A critical analysis of commercial forensic interviewing techniques applicable in a South African context

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Abstract

Purpose – A significant increase in financial crime globally emphasises the importance of forensic interviewing to obtain useful and reliable information as part of a commercial forensic investigation. Previous research has identified two interviewing strategies that are aligned with the legal framework in South Africa: the PEACE model (P = preparation and planning; E = engage and explain; A = account, clarify and challenge; C = closure; E = evaluation) and the person-centred approach (PCA). The purpose of this paper is to explore the theoretical underpinnings and application of the PEACE model and the PCA as commercial investigative strategies aligned with the legal context in South Africa.

Design/methodology/approach – A scoping review was undertaken to identify literature relevant to the theoretical assumptions and application of the PEACE model and the PCA.

Findings – Literature for the most part reports on the PEACE model but offers very little information about the PCA. A critical analysis revealed that the PEACE model incorporates a clear guiding structure for eliciting information but lacks content needed to create an optimal interpersonal context. To promote this, the PCA proposes that interviewers demonstrate three relational variables: empathy, congruence and unconditional positive regard. The PCA suggests a basic structure for interviewing (beginning, middle and end), while providing very little guidance on how to structure the forensic interview and what information is to be elicited in each phase.

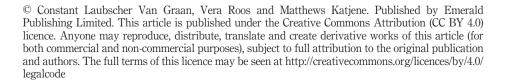
Originality/value – Combining the PEACE model and PCA presents an integrated interviewing technique best suited for obtaining useful and reliable information admissible in a South African court of law. The PEACE model has a clear structure, and the PCA assists in creating an optimal interpersonal context to obtain information in an interview.

Keywords Economic crime, Financial crime, Forensic interviewing, Interrogation, Investigative interviewing, PEACE model, Person-centred approach

Paper type Research paper

Introduction

Financial crime is a phenomenon that affects organisations globally, with the consequent loss of large amounts of money (Association of Certified Fraud Examiners, 2022). Forensic accountants and commercial forensic practitioners (FPs) play a crucial role in combatting financial crime by conducting commercial forensic investigations (Bredenkamp, 2015;





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Institute of Commercial Forensic Practitioners, 2023). FPs are qualified to investigate commercial crimes by applying knowledge related to accounting, law and information technology and exhibit professional skills to conduct forensic interviewing involving suspects, witnesses and/or other relevant third parties to obtain information (Crumbly, 2016; Davis *et al.*, 2010; McIntyre *et al.*, 2014). FPs function in the private or the public sector. FPs in the private sector have a limited mandate when compared with those in the public (police) environment (McIntyre *et al.*, 2014) and thus must rely on their ability to create an optimal interpersonal environment when interviewing (Van Romburgh, 2008). The forensic interview, drawing on Vorster (2016), is the most common tool for eliciting useful and reliable information.

The conduct of an FP during commercial forensic interviewing should be aligned with the legal context in which it is taking place to ensure that the information obtained is admissible in a court of law (Cleary and Warner, 2016; Gudjonsson and Pearse, 2011; Kassin et al., 2010; Meissner et al., 2010). In South Africa, commercial forensic investigators should act in accordance with the principles enshrined in the Constitution of South Africa (The Constitution), which emphasise on human dignity (s 10), freedom and security (s 12), privacy (s 14) and the rights of arrested, detained or accused persons (s 35(1)(c)) (see Constitution of South Africa, 1996; Van Graan et al., 2022). Previous research (see Van Graan et al., 2022) has identified two interviewing strategies that are aligned with The Constitution, namely, the PEACE model (P =preparation and planning; E = engage and explain; A = account, clarify and challenge; C =closure; E = evaluation) and the person-centred approach (PCA). Both techniques adopt a nonguilt-presumptive and an information-seeking approach, in contrast to the Reid technique and kinesic interviewing (based on the behavioural analysis interview) (see Bull and Soukara, 2010; Gudjonsson, 2003; Madon et al., 2012; Van Graan et al., 2022). It is, however, unclear what theoretical assumptions inform the practical application of the PEACE model and the PCA. This article has a threefold aim: to conduct a scoping review to identify the theoretical assumptions and application of the PEACE model and the PCA, to critically analyse the theoretical assumptions and application and to propose a suitable forensic interviewing technique to use in the South African legal context. The processes followed to obtain literature regarding forensic interviewing techniques from relevant databases are discussed next.

Materials and methods

A scoping review was undertaken to obtain relevant literature because this type of review focusses on the broad understanding of relevant concepts of a topic or research field (Peterson *et al.*, 2017) and can combine knowledge in an understandable and logical way (Pham *et al.*, 2014). The five stages suggested by Arksey and O'Malley (2005) guided the review, namely: (a) identify the research question(s), (b) identify relevant studies, (c) study extraction, (d) chart the data and (e) collate, summarise and report the results. The PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols; Moher *et al.*, 2015) checklist was used to add rigour.

