Note Taking in Investigative Interviews: Memory Enhancement Tool or Distraction?

Laura R Fallon, Memorial University of Newfoundland, MAPS

Abstract

Investigative interviews - particularly, interviews with witnesses - are a key component of criminal investigations. Consequently, researchers in forensic psychology are continually attempting to determine how to optimize information provision during witness interviews. One method that has been suggested by researchers is for the interviewers to take notes during interviews. In other domains (e.g., education, juries, clinical), note-taking has been shown to improve information retention, recall, and recognition, thereby suggesting that note-taking could potentially be a useful memory enhancement tool for investigators. However, some evidence also exists to suggest note-taking may produce a potential distraction effect in an interview setting – witnesses may perceive the interviewer negatively and subsequently provide less information. This literature review considers these contrasted findings and outlines future directions for this area of research.

Résumé

Les entrevues d'enquête – en particulier, les entrevues avec les témoins - constituent un élément clé des enquêtes criminelles. Par conséquent, les chercheurs en psychologie judiciaire ne cessent d'essayer de déterminer comment optimiser la communication d'informations durant les entrevues avec les témoins. Les chercheurs ont suggéré comme méthode la prise de notes par les intervieweurs pendant les entretiens. Dans d'autres domaines (p. ex., enseignement, jurys, clinique), la prise de notes a fait ses preuves comme moyen d'améliorer la rétention de l'information, le rappel et la reconnaissance, ce qui laisse croire que la prise de notes pourrait être un outil d'amélioration de la mémorisation utile pour les enquêteurs. Cependant, certains éléments probants indiquent que la prise de notes est susceptible de produire un effet de distraction potentiel dans le cadre d'une entrevue; il est donc possible que les témoins perçoivent l'intervieweur négativement et, de ce fait, fournissent moins d'information. La présente revue de la littérature analyse ces conclusions contrastées et définit les orientations futures de ce domaine de recherche.



One key determinant of whether or not a criminal investigation is solved is the completeness and accuracy of eyewitness accounts (Kebbell & Milne, 1998; Milne & Bull, 1999). Successful witness interviews can lead to the discovery of new information, inclusion and exclusion of suspects, and new lines of inquiry. However, interviewing is a complex process that is difficult to practice and receive training in, and often involves issues with both interviewer and witness memory (Shepherd, 1991). Thus, researchers are continually trying to improve best-practice investigative interviews without damaging memory retrieval.

One method that could be effective in improving investigative interviews is note-taking by police interviewers. Schreiber Compo, Gregory, and Fisher (2012) suggested that note-taking could be beneficial in enhancing interviewer memory for witness accounts because it helps officers reconstruct information later, through the activation of working and long-term memory systems. However, it is also possible that note-taking could be a distraction that divides officers' attention between listening to the witness and copying down information (Hickling, Hickling, Sison, & Radetsky, 1984). Another concern is the effect of note-taking on the witness; note-takers may appear disinterested in the information being provided because the witness does not receive the interviewer's full attention. This may result in distraction, negative perceptions of the interviewer, and a decrease in recall on the part of the witness.

The note-taking process is not standardized across police organizations. Although some jurisdictions do advocate for note-taking (e.g., Investigative Interviewing, 2013), it is difficult to know whether individual officers actually adhere to the practice. There are also some jurisdictions that advise against taking notes

30

during interviews (Achieving Best Evidence, 2011; Royal Canadian Mounted Police, 2015). Additionally, there are many police organizations for which no information is available regarding their use of note-taking. While empirical data on the use of note-taking by police officers is lacking, anecdotal evidence can shed some light on current practices; video footage of police interviews in the media often portray police officers not taking notes (e.g., *Making a Murderer, the Confession Tapes*). Given this apparent inconsistency in the use of note-taking in investigative interviews, empirical research on this topic is warranted to determine whether the benefits of note-taking in this context outweigh the costs.

Note-Taking: An Effective Memory Enhancement Technique

Given the lack of empirical research on the effects of note-taking in investigative interviews, note-taking has been heavily studied in other fields. In particular, numerous studies have indicated the benefits of notetaking in the educational context. For example, Di-Vesta and Gray (1972) showed that when participants were allowed to take notes during a lecture, they remembered more information on a free recall test than participants who only listened to the lecture. The researchers concluded that note-taking is an important learning tool that should be used in schools to increase retention and recall of information. Various meta-analyses on this topic echo those results, suggesting that note-takers exhibit increased memory performance over those who do not take notes (e.g., Henk & Stahl, 1985; Kobayashi, 2005; Kobayashi, 2006).

