When should evidence be disclosed in an interview with a suspect? An experiment with mock-suspects.

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Abstract

The question of whether to disclose evidence to a suspect early on, or later, in an interview is often of critical importance for police officers’ interviewing strategies. To shed light on this issue an experiment was conducted in which 95 participants each committed a mock-theft as a hidden "witness" observed them. A statement from the witness was presented to them during a subsequent interview in which they were a "suspect." The time at which this evidence was disclosed to participants, and the evidence strength, were manipulated. Each participant was randomly assigned to one of four conditions; Early Weak, Early Strong, Late Weak or Late Strong. Both late evidence disclosure, and strong evidence, produced higher confession rates than did early disclosure or weak evidence, and late disclosure of weak evidence resulted in the withdrawal of most of the confessions which had previously been made.

Keywords: Investigative interviewing, Disclosure, Evidence, Confession
According to Gudjonsson (2007), suspects' perception of evidence strength is the main reason they confess to crimes. In field studies, a strong positive correlation has been found between confession rates and strength of the evidence of guilt as judged by the interviewing officer (Cassell & Hayman, 1996; Moston, Stephenson, & Williamson, 1992). The most common cause of confessions among prison inmates is their belief that the evidence against them is strong (Gudjonsson & Petursson, 1991), and this finding has been replicated in an experimental simulation (Kebbell, Hurren, & Roberts, 2006).

Because evidence is such a crucial consideration in suspect interviewing, interviewers often disclose it to suspects. After conducting a survey of police interviewing practices, Kassin et al. (2007) reported that only 1% of officers claimed they never confronted suspects with case evidence, whereas 22% claimed they always did this. However, while a consensus is emerging that evidence is vital to the eliciting of confessions, there is disagreement about how and when it should be used in suspect interviews. The purpose of this paper is to assess the potential advantages of various evidence disclosure strategies which interviewers might want to consider when questioning suspected offenders.

A strategy used by some interviewers is to disclose evidence almost immediately. Leo (2002) contends that in the USA, police officers often begin an interview by directly confronting suspects with evidence of their guilt. In fact Wald, Ayres, Hess, Schantz, and Whitebread (1967) reported the disclosure of evidence by the police to suspects before the interview had even begun.

In contrast, several authors caution against early evidence disclosure (e.g., Bull & Milne, 2004; Hartwig, Granhag, Strömwall, & Vrij, 2005; Napier & Adams, 2006; Ord, Shaw, & Green, 2008; Savino & Turvey, 2005; Shuy, 1998; Vrij, 2004). Zulawski and Wicklander (1992) assert that early and direct accusations against suspects only tend to elicit resistance from them, and once they have made a denial they are unlikely to change their story. Whereas Zulawski and Wicklander offer no empirical evidence to support their position, Baldwin (1992) analysed 200 audiotapes and 400 videotapes of police interviews with suspects before coming to much the same conclusion, noting that in only 20 of the 600 interviews analysed did suspects initially deny the offence but later confess, and in only nine of these cases did the change seem due to the interviewer's persuasive skills.

Some authors (e.g., Buckwalter, 1983; Yeschke, 2003) stress that the first moments of an interview are critical because they allow an interviewer to build rapport with the suspect by displaying fairness and compassion; immediately confronting them with evidence of their guilt risks squandering this opportunity. Interviewers should bear in mind that evidence...
collected by the police often contains inaccuracies, such as witness's errors of memory, or undue inferences being drawn from forensic evidence, and officers’ recollection of such material during the interview may also be faulty. A suspect confronted with inaccurate evidence against them may perceive this treatment as unfair, come to distrust and resent the interviewer, and hence withdraw all cooperation. If an interviewer discloses evidence which the suspect believes to be mistaken, their credibility may also suffer. As credibility is strongly associated with persuasiveness (Aronson, 1999; Palmiotto, 2004), an interviewer usually needs solid facts to be taken seriously. Evidence disclosure can be risky at any time, but especially when it is made so early that if the suspect reacts badly to it, they could stop talking before a statement has been obtained from them.

Another reason early disclosure may be strategically unwise is that knowledge of the case evidence can assist a suspect to fabricate an account which seems consistent with both their own innocence, and with the evidence. Moreover, late disclosure has the advantage that if the suspect is guilty, allowing them to commit to falsehoods before confronting them with strongly contradictory evidence may unsettle them (Hartwig et al., 2005). Even if the suspect successfully hides their emotional reactions to such evidence but fears they have failed to do so, this may still work to their psychological disadvantage.