Data collection methods and recording

A twofold strategy was followed to obtain relevant data. In the first phase, inclusion criteria were established in advance of the literature search, such as peer-reviewed articles in English between 2000 and 2023, with a focus on the commercial forensic investigative context. The time frame was selected to include recent literature. The search strategy followed the five stages suggested by Booth *et al.* (2012), namely, (a) scoping search: the initial screening of literature for existing reviews, identifying relevant databases, determining keywords and establishing a search strategy; (b) performing search: searching relevant databases using the selected keywords, identifying grey literature, considering a "methodological filter" and documenting changes to the search terms (Bandara *et al.*, 2015,

p. 163); (c) bibliography search: determining main citations and continuous searching for further relevant articles; (d) verification: identifying and checking articles missed by keywords, reviewing search strategies and contacting domain process owners if applicable; and (e) documentation: noting how articles were searched, keywords were applied, the number of sources identified and the *modus operandi* followed for the search process. Relevant databases (e.g. EBSCOhost, JSTOR, WorldCat and Scopus) were accessed to search for literature using the following combination of Boolean/phrases: ("person-centred", OR "person centred", OR "person-centered", 'OR "person centered" OR "PEACE model" OR "client-centred" OR "client centred" OR "client-centered" OR "client centered") AND ("interviewing" OR "interrogation" OR "questioning") in the abstracts and titles of published articles; and ("forensic interviewing", OR "fraud interrogation", OR "police interrogation", 'OR "criminal interrogation" OR "forensic investigation" OR 'fraud investigation OR "police investigation" OR 'criminal investigation) in subject terms. Articles were included if the content was relevant to the theoretical assumptions and application of the PCA and the PEACE model. Full-text articles were included but excluded when the article could not be accessed via the database searches. Articles about forensic interviews with victims of sexual assault or interviews with children were also excluded.

The second phase involved scrutinising grey literature to obtain information relating to the PCA. During the search process, the researcher and research assistant independently identified 6,306 articles and screened the article titles, abstracts and key words for eligibility. After duplicates had been removed and exclusion and inclusion criteria applied, 674 relevant articles were identified, but after removing articles that did not address the phenomenon of interest or did not contain sufficient information regarding theory and application of the PEACE model and PCA, only 33 articles were analysed (28 articles – PEACE model; 5 articles – PCA).

The PRISMA process is presented in Figure 1.

Data analysis

The adapted methods of Arksey and O'Malley (2005) and Peters *et al.* (2015) were used to analyse the data: charting the data according to the title of the article, journal source, source type, author/s, year, database, aim of study and type of interviewing technique applicable (PEACE model or PCA) (see Supplementary Material). Contextual details included were the theory and application of the interviewing technique(s) discussed in the articles, done manually by the researcher and revised by the research assistant.

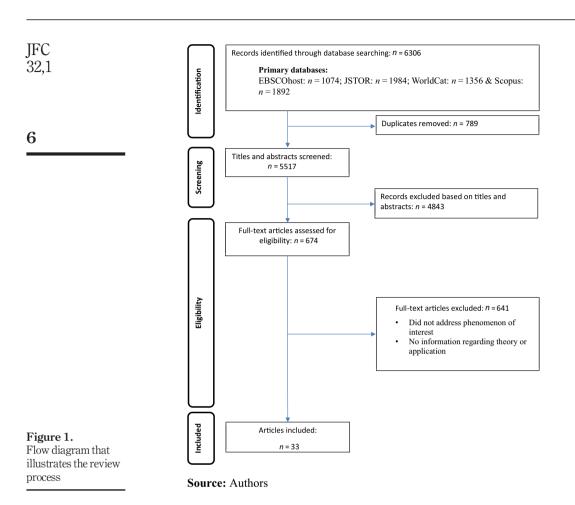
These results – i.e. studies about the theory and application of the PEACE model and PCA – were captured in a spreadsheet. Regular meetings were held to address questions and differing views during the process.

Rigour

Credibility was established by engaging with the research assistant in the course of the search and analysis of the literature. Disagreements were resolved by including an additional reviewer (if necessary) to serve as an arbitrator. Inclusion criteria were determined before the literature search commenced and were not changed during the search process. Transferability, which refers to the extent to which the research may be applied in other contexts (Houghton *et al.*, 2013), was obtained by giving detailed description of the sampling methods, data collection methods and recording, and by data analysis (Bitsch, 2005; Tobin and Begley, 2004). Dependability was obtained by initiating an audit trail, applying a coding strategy, performing a stepwise replication of the process and peer examination (Cohen *et al.*, 2011; Tobin and Begley, 2004). Two researchers independently cross-checked the coding until consensus had been reached, thereby adding to confirmability of the findings.

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The theoretical assumptions and application of the PEACE model and PCA are discussed below.

Discussion

Description of included studies

The 33 studies were critically analysed in terms of the theory and application of the PCA and the PEACE model. Of these, 28 articles are relevant to the PEACE model, and 5 additional articles (handbooks/academic reviews or considered grey literature and are still in the process of being published in relevant journals) were added (via hand search) to the study to provide further information (Clarke and Milne, 2001; Gudjonsson, 2003; Jacobs, 2021; Van Graan *et al.*, 2022; Vrij, 2008). Of the 33 studies, 5 contained information about the PCA, and a further 19 articles were included (via hand search) in the study due to the limited information available regarding the PCA in the commercial forensic investigative context (Blair and McCamey, 2002; Du Plooy, 2014, 2019; Greeff *et al.*, 2011; Hawtrey, 2007; Kanfer and Grimm, 1977; Lee, 2021; Levy and Bader, 2020; Phipps, 2004; Phipps and Vorster, 2011;

Rogers, 1987; Roos and Wheeler, 2016; Vorster, 2012, 2016; Vorster *et al.*, 2013; Vorster *et al.*, 2016; Walters, 2003). Two more PCA articles were included to provide additional context and are considered grey literature (Bekker *et al.*, 2023; Van Graan *et al.*, 2022). The outcome of the critical analysis is discussed below.

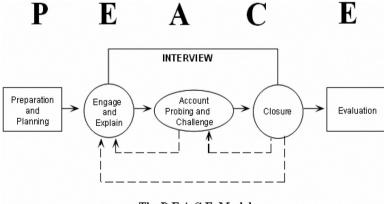
PEACE model

Theoretical assumptions. The PEACE model (Scott *et al.*, 2015; Snook *et al.*, 2014; Walsh and Bull, 2011) was developed in the early 1990s in the UK as an effort to establish a new approach to investigative interviewing after the occurrence of several miscarriages of justice. The behaviour of the police, especially in terms of interviewing techniques, was heavily criticised in those cases (Gudjonsson and Pearse, 2011). This led to the establishment of two Royal Commissions of Inquiry, which proposed an ethical approach to interviewing suspects and witnesses.