There are two main theories that explain why notetaking is effective for improving memory performance. The encoding function theory of note-taking states that the process of taking notes itself (regardless of whether or not the notes are reviewed) leads to a greater increase in achievement than does listening only (Kierwa, 1985). This theory suggests that notetaking should be seen as a deep and meaningful reproduction of material, and thereby involves processing the recorded material in ways that make it relatable and personally understandable (DiVesta & Gray, 1972; Faber, Morris, & Lieberman, 2000). Unsurprisingly, research has shown that material generated during this encoding process better facilitates learning of said information than material that has only been heard (e.g., Benton, Kierwa, Whitfill & Dennison, 1993; Bohay et al., 2011; Faber et al., 2000). According to Piolat, Olive, and Kellogg (2005), notetaking requires great cognitive effort because the notetaker must choose the material to be recorded, and do so in an organized manner that makes sense to

him or her. Therefore, it is possible that the mental effort required for taking notes (i.e., selecting and organizing material) makes it an effective strategy for improving memory. It has also been posited that taking notes allows the note-taker to record whatever subjective associations, inferences, and interpretations occurred to him or her while listening, thereby leading to more meaningful processing of material and contributing to increased retention, recall, and recognition (DiVesta & Gray, 1972).

While proponents of the encoding function theory believe that the act of taking notes itself is beneficial for retention and performance, other researchers argue for an alternative theory. The external storage function theory suggests that it is the act of reviewing notes that is beneficial for improving memory performance, as opposed to the act of taking notes itself (Carter & Van Matre, 1975; Kierwa, 1985). According to this theory, notes are useful because they give the note-taker an opportunity to store information somewhere other than the brain and review it later (Faber et al., 2000). In a study by Carter and Van Matre (1975), no difference in recall performance was found between participants who took notes and those who did not, but when participants were given the opportunity to review their notes prior to recall, they performed significantly better than those who did not have access to their notes. The fact that research supports both theories suggests that note-takers may benefit both from the act of taking notes and the ability to access an external copy of key concepts and ideas.

While empirical research on note-taking in witness interviews is lacking, the practice has been researched extensively in other areas of the criminal justice system, with most of the focus on jury recall. In a study where mock jurors were asked to take notes on trial proceedings, the participants reported that the process of note-taking helped refresh their memories and made the trial less difficult to understand (Flango, 1980). In a study by Rosenhan, Eisner, and Robinson (1994), mock jurors watched a video of a trial, while half of the jurors were allowed to take notes. The results revealed that note-takers scored significantly higher on a test of recall than non-note-takers. Heuer and Penrod (1988) found that jurors who took notes did not find that the act of note-taking was distracting to themselves or to other jurors.

Judging Note-Takers: Implications for Information Provision

Although there is a wealth of evidence to support the effect of note-taking on improving recall, some research suggests that it could also be detrimental in an interview setting. In a study by Hickling et al. (1984), clinical interviews were simulated and videotaped using professional actors as the therapist and client. The therapist either took notes during the session or simply listened. Participants watched the simulated interviews and were asked to rate the therapist's effectiveness, the client's perception of the session, and the overall session. Results showed that the session without note-taking was rated higher in all categories, suggesting that listening was preferred and that note-taking may have been viewed as distracting rather than facilitating.

Although there is a lack of research on note-taking in witness interviews, guidelines from police organizations in Canada and the U.K. suggest that note-taking during interviews can be detrimental in that it may distract the witness and lead to reduced information provision (RCMP, 2015; Investigative Interviewing, 2011). The fact that note-taking during an interview could be seen as distracting has major implications for its use in investigative interviews. For example, if witnesses do not feel that they are being listened to, they may be less likely to tell their whole story and could provide less information (e.g., RCMP, 2015). The negative findings regarding perception of note-taking call into question the application of the practice, regardless of its known positive effects for the mnemonic ability of the note-taker.