It might be thought that allowing suspects to say whatever they like, instead of trying to use evidence as "leverage" to elicit a confession, could cause them to lose respect for the interviewer. Yet Heydon (2005, p. 181) has argued the police tend to be overly anxious that their control of a suspect will be jeopardised if they do not make overt displays of power, and describes this mindset as the "myth of threatened authority." If the suspect is innocent, giving them an early chance to state their position may resolve the matter so that no further questioning is necessary. If they are guilty, attempting to intimidate them with evidence may not be necessary. Suspects are often obliging and helpful even in the absence of any apparent pressure from the interviewer (Baldwin, 1992; Dixon, 2006; Elshtain, 2004), and those who seem evasive or uncooperative might be experiencing genuine difficulty with their memories.

Even authors who favour early evidence disclosure generally acknowledge that it should not be made in an unrestrained manner. It is customary for at least some evidence to be selectively withheld by the interviewer so that if a confession is obtained, its validity can then be tested by comparing this undisclosed evidence against the information supplied by the suspect (Gordon & Fleisher, 2006; Inbau, Reid, Buckley, & Jayne, 2005; Powel & Amsbary, 2006). If the suspect was provided with everything known about a crime then it might not be possible to determine whether details of their confession truly reflect memories of committing
the offence, or were simply learned during the interview. However, if the suspect is not prepared to give an account of themselves then asking them to comment on some of the evidence might be the only way to get any statement from them.

Due to legal and ethical constraints, research on evidence disclosure strategies cannot be conducted with real criminal suspects. Hence, an experiment using mock-suspects was devised. Eyewitness testimony is the most common type of evidence used in criminal investigations (Phillips & Brown, 1998; Scheck, Neufeld, & Dwyer, 2003). It is also known to vary greatly in strength and quality (Cutler & Penrod, 1995; Kebbell & Wagstaff, 1999), and this strength can be experimentally manipulated. For these reasons, the evidence used in this study was eyewitness testimony.

In light of the considerations which have already been outlined, the drawbacks associated with early evidence disclosure appear to outweigh the potential benefits. Therefore, it was hypothesised that more confessions would be obtained when the evidence was disclosed late in the interview than when it was disclosed early. It was also predicted that more confessions would be obtained when the evidence was strong than when it was weak.

Method

Design

A 2 x 2 between-subjects design was used. The independent variables were the strength of the evidence, which was manipulated by disclosing weak versus strong eyewitness statements, and the time at which this evidence was made known to participants, which was manipulated by disclosing the statements early versus late in the interview. The main dependent variable was whether or not participants made a confession.

Participants

The participants were first year psychology students, randomly allocated to one of four conditions. A total of 95 participants received course credit for completing the study. Their mean age was 21 years ($SD = 6.3$), with a range of 17 to 56 years.

Procedure

Participants were told they would be taking part in a study of criminal investigation, and that in Phase I of the experiment they would be assigned to either a "theft" condition, and asked to "steal" an object, or to an "innocent" condition. Participants were led to believe there was an innocent condition so that they would assume they could make a credible denial of
their responsibility for the theft. While some participants were given innocent instructions, the data from these individuals was not analysed. Participants were instructed to go into a room and steal a mobile phone, and were observed while they did this (for more details on the methodology see Kebbell et al., 2006).

Three days after the mock-theft, participants returned to be interviewed by a person who was blind to the experimental hypotheses. At this point participants were randomly allocated to one of four conditions; Early Weak, Early Strong, Late Weak and Late Strong. For the early conditions, the following nine-step procedure was employed. Participants were first informed that they were suspected of stealing a phone. At step two, an eyewitness statement in apparent support of this allegation was read to them. Participants were then asked to rate, on a ten-point Likert scale, their likelihood of confessing to the crime. The fourth step was taken from Kebbell et al. (2006); participants were promised $10 which they could keep if they successfully fooled a mock-jury into believing they were innocent, and were offered $5 if they confessed to the theft, but those who made a denial which was not believed received no money. Participants were then asked "Do you confess or deny stealing the phone?" (step five) and "What happened in the room that day?" (step six). The next step was to again ask participants to rate their likelihood of confessing on the Likert scale. They were then asked "Do you confess to stealing the phone?" After their interview, participants completed a questionnaire which included such target questions as "How strong do you think the evidence against you is?", "How guilty do you feel?" and "If you confessed, why did you confess?" The procedure for late conditions was identical to that used in early except that the timing of disclosure was manipulated by simply reversing the positions of steps two and six.

