Eyewitness Identification Accuracy: A Comparison of Adults With and Those Without Intellectual Disabilities

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Abstract

The effect of variation in the clarity of a witnessed event on the accuracy of eyewitness identification for adults with intellectual disabilities and those without disabilities was examined. Following observation of one of three films (clear, less distinct, or ambiguous) depicting a nonviolent theft, participants were asked to identify the thief from a photo lineup. Across all film conditions, participants with intellectual disabilities made as many correct identifications as did participants without disabilities, but they also made more false identifications and were more prone to guessing. Differences between groups seemed to be attributable to the demand factors inherent in the eyewitness identification task and understanding of the nature of the task itself.

Eyewitness identification is often the most important or sole evidence linking a particular defendant to a crime (Grano, 1984; Wells, 1993; Wells, Small, Penrod, Malpass, Fulero, & Brimacombe, 1998). The importance of accuracy in identification is, therefore, a topic of much interest to members of the criminal justice system. To date, although there are some studies and case reports on the accuracy of children and adults with intellectual disabilities in terms of reporting on observed events (e.g., Brown & Geiselman, 1990; Dent, 1986; Gudjonsson & Gunn, 1982; Isaacs, 1997; Isaacs & Ericson, 2000; Jens, Gordon, & Shaddock, 1990; Milne, Clare, & Bull, 1999; Perlman, Ericson, Esses, & Isaacs, 1994), no investigators have examined eyewitness identification accuracy of individuals with intellectual disabilities.

Although there is a dearth of research on the eyewitness capacity of individuals with intellectual disabilities, there is an extensive body of literature on the eyewitness identification capacity of adults and children without intellectual disabilities. Although not directly relevant, such research may be pertinent for individuals with intellectual disabilities and other special populations in terms of suggesting factors that may affect identification performance, by providing (a) theoretical explanations for performance differences and (b) guidelines for appropriate research design.

Rates of correct identification for both adults and children without intellectual disabilities vary widely between studies, ranging from chance levels (e.g., Dent & Stephenson, 1979) to close to 100% (e.g., Leippe, Romanczyk, & Manion, 1991). Children 6 years of age and older generally make as many correct identifications as do adults (Beal, Schmitt, & Dekle, 1995; Goodman, Hirschman, Hepps, & Rudy, 1991; Goodman & Reed, 1986; Parker & Carranza, 1989; Parker & Ryan, 1993; Peters, 1987; for an exception see King & Yuille, 1987). The performance of children relative to adults on the identification task does emerge as considerably inferior, however, when rates of false identification and “no selection” are examined. Children make more false identifications and are generally more likely to choose a candidate from a lineup rather than making no choice compared to adults (Beal et al., 1995; King & Yuille, 1987; Leippe et al., 1991; Parker & Carranza, 1989).

Differences in performance between studies with respect to correct identifications and differences in rates of false identifications between adults and children, can be understood in the context of a theoretical analysis of the factors affecting the decision-making process when selecting a suspect from a lineup. Malpass and Devine (1984) identified two major factors that affect this process in all witnesses.
The first factor is the amount or quality of information available to the witness about the appearance of the offender. Such information is a product of situational variables affecting the witness situation, such as opportunity to observe the offender at the time of the crime and his or her physical characteristics, focus of attention at the time of the crime, lighting at the scene of the crime, etc. Variations in these factors, along with other discrepancies in experimental design, likely account for many of the differences in correct identifications obtained between studies with both adults and children.

The second factor affecting decision-making is the witness's estimation of the risks and values associated with making a choice, referred to as the social utility of choosing. When the witness's information about the crime is less than optimal, the witness engages in a process of weighing the consequences of his or her identification decision, which affects the attractiveness or likelihood of choosing a suspect from a lineup. For the purposes of the present discussion, an important factor concerning the attractiveness of making a decision is the desire for social approval as a cooperative and helpful witness. Adults without intellectual disabilities who have a strong need for approval, who exhibit more than usual deference to police authority, and who are inclined to be overly cooperative are more inclined to make a selection than are adults without such attitudes or belief systems (Wells, 1988), as are children, whose dependency on adults, and history of reinforcement for cooperative behavior, renders them more generally susceptible to the demands of perceived authority figures (King & Yuille, 1987). As noted by King and Yuille, the presentation of a photo lineup may in effect be equivalent to a leading question, which may be more likely to elicit a choice response in individuals with an increased proclivity for suggestibility. Witnesses who are more inclined to be suggestive and/or who desire to appear compliant and cooperative may be concerned that the interviewer will be disappointed if they do not select a candidate because from their perspective, that is what the task demands. For example, because in most studies children do not tend to differ from adults in the number of correct identifications made from photo lineups, it would seem that memory factors do not account for differences in accuracy. Rather, the higher rates of choosing and false identifications reported for children indicate that they generally differ from most adults with respect to factors affecting the social utility of decision-making.

