: at the end of the overview, a statement was provided outlining that police believed this crime would occur in a week.

Suspect information. Identical information pertaining to the suspect was then provided to all conditions. Participants were told that John Brooks had been brought into the station on charges unrelated to the crime previously discussed, however, he was believed to possess knowledge relevant to the kidnapping. It was further noted that Brooks had been a long-time member of this gang, had a criminal record and had recently lost his job. Lastly, it was suggested that Brooks had been seen attending meetings in which it was believed the planning of the kidnapping took place and had been heard stating he was in desperate need of money due to being unemployed.

Interview Strategy. The interview strategy types consisted of Overt, Psychological and Rapport-based. Specifically, 3 tactics for each strategy were included. The specific tactics used for each Strategy type were as follows: Overt – physical abuse, verbal abuse and excessive force; Psychological – reduce guilt, condemn others for the crime and normalize the crime; and Rapport-based – active listening (e.g., avoiding interrupting the suspect when he is speaking), displaying personal interest (e.g., encouraging discussion that is not directly related to the crime) and self-disclosure (e.g., discussing mutual interests).

Appropriateness and Effectiveness. Beneath each tactic participants were asked to provide a rating of appropriateness on a 7-point scale (1 = very inappropriate, 7 = very appropriate). The term "appropriateness" has been used in past research (Hall et al., 2020) and is believed to get at the root of the "shock the consciousness" principle. On a subsequent page, participants then viewed the same tactics previously shown (but in a different order) and were asked to provide a rating of effectiveness for each tactic on a 7-point scale (1 = very ineffective, 7 = very effective).

Procedure

Participants accessed the Qualtrics survey link via SONA. Before starting the study, all participants first read and agreed to a consent form. They then read an overview of a crime that had occurred in the past, was believed to occur the same day or was believed to occur in a week. Participants were then presented with a page containing details related to the suspect. Participants then viewed one of two pages containing a series of interviewing tactics in which they were asked to provide ratings of either effectiveness or appropriateness. The order of the pages (i.e., effectiveness, appropriateness) presented and tactics listed were randomized. Participants were then debriefed and thanked for their time.

RESULTS

Effectiveness

To examine how perceptions of effectiveness may be differentially impacted based on the tactics used by the interviewer and the time of the offence, we conducted a 3 (Rapport, Psychological or Overt) by 3 (Investigative, IGI, IGD) mixed factor ANOVA. Results indicated a significant main effect of Tactic Type on perceptions of effectiveness (F (2, 192) = 124.16, $p < .001$). The Rapport condition (M = 5.12, SD = .86) was rated as more effective than both the Psychological (M = 3.91, SD = 1.20, d = 1.15) and Overt (M = 2.72, SD = 1.40, d = 2.06) conditions. The Psychological condition was also rated as more effective than the Overt condition (d = .91). The effect of Interview Type, however, was not statistically significant (F (2, 96) = .269, p =

.765). Similarly, the observed interaction was not statistically significant (F (4, 192) = 1.61, p = .203). This finding suggests that the type of tactics utilized by an investigator but not the type of interview may meaningfully impact perceptions of effectiveness. Rapport-based tactics were again seen as the most effective method for questioning suspects while overt approaches were seen as the least effective.

Appropriateness

To determine the impact of interview strategy and time of offence on perceptions of appropriateness, a 3 (Rapport, Psychological or Overt) by 3 (Investigative, IGI, IGD) mixed factor ANOVA was conducted. Results indicated a significant main effect of Tactic Type on perceptions of appropriateness (F (2, 192) = 280.21, p < .001). The Rapport condition (M = 5.08, SD = .99) was rated as more appropriate than both the Psychological (M = 3.67, SD = 1.16, d = 1.30) and Overt (M = 1.86, SD = 1.00, d = 3.45) conditions. The Psychological condition was also rated as more appropriate than the Overt condition (d = 1.67). However, neither Interview Type (F (2, 96) = .244, p = .784), nor the interaction (F (4, 114) = .901, p = .409) achieved statistical significance. The type of interview tactics used but not the type of interview appears to impact on perceptions of tactic appropriateness. Specifically, participants demonstrated a strong preference for rapport-based tactics, followed by psychological-based tactics and lastly, overt tactics.

STUDY 2

The goal of Study 2 was the conceptual replication of Study 1 with a sample of general population members. The materials and procedure were all identical to those in Study 2. The only differences were 1) the website

through which participants accessed the survey (i.e., Prolific) and 2) the type of sample collected. Prolific is a publicly accessible platform where researchers can post studies and the public can complete them for financial compensation.

Participants

Study 2 consisted of a sample of 123 general population members collected using Prolific. Each participant received financial remuneration of 1.5£ for completing our study. Of the current sample, 63 identified as male, 58 as female and 2 as other. Participant age ranged from 18 to 68 with a mean of approximately 27 years. In terms of ethnicity, participants identified as the following: Asian/East Asian (n = 45), White/Caucasian (n = 41), South Asian (n = 8), Middle Eastern (n = 5), Black/Caribbean (n = 4), Latino/Hispanic (n = 3), Other (n = 4).

RESULTS

Effectiveness

As in study 1, we examined the potential influence of Tactic Type and Interview Type on perceptions of effectiveness by conducting a 3 (Rapport, Psychological or Overt) by 3 (Investigative, IGI, IGD) mixed factor ANOVA. Results again revealed a significant main effect of Tactic Type on perceptions of effectiveness (F (2, 236) = 132.51, p < .001). The Rapport condition (M = 5.25, SD = .91) was rated as more effective than both the Psychological (M = 4.36, SD = 1.13, d = .86) and Overt (M = 2.82, SD = 1.40, d = 2.05) conditions. The Psychological condition was also rated as more effective than the Overt condition (d = 1.21). Interview Type, however, did not impact perceptions of effectiveness at statistically significant level (F

(2, 118) = 1.80, p = .170), nor did the interaction between the two variables (F (4, 236) = .90, p = .463). As in the previous studies, participants clearly believed Rapport tactics were the most effective, followed by Psychological and then Overt. Also consistent with the earlier studies, the impact of Interview Type was negligible.

Appropriateness

We examined the potential influence of Tactic Type and Interview Type on perceptions of appropriateness, by conducting a 3 (Rapport, Psychological or Overt) by 3 (Investigative, IGI, IGD) mixed factor ANOVA. The analyses revealed a statistically significant main effect of Tactic Type (F (2, 238) = 360.90, p < .001). The Rapport condition (M = 5.33, SD = .95) was rated as more effective than both the Psychological (M = 3.92, SD = 1.30, d = 1.23 and Overt (M = 1.87, SD = 1.06, d = 3.43) conditions. The Psychological condition was also rated as more appropriate than the Overt condition (d = 1.72). Both Interview Type (F (2, 119) = .334, p = .71) and the interaction between the examined variables (F (4, 238) = 2.30, p = .059), failed to achieve statistical significance. Consistent with Studies 1 and 2, the influence of Interview Type on perceptions was negligible. As with our past findings, however, large differences existed between the Tactic Types. Specifically, rapport-based interview approaches were clearly believed to be the most appropriate approach when questioning suspects while overt approaches were seen as highly inappropriate.

GENERAL DISCUSSION

The current research sought to explore how the public perceives interview tactics across intelligence gathering and investigative interviews with the specific goal of improving our understanding of the "shock the conscience" principle. This was accomplished by measuring perceptions of tactic appropriateness and effectiveness as they were applied in an interview with a person believed to have committed a crime in the past (i.e., investigative interview) or to possess information about a crime that was believed to occur in the future (i.e., intelligence gathering). Overall, we generally observed that overt tactics were perceived as the least appropriate and effective of those examined, interview type did not impact perceptions and that rapport-based tactics were consistently rated highest across all dependent variables.