Explaining the Note-Taking Process

One potential factor that could lead to the negative perception of note-taking is a lack of explanation about the note-taking process. Given that police interviews play a foundational role in solving crimes, it is crucial that the environment in which the interview is conducted is as accommodating as possible for the witness. Of particular importance is the introductory phase of an investigative interview, which stresses the importance of (1) sufficiently explaining the interview process to witnesses (e.g., expectations, purpose, routines), and (2) engaging with the witness (e.g., asking their preferred name, addressing personal needs; see Clarke, Milne & Bull, 2011; Walsh & Milne, 2008). This process of explaining interview procedures and engaging the witness aims to develop and increase rapport, a process that involves building the interviewer-witness relationship and has been shown to increase the amount of accurate information reported in an interview setting (Kieckhaefer, Vallano, & Schreiber Compo, 2014; Schreiber Compo, Gregory, & Fisher, 2012). It is possible that if an explanation of the note-taking process were to be included during the introductory stage of an interview, the potential negative effects of note-taking could be mitigated.

Eye Contact: Signaling Interest in What is Being Said

A second possible explanation for the negative perceptions of note-takers may be the level of eye contact during an interview. Maintaining eye contact with a witness is argued to be important in contributing to rapport and witness engagement, because it signals that the interviewer is confident and paying attention (Shepherd & Griffiths, 2013) - but no empirical research has been conducted on the effect of eye contact in police interviews, specifically. Social psychology research has shown that compared to those using indirect or no eye contact, higher ratings of credibility were given to people who used direct eye contact (Aguinis, Simonsen, & Pierce, 1998). The importance of eye contact has also been studied in clinical interviewing contexts. In one study, counsellors who maintained high (versus medium and low) levels of eye contact were rated higher on measures of attention, interest, respect, and genuineness (Kelly, 1978). Tipton and Rymer (1978), however, found that counsellors who maintained high (versus low) eye contact did not differ significantly on ratings of similar traits. Sharpley and Sagris (1995) suggest that good client-counsellor relationships are characterized by varying levels of eye contact at certain times during the interview, contributing to higher levels of rapport. If, in a clinical context, sufficient eye contact contributes to increased rapport - a critical component of witness interviewing - it is possible that maintaining eye contact during a witness interview may decrease the negative effects of note-taking (i.e., distraction, negative perceptions of interviewer, decreased information provision).

Concluding Remarks

Note-taking has been shown to be an effective memory enhancement tool in various domains (i.e., educational, legal, and clinical settings), thereby suggesting that it could also be a useful tool for police interviewers. It is possible, however, that note-taking may also have a distracting effect during the interview and could decrease engagement and rapport between the interviewer and the witness. Based on the evidence that both supports and cautions against the use of note-taking in investigative interviews, and since it is not currently a standard practice, it is clear that this topic is deserving of further research. In particular, it would be useful to determine whether the benefits of note-taking in witness interviews outweigh the costs. Future research could test the benefits of note taking as well as the potentially distracting effects using a mock-interview design. The results of this research will shed light on the benefits (and consequences) of note-taking in witness interviews. If the benefits of note-taking in this setting are confirmed, then researchers should look at two potential moderators of this effect: engagement with the witness (e.g., maintaining eye contact) and explanation of the notetaking process. Investigating these variables will allow researchers to determine the appropriate circumstances that will allow interviewers to reap the benefits of note-taking, without an added distraction factor or other negative experiences for the interviewee. This line of research could lead to an overall improvement in criminal investigations (e.g., reduction in miscarriages of justice, fewer wrongful convictions), and subsequently, improve the criminal justice system as a whole.

References

Achieving Best Evidence in Criminal Proceedings. (2011). Retrieved from:

https://www.cps.gov.uk/publications/docs/best_evidence_in_criminal_proceedings.pdf

- Aguinis, H., Simonsen, M. M., & Pierce, C. A. (1998). Effects of nonverbal behavior on perceptions of power bases. *The Journal of Social Psychology*, *138*, 455-469. doi:10.1080/00224549809600400
- Benton, S.L., Kierwa, K.A., Whitfill, J.M., & Dennison, R. (1993). Encoding and external storage effects on writing processes. *Journal of Educational Psychology*, 85, 267-280. doi:10.1037/0022-0663.85.2.267

Bohay, M., Blakely, D. P., Tamplin, A. K., & Radvansky, G. A. (2011). Note taking, review, memory and comprehension. *American Journal of Psychology*, *124*, 63-73. doi:10.5406/amerjpsyc.124.1.0063

Carter, J. F., & Van Matre, N. H. (1975). Note taking versus note having. *Journal of Educational Psychology*, 67, 900-904. doi:10.1037/0022-0663.67.6.900

Clarke, C., Milne, R., & Bull, R. (2011). Interviewing suspects of crime: The impact of PEACE training, supervision and the presence of a legal advisor. *Journal of Investigative Psychology and Offender Profiling*, 8, 149-162. doi:10.1002/jip.144

DiVesta, F. J., & Gray, S. (1972). Listening and note taking. Journal of Educational Psychology, 63, 8-14. doi:10.1037/h0032243

Faber, J. E., Morris, J. D., & Lieberman, M. G. (2000). The effect of note taking on ninth grade students' comprehension. *Reading Psychology*, 21, 257-270. doi:10.1080/02702710050144377

Flango, V. E. (1980). Would jurors do a better job if they could take notes? *Judicature*, 63, 436-443.