It is reasonable to hypothesize that adults with intellectual disabilities will be susceptible to higher rates of choosing and false identifications compared to adults without intellectual disabilities. Witness and interview research indicates that they are generally more susceptible to the perceived demands of authority figures than are adults without intellectual disabilities (e.g., Brown & Geiselman, 1990; Ericson & Perlman, 2001; Gudjonsson & Gunn, 1982; Isaacs, 1997; Milne et al., 1999; Perlman et al., 1994; Sigelman, Budd, Spanhel, & Schoenrock, 1981; Sigelman, Budd, Winer; Schoenrock, & Martin, 1982; Sigelman et al., 1980). Due to cognitive limitations and the fact that in contrast to individuals without intellectual disabilities, those with intellectual disabilities often do not obtain education or knowledge about the legal system or their rights (Ericson & Perlman, 2001; Everington & Fulero, 1999; Fulero & Everington, 1995), they may also differ from individuals without intellectual disabilities in their interpretation of the lineup task. Therefore, it is reasonable to hypothesize that adults with intellectual disabilities will be susceptible to higher rates of choosing and false identifications compared to adults without intellectual disabilities.

In real-life situations, information factors are variables over which the police have no control, and to some extent, social utility variables are intrinsically part of the witness’s personality profile and value system. To a considerable extent, however, social utility variables can be manipulated by the behavior of the police. For example, if the police either directly or indirectly imply confidence that the offender is in a lineup, this will increase the witness’s subjective belief that the offender is present (Garrioch & Brimacombe, 2001; Wells et al., 1998). Moreover, there may also be greater concern that the police will be disappointed if an identification is not made, thus increasing the attractiveness of making a selection under conditions of uncertainty (Malpass & Devine, 1984). Factors affecting the social utility of decision-making, as well as other factors affecting the accuracy of eyewitness identifications, have been studied extensively in the general population.

In witness identification research with individuals who do not have intellectual disabilities, investigators have been concerned mainly with factors that increase identification accuracy and decrease false identifications. The construction and
administration of police lineups constitutes one of the most studied variables in this area. In the classic lineup, several foils (known innocents) and a suspect stand in single file, facing the witness, and then turn for a profile view. In practice, however, most identifications are made from photos (often referred to as photo spreads or arrays) rather than live lineups because there are several pragmatic advantages that accrue to the use of photos, and they may be less traumatic for victims than live viewing of the perpetrator of a crime (Peters, 1991; Shapiro & Penrod, 1986; Wells, 1988; Wells et al., 1998).

The identification of innocent suspects is probably the topic of most substantive interest to researchers and the criminal justice system (Deffenbacher, 1991; Doob & Kirshenbaum, 1973; Egseth, 1993; Luus & Wells, 1991; Malpass & Devine, 1983, 1984; Wells, 1993; Wells et al., 1998). Lineups in which it is easy to identify the person suspected by the police are generally regarded as suggestive or “unfair.” It is important that a suspect is selected because the witness recognizes the individual as the perpetrator. The foils in a lineup should have similar broad characteristics to the suspect, as described in the witness’s original description of the suspect. If the foils in a lineup do not resemble the witness’s prior description of the suspect, the witness may be at risk of confusing the identity of the person whom the police suspect, or they may select a candidate merely because he or she looks most like the culprit relative to other members of the group. Selection then is based on rational deduction rather than recognition (Gonzalez, Ellsworth, & Pemroke, 1994; Wells, 1988; Wells et al., 1998). It is also important that all members of the lineup are dressed similarly so that identification is based on recognition of the suspect rather than recognition or distraction by certain pieces of clothing (Lindsay et al., 1991).