In the Hall et al. (2020) research, they observed that participants perceived psychological tactics as consistently more appropriate than overt tactics. While the relatively negative view of overt tactics was seen as promising, the authors also argued that it was problematic that participants seemed not to detect the coercive nature of the psychological tactics and their potential to elicit false confessions as indicated by previous research (e.g., Klaver et al., 2008; Russano et al., 2005). It was also noted that participants seeming acceptance of the psychological tactics may have been due to these being the only option other than overt tactics (Hall et al., 2020). If psychological tactics were viewed relative to other, more ethical, tactics they may not have been perceived so highly and would have therefore been more likely to "shock the conscience". The current research demonstrated that this was in fact the case. While the psychological tactics were consistently perceived as superior to the overt, they were also consistently perceived as inferior - in terms of both appropriateness and effectiveness -

relative to the rapport tactics. When making determinations regarding what "shocks the conscience" of the community, it may therefore be important that judges consider all methods of questioning available to interviewers. In turn, this may allow the "shock the conscience" concept to be a more effective metric by which the rights of suspects can be protected and due process can be facilitated.

Unlike the Hall et al. (2020) study, we did not manipulate contextual factors related to crime severity or evidence strength. However, the crime the suspect was accused of (i.e., kidnap and murder of a female child) in the current research was severe and the evidence against him was strong. Furthermore, information provided to participants outlined that the suspect had been involved in multiple past criminal offences and had gang affiliations. Findings from the Hall et al. (2020) study as well as elsewhere (e.g., Carlsmith & Sood, 2009) have suggested that lay-people show a general acceptance of more coercive or abusive tactics when the suspect is accused of a particularly severe crime, has a criminal past and there is strong evidence indicating guilt. Our findings, however, did not support this notion, as participants consistently demonstrated a preference for rapport-based tactics.

As mentioned, rapport building tactics were consistently perceived as the most appropriate of those examined across all scenarios included in the conducted studies. Given that rapport-based approaches are founded in concepts such as mutual attention (i.e., focused, cohesive involvement and mutual interest), positivity (i.e., mutual friendliness, caring, and positive affect), and coordination (i.e., fluent interaction and

shared understanding; Tickle-Degnan & Rosenthal, 1990), it is not necessarily surprising that it received such high ratings on this specific measure relative to the other examined tactics. However, given the inherently adversarial nature of suspect interviews and the heinous nature of the suspect's alleged crimes, we believe it to be a noteworthy finding that lay-people continue to believe that rapport-based tactics are the most appropriate for investigators to utilize.

The practice of building rapport in police interviews is widely regarded as crucial to achieving positive outcomes (Gabbert et al., 2020; Vallano & Schreiber-Compo, 2015). However, public perceptions of these tactics can be complex, often shaped by retributive motives and contextual factors like crime severity (Carlsmith & Sood, 2009; Hall et al., 2020). Additionally, practitioners have expressed concerns that rapport-building techniques, such as the PEACE model, may be "too soft" for eliciting confessions (Snook et al., 2014). Despite such concerns, our findings demonstrate that public perception favors rapport-based tactics over more confrontational ones in terms of both effectiveness and appropriateness.

To gain further insight, we also assessed the open-ended responses provided by participants outlining the reasoning for their provided ratings. Interestingly, it appeared many participants accurately detected potential benefits of a rapport-based approach (e.g., "By conducting themselves in a non-hostile and empathetic manner, the police performing the interview had a better chance of receiving information"; "The tactics police used would make the suspect feel more comfortable, hopefully making him express more information"). Additionally, participant open-ended responses seemed to

indicate a partial motivation for their preference for rapport-based tactics being due to the potential dangers of using more coercive or abusive tactics (e.g., "I think the police did the right thing because if they were to be abusive or aggressive they would most likely receive false information…"; "For the police to have done anything more to elicit information, they would have had to take a more threatening route, which would have most likely achieved the opposite and got them in legal trouble").

Recent media portrayals, such as *Making a Murderer* (emphasizing the dangers of coercive tactics) and *Interrogation Raw* (highlighting the benefits of empathy-based approaches), may have increased public awareness of investigative interviewing techniques (Mindthoff et al., 2018). This heightened awareness may have created a more informed public, which police may want to consider when selecting interview strategies. While rapport-building is widely seen as an effective and ethical method for eliciting information (Bull & Soukara, 2010), some researchers suggest it can still be viewed as a form of influence (Crough et al., 2022). However, participants in our study did not perceive rapport-based approaches as problematic or inappropriate in suspect interviews.

Previous research indicates that rapport-building is effective in both investigative (Vallano & Schreiber-Compo, 2015) and intelligence-gathering settings (Alison & Alison, 2017). However, studies by Carlsmith and Sood (2009) and Hall et al. (2020) found that retributive motivations often lead the public to prefer harsher tactics. Furthermore, the "ticking-time bomb" scenario can prompt a belief that more aggressive methods are needed (Janoff-Bulman, 2007). However, our

research reveals that even in high-stakes contexts (e.g., ticking time-bomb scenarios), rapport-based tactics are consistently viewed as the most appropriate and effective for obtaining relevant information.

Limitations

There are several limitations present in the current research that may impact the generalizability of the conclusions. First, although we manipulated whether the assessed crime occurred in the past or was believed to occur in the future, we only examined one specific offence type. It is therefore unknown whether results would have differed if a different crime (e.g., rape, robbery) was assessed. However, given the severity of the offence examined (i.e., kidnap and murder), it seems unlikely that participants would favour more coercive or abusive tactics had a less severe crime been assessed. Secondly, the overarching context in which both interview-types was examined was policing. This is, however, not the only context in which suspect interviews may occur. Thus, how or if our results may translate to other contexts (e.g., military, international) cannot be determined based on the current results. Thirdly, given the lack of deception used when recruiting participants, it is possible that participants were aware of our manipulation, thus raising the possibility of demand characteristics and socially desirable responding.

Fourthly, although our sample was diverse in terms of ethnicities, all participants were either Canadian or residing in Canada at the time of the study. Given that cultural factors can shape perceptions and decision-making, our findings may not generalize to individuals from different cultural backgrounds (e.g., those living in other countries). Future research may consider replicating this work

in other cultural contexts to examine the potential influence of cultural norms and legal traditions on the observed effects. Lastly, although it was outlined clearly to participants when the crime was believed to occur or to have occurred (i.e., the difference between the interview types), it is possible that that they did not detect or appreciate this difference fully.

CONCLUSION

As the debate regarding the appropriateness and effectiveness of interviewing tactics continues amongst academics and practitioners, it is important that voices of the public be heard and considered. This is especially true considering the role that police-public relations plays in the success of both investigations and policing initiatives more generally. As best-practice recommendations within the literature continue to shift in favour of rapport-based tactics, the current research provides clear evidence in support of this transition by members of the public. Additionally, the present findings demonstrate that if lay-people are aware of ethical tactics (e.g., those based in rapport) they are more likely to have their "conscience shocked" by coercive or abusive interviewing practices. Thus, to increase the accuracy of decisions regarding what may "shock the conscience of the community", we recommend that those making these decisions (i.e., judges) take into consideration the public's real opinions on these matters (i.e., the empirical research) as well as the wide array of tactics available to investigators.

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iIIRG

Conducting First Conversations in Cases of Suspected Child Sexual Abuse in Schools

Results of a multi-professional interview study including school, child protection and law enforcement professionals in Germany

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ABSTRACT

Background: In child abuse cases, the testimony of child victim witnesses often stands as the sole evidence. Some responsibility for ensuring the quality of this testimony falls on those who conduct preliminary conversations prior to criminal proceedings. Such conversations must be conducted professionally.

Objective: As one of the largest group of professionals reporting child abuse, teachers often start the initial conversations with children in cases of child sexual abuse (CSA).