The PEACE model is based on the assumption that forensic interviewing should be investigative in nature and not interrogative, thus signalling a change in objective of the forensic interview: from obtaining a confession to gathering truthful and reliable information (Clarke *et al.*, 2011; Jacobs, 2021; Morgan *et al.*, 2020; Walsh and Bull, 2011). The application of the PEACE model is discussed below.

Application: phases of the PEACE model. Each letter of the PEACE acronym represents a phase in the interview. Figure 2 illustrates the application of the phases:

P – preparation and planning. The forensic interviewer should be informed of the facts of the case before the interview takes place (Walsh and Bull, 2011). This includes preparing for any rebuffs or defences voiced by the interviewee during the interview, as well as obtaining additional information to counter such defences (Clarke *et al.*, 2011; Kim *et al.*, 2018; Walsh and Milne, 2008). The forensic interviewer should develop a detailed plan to conduct the interview before the interview takes place. According to Snook *et al.* (2014), the interview serves the purpose of gathering information from the interviewee to aid the investigation overall; obtaining background information about the interviewee (including information regarding their history at the specific organisation, position and previous employment); taking specific legal aspects into account (including the basic human rights of



The P.E.A.C.E. Model

Source: Clarke and Milne (2001)

Figure 2. The PEACE model phases

the interviewee); and determining priority questions that need to be asked in terms of the investigation.

In the PEACE model, the focus is also on logistical arrangements; forensic interviewers are expected to consider practical implications such as making the appointment, finding a venue, creating a schedule of proceedings, preparing opening and subsequent questions based on the existing facts and preparing for potential and/or expected outcomes (Jacobs, 2021; Snook *et al.*, 2014; Walsh and Bull, 2010).

E – engage and explain. This phase consists of two sections: engaging the interviewee in conversation and explaining the context and reasoning behind the interview (Walsh and Bull, 2011). According to Snook *et al.* (2014), by creating a context for the interview, establishing rapport, engaging with the interviewee and interacting in a respectful and empathetic manner, the interviewer involves the interviewee, thus promoting the formation of a working relationship and an atmosphere conducive to information-sharing (Bull and Soukara, 2010; Walsh and Bull, 2011; Walsh and Milne, 2008). Moreover, in this phase, the interviewer explains the structure of the interview, clarifies the procedures that will follow, discusses the expectations of both parties and communicates the ground rules for the interview (Clarke *et al.*, 2011; Jacobs, 2021; Snook *et al.*, 2014).

A – account, clarify and challenge. This phase involves two steps: allowing interviewee to tell his/her side of events without interruption and recognising any inconsistencies and confronting the interviewee with the evidence (Clarke *et al.*, 2011). The interviewer will usually open with a closed-ended question about whether the interviewee is involved in the specific offence that occurred (Clarke *et al.*, 2011). This will lead to two potential outcomes: if the interviewee answers "yes", the interviewer will switch to open-ended questions whereby the interviewer will ask for a comprehensive account of events; and if the interviewee responds "no", the interviewer will use open-ended questions to initiate a chronological and detailed description of the interviewee's *modus operandi* during the time span in question (Snook *et al.*, 2014).

In instances in which the interviewee dismisses any involvement in the specific crime, Clarke and Milne (2001) and Snook *et al.* (2014) argue that the aim should be to obtain an uninterrupted version of events from the interviewee. The interviewer will then focus on the details of the interviewee's story and identify any discrepancies or information that may need further scrutinising by:

- elaborating on a topic by using open-ended questions (e.g. by starting sentences with "tell", "explain", or "describe");
- scrutinising the interviewee's account (asking "who", "what", "where", "when", "why", and "how"); and
- summarising the information collected (Snook et al., 2014).

The above steps are repeated until the interviewer is satisfied with all aspects of the version the interviewee provided (Snook *et al.*, 2014; Walsh and Bull, 2011). The interviewer will ask additional questions if he/she feels the interviewee's account did not answer questions formulated beforehand, during the planning phase.

If the interviewer is satisfied that all queries have been answered, the interviewer repeats the interviewee's version of events and confirms it with the interviewee (Snook *et al.*, 2014). This forms part of the "clarify" phase. During this phase, it is imperative to test the interviewee's version of events against statements made earlier and establish whether there are any contradictions (Clarke *et al.*, 2011). If inconsistencies are identified, the interviewer

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will challenge them in a non-accusatory manner during the next phase (Clarke and Milne, 2001; Snook *et al.*, 2014).

C – closure. During this phase, the interviewer concludes the interview (Walsh and Bull, 2010). The main points of discussion are summarised, and the interviewee is afforded the opportunity to clarify or add information. The interviewer also details the procedures that will follow. Any new information at this stage should be critically analysed by the interviewer and assessed for its potential to influence the investigation (Walsh and Bull, 2011). Any legal requirements, especially in terms of admissions from suspects, should be taken into consideration (Griffiths and Milne, 2006). It is important to note that the PEACE model is not a linear technique, and if the interviewer identifies new evidence during, for example, the "closure" phase, he/she may move back to previous phases to obtain relevant information as part of the investigation (Walsh and Bull, 2011).

E - evaluation. Co-interviewers and/or supervisors are expected to evaluate the performance of the interviewer and provide constructive feedback (Snook *et al.*, 2014). Self-evaluation is also important, because interviewers should constantly strive for improvement (Walsh *et al.*, 2017).