To encourage participants to engage closely with their task, the phone was deliberately hidden. Evidence strength was reduced in the weak conditions by changing parts of the eyewitness statement concerning the behaviour and description of the participant (eyewitness evidence in real criminal cases is often inaccurate-see Kebbell & Wagstaff, 1999). For instance, if a participant had immediately taken the phone as soon as they entered the experimental room, the statement was altered to say that they had first searched in various places before finding it. Likewise, details of the clothing, hair style and colour, and height and build of the participant were also distorted. In contrast, accurate information as to the participant's actions and appearance were correctly preserved in the strong conditions. Hence, the only difference between the early and late conditions was the time at which the evidence was disclosed, and the only difference between the weak and strong conditions was the strength of this evidence.
Results

Confession rates and participant’s ratings of likelihood of confessing

To confirm that manipulation of evidence strength was successful, an independent $t$-test was conducted on participants' ratings of evidence strength. These ratings were higher in the strong conditions ($M = 8.12, SD = 1.83$) than the weak, ($M = 2.62, SD = 1.80$), $t(93) = 14.76, p < .01$. As mentioned previously, each participant was given two opportunities to confess, and two opportunities to rate their likelihood of confessing. Confessions made at the first opportunity are referred to as "First Confessions", and those made at the second as "Second Confessions." Similarly, first likelihood of confessing ratings are referred to as "First Likelihoods" and the second as "Second Likelihoods." An additional variable referred to as "Any Confessions" reflects responses to the question, "Did you confess to stealing the phone at any time?" A total of 53 participants (55.8%) made a First Confession, 52 (54.7%) made a Second Confession, and 62 (65.3%) made a confession at least once (an Any Confession). Confession results are displayed in Table 1.

Table 1 to go here

A $2 \times 2 \times 2$ ANOVA (early/late x weak/strong x first/second) with repeated measures on the third factor was conducted on participants’ ratings of their likelihood of confessing. See Table 2 for these results. There was no significant main effect of disclosure timing on ratings of likelihood of confessing, $F(1, 91) = 0.00, p > .05, \mu^2 = .00$. There was a significant main effect of strength of evidence, $F(1, 91) = 23.13, p < .01, \mu^2 = .20$, with the likelihood of confessing being higher in the strong conditions ($M = 6.95, SD = 0.32$) than the weak conditions ($M = 4.74, SD = 0.33$). There was no significant difference between first and second likelihood of confessing, $F(1, 91) = 2.16, p > .05, \mu^2 = .02$.

Table 2 to go here

There was a significant interaction between disclosure timing and likelihood of confessing, $F(1, 91) = 5.19, p < .05, \mu^2 = .05$, and between strength of evidence and likelihood of confessing, $F(1, 91) = 37.25, p < .01, \mu^2 = .29$. A significant interaction was also indicated between timing and strength and likelihood of confessing, $F(1, 91) = 18.16, p < .01, \mu^2 = .17$. The interactions were explored with follow-up $t$-tests using an alpha level of $p < .05$. In the late conditions likelihoods showed significant changes over time, decreasing in response to weak evidence and increasing in response to strong. In the early conditions, likelihoods increased when evidence was strong, but did not significantly change when it was weak.

Results for likelihood of confessing were mirrored by those for actual confessions. A logit model was run on confessions at any time as the dependent variable, and early/late
Disclosure timing in suspect interviews

disclosure and weak/strong evidence as independent variables. This is analogous to the
previous ANOVA, except binary data was used. There was a significant effect of disclosure
timing, $z = 2.54, p < .05$, with 24 confessions recorded in response to early disclosure and 38
in response to late. There was also a significant effect of evidence strength, $z = 2.96, p < .01,
with 23 confessions in response to weak evidence and 39 in response to strong. There was no
significant interaction between disclosure timing and evidence strength, $z = 0.74, p > .05$.

Ratings for pressure, guilt and fairness are displayed in Table 3. Two-way ANOVAs
(early/late x weak/strong) were conducted on these values. Strength had a significant main
effect on pressure $F(1, 91) = 19.66, p < .01, \mu^2 = .18$, with higher ratings in the strong
conditions ($M = 6.42, SD = 2.35$) than the weak conditions ($M = 4.36, SD = 2.12$). Means
were also higher in the strong conditions for guilt ($M = 7.13, SD = 2.01$) than in the weak ($M
= 4.74, SD = 2.23$), $F(1, 91) = 29.63, p < .01, \mu^2 = .25$, and higher in the strong conditions for
fairness ($M = 8.00, SD = 1.53$) than in the weak ($M = 7.14, SD = 1.89$), $F(1, 91) = 5.75, p <
.05, \mu^2 = .06$. There were no significant effects of timing, and no significant interactions.