Participants and setting: This interview study examined teachers' attitudes and knowledge about communicating with children in cases of suspected CSA, and sought advice from child protection and law enforcement professionals for teachers and school professionals.

Methods: Semi-structured expert interviews were conducted with 45 professionals from Germany. The interviews were analyzed using qualitative content analysis.

Results: The findings of this study align with previous international research, underscoring the need for more comprehensive teacher education. A need for more education on talking to children for school professionals became evident. Furthermore, school was viewed as an ideal place for intervention and support for children in CSA cases.

Conclusion: Developing a training and education program on how to handle cases of suspected CSA to support children in schools is deemed highly important.

Key Words: teacher training; child sexual abuse; interview study; multi-professional; school

EXECUTIVE SUMMARY IN SPANISH

Abordaje de conversaciones iniciales en las escuelas ante sospechas de abuso sexual infantil: resultados de un estudio multiprofesional con entrevistas a profesionales de los ámbitos de la educación, la protección infantil y las fuerzas del orden en Alemania

Antecedentes:

En los casos de abuso infantil, el testimonio de la víctima suele constituir la única prueba disponible. Por ello, los profesionales que trabajan con menores deben estar capacitados para propiciar que estos se sientan en condiciones de relatar lo sucedido. Parte de la responsabilidad de garantizar la calidad de dicho testimonio recae en quienes entablan las conversaciones preliminares con los menores antes del inicio del proceso penal. Estas conversaciones deben desarrollarse con el máximo rigor profesional, ya que los menores son especialmente vulnerables a influencias sugestivas, las cuales pueden derivar en consecuencias adversas en los casos de abuso sexual infantil (ASI) y, por tanto, deben evitarse. Dichas influencias pueden manifestarse, por ejemplo, mediante el uso de técnicas sugestivas, como las preguntas predominantemente cerradas (de sí/no o con opciones múltiples, como «¿Hubo una discusión?») o formulaciones que validan presuposiciones del interlocutor (como «Supongo que no te gustó, ¿verdad?»).

Objetivo:

Dado que el personal docente es uno de los colectivos que con mayor frecuencia detecta y notifica casos de abuso infantil, también suele ser quien mantiene las primeras conversaciones con los menores cuando se observan indicios de ASI. En la actualidad, en Alemania, el profesorado recibe escasa formación específica sobre cómo abordar adecuadamente estas interacciones iniciales. No obstante, recientes reformas legislativas exigen a los centros escolares la elaboración de un plan de protección infantil que contemple actuaciones concretas ante sospechas de ASI. Se hace, por tanto, necesario investigar qué conocimientos posee el profesorado alemán sobre cómo comunicarse con los menores ante sospechas de ASI. Esta información permitirá diseñar programas específicos de formación docente y contribuirá al desarrollo de planes escolares de protección infantil.

Participantes y contexto:

El estudio, basado en entrevistas, exploró las actitudes y los conocimientos del personal docente sobre cómo comunicarse con menores en casos de sospecha de ASI, y recogió perspectivas y recomendaciones de profesionales del ámbito de la protección infantil y las fuerzas del orden dirigidas a docentes y otros profesionales escolares. Se incluyó a profesionales escolares por su experiencia directa en sus propios centros, y a profesionales de los ámbitos de la protección infantil y las fuerzas del orden por su experiencia y conocimientos especializados en casos de ASI.

Método:

Se realizaron entrevistas semiestructuradas a 45 profesionales en Alemania. Las entrevistas fueron analizadas mediante análisis de contenido cualitativo. Para ello, se elaboró un sistema de codificación que fue evaluado mediante codificación consensuada y cálculo del índice de concordancia entre codificadores. Los resultados del sistema de codificación demostraron un alto grado de concordancia entre codificadores, lo que respalda la fiabilidad del sistema de codificación empleado en el análisis de contenido cualitativo.

Resultados:

Los hallazgos del estudio coinciden con investigaciones internacionales previas y refuerzan la necesidad de una formación más sólida del profesorado en relación con las conversaciones iniciales con menores ante sospechas de ASI. Tanto los profesionales del ámbito escolar como los ajenos a él señalaron esta necesidad. Si bien algunos profesionales escolares demostraron contar con conocimientos adecuados sobre cómo comunicarse con un menor ante sospechas de ASI, otros expresaron desconocimiento y mostraron interés en recibir formación específica. La mayoría de los profesionales escolares eran conscientes del riesgo de influir en los menores mediante técnicas sugestivas; sin embargo, algunos participantes lo desconocían. Los profesionales ajenos al ámbito escolar subrayaron la importancia de sensibilizar a los profesionales escolares sobre el riesgo de la influencia sugestiva en las conversaciones sobre sospechas de ASI. Asimismo, se señaló que la escuela constituye un espacio privilegiado para la intervención y el acompañamiento de menores víctimas de ASI. Los profesionales escolares reconocieron su responsabilidad a la hora de ofrecer apoyo a los alumnos afectados por el ASI y la necesidad de actuar como figuras de referencia en quienes estos puedan confiar. Los profesionales ajenos al ámbito escolar destacaron, además, el papel de la escuela como «sistema de radar» para la protección de los alumnos y remarcaron la importancia de que el profesorado sea consciente de que puede haber víctimas de ASI en sus aulas.

Conclusión:

Resulta de suma importancia desarrollar un programa de formación y educación específico sobre el abordaje de situaciones de sospecha de ASI que proporcione herramientas para apoyar al menor desde el entorno escolar. Los profesionales escolares se sienten responsables de actuar ante sospechas de ASI, pero necesitan formación para hacerlo de manera profesional, centrada en el acompañamiento al menor y minimizando el uso de preguntas sugestivas. Si las escuelas establecen canales de cooperación con profesionales ajenos al ámbito escolar, podrán beneficiarse de la experiencia y conocimientos especializados que estos aportan en casos de ASI. Hace falta seguir elaborando y evaluando protocolos que permitan abordar con profesionalidad, en el ámbito escolar, las situaciones de sospecha de ASI.

Introduction

Conducting Child sexual abuse (CSA) is a pervasive problem worldwide, affecting children of every age, gender and nationality (Singh et al., 2014; Stoltenborgh et al., 2011). Given that all children in Germany are required to attend school until the age of 15, school can play a critical role in identifying and addressing cases of CSA as well as supporting affected children. In such situations, initiating a professional and carefully documented conversation with the child opens up the possibility of reporting of sexual abuse (Brubacher et al., 2016). Although several studies from different countries have explored the overall topic of CSA and its disclosure, few have focused on how teachers, school social workers, and principals talk to children in cases of CSA. In order to provide suitable further training in this area, there is a clear need to assess teachers' knowledge and experiences of CSA and CSA disclosure. Teachers and other school professionals need to be trained in how they to talk to children in CSA cases as mistakes in communicating with victimized pupils can lead to challenges for judicial proceedings and the work of law enforcement. Additionally, suggestive influencing in first conversations can lead to false memories for children (Bruck & Ceci, 1999).

1.1 *The importance of CSA disclosure*

Because physical evidence is often scarce in sexual abuse cases, the child's testimony is typically the central component of a child criminal investigation (Earhart et al., 2016). Early disclosure can greatly facilitate an effective criminal investigation of suspected abuse, thereby increasing the likelihood of conviction of the perpetrator. The likelihood of filing criminal charges generally decreases as the time between abuse and disclosure increases (Treibel et al., 2019).