The person-centred approach

Theoretical assumptions. The literature indicates that the PCA is based on the general systems theory, and particularly, the assumption that a system exhibits part-whole relationships that are subject to several principles, including self-regulation or feedback (Phipps and Vorster, 2011; Vorster, 2016; Vorster et al., 2016). Within the commercial forensic investigative context, the interview itself, the interviewer and the interviewee are seen as a system (Phipps, 2004; Phipps and Vorster, 2011). The circular (interpersonal) processes that take place between interviewers and interviewees seek to establish control of the interview – attempts described as manoeuvres and counter-manoeuvres (Greeff et al., 2011: Vorster *et al.*, 2016). Vorster (2016, p. 54) explains these circular processes by using the analogy of a "dance in which the participants co-determine each other's emotions and behaviour". To this end, interactional pattern analysis (IPA) plays an important role, as it is deemed an effective way of understanding human behaviour "within the context of a dynamic person-environment relationship", such as a commercial forensic interview (Du Ploov, 2014, p. 30; Vorster *et al.*, 2013, 2016). One of the variables of IPA is the *degree of control*, which refers to the level of internal vs external control the FP has over his/her circumstances (Du Plooy, 2019; Vorster et al., 2013). This control links directly to the manoeuvres and counter-manoeuvres discussed above.

To initiate control, the FP needs to be aware of the interpersonal contact between him/her and the interviewee (Vorster *et al.*, 2013). This is achieved by analysing the interviewee's verbal and non-verbal messages (Blair and McCamey, 2002). Verbal messages refer to communication using words or paralinguistic cues (verbal messages that do not include the use of words), while non-verbal messages are visual communication responses, such as body and facial movements (Kanfer and Grimm, 1977; Sporer and Schwandt, 2006; Walters, 2003).

This interpersonal context should be optimal because a forensic interview could be anxiety-provoking for some interviewees due to its investigative nature, irrespective of whether they are suspects or not (Van Graan *et al.*, 2022). From the literature, it is evident that an optimal interpersonal space from a PCA involves initiating rapport (trust) (Rogers, 1987; Vorster, 2016). Rapport refers to a close and harmonious relationship in which the interviewee feels safe enough to provide information (Vorster, 2016). The onus is on the interviewer to create optimal conditions for the establishment of rapport (David *et al.*, 2017; Vorster, 2016), usually by applying three relational variables: empathy, congruence (or

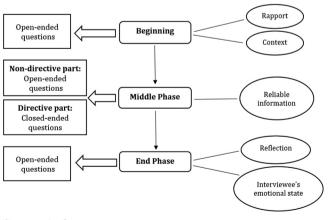
genuineness) and unconditional positive regard (UPR) (Van Graan *et al.*, 2022; Vorster, 2016). These variables constitute the core assumptions of the PCA, and will be discussed next.

Empathy refers to effectively understanding an individual's experience, as well as accurately expressing this understanding that, according to Bloom *et al.* (2018), forms the basis for all optimal interpersonal relationships. Empathy in an interview context is effective when the interviewer understands an individual's subjective situation, emotions or circumstances and accurately expresses this understanding to the individual (Roos and Wheeler, 2016; Vorster, 2016). For interviewers to display empathy as an optimal interpersonal variable, they have to intentionally adopt the interviewee's perspective and abandon their own frame of reference, which is a subjective self-owned perspective (Levy and Bader, 2020; Vorster, 2016). Effective mastering of this interpersonal skill fosters the interviewee's trust but it does not mean that interviewers are becoming involved in the subjective experiences of the interviewee (Bloom *et al.*, 2018; Vorster, 2012).

Congruence refers to the demonstration of authenticity, without pretence or deception (Vorster, 2016). This authentic presentation means that there is no variance in the verbal communication, using words or paralinguistic cues, or non-verbal, visual responses of communication, such as body and facial movements; rather these two types of communication complement and confirm each other (Bekker *et al.*, 2023; Cohen and Wiener, 2007). Congruent interviewers are, therefore, congruent in terms of the content of questions or statements and also in their tone of voice and body language (Van Graan *et al.*, 2022).

UPR refers to the non-judgemental acceptance of all aspects of an individual's experiences (Vorster *et al.*, 2013). Interviewers accept interviewees' values and morals, or even their lack of, unconditionally (Lee, 2021). Interviewees can express themselves in whatever way they want, trusting that interviewers will accept them, irrespective of who they are, what they have done or what beliefs or convictions they hold (Bekker *et al.*, 2023; Day *et al.*, 2019; Vorster, 2016).

Application of the person-centred approach. In applying the PCA, Vorster (2016) and Vorster *et al.* (2016) propose three phases: beginning, middle and end phase. These are illustrated below, along with the purpose of each phase, in Figure 3.







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The beginning phase aims to establish rapport (using empathy, congruence and UPR) with the interviewee, as well as to provide information about the purpose of the interview, which Vorster refers to as creating a clear context (Vorster, 2016). At the start of the interview, interviewers introduce themselves, to make clear whom the interviewees will be talking to. The discussion should be kept as open-ended as possible, without questions asked that challenge the interviewee (Van Graan *et al.*, 2022). The interviewer may refer to the interviewee's thoughts and feelings so that the interviewee feels understood and willing to cooperate in disclosing information later during the interview (Van Graan *et al.*, 2022; Vorster *et al.*, 2016).