Table 3 to go here

Discussion

The timing of evidence disclosure had significant effects. Late disclosure caused more
mock-suspects to confess, and made them more likely to change from confessing to denying,
than did early disclosure. Among participants who confessed, early disclosure was positively
correlated with reported feelings of pressure. Early disclosure of weak evidence yielded only
six First Confessions (27.3%), the lowest such rate for any condition by far, whereas late
disclosure of weak evidence elicited no further confessions and resulted in 10 of the 16
previously made confessions being retracted, yielding a Second Confession rate in Late Weak
of only 25%, which was also lower than the corresponding rate for any other condition. Thus,
to the question of when weak evidence should be disclosed, the answer may be never. The
retraction of confessions in response to weak evidence seems to provide further corroboration
of the power of evidence strength in suspect interviewing.

The implications of confession retraction in response to weak evidence are not entirely
clear. "Losing" a confession may disappoint interviewers. Then again, if the case evidence
really is weak, and a confession is one of the few indications of guilt, this is precisely the sort
of situation which is likely to result in a miscarriage of justice. When evidence is very strong,
most retractions of confession may not be particularly interesting or significant, because the
suspect is likely to be guilty, and is also likely to be convicted whether they confess or not.
When the evidence is weak however, the retraction of a confession means that investigators
are left with a case based on weak evidence, plus a retracted confession. In such cases they may also be left with a personal belief that the suspect must be guilty, because many seem to believe that false confessions are rare (e.g., Cassell, 1998; Gosselin, 2007). Under these circumstances, it could well be that acceptance of the initial confession as valid would lead to the conviction of an innocent person (because weak evidence is consistent with innocence), but its rejection as invalid might cause a guilty person to escape prosecution, because the case against the suspect would collapse once the confession was rejected.

An unexpected finding of this study was that the tendency for confession rates and likelihoods of confessing to fall in response to weak evidence was more striking than the tendency for these variables to rise in response to strong evidence. One possible explanation is that weak evidence does more to diminish the frequency of confession than strong evidence does to increase it. If this were so, the conventional wisdom that evidence exerts its main influence when it is strong, by exerting an upward pressure on confession rates, might have to be revised along the lines that evidence truly does most of its work when it is weak, by exerting a downward pressure on confession. A more likely explanation however, is that because most participants were aware they might have been seen when committing the theft, they were surprised by any weak testimony against them, but relatively unmoved by strong. A better understanding of how suspects perceive and process the evidence against them might assist interviewers to use it more effectively, so future researchers may wish to deliberately manipulate these perceptions. For instance, they could lead suspects to believe that the evidence against them is weak, and then observe their responses to the disclosure of strong evidence. As Granhag and Hartwig (2008) have pointed out, interviewers often tend to focus on their own strategies at the expense of considering how the suspect is thinking.

As compared to the disclosure of weak evidence, strong evidence appears to have made participants significantly more likely to do the following in this study; to rate the evidence against themselves as strong and accurate, to rate the interviewer as being more fair to them, to rate their Second Likelihoods of confessing as higher, to make both a Second and an Any Confession, and to report their experience of guilt and pressure as higher. In the strong conditions no participant changed from confessing to denying but eight changed from denying to confessing. Furthermore, when participants confessed, those in the strong conditions were significantly more likely to identify their feelings of guilt and pressure, and the evidence against them, as being at least part of the reason they had done so. The finding that participants appeared to perceive the interviewer as treating them less fairly in the weak conditions may be important because it might partially explain why weak evidence is less
likely to elicit confessions; it is possible that when suspects, whether innocent or guilty, are confronted with spurious evidence against them, this offends their sense of justice and fairness to the point they become less compliant.

Evidence disclosure in suspect interviews, or the lack of it, may of course have legal consequences. While lawyers may insist that their clients should be informed of the evidence against them before being questioned, some authors claim that the police are not generally obliged to do this in the UK (Hutton & Johnston, 2000; Shepherd, 2007), the USA (Gilbert, 2004; Shearer, 2005) or Australia (Ord et al., 2008). Thus, police interviewers often have considerable discretion to withhold or divulge evidence as they wish.