Literature reviews as well as empirical studies suggest that about a half to two-thirds of adults today who experienced CSA did not disclose the incidents when they occurred (Hébert et al., 2009; London et al., 2008). This appears to be due less to the child's inherent inability to report and more to the lack of an appropriate person to confide in or the lack of an opportunity to have such a conversation (Faller, 2016; Schaeffer et al., 2011). Children who have experienced sexual abuse should be given the earliest opportunity to disclose their experiences to a trusted adult. The sooner children can report such incidents, the sooner they can receive support or protection from further harm. Social support in general is considered an important protective factor against the negative psychological effects of sexual abuse (Murthi & Espelage, 2005; Tremblay et al., 1999). Similarly, therapeutic interventions are more effective when initiated promptly after a traumatic event (Pipe et al., 2007). Teachers and other professionals in schools can act as confidants for children who have experienced CSA. Efrati and Gewirtz-Meydan (2022) report that teachers are perceived more approachable and more accepting if they actively mediate CSA. Thus, it is necessary to effectively communicate how they can foster an environment conducive to disclosure.

1.2 *Disclosure of CSA*

The majority of children disclose their CSA experiences to peers or their mothers (Hofherr, 2017). However, there is a shift in

recipients of CSA disclosure, which comes with age: While younger children are more likely to disclose CSA to their mothers, older children and teenagers tend to address their disclosure to peers (Hershkowitz et al., 2007). Teachers can be an additional option for children to disclose to. A retrospective study by Schaeffer et al. (2011) showed that teachers are the first recipients of disclosure in 7.4% of CSA cases. Notably, children who experience intrafamilial CSA were more likely to disclose to trusted teachers than to their mothers (Christmann 2021; Münzer et al., 2016). This shows, that receptive and trustworthy teachers can fill a gap as a trustworthy adult for children who are experiencing intrafamilial CSA. By responding appropriately in such situations, teachers and school social workers can position themselves as trustworthy individuals (Christmann, 2021). A key prerequisite for facilitating disclosure is to give children the opportunity to confide in someone. Retrospective studies show that adults who were abused as children were neither asked about their well-being (Lemaigre et al., 2017; Magnusson et al., 2017; Schaeffer et al., 2011) nor given the opportunity to discuss their childhood situations (Hershkowitz et al., 2007; Schaefferet al., 2011). Importantly, direct questions about abuse are not necessary; often, a general question about well-being is enough for children to open up (McElvaney, 2015; Schaeffer et al., 2011). Conversations in which children disclose their CSA experiences can be initiated by the children themselves as well as trusted adults. Therefore, it is necessary for teachers to be educated on the effects of CSA to know when to examine a suspicion of CSA and engage in an initial conversation. The effects of CSA differ and there is no set of signs which clearly indicates

that a child has experienced CSA (Finkelhor, 1990). Sudden changes in behaviour (e.g. a sudden drop in school performance, enuresis, unusual sexual behaviour) can be a reason for teachers to talk to a pupil about their wellbeing (Volbert & Kuhle, 2019). In such conversations, it is very important for teachers to not confront the pupil with a potential suspicion and stay open to alternative explanations (e.g. conflicts with parents, death of a family member) for the observed changes in behaviour (Brown & Lamb, 2015). When initiating such a conversation, teachers should be open about why they want to talk to their pupil (e.g. "I've noticed that you rarely play with the others during the break."), facilitate the pupil's willingness to open up (e.g. "I want to know how you are at the moment."), and assess possible stress (e.g. "There might be no reason for this change. But, I do want to talk to you about it.") (Hershkowitz et al., 2007; Niehaus et al., 2017).

Trust facilitates the disclosure process (Lemaigre et al., 2017), and being trustful is important when talking to children. However, adults who express strong emotional involvement may discourage children from disclosing (Hershkowitz et al., 2007). For this reason, school professionals should strive to maintain neutrality whilst still being supportive – a balance that can be challenging to achieve (Volbert, 2015).

1.3 Communicating with children in cases of suspected CSA

Talking to children about CSA is challenging for both children and professionals, and requires a different approach than other types of school conversations (Brubacher et al., 2016). While adults know the expected response in most conversations at school, this

is not the case when CSA is suspected. Therefore, encouraging free reporting through the use of open-ended questions is essential in these conversations (Brown & Lamb, 2015; Brubacher et al., 2016). Asking closed yes-no questions or those that dictate specific answers inhibit free reporting (Brubacher et al., 2016).

Even when teachers have a strong relationship with students, it is important to continue to build rapport with students in order to encourage them to overcome barriers that may inhibit their willingness to report (Hershkowitz et al., 2017; Zajac & Brown, 2018). Unlike in police or court hearings, teachers do not need to know the details of the abuse; they only need to determine whether a child has been exposed to abuse, and whether there is an imminent risk of recurrence. According to Bibou-Nakou and Markos (2017) teachers are often unsure of their responsibilities and think that they are responsible for gathering more information than they actually should.

Whilst considering these factors, teachers must also be careful not to (un-)consciously influence children to recount things that did not really happen to them. The tendency to talk to a child in a way that confirms one's own assumption is confirmed is referred to as "interviewer bias" (Duke et al., 2016) and different suggestive techniques can indeed influence children, their testimonies, and their memories (Bruck & Ceci, 1999). In fact, children's suggestibility is susceptible to social influences. This is especially true if the child's conversation partner has certain pre-conceived assumptions that they then try to confirm during the conversation (Bruck & Ceci, 1999). To prevent their behaviours – even subtle ones – from inadvertently

influencing the child's narrative, school professionals who suspect that a child may be experiencing CSA must reflect on their own assumptions before they initiate a conversation with that child (Brown & Lamb, 2015; vom Schemm et al., 2008).

When talking about suspected CSA, children may ask their teachers or school social workers to maintain confidentiality. Promising confidentiality puts professionals in a difficult position: it means they cannot intervene without breaking their promise to the child, which may cause the child to lose trust in them. Therefore, instead of promising children confidentiality, school professionals should be transparent about their obligation to share certain information with others (Brubacher et al. 2016). Given the complexities of discussing CSA with children, it is critical to examine teachers' knowledge and attitudes on the topic.

1.4 *Teachers' knowledge and attitudes regarding* CSA

Newly trained teachers in the United Kingdom have expressed a clear need for training on how to talk to children in cases of suspected CSA (Baginsky & Macpherson, 2005). Further international studies like that by Cowan et al. (2019) found that teachers are ill-prepared to talk to children or to react appropriately in cases of CSA disclosure. This need is underscored by the findings of Alaggia (2010), who interviewed adult survivors of CSA. According to the survivor reports, teachers rarely initiate conversations with children about issues such as CSA. In addition, the reactions of teachers following CSA disclosures are often unhelpful or expected to be problematic. Survivor reports indicated that teachers were uninvolved in

their pupil's wellbeing or expected to not believe a CSA disclosure (Alaggia, 2010).

Numerous studies point to the need for teacher qualifications in the area of CSA (Abrahams et al., 1992; Cowan et al., 2019; Greytak, 2009; O'Toole et al., 1999). The lack of teacher training on CSA appears to be a worldwide challenge (Al-Zboon & Ahmad, 2016; Goldschmidt-Gjerløw, 2019).

In Germany, which is the focus of this paper, studies on this topic primarily revolve around sexual abuse in general rather than how to conduct a conversation. For example, Glammeier (2019) emphasizes that many teachers and student teachers in Germany doubt the reality of sexual violence. Yet a significant number of teachers and principals report being confronted with cases of suspected CSA. Indeed, approximately 41.4% of teachers and principals in Germany suspected at least one case of CSA in their schools during the past three years (Helming et al., 2011). Despite their suspicions, however, school professionals often do not intervene when suspecting CSA (Kenny, 2004) – most likely because their schools lack a comprehensive concept and guidelines for CSA prevention and intervention (Gubbels et al., 2021; Helming et al., 2011). Moreover, teachers seem to use fewer open questions and more leading questions in mock interviews with children which is not desirable or confirming with current forensic evidence and best practice (Brubacher et al., 2014). To initiate a conversation with children is the starting point for further help and should therefore be the focus of training measures. A training program for teachers on how to conduct initial conversations in cases of suspected CSA has been shown to be effective in increasing teachers' use of open-ended questions and socio-emotional support (Krause et al., 2024).