The middle phase has two purposes – obtaining relevant information and testing its trustworthiness (Van Graan *et al.*, 2022). It is divided into two parts: a non-directive and a directive part. In the non-directive part, the interviewer does not ask direct questions, but rather allows the interviewee to lead the conversation (Van Graan *et al.*, 2022; Vorster, 2016). During this stage, the interviewer may use open-ended questions, such as "Why do you say that?" or "How did you come to that conclusion?" (Hawtrey, 2007; Vorster *et al.*, 2016). The FP initiates the directive part when it is obvious that the interviewee has shared all relevant information during the non-directive part; this is usually apparent when he/she becomes unwilling to take the discussion any further (Vorster *et al.*, 2016). The directive part is divided into two categories: prior knowledge-based enquiries prepared in advance by the interviewer and follow-up enquiries based on information obtained during the non-directive part.

The end phase comprises the interviewer's reflections on the interview itself and the assessment of the interviewee's emotional state, especially considering the robust nature of commercial forensic investigations (Van Graan *et al.*, 2022). A forensic interview usually leads to "emotional exposure and emotional vulnerability", and this should be mitigated by the interviewer by applying the three main variables of the PCA: empathy, congruence and UPR (Vorster, 2016, p. 71).

Taking into consideration the underlying theoretical assumptions and application of the PEACE model and PCA, a critical analysis drawing on relevant literature is presented in the next section.

Critical analysis: PEACE model and person-centred approach

The scoping review set out to identify the theoretical assumptions and application of the PEACE model and PCA and to engage in a critical discussion.

Summary of findings – theoretical assumptions and application. Both the PEACE model and the PCA are non-accusatory interviewing techniques aimed at obtaining information (and not a confession) from interviewees (Gudjonsson and Pearse, 2011). Both techniques seek to obtain the interviewee's account and to check its authenticity by questioning and testing it against other evidence (Van Graan *et al.*, 2022). Interviewers who use the PEACE model or PCA do not expect to encounter deceptive behaviour on the part of the interviewee (Mason, 2016; Vorster *et al.*, 2016).

In terms of application, both techniques use open-ended questions at the beginning of the interview and only later apply closed-ended questions, which are recommended as an effective method for eliciting more detailed answers from the interviewee (Memon *et al.*, 2010; Van Graan *et al.*, 2022). Open-ended questions also underpin the central theme of respect and understanding, which may lead to interviewees' feeling more valued, which, in turn, plays a central role in gaining their trust (Vorster *et al.*, 2016).

There is consensus among researchers that as the PEACE model was first introduced, investigative interviewing in general has improved (Fallon *et al.*, 2021; Howes, 2019; Soukara *et al.*, 2002), but as Walsh and Bull (2011) indicate, this model is not attuned to the

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interpersonal context of the commercial forensic interview (Akca and Eastwood, 2019; Akca *et al.*, 2021). To this end, the PCA first establishes an optimal interpersonal context by applying the three relational variables: empathy, congruence and UPR, whereby the emphasis falls on what occurs between people (Vorster, 2012), before moving to obtaining reliable information from an interview (Rogers, 1987; Vorster, 2016). The relational variables referred to – empathy, congruence and UPR – are of particular importance in this interpersonal context, as they ensure the establishment of trust and rapport (Vorster *et al.*, 2016), which are central to the flow of useful and reliable information in investigative interviewing.

In applying the PCA, a suspect is only confronted with evidence at the end of the interview (Vorster, 2012). The role and responsibilities of interviewees, as well as their version of events, are first established, before evidence is disclosed towards the end of the middle phase and verified against information provided by the interviewees (Vorster, 2016). Vrij (2008) and Walsh *et al.* (2015) argue that it is more effective to reveal evidence later rather than early in the interview.

It is important to note that although the PCA creates an optimal interpersonal space, its interview structure is very basic and lacks proper guidance on how to conduct the forensic interview (Van Graan *et al.*, 2022; Vorster, 2016; Vorster *et al.*, 2016). No mention is made of a planning phase for the interview, which is essential to ensure that an effective strategy is applied throughout (Griffiths and Walsh, 2018). Moreover, there is no indication of how the middle phase should be approached, specifically in terms of switching from the non-directive to the directive part, which subsequently informs the use of open- and closed-ended questions. Additionally, the PCA's structure makes no provision for an assessment of how the interviewer fared during interviewing – there is no feedback expected, from peers or a move by interviewers themselves to facilitate honest critique and to improve the interviewing process overall.

Conversely, despite the fact that the PEACE model is not sensitively attuned to creating an optimal interpersonal context, it does offer a clear guiding structure for eliciting information as part of the commercial forensic investigative context (Scott *et al.*, 2015; Snook *et al.*, 2014; Walsh and Milne, 2008).

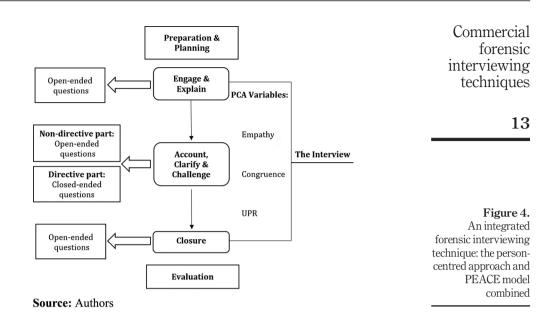
In conclusion, the PEACE model does incorporate a clear guiding structure, but does not detail how to create an optimal interpersonal context conducive to obtaining information in an anxiety-provoking commercial forensic investigative context. The PCA may benefit from the clear structure of the PEACE model, while the addition of mechanisms to develop an optimal interpersonal context to obtain reliable information may benefit the PEACE model. Combining the PEACE model with the PCA could create an integrated forensic interviewing technique to obtain useful and reliable information in the South African commercial forensic investigative context. The basic components of such a new framework are presented in Figure 4.