From a strategic viewpoint, late evidence disclosure guards against the potential damage of both inaccurate evidence, which can undermine the interviewer's credibility, and accurate evidence, which could inform the suspect about the best way to maintain their own credibility as an innocent person. Late disclosure also helps to preserve flexibility for two reasons. Firstly, a decision to defer disclosure can always be changed, whereas actual disclosure cannot be undone. Secondly, early disclosure of guilt presumptive evidence may make the interviewer seem harsh, and it is much less sensible to start off in a harsh manner and then try to present oneself as friendly, than vice versa. Moreover, from the standpoint of cognitive distortions, if an interviewer focuses on the suspect's side of the story before focusing on evidence of their guilt, this may foster an open mindedness which could make them less vulnerable to the sort of premature judgements and excessive "need for cognitive closure" (Ask & Granhag, 2007, p. 564) which are known to be resistant to correction.

Allowing suspects to provide their own accounts also means that the guilty may be able to portray themselves in a positive light by emphasising mitigating factors (Benneworth, 2006), and this may make a confession more likely. Arguably, encouraging a suspect to state their case before disclosing evidence is also fairer to them than is immediate confrontation. Even if it is not actually more fair, if it appears fair to the suspect this has strategic and rapport enhancing benefits, and it if appears fair to the courts this could have legal advantages if the suspect is later prosecuted. Hence, from the perspectives of rapport building, strategy, fairness, the law, and protection against psychological biases, late evidence disclosure in suspect interviewing seems generally preferable to early.

As with other experiments of this type, certain factors limit the generalisability of these findings to forensic settings, including the use of predominantly female university student participants who have committed no real criminal offence, and the absence of any
major consequences of interview outcome for either the mock-suspects or the interviewer. However, as previously stated, alternative experimental designs may not be feasible.

Conclusions

Although interviewers need to gather as much evidence as possible before a suspect interview, they should not put too much faith in this information, because they can seldom be sure it is entirely reliable. While the disclosure of strong evidence can sometimes help to elicit a confession, interviewers should be wary about disclosing weak evidence, which could have the opposite effect. The finding of this study that late disclosure is more likely to generate confessions than early disclosure is important because it adds to our understanding of a variable, disclosure timing, which in forensic settings is far more amenable to manipulation than is evidence strength.
References


Table 1  
Confession Rates for Participants at First, Second and Any Opportunity

<table>
<thead>
<tr>
<th>Timing</th>
<th>Strength</th>
<th>First</th>
<th>Second</th>
<th>Any</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>Weak</td>
<td>6 (27.3)</td>
<td>7 (31.8)</td>
<td>7 (31.8)</td>
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<td></td>
<td>Strong</td>
<td>15 (62.5)</td>
<td>17 (70.8)</td>
<td>17 (70.8)</td>
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<tr>
<td>Late</td>
<td>Weak</td>
<td>16 (66.7)</td>
<td>6 (25.0)</td>
<td>16 (66.7)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>16 (64.0)</td>
<td>22 (88.0)</td>
<td>22 (88.0)</td>
</tr>
</tbody>
</table>

*Note.* Percentages in brackets.
Table 2

Mean Likelihoods by Timing, Strength of Evidence and First and Second Likelihood of Confessing

<table>
<thead>
<tr>
<th>Timing</th>
<th>Strength</th>
<th>Likelihood of Confessing</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First</td>
</tr>
<tr>
<td>Early</td>
<td>Weak</td>
<td>4.55 (3.00)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>6.25 (2.71)</td>
</tr>
<tr>
<td>Late</td>
<td>Weak</td>
<td>6.04 (2.46)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>5.84 (2.28)</td>
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</table>

*Note.* Standard deviations in brackets
Table 3

*Mean Ratings by Condition for Pressure, Guilt and Fairness*

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Timing</th>
<th>Weak</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Early</td>
<td>4.52 (2.14)</td>
<td>6.70 (1.89)</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>4.21 (2.13)</td>
<td>6.16 (2.72)</td>
</tr>
<tr>
<td>Guilt</td>
<td>Early</td>
<td>4.73 (2.27)</td>
<td>6.83 (2.15)</td>
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<tr>
<td></td>
<td>Late</td>
<td>4.75 (2.23)</td>
<td>7.44 (1.87)</td>
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<tr>
<td>Fairness</td>
<td>Early</td>
<td>7.16 (2.25)</td>
<td>8.04 (1.46)</td>
</tr>
<tr>
<td></td>
<td>Late</td>
<td>7.12 (1.54)</td>
<td>7.96 (1.62)</td>
</tr>
</tbody>
</table>

*Note.* Standard deviations in brackets