2. Research questions and aim of the study

Teachers are an appropriate target group for research on CSA because of the potentially significant support they can provide in CSA cases. Therefore, teachers must be aware of their importance as potential resources for children who may be experiencing CSA. To facilitate disclosure, teachers need not only knowledge but also strategies for action. In order to identify starting points for appropriate training measures, the present study aimed to shed light on the knowledge of teachers and other school professionals, such as social workers and principals. To develop tailored training interventions, we sought recommendations for teacher training from child protection and law enforcement professionals. There is a lack of research in Germany on schools and how they deal with CSA, as well as a lack of mandatory teacher training. Legislative changes in some German states have made the development of a "Schutzkonzept" (a child protection plan) which has become mandatory in schools. The "Schutzkonzept" aims to prevent CSA and to provide guidance on dealing with CSA suspicions. School development in Germany is currently focusing on CSA. Research is needed on schools and school professionals in dealing with these requirements. Therefore, this study explores the following topics:

- Perceptions of schools and school professionals for facilitating CSA disclosure.

- Knowledge of school professionals of how to conduct first conversations in CSA cases.

- Advice to school professionals on talking to children from child protection and law enforcement professionals.

METHOD

Semi-structured expert interviews were conducted to address the research questions for this study. The interviews were designed to gain insight into the professionals' knowledge regarding CSA (Bogner et al., 2014; Misoch, 2019). Data was collected from November 10th 2021 until May 1st 2022. Participants were recruited based on their knowledge of either CSA and child protection (child protection and law enforcement professionals) or their knowledge of schools and school development (school professionals). To that end, experts from school (n=15), child protection (n=20) and law enforcement (n=10) were interviewed. The interview protocol, which structured the interview in several thematic parts, was developed based on Kruse (2015) to ensure that all interviews covered the same topic areas. The experts were asked about the following topics:

(i) school as a place of disclosure (e.g. "What tasks do you see in dealing with the victims of CSA?"),

(ii) initial conversations with children (e.g. "Do you have the confidence to conduct an initial conversation with a child? [If not: What would you do instead?]"), and

(iii) suggestive influencing (e.g. "Do you see a risk of unwanted influence during a conversation?").

Prior to the actual interviews, which were conducted by four different interviewers, we tested the interview protocol under real-life conditions in two different phases of pilot

testing (Kruse, 2015). In the first phase of pilot testing, eight interviews were conducted with professionals related to school, child protection or law enforcement. Possible pitfalls and incomprehensible questions were discussed after each interview section. The test interviews were documented and changes were made to the interview protocol as proposed in the test interviews (e.g., some questions were fitted for a certain professional group). Following this, in the second phase of pilot testing another four interviews were conducted with the revised interview protocol. These interviews again included related professionals and led to no further changes to the interview protocol. The interview protocol was then used to conduct the interviews for the main study and fitted for each professional group included (school, child protection, law enforcement). Most of these interviews took place face-to-face, with a few exceptions that were conducted via videoconferencing (Cisco WebEx). Prior to the interviews, all participants received detailed information about the project and signed an information consent form. They also completed a form to collect their socio-demographic data. Student assistants and research assistants transcribed the interviews after a comprehensive briefing. The data was then imported in MAXQDA and document variables for the socio-demographic data were created by one author. Document variables are used within MAXQDA to perform comparisons on the basis of socio-demographic data. They can be used to analyze the interview material (Kuckartz & Rädiker, 2020).

The interviews were analysed using Kuckartz's (2018) qualitative content analysis method. During this phase, codes were deductively developed on the basis of the

interview guidelines. The first preliminary set of codes was developed based on current research on the topic as well as the expected responses of the interviewees to the questions in the interview guideline. To identify the number of codes and potentially add on to the first set of codes, an initial interview was coded by the entire project team of five researchers. This resulted in additional codes being developed inductively by way of reference to materials. In a second step, four further interviews were then coded concurrently by working in pairs (Kuckartz, 2018). The remaining 40 interviews were divided among the project team and coded individually. The following system of codes was used for the content analysis:

TABLE 1. *Code System*

Code	Subcode	Definition	Intercoder agreement (%)	Illustrative examples
Initial conversations and disclosure		The category comprises knowledge about initial conversations (initiated by a child or teacher) in a school when suspecting CSA and CSA disclosure.		
	Conditions of initial conversation	All sections that focus on preparation for and follow-up of an initial conversation.	57.14	"I also don't know whether I would do it here in the office or whether we would arrange to meet in the classroom. Where the children feel reasonably comfortable, where they are free and where they would dare to say something." (translated quote; Pp03/36)
	Talking to children	All sections that focus on conversation techniques and how to talk to children during an initial conversation.	97.06	"I wouldn't put it under pressure and if I realized that I was done talking, then that would be okay too. And above all, I wouldn't keep it there against their will, so to speak, or put them under pressure." (translated quote; Te03/20)
	Needs for qualification	All sections that focus on the need for qualification among school professionals within the context of an initial conversation with children in cases of suspected CSA.	63.64	"I think teachers also need to be well coached in how to conduct conversations so that they don't ask specific questions. I think that's very important." (translated quote; CPE01/22)
Problem of suggestibility		The category comprises a lack of knowledge about the exertion of (un-)conscious influences on children when talking with them about suspected CSA.		

Known	Sections that indicate the interviewee's awareness about the issue of suggestibility.	100	"Well, you can always ask bad questions or something. So that can happen, in any case. That's why you have to be very careful how you ask. And sometimes you just ask in such a way that you perhaps put something in the child's mouth or something similar." (translated quote; SSW05/34)
Unknown	Sections that indicate the interviewee's lack of awareness about the problem of suggestibility.	100	"To influence the child in what direction? To give a false testimony or a testimony that they don't agree with? (…) No, I don't think that's possible." (translated quote; Pp01/46)

The resulting code system was evaluated after all interviews had been coded. A research assistant who had no prior knowledge of the code system (except of the code definitions and one exemplary text section for each code) was appointed to code n=9 interviews (one of each professional group) on their own. Then, their codes were compared with the original set of codes leading to small adjustments in the original coding (e.g. in cases where section were coded by the first author which did not really fit the definition). The intercoder agreement was then calculated using MAXQDA (Kuckartz, 2018), yielding an intercoder agreement of 84.93% for the whole code system, with Cohen's κ = 0.81. This indicates very good intercoder agreement, demonstrating the reliability of the code system used for data analysis (Kuckartz & Rädiker, 2022).

3.1 Sample

The socio-demographic information for our dataset was collected from the self-reported data of participants; see Table 2. The sample included professionals from the three aforementioned groups: school, child protection and law enforcement. To clarify the German context to international readers, the differences between the professionals from child protection will be described briefly. The "InsoFa" is a child protection expert in Germany who can be contacted by other professionals, such as teachers, and offers anonymous case consultation. Youth welfare professionals are responsible for supporting children and their families and ensuring that children grow up in a safe and caring environment. Counseling centers can be contacted by victims of CSA, their families or other professionals for advice on how to deal with (suspected) CSA. Psychosocial court support has been implemented as an interface between child protection and law enforcement. Professionals from this profession are advocating for the needs of CSA survivors in court cases without giving any legal advice (e.g. they may familiarize children with court proceedings and visit the court before the trial to familiarize them).

TABLE 2. *Socio-demographic information*

School (n=15)	Child protection (n=20)	Law enforcement (n=10)
5 teachers (Te) 5 principals (Pp) 5 school social workers (SSW)	5 InsoFa (CPE) 5 youth welfare office (YWO) 5 counselling centre (CC) 5 psychosocial support in criminal trials (PCS)	5 police (Po) 5 prosecutors (Pr)
Experience with cases of CSA:		
4 experienced 11 inexperienced	17 experienced 3 inexperienced	10 experienced
Age:		
mean = 47.23 years, min =30 years, max = 68 years		
Gender: 31 women, 14 men		
In the field since:		
mean = 13.77 years, min = 1 year, max = 38 years		

RESULTS

The interviews provided important insights into professionals' knowledge about communicating with children in cases of suspected CSA. These findings are presented in terms of three topics: disclosing CSA, initial conversations with children in cases of suspected CSA, and the suggestibility of children. Interview data are cited by occupation, individual interview number and the segment number.