Conclusion

This study used a scoping review to identify the theoretical assumptions and application of the PEACE model and PCA as forensic interviewing techniques in the commercial forensic investigative context to elicit useful and reliable information admissible in a South African legal context. To our knowledge, this is the first attempt to establish an in-depth analysis of the two interviewing techniques, and drawing on the strengths of both, we recommend a combination of the two to achieve an integrated forensic interviewing technique. This brings together the structure of the PEACE model and the relational qualities of the PCA to create an optimal interpersonal context involving interviewees and interviewers in a dynamic interplay to obtain information in a forensic investigative context.

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References

- Akca, D. and Eastwood, J. (2019), "The impact of individual differences on investigative interviewing performance: a test of the police interviewing competencies inventory and the five factor model", *Police Practice and Research*, pp. 1-19.
- Akca, D., Di Danieli, C., Shane, M. and Eastwood, J. (2021), "A test of a short PEACE interview training course: training efficacy and individual differences", *Journal of Police and Criminal Psychology*, Vol. 37 No. 1, pp. 183-194.
- Arksey, H. and O'Malley, L. (2005), "Scoping studies: towards a methodological framework", International Journal of Social Research Methodology, Vol. 8 No. 1, pp. 19-32.
- Association of Certified Fraud Examiners (2022), "Report to the nations on occupational fraud and abuse", available at: https://legacy.acfe.com/report-to-the-nations/2022/
- Bandara, W., Furtmueller, E., Gorbacheva Miskon, S. and Beekhuyzen, J. (2015), "Achieving rigor in literature reviews: insights from qualitative data analysis and tool-support", *Communications of* the Association for Information Systems, Vol. 37 No. 8, pp. 154-204.
- Bekker, L., Van Graan, C.L. and Kruger, A. (2023), "Die impak van grenslyn-persoonlikheidsversteuring op die persoonsgesentreerde benadering tot kommersiële forensiese onderhoudvoering: 'n kritiese analise", Submitted to LitNet Akademies.
- Bitsch, V. (2005), "Qualitative research: a grounded theory example and evaluation criteria", *Journal of Agribusiness*, Vol. 23 No. 1, pp. 75-91.
- Blair, J.P. and McCamey, W.P. (2002), "Detection of deception: an analysis of the behavioral analysis interview technique", *Illinois Law Enforcement Executive Forum*, Vol. 2 No. 2, pp. 165-169.
- Bloom, Z.D., McNeil, V.A., Flasch, P. and Sanders, F. (2018), "A comparison of empathy and sympathy between counselors-in-training and their non-counseling academic peers", *The Professional Counselor*, Vol. 8 No. 4, pp. 341-354.
- Booth, A., Papaioannou, D. and Sutton, A. (2012), Systematic Approaches to a Successful Literature Review, Sage, London, UK.

JFC 32,1	Bredenkamp, D.P. (2015), "The development of an investigation process for commercial forensic practitioners in South Africa", Dissertation – MBA, North-West University, Potchefstroom.
	Bull, R. and Soukara, S. (2010), "Four studies of what really happens in police interviews", in Lassiter, G.D. and Meissner, C.A. (Eds), <i>Police Interrogations and False Confessions: Current Research</i> , <i>Practice, and Policy Recommendations</i> , American Psychological Association, New York, NY, pp. 81-95.
14	Clarke, C. and Milne, B. (2001), A National Evaluation of the PEACE Investigative Interviewing Course, Home Office, London.
	Clarke, C., Milne, R. and Bull, R. (2011), "Interviewing suspects of crime: the impact of PEACE training, supervision and the presence of a legal advisor", <i>Journal of Investigative Psychology and Offender Profiling</i> , Vol. 8 No. 2, pp. 149-162, doi: 10.1002/jip.144.
	Cleary, H.M.D. and Warner, T.C. (2016), "Police training in interviewing and interrogation methods: a comparison of techniques used with adult and juvenile suspects", <i>Law and Human Behavior</i> , Vol. 40 No. 3, pp. 270-284.
	Cohen, B.A. and Wiener, M.C. (2007), "Effective ways to conduct forensic interviews", <i>Pennsylvania CPA Journal</i> , Winter.
	Cohen, L., Manion, L. and Morrison, K. (2011), Research Methods in Education, Routledge, New York, NY.
	Constitution of South Africa (1996), "Constitution of the Republic of South Africa 1996".
	Crumbly, D.L. (2016), Forensic and Investigative Accounting, 6th ed., CCH, Chicago, IL.
	David, G.C., Rawls, A.W. and Trainum, J. (2017), "Playing the interrogation game: rapport, coercion, and confessions in police interrogations", <i>Symbolic Interaction</i> , Vol. 41 No. 1, pp. 3-24.
	Davis, C., Farrell, R. and Ogilby, S. (2010), "Characteristics and skills of the forensic accountant", available at: www.aicpa.org/InterestAreas/ForensicAndValuation/Resources/PractAidsGuidance/ DownloadableDocuments/ForensicAccountingResearchWhitePaper.pdf
	Day, A., Daffern, M., Dunne, A., Papalia, N. and Thomson, K. (2019), "Interviewing forensic mental health patients who have a history of aggression: considerations and suggestions", <i>International</i> <i>Journal of Forensic Mental Health</i> , Vol. 18 No. 1, pp. 12-20.
	Du Plooy, K. (2014), "The use of the interactional pattern analysis as a tool for effective short term psychotherapy among students at South African tertiary institutions", <i>Journal of Counselling and Development in Higher Education Southern Africa</i> , Vol. 2 No. 1, pp. 27-40.
	Du Plooy, K. (2019), "Interactional therapy: prospects for treating mental health conditions", <i>Journal of Psychology in Africa</i> , Vol. 29 No. 6, pp. 630-637.
	Fallon, L., Snook, B., Barron, T., Baker, A., Notte, M., Stephenson, J. and Trottier, D. (2021), "Evaluating the Vermont State police's PEACE model training program: phase 1", <i>Psychology, Crime and Law</i> , Vol. 28 No. 1, pp. 59-81.
	Greeff, P., Roos, V. and Van Romburgh, J. (2011), "Applying mixed-methods to assess the value of forensic interviewing from a person-centred approach", <i>Acta Criminologica: African Journal of</i> <i>Criminology and Victimology</i> , Vol. 24 No. 2.
	Griffiths, A. and Milne, B. (2006), "Will it all end in tiers?: police interviews with suspects in Britain", in Williamson, T., (Ed.), <i>Investigative Interviewing: Rights, Research, Regulation</i> , Willan, Exeter, pp. 167-189.
	Griffiths, A. and Walsh, D. (2018), "Qualitative analysis of qualitative evaluation: an exploratory examination of investigative interviewers' reflections on their performance", <i>Psychology, Crime and Law</i> , Vol. 24 No. 4, pp. 433-450.
	Gudjonsson, G.H. (2003), The Psychology of Interrogations and Confessions: A Handbook, Wiley, Chichester.
	Gudjonsson, G.H. and Pearse, J. (2011), "Suspect interviews and false confessions", <i>Current Directions in Psychological Science</i> , Vol. 20 No. 1, pp. 33-37.