The mock witness paradigm, first used by Doob and Kirshenbaum (1973), can be used to determine whether selected foils are reasonably similar to the suspect. In this procedure, subjects or “mock witnesses,” who have never seen the suspect, are given a verbal description of him or her and the crime. They are then asked to select the individual they believe committed the crime from a lineup. Because the mock witnesses have not seen the actual suspect, based on a verbal description alone, the suspect should not be more likely to be selected than one of the foils, if the foils are reasonably similar to the suspect. Thus, the mock witness procedure can be used to rule out the possibility that foils selected for a lineup can be dismissed merely on the basis of a verbal description of the perpetrator.

Once reasonable foils have been selected using the mock witness paradigm, there are a number of ways to assess the resulting “fairness” of the selected lineup. One method is to consider the distribution of mock witness choices across members of the lineup, which should not depart significantly from chance expectation, as measured by a chi-square test. Bias towards selection of the actual suspect can be measured statistically by assessing the difference between the proportion of mock witness identifications of the suspect expected by chance and the proportion observed, using the standard z test for proportions. The suspect or perpetrator should not have a probability greater than chance of being selected on the basis of a description alone. As a basic standard for constructing a fair lineup, it is desirable that these two criteria are met.

The structure or mode of presentation of the lineup, and the instructions provided to witnesses, can also affect rates of correct and incorrect identification. Suspect-absent lineups (also known as blank lineups) have been used extensively in research studies to examine response bias tendencies (e.g., Lindsay et al., 1991; Malpass & Devine, 1984, 1981; Parker & Carranza, 1989; Wells & Luus, 1990). Typically in such procedures, following a contrived witness situation, research participants are shown a lineup in which the “suspect” is deliberately omitted, followed by a second lineup in which the suspect is present. This procedure provides a means of assessing the degree to which a witness is prone to guessing and his/her ability to differentiate the offender from other members of the lineup. With respect to the latter point, such studies demonstrate that when a witness has a poor memory for the perpetrator, he or she is inclined to make a lineup selection because a candidate looks most like the perpetrator relative to other members in the lineup rather than making a selection because the candidate looks exactly like the perpetrator (Malpass & Devine, 1984; Wells & Luus, 1990). Research suggests that the likelihood of an innocent suspect being falsely identified is greatly reduced when a suspect-absent lineup is used (Wells, 1988; Wells et al., 1998). The procedure is intended to protect an innocent suspect from a witness who is guessing and to bolster the credibility of a witness who is able to correctly reject an entire set of photographs prior to identifying the suspect.
Suspect-absent lineups have also been used extensively to examine the effect of instructions to witnesses on rates of correct and false identifications. Instructions may be considered biased if they directly or indirectly imply or suggest that the perpetrator is present in the lineup and that the witness should make a selection. Unbiased instructions are those in which it is indicated that the perpetrator may or may not be present and that "no-choice" is an option. Although there are exceptions (e.g., Shepherd, 1983), research with adults generally suggests that unbiased instructions reduce rates of "choosing" and false identifications without decreasing rates of correct identifications (e.g., Lindsay et al., 1991; Malpass & Devine, 1981; Steblay, 1997).

The design of the present study allowed for examination of the interaction of the social utility of decision-making and situational variables in the process of lineup selection for adults with intellectual disabilities and those without intellectual disabilities. The inclusion of a suspect-absent lineup as well as a suspect-present lineup and assessment of rates of choosing permitted us to examine differences between adults with and those without intellectual disabilities, with respect to social utility variables, through analysis of guessing behavior in both groups. Prior to each lineup, participants received unbiased verbal instructions as to whether the suspect was present in the lineup, and they were advised not to guess. The inclusion of different observational circumstances in this study (i.e., clear, less distinct, and ambiguous observational circumstances) provided an opportunity to assess identification behavior in adults with and those without intellectual disabilities when the situational variables of the observed event differed. Rates of correct identifications were not expected to differ between groups. However, because individuals with intellectual disabilities may be more likely to be susceptible to social demands compared to those without intellectual disabilities, we anticipated that individuals with intellectual disabilities would be more inclined to guess (make choices) and make false identifications, particularly under conditions of greater ambiguity in the observed event.