4.1 Schools as places for CSA disclosure

Results that cover schools as places for CSA disclosure will be presented in the following section. First, we present interview sections that focus on the conditions of initial conversations, with an emphasis on enabling CSA disclosure. Second, the presentation focuses on the perceived qualification needs for school professionals to become possible recipients of CSA disclosure.

4.1.1 Conditions of initial conversations

The following quote by a school principal offers some initial insight into this topic:

"I believe that school should provide a trustworthy environment where children can disclose any burdens that they cannot or do not want to talk about at home. It is especially important that they can trust everyone at school, including their teachers, me as their principal and the school social workers. This is an essential task that school should and must fulfil. This is my understanding of working with children with any kind of difficulty, not only in terms of CSA, but on a more basic level. If they cannot solve their problem at home, it is our responsibility to help them." (translated quote; Pp01/18)

Here, the speaker outlines a basic understanding of the role of school for children who are experiencing problems. The statement suggests that school professionals do indeed see themselves as responsible for

dealing with the problems of their students. This self-conception is supported by other school professionals (Te01/88; Te02/83; Pp04/16; SSW05/72).

Non-school professionals were asked for their advice on the topic for school professionals. A youth welfare office worker further stressed the importance of school professionals taking on this responsibility:

"There is a need for trusted persons outside the child's or adolescent's family who often are or can often be teachers. But they have to present themselves as such and take their time. And also show real interest in the child or adolescent and really observe them, how they are and sometimes what they say." (translated quote; YWO01/68)

Here, the helping system professional calls on teachers to take the responsibility for presenting themselves as individuals who are open to receiving disclosures. This call by a police officer emphasizes the potential of schools as a place of disclosure:

"School is a very important place to look for signs of stress – a kind of radar system. I would expect teachers to be aware of CSA. To keep an eye out for possible changes children's behaviour. That they might also have an open ear when children tell them about problems their classmates might be having. Of course, I know it is hard for teachers to keep their eyes open for about 25-28 kids but they should especially keep their eyes open so that they do not ignore more quiet kids." (translated quote; Po05/38)

By referring to school as a "radar system" (translated quote; Po05/38), this police officer underscores the importance of schools as places where CSA can be disclosed.

4.1.2 Needs for qualification

The following quote shows that there is a need for further training on how to respond appropriately to CSA disclosure:

"For them [teachers] to know: How do I initiate a conversation like this?'. What do I need to be aware of? How do I inhibit disclosure/'. […] That they are aware of the issue […]. And that is something that could be done through training." (translated quote; SSW01/114)

This school social worker identifies the need for more teacher training on what to look for when talking to children about suspected CSA, and when to initiate a conversation and ask children about their problems. This call for more education on the topic of CSA is echoed by other school professionals (Te01/118; SSW04/84) – and by professionals outside the school system. As one psychosocial support professional noted:

"And then, as part of creating a protective environment for children in school, there should be some kind of workshop on what signs of CSA can I see and how can I respond? Then, how do I talk to the child about my observations without manipulating them in a certain direction?" (translated quote; PCS03/46)

In order to ensure a safe and protective environment for children at school, this professional insists on the need for additional training for professionals working in schools. This demand is also supported by child protection and law enforcement professionals (CC01/24; CC05/26; Pr02/102). To address this issue, a training program focused on child sexual abuse is a potential solution. When children disclose incidents of CSA, having a solid knowledge about how to

respond is critically important, as the child protection expert notes:

"But I often felt too much insecurity which resulted in no one even talking to the children anymore." (translated quote; CPE05/8)

The statement serves to remind teachers that, as challenging as it may be, they need to talk to children in situations of suspected CSA.

4.2 Having initial conversations with children

An initial conversation with a child is the conversation during which children first disclose their experience of CSA. This situation is highly complex, and there are many factors to consider when conducting an initial conversation with a child who has just disclosed CSA. This section presents the findings on talking to children followed by a section on the need for qualification in talking to children when suspecting the child may have experienced CSA.

4.2.1 Talking to children

Professionals within the school system have demonstrated their willingness to initiate these crucial initial conversations with children who they suspect to have experienced CSA:

"I would try to talk to the child and I would try to let them describe as much as possible." (translated quote; Pp02/36)

Beyond the willingness to start an initial conversation, this teacher also demonstrates a deeper understanding of the factors that need to be considered during such a conversation with a child:

"I would take my time to really listen to the child and to make them feel like they could trust me and disclose their experiences. I

wouldn't pressure them, and if I felt they didn't want to talk anymore, that would be okay. And most importantly, I wouldn't keep them here if they didn't want to or pressure them at all." (translated quote; Te03/20)

Ensuring stability and support for children who disclose experiences of CSA without influencing their behaviour or exerting undue pressure on them is difficult.

Non-school professionals were asked for advice on this topic as well. This police officer gave a brief but very comprehensive overview of what to consider when talking to children:

"You should participate in the conversation mainly as a listener. You are not the person who should do most of the talking. However, this can be difficult with children, who often give only a brief description of an event or use gestures or facial expressions to indicate what might have happened. You should be very careful about what you ask and how you frame the questions. In particular, don't use closed questions to lead the child to a statement that you want to hear or that you expect them to make by using closed questions but rather use open-ended questions. Use wh-questions: How did it happen? What happened next? Try to encourage the child to tell their story in their own words without making demands or leading the story in a particular direction by using closed questions such as yes-no-questions." (translated quote; Po05/16)

School professionals and non-school professionals alike agreed that it is important to prevent and react appropriately to child maltreatment.

4.2.2 Needs for qualification

Here, results are presented of needs for further qualification when talking to children

in cases of suspected CSA. A teacher raised a question that highlights the need for further training on how to communicate with children during an initial conversation:

"How do I talk to children? Often, the question isn't what to do, but how to conduct an initial conversation. How do I do it?" (translated quote; Te01/118)

There seems to be a general uncertainty about how to talk to a child who discloses CSA and how to respond appropriately and continue the conversation in such a situation. One of the interviewed principals stressed this concern:

"Also, how do I behave in a conversation about CSA? This would also be important for teachers to know how to behave correctly? I don't know any colleagues who don't want to deal with CSA but maybe some of them go too far or do something that is wrong in this case. But they don't do it out of bad intentions but instead because they just don't know any better." (translated quote; Pp05/88)

Clearly, school professionals see a need for further education on how to handle cases of suspected CSA. As one interviewee commented:

"What am I aware of when I talk to children? First of all, to build trust. That I tell the children first, and I always do that when they come, that everything we talk about in this room is between us. That it is a conversation just between me and them. Everything else is established within a conversation." (translated quote; SSW01/56)

School and non-school professionals alike point to a need for more education about how to talk to children in cases of suspected CSA. Notably, teachers, school social workers, and

principals see themselves as responsible for addressing cases of suspected CSA.

4.3 *The suggestibility of children in cases of suspected CSA*

Suggestibility is a major factor for all professionals who talk to children about suspected CSA to consider during their initial conversations. Although suggestibility is addressed in the previous chapter on talking to children, it presents a unique challenge to all professionals who interact with child witnesses. For this reason, our findings on this topic are presented in a separate section. In a first section, findings are presented where professionals showed to be aware of the suggestibility of children. This is followed up by a section focusing on professionals who were unaware of the possibility of suggestive influences in conversations with children, before looking at possible training needs for school professionals.