- Hawtrey, K. (2007), "Using experiential learning techniques", *The Journal of Economic Education*, Vol. 38 No. 2, pp. 143-152.
- Houghton, C., Casey, D., Shaw, D. and Murphy, K. (2013), "Rigour in qualitative case-study research", *Nurse Researcher*, Vol. 20 No. 4, pp. 12-17.
- Howes, L.M. (2019), "Interpreted investigative interviews under the PEACE interview model: police interviewers' perceptions of challenges and suggested solutions", *Police Practice and Research*, Vol. 21 No. 4, pp. 333-350.
- Institute of Commercial Forensic Practitioners (2023), "Home", available at: www.icfp.co.za/
- Jacobs, J. (2021), "A critical analysis of the effect of an online environment on the PEACE model in the commercial forensic investigative context", Unpublished mini-dissertation, North-West University, Potchefstroom.
- Kanfer, F.H. and Grimm, L.G. (1977), "Behavioral analysis: Selecting target behaviors in the interview", *Behavior Modification*, Vol. 1 No. 1, pp. 7-28.
- Kassin, S.M., Drizin, S.A., Grisso, T., Gudjonsson, G.H., Leo, R.A. and Redlich, A.D. (2010), "Policeinduced confessions: risk factors and recommendations", *Law and Human Behavior*, Vol. 34 No. 1, pp. 3-38.
- Kim, J., Walsh, D., Bull, R. and Bergstrom, H. (2018), "Planning ahead? An exploratory study of South Korean investigators' beliefs about their planning for investigative interviews of suspects", *Journal of Police and Criminal Psychology*, Vol. 33 No. 2, pp. 158-174.
- Lee, J. (2021), "Investigating unconditional positive self-regard as a mediator in psychotherapy", (Thesis MA), Roosevelt University, Chicago.
- Levy, J. and Bader, O. (2020), "Graded empathy: a neuro-phenomenological hypothesis", Frontiers in Psychiatry, Vol. 11, p. e554848, doi: 10.3389/fpsyt.2020.554848.
- McIntyre, J., Van Graan, C.L., Van Romburgh, J.D. and Van Zyl, A.P. (2014), "Contextualizing the South African forensic accountant", *Journal of Forensic and Investigative Accounting*, Vol. 6 No. 3, pp. 7-9.
- Madon, S., Guyll, M., Scherr, K.C., Greathouse, S. and Wells, G.L. (2012), "Temporal discounting: the differential effect of proximal and distal consequences on confession decisions", *Law and Human Behavior*, Vol. 36 No. 1, pp. 13-20.
- Mason, M. (2016), "The 'preparatory' and 'argumentation' stages of police interrogation: a linguistic analysis of a criminal investigation", *Language and Communication*, Vol. 48 No. 5, pp. 79-87.
- Meissner, C.A., Hartwig, M. and Russano, M.B. (2010), "The need for a positive psychological approach and collaborative effort for improving practice in the interrogation room", *Law and Human Behavior*, Vol. 34 No. 1, pp. 43-45.
- Memon, A., Meissner, C.A. and Fraser, J. (2010), "The cognitive interview: a meta-analytic review and study space analysis of the past 25 years", *Psychology, Public Policy and Law*, Vol. 16 No. 4, pp. 340-372.
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., Stewart, L.A. and PRISMA-P Group (2015), "Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement", *Systematic Reviews*, Vol. 4 No. 1.
- Morgan, R., Alison, L., Palace, M., Shortland, N. and Humann, M. (2020), "The effects of intelligence and personality on performance in simulated interrogation scenarios", *Journal of Police and Criminal Psychology*, Vol. 37 No. 2, pp. 271-278.
- Peters, M.D.J., Godfrey, C.M., Khalil, H., McInerney, P., Parker, D. and Soares, C.B. (2015), "Guidance for conducting systematic scoping reviews", *International Journal of Evidence-Based Healthcare*, Vol. 13 No. 3, pp. 141-146.
- Peterson, J., Pearce, P.F., Ferguson, L.A. and Langford, C.A. (2017), "Understanding scoping reviews: definition, purpose, and process", *Journal of the American Association of Nurse Practitioners*, Vol. 29 No. 1, pp. 12-16.