Henk, W.A., & Stahl, N.A. (1985). A meta-analysis of the effect of notetaking on learning from lecture. In J.A. Niles & R.V. Lalik (Eds.), *Issues in literacy: A research per-*

spective. Thirty-fourth yearbook of the National Reading Conference. Rochester: NY: National Reading Conference.

Heuer, L., & Penrod, S. (1988). Increasing jurors' participation in trials: A field experiment with jury notetaking and question asking. *Law and Human Behavior*, *12*, 231-261. doi:10.1007/BF01044383

Hickling, L. P., Hickling, E. J., Sison Jr., G. F. P., & Radetsky, S. (1984) The effect of note taking on a simulated clinical interview. *The Journal of Psychology*, *116*, 235-240. doi:10.1080/00223980.1984.9923641

Investigative Interviewing. (2013, October 23). Retrieved from: https://www.app.college.police.uk/appcontent/investigations/investigative-interviewing/#top

Kebbell, M. R., & Milne, R. (1998). Police officers' perceptions of eyewitness performance in forensic investigations. *The Journal of Social Psychology*, 138, 323-330. doi:10.1080/00224549809600384

Kelly, E.W. (1978) Effects of counselor's eye contact on student-clients' perceptions. *Perceptual and Motor Skills*, 46, 627-632. doi:10.2466/pms.1978.46.2.627

Kieckhaefer, J. M., Vallano, J. P., & Schreiber Compo, N. S. (2014). Examining the positive effects of rapport building: When and why does rapport building benefit adult eyewitness memory? *Memory*, 22, 1010-1023. doi:10.1080/09658211.2013.864313

Kierwa, K. A. (1985). Students' note-taking behaviors and the efficacy of providing the instructor's notes for review. *Contemporary Educational Psychology*, *10*, 378-386.

Kobayashi, K. (2005). What limits the encoding effect of note-taking? A meta-analytic examination. *Contemporary Educational Psychology*, 30, 242-262.

Kobayashi, K. (2006). Combined effects of note-taking/-reviewing on learning and enhancement through interventions: A meta-analytic review. *Educational Psychology*, 26, 459-477.

Milne, R., & Bull, R. (1999). *Investigative interviewing: Psychology and practice*. Chichester: Wiley.

Piolat, A., Olive, T., & Kellogg, R. T. (2005). Cognitive effort during note taking. *Applied Cognitive Psychology*, 19, 291-312. doi:10.1002/acp.1086

Rosenhan, D. L., Eisner, S. L., & Robinson, R. J. (1994). Notetaking can aid juror recall. *Law and Human Behavior, 18*, 53–61. doi:10.1007/BF01499143

Royal Canadian Mounted Police. (2015). *The RCMP Phased Interview Model for Suspects: Generating Information Through Dialogue.* Ottawa, ON: Carr, D.

Schreiber Compo, N. S., Gregory, A. H., & Fisher, R. (2012). Interviewing behaviors in police investigations:
A field study of a current US sample. *Psychology, Crime and Law, 18*, 359-375.

doi:10.1080/1068316X.2010.494604

Sharpley, C. F., & Sagris, A. (1995). Does eye contact increase counsellor–client rapport? *Counselling Psychol*ogy *Quarterly*, 8, 145-155. doi:10.1080/09515079508256332

Shepherd, E. (1991). Ethical Interviewing. *Policing*, 7, 42-60.

- Shepherd, E., & Griffiths, A. (2013) *Investigative interviewing: The conversation management approach*. New York: Oxford University Press.
- Tipton, R.M., & Rymer, R.A. (1978) A laboratory study of the effects of varying levels of counselor eye contact in client-focussed and problem-focussed counseling

styles. Journal of Counseling Psychology, 25, 200-204.doi:10.1037/0022-0167.25.3.200 Walsh, D. W., & Milne, R. (2008). Keeping the PEACE? A study of investigative interviewing practices in the public sector. Legal and Criminological Psychology, 13, 39-57. doi:10.1080/1068316X.2010.494604

34