4.3.1 *Known*

Most of the school professionals we interviewed were aware of the possibility of influencing children through suggestive techniques, as one interviewee noted:

"Without being suggestive but also without resting the case too early and thinking it is safe because nothing happens." (translated quote; Te01/118)

Most of the school professionals recognized the issue of suggestibility (Te01/48; Te03/56; Pp03/38; SSW05/34-36). As one teacher noted:

"I wouldn't talk to the children about my suspicions, I would rather give them the opportunity to tell me. Well, I wouldn't say something like: ,Is there someone who has abused you?' or something like that, but

rather 'Why are you not doing so well? What is going on? […]' I would ask for different possibilities: ,What is going on?' But, I wouldn't name that first suspicion. I would <u>never</u> do that, Well, because I could influence their narrative and I don't want to do that." (translated quote; Te04/56)

4.3.2 Unkown

Nevertheless, some of the professionals we interviewed lacked the necessary awareness of how asking certain questions or behaving in a suggestive manner can influence children:

"I don't think I can make children believe that [they have experienced CSA] if they haven't really experienced it. That can happen, but I don't think that's the most important aspect of talking to children." (translated quote; Te02/51)

Here, the teacher apparently believes that children cannot be influenced into believing something that has not actually happened to them. The following comment by a principal we interviewed shows the same assumption about children's invulnerability to suggestive influence:

"To influence the child in what direction? To give a false testimony or a testimony that they don't agree with? (…) No, I don't think that's possible." (translated quote; Pp01/46)

4.3.3 Needs for qualification

Child protection and law enforcement professionals were very specific about the need to be aware of suggestibility in initial conversations in CSA cases. Lack of knowledge about suggestibility is highlighted by this police office as a key content for future training programs for professionals in schools:

"The earlier an untrained person interacts with a child in an interview situation, the more a suggestible child can be influenced in the wrong direction. And we can't undo the damage that has already been done to the report and the child's memory when they go to the police station to file their report. Because eventually the child will believe what the teacher wants them to believe. I don't even want to assume bad intentions, I think it's just a lack of knowledge. […] And I think that is very dangerous." (translated quote; Po03/26)

In addition, this child protection expert recommends being aware of suggestive influences and offers tips on how to avoid suggestive questions during initial conversations with children:

"Don't be suggestive. Use open-ended questions. […] I think the main challenge for teachers is to keep the conversation as open as possible." (translated quote; CPE01/22)

Later in their interview, the child protection expert emphasized the importance of being aware of one's own actions and not being suggestive, while adding that professionals need to be aware of their own responsibilities:

"And I would always include the responsibilities of teachers in continuing education programs. What I said before: They don't have to investigate and they shouldn't use suggestive questioning. That the responsibilities of each professional involved are clear and that they know their responsibilities as well as the limits of their responsibilities." (translated quote; CPE01/74)

According to this interviewee, teachers, principals and school social workers should have access to training programs to increase

their awareness of the problem of suggestibility in CSA cases.

DISCUSSION

Disclosure of CSA is necessary for an intervention that can lead to an end of the abuse. School professionals can be important recipients of disclosure for children who have experienced CSA. School is seen as a potential place for disclosure (Pp01/18; Te01/88) and teachers and other school professionals see themselves as potential recipients of disclosure (Te01/54; Te02/ 18; SSW01/10). However, there seems to be a need for further training on how to facilitate the disclosure process through appropriate conversation techniques (Pp01/40). The teachers, school social workers and principals we interviewed showed a responsible attitude towards their (potential) role in the CSA disclosure process. These findings are encouraging for the development of a vocational training program on this topic. Out-of-school professionals share the understanding that school is an important place for disclosure and school professionals are potential recipients of disclosure, while also emphasizing the need for further training of school professionals (Po02/40; Po05/38; PCS01/56; CC03/ 30). However, the results of the interviews also point to an urgent need for further training on what to consider when talking to children about their experiences of CSA. The teachers and other school professionals we interviewed showed a lack of confidence in initiating an initial conversation (Te03/47-48) or expressed a need for further training to initiate such a conversation with confidence (Te01/118; Te03/60; Pp02/88). This need is also emphasized by child protection and law enforcement professionals (CPE02/92; YWO02/22; Pr02/102). In order

to fulfill the role for which they feel responsible and the one for which they are perceived to be qualified, school professionals need additional training on how to talk to children in cases of suspected CSA.

The results of this study of professionals in Germany align with those previously found in international studies such as that of Alaggia (2010), who found that teachers were uncertain about how to initiate a conversation with a child when they suspected CSA. Similar evidence was found by Baginsky and Macpherson (2005) and in a more recent study by Goldschmidt-Gjerløw (2019), who found a need for further training on how to facilitate the disclosure process for affected children. Knowing how to talk to children when CSA is suspected is a key factor for a successful intervention in cases of CSA (Alaggia, 2010). Because teachers spend a great deal of time with their students and are able to observe their behavior, they are in a prime position to identify CSA and initiate an appropriate intervention (McGrath, 1994). Therefore, they must be qualified to initiate a conversation in situations where CSA is suspected and must be aware of opportunities to talk to pupils about their well-being (Volbert & Kuhle, 2019). This need was expressed by most of the professionals we interviewed. One topic of further training frequently requested by those interviewed is the issue of suggestive influence on children's testimonies (YWO02/28; YWO05/38; Po01/29; Po03/26). Further potential training content can be derived from studies on forensic interviewing of children. Talking to children about suspected CSA requires adult support, which makes it much easier for children to disclose experiences of CSA (Hershkowitz et al., 2017). This has also been called for by out-of-school experts (CC01/18;

CC02/18; PCS05/26). Teachers also need training on what questions to ask and what steps to take after talking to a child who has disclosed experiences of CSA (Brubacher et al., 2016). The interviewees expressed similar requests when discussing the potential content of targeted CSA training for school professionals (CC04/16; PCS04/12).

School professionals and teachers in particular need further training and education on how to talk to children in cases of suspected CSA. This training is necessary for school professionals to fulfill their role as a supportive institution for children in cases of CSA. As shown above, this need is recognized by both school professionals and out-of-school professionals. Two key potential content areas for such training include how to communicate with children in cases of suspected CSA and how to respond appropriately to children's disclosure of such experiences. While such training should primarily target teachers, it should also provide relevant information and training for school social workers and principals. As noted above, teachers are in a unique position when it comes to responding to CSA. Therefore, in order to ensure that children who experience CSA receive the support they need, it is essential that teachers are as prepared as possible to fulfill this role.

5.1 Strengths and Limitations

A major strength of this study is the participation of experts from many different professions involved in child protection. The combination of school, child protection and law enforcement in this study provides a unique multi-professional perspective for the German context. In addition, teachers, principals and school social workers were asked to reflect on their knowledge of CSA

and were given the opportunity to express their personal wishes for the future training of school professionals. Because this study has a qualitative and exploratory design, these findings need to be explored using a quantitative design that surveys a representative sample. Due to its design and methodology, the results of this study cannot be generalized. The sample for this study consists of experts from the German state of Schleswig-Holstein, which further hinders the generalizability of our findings. As the interviews were semi-structured, not all experts were asked exactly the same questions, which led to different interview sequences. A minority of the interviews were conducted via videoconferencing, which may have led to a loss of information. Because the interviews were first transcribed and then analyzed, information may have been lost. As the interviews were conducted in German and then translated into English, other information may have been lost in the translation process. Although the code system shows very good overall intercoder agreement, the intercoder agreement is suboptimal for two categories. This may be due to an unclear definition of the categories.

5.2 Future research and implications for practice

To compensate for the limitations of this study, a quantitative survey should be conducted with professionals from all the professions included in this study. Schools and teachers should be the focus of further studies on CSA because of their special position as professional first responders in cases of CSA. Training programs for teachers, principals and school social workers should be developed and tested. Guidelines for handling CSA cases in schools should be

developed and evaluated. It is important that schools and school professionals evolve to meet the demands placed on them in the context of child protection.