JFC 32,1	Pham, M.T., Rajic, A., Greig, J.D., Sargeant, J.M., Papadopoulos, A. and McEwen, S.A. (2014), "A scoping review of scoping reviews: advancing the approach and enhancing the consistency", <i>Research Synthesis Methods</i> , Vol. 5 No. 4, pp. 371-385.
	Phipps, W.D. (2004), "Narrative theory: a bona fide ecosystemic development or a re-invention of the wheel", Unpublished doctoral dissertation, Medical University of Southern Africa, Pretoria.
16	Phipps, W.D. and Vorster, C. (2011), "Narrative therapy: a return to the intrapsychic perspective?", Journal of Family Psychotherapy, Vol. 22 No. 2, pp. 128-147.
	Rogers, C.R. (1987), <i>Client-Centred Therapy: Its Current Practice, Implications and Theory</i> , Constable, London.
	Roos, V. and Wheeler, A. (2016), "Older people's experiences of giving and receiving empathy in relation to middle adolescents in rural South Africa", South African Journal of Psychology, Vol. 46 No. 4, pp. 1-13.
	Scott, A.J., Tudor-Owen, J., Pedretti, P. and Bull, R. (2015), "How intuitive is PEACE? Newly recruited police officers' plans, interviews and self-evaluations", <i>Psychiatry, Psychology and Law</i> , Vol. 22 No. 3, pp. 355-367.
	Snook, B., Eastwood, J. and Barron, W.T. (2014), "The next stage in the evolution of interrogations: the PEACE model", <i>Canadian Criminal Law Review</i> , Vol. 18 No. 1, pp. 219-239.
	Soukara, S., Bull, R. and Vrij, A. (2002), "Police detectives' aims regarding their interviews with suspects: any change at the turn of the new millennium?", <i>International Journal of Police Science</i> and Management, Vol. 4 No. 2, pp. 101-114.
	Sporer, S.L. and Schwandt, B. (2006), "Paraverbal indicators of deception: a meta-analytic synthesis", <i>Applied Cognitive Psychology</i> , Vol. 20 No. 4, pp. 421-446.
	Tobin, G.A. and Begley, C.M. (2004), "Methodological rigour within a qualitative framework", <i>Journal</i> of Advanced Nursing, Vol. 48 No. 4, pp. 388-396.
	Van Graan, C.L., Roos, V. and Katjene, M. (2022), "Commercial forensic interviewing techniques in South Africa: critical appraisal against the constitution", Submitted to South African Crime Quarterly
	Van Romburgh, J.D. (2008), "The training of a forensic accountant in South Africa", Mini-dissertation – MCom, NWU, Potchefstroom.
	Vorster, C. (2012), "Interactional pattern analysis", International Journal of Psychology, Vol. 47, p. 17.
	Vorster, C. (2016), Basic Interviewing Skills for Forensic Investigators, 2nd ed., Verbum, Potchefstroom.
	Vorster, C., Donaldson, B. and Bubb, E. (2016), "Assessment for psycho-legal purposes", in Roos, V., Scholtz, J.G. and Wessels, C. (Eds), An Introduction to Forensic Psychology, 3rd ed., Verbum, Potchefstroom, pp. 47-73.
	Vorster, C., Roos, V. and Beukes, M. (2013), "A psycho-diagnostic tool for psychotherapy: interactional pattern analyses (IPA)", <i>Journal of Psychology in Africa</i> , Vol. 23 No. 3, pp. 163-169.
	Vrij, A. (2008), Detecting Lies and Deceit: Pitfalls and Opportunities, Wiley, Chichester.
	Walsh, D. and Bull, R. (2010), "What really is effective in interviews with suspects? A study comparing interviewing skills against interviewing outcomes", <i>Legal and Criminological Psychology</i> , Vol. 15 No. 2, pp. 305-321.
	Walsh, D. and Bull, R. (2011), "Benefit fraud investigative interviewing: a self-report study of investigation professionals' beliefs concerning practice", <i>Journal of Investigative Psychology and</i> Offender Profiling, Vol. 8 No. 2, pp. 131-148.
	Walsh, D. and Milne, R. (2008), "Keeping the PEACE? A study of investigative interviewing practices in the public sector", <i>Legal and Criminological Psychology</i> , Vol. 13 No. 1, pp. 39-57.
	Walsh, D., King, M. and Griffiths, A. (2017), "Evaluating interviews which search for the truth with suspects: but are investigators' self-assessments of their own skills truthful ones?", <i>Psychology</i> , <i>Crime and Law</i> , Vol. 23 No. 7, pp. 647-665.

- Walsh, D., Milne, B. and Bull, R. (2015), "One way or another? Criminal investigators' beliefs regarding the disclosure of evidence in interviews with suspects in England and Wales", *Journal of Police* and Criminal Psychology, Vol. 31 No. 2, pp. 127-140.
- Walters, S.B. (2003), *Principles of Kinesic Interview and Interrogation*, 2nd ed., CRC Press, Boca Raton, FL.

Further reading

- Hartwig, M., Granhag, P.A., Strömwall, L.A. and Kronkvist, O. (2006), "Strategic use of evidence during police interviews: when training to detect deception works", *Law and Human Behavior*, Vol. 30 No. 5, pp. 603-619.
- Kassin, S.M. (2008), "Confession evidence: commonsense myths and misconceptions", Criminal Justice and Behavior, Vol. 35 No. 10, pp. 1309-1322.
- Vrij, A. (2003), "We will protect your wife and child, but only if you confess: police interrogations in England and The Netherlands", *Perspectives in Law and Psychology*, Vol. 17, pp. 55-79.

Supplementary material

The supplementary material for this article can be found online.

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