CONCLUSION

As mentioned above, new legislation in some German states requires schools to develop and implement child protection plans. The results from this study show that German school professionals are willing to deal with cases of CSA but they lack proper training. As this change requires schools to evolve, teachers, school social workers and principals need to be prepared on how to talk to children when CSA is suspected. Therefore, this is an opportune time to initiate change in schools and implement the CSA training programs that school and out-of-school professionals alike are demanding. Including this topic in training programs for school professionals, especially teachers, could be beneficial because these individuals often do not know what to do or what their responsibilities are when a case of CSA occurs in their schools (Blakey et al., 2019). Because talking to children is important not only in the context of CSA or sexual violence against children, but also in the context of physical, psychological or emotional violence against children, additional targeted training in this skill could prove beneficial in a variety of child protection contexts and situations.

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APPENDIX

Interview protocol (translated)

Block I: Handling Suspected Cases

Research Focus: Thank you for agreeing to talk to me. As I mentioned earlier, we shall be discussing the ways in which suspected cases of child sexual abuse are handled.

I'd like to start with a brief overview of how the interview will go. Specifically, we shall cover four topic blocks:

1. Handling suspected cases
2. Cooperating with other services
3. Reporting an offense
4. Some final questions

Let's start with handling suspected cases.

1. Have you personally encountered a case of child sexual abuse?
   a) If yes: Did this case lead to criminal proceedings?

Note: Alternative proposal for child protection services, counseling centers, or all professions likely to have encountered such cases:
To what extent do you deal with cases of child sexual abuse?

2. A child has confided in you, and now this has raised a suspicion of child sexual abuse. How do you proceed?

Alternative for law enforcement:
A child has confided in someone. Now, this has raised a suspicion of sexual abuse and you have been called in. How do you proceed?

Alternative: How do you handle a case of child sexual abuse in which a child has already confided in someone?

a) What are the roles and responsibilities of [your professional group]?
b) You mentioned turning to [specific entity]; could you give me more detail?
c) Who else would you inform?
d) Which institutions or agencies must be notified?
e) What do you have to consider when the child is in direct danger?
f) What do you think your responsibilities are when it comes to handling the victim?
g) How would you handle a potential offender?
h) What approach would you take if the offender is a family member, a member of a child-related organization, a peer, or a stranger?
i) How do you address confidentiality requirements when calling in another person or institution?
j) And then? And what else?
k) Can you describe that in more detail?

l) Can you give me an example to help me visualize this more concretely?

m) Is there anything else?

   3. Let us put aside the previous scenario in which a child has confided in you. Now, imagine that specific observations have led you to suspect that a child may have been sexually abused. However, you have **not** yet spoken to the child. What do you think needs to be taken into account during this stage of investigating a suspected case?

a) Do you feel confident about carrying out an initial conversation with the child? (If not, what would you do instead?)

b) What do you need to consider when talking to the child concerned?

c) Do you see risks of unintentionally influencing the child during such an interview?

d) Are you familiar with the issue of suggestibility? (If yes, request an explanation; if not, let it stand.)

e) And then? And what else?

f) Can you describe that in more detail?

g) Can you give me an example to help me visualize this more concretely?

h) Is there anything else?

   4. What obligations does [your institution] have in cases of suspected child sexual abuse?

Alternative: Are there specific protocols for what [your institution] must do in such a case? → If yes, what are they, and where are they documented?

a) What further roles could [your institution] assume?

b) And then? And what else?

c) Can you describe that in more detail?

d) Can you give me an example to help me visualize this more concretely?

e) Is there anything else?

   5. To what extent does [your institution] fight child sexual abuse?

Alternative: How important is child sexual abuse in [your institution]?

a) Operationalizing this importance:

i. Is there a mission statement on child sexual abuse?

ii. Have there been training sessions on child sexual abuse?

iii. Have prevention programs been implemented?

b) Why is child sexual abuse **this important** in [your institution]? Why is it **not so important**?

c) What is your personal assessment of the level of engagement in your institution?

d) And then? And what else?

e) Can you describe that in more detail?

f) Can you give me an example to help me visualize this more concretely?

g) Is there anything else?

Block II: Collaborating With Other Services

Next, I want to discuss what options you have for cooperating with other services.

   6. Which institutions or groups of individuals do you collaborate with in cases of suspected child sexual abuse?

Reminder: If none are known, drop the following block of questions.

a) Which other professional groups do you contact over suspected cases?

b) Do you know the contact persons? If yes, do you have personal contact?

c) And then? And what else?

d) Can you describe that in more detail?

e) Can you give me an example to help me visualize this more concretely?

f) Is there anything else?

☑ Teachers, school administrators, school social workers, school psychologists

☑ Counseling centers

☑ Child protection experts (German: Insoweit erfahrene Fachkraft)

☑ Youth welfare office

☑ Police, public prosecutor's office

☑ Psychosocial support services during criminal trials

☑ Social psychiatric service, psychiatric emergency services

☑ Other named cooperation partners

——————————————————————————————————

List institutions and then follow up with additional questions, introducing them, for example, as follows:

- Let's go through the cooperation partners you mentioned:

    o What is your experience of collaborating with [institution]?

    o How far do you currently benefit from collaborating with [institution]?

    o What improvements would you like to see when collaborating with [institution]?

7. What role could schools play in a multidisciplinary network for handling suspected cases of child sexual abuse?

a) If the response is that schools should not play any role, inquire why not.

b) What roles do the different professional groups within schools play?

c) And then? And what else?

d) Can you describe that in more detail?

e) Can you give me an example to help me visualize this more concretely?

f) Is there anything else?

8. What possibilities of cooperating with others do teachers need to know about so that they are able to handle a suspected case of child sexual abuse professionally?

a) Are there any other cooperation partners teachers should know about?

b) And then? And what else?

c) Can you describe that in more detail?

d) Can you give me an example to help me visualize this more concretely?

e) Is there anything else?

Block III: Reporting an Offense

Research Focus: Let's now move to the third block: reporting a crime to the police.

9. Why do you think the issue of child sexual abuse is currently receiving so much public attention?

10. Now for your personal opinion: What is your personal attitude towards reporting a case of child sexual abuse to the police?

11. a) Can you tell me the reasons for your attitude (positive/negative)?
b) You've discussed [**advantageous/disadvantageous aspects**] of a criminal report; what [**disadvantages/advantages**] do you see?
c) What is your priority: reporting an offense to the police or providing therapy for the victims?
(Only if familiar with the issue of suggestibility)
d) How do you view the situation of the child in criminal proceedings?
e) How important is the child's welfare in criminal proceedings?
f) And then? And what else?
g) Can you describe that in more detail?
h) Can you give me an example to help me visualize this more concretely?
i) Is there anything else?

11. Under what circumstances would you advise reporting to the police?

Alternative for law enforcement: What factors facilitate a successful prosecution? What hinders it?

12. In what cases would you advise against reporting an offense?

a) Should anyone else be informed in advance before reporting a crime to the police?
b) What is the legal framework for [your institution] when it comes to reporting a crime?
c) Does [your institution] have the obligation to report a crime?
d) And then? And what else?
e) Can you describe that in more detail?
f) Can you give me an example to help me visualize this more concretely?
g) Is there anything else?

Block IV: Some Final Questions

We now move to three final questions.

13. What qualifications do you think teachers need to have so that they can handle suspected cases of child sexual abuse adequately?

Alternative: What specific knowledge or skills should be conveyed to teachers to best prepare them for handling suspected cases of child sexual abuse ?

a) And then? And what else?
b) Can you describe that in more detail?
c) Can you give me an example to help me visualize this more concretely?
d) Is there anything else?