For the purposes of the study, we applied the diagnostic term intellectual disability to individuals who met the following criteria, established by the most recent Diagnostic and Statistical Manual of Mental Disorders, 4th edition (American Psychiatric Association, 1994): (a) An IQ of 70 or below as measured by an individually administered intelligence test, (b) concurrent deficits in adaptive behavior in at least two or more areas of functioning (e.g., social skills, life skills, domestic skills), and (c) onset of the disability prior to age 18. There are varying degrees of developmental disability (i.e., mild, moderate, severe, profound). This research was concerned with individuals assessed or deemed to be functioning within the high moderate to high mild range of developmental disability, or an IQ of approximately 50 to 75. Extending the upper limit to 75 from 70 allows for a 5-point measurement error, which is assumed in most standardized intelligence tests. Individuals with this degree of intellectual disability were selected for participation in the study because they account for about 90% of people with intellectual disabilities (Ramey & Finkelstein, 1981).

Method

Participants

Participants were 60 adult clients of Surrey Place Centre, a research and outpatient treatment facility for people with intellectual disabilities located in Toronto, Canada. They functioned in the high moderate to mild range of developmental disability (IQ 50 to 75). There were two comparison groups, each with 60 participants: a university/college sample and a sample who had completed high school with no further education. Participants ranged in age from 18 to 50 years. There were an equal number of males and females in each of the individual groups. The 60 participants in each of the three groups were divided equally into three conditions in which film clarity was manipulated (3 × 3 ANOVA design).

Film Development

Participants were blocked for group and gender to ensure balance and were then randomly assigned to film condition. Participants were asked to view one of three film clips. Each film depicted a non-violent purse theft at a garden shop. In the clear film condition, close-up shots of the perpetrator were incorporated to depict very nonAmbiguously the appearance and intentions of the thief, a situation analogous to a serious crime against a person. In the less distinct film condition, longer camera angles were used, a situation analogous to one in which a crime is observed but does not directly involve the witness. In the ambiguous film condition,
some of the details and events were not explicitly shown, and the perpetrator of the crime was less clearly evident. This film condition was analogous to crime situations in which the suspicious behavior of the perpetrator may not be clear prior to the crime, and witnesses may have to piece together their perceptions of the scene.

**Photo Lineup Development**

Considerable effort was made to ensure that the photo lineup constructed for the study was “fair” in that the alternative choices or foils resembled the “perpetrator” in the film with respect to basic features and characteristics. Initially, a picture of the perpetrator was distributed to 10 staff members at Surrey Place Centre, who were asked to provide a verbal description of him. The information provided by these volunteers, in conjunction with a written profile provided by the agent of the actor who played the role of the thief in the film, was used to generate a description of him. This information was then used to advertise for volunteers to take part in the photo lineup. Volunteers were solicited through posted notices and by word-of-mouth through colleagues and friends. They were advised of the purpose of the study and the nature of their involvement in the photo lineup. All photo lineup volunteers were paid $20 for their contribution to the study.

For the photo lineup pictures, the actor who played the thief in the film was photographed against a white backdrop in neutral clothing, consisting of blue jeans and a white t-shirt. Volunteers who took part in the photo lineup were photographed against the same background and wore the same t-shirt. Volunteers were asked to wear jeans or track pants.

A total of 19 potential foils were obtained. The mock witness paradigm, as developed by Doob and Kirshenbaum (1973) and discussed in the literature review, was implemented to ensure that the lineup was fair. Undergraduate students at York University in Toronto, Canada, served as mock witnesses for this study. Mock witnesses were provided with a brief description of the purse snatching and a general description of the thief as a Caucasian male, in his late 20s to early 30s, clean-shaven, with red-brown hair, of medium build, and 5’9” to 5’11” tall. Mock witnesses were instructed to select only one candidate whom they felt best fit the description provided.

Eight undergraduate classes initially served as mock witnesses (N = 194). Potential foils who were seldom or never picked by mock witnesses as the most likely match to the description of the thief were systematically dropped from the photo lineup. Through this process of elimination, 10 candidates for the lineup (including the actual perpetrator) were identified as the most likely unbiased group of candidates. These 10 candidates were then shown to two additional classes, in which a total of 101 students took part as mock witnesses. Under the assumption that an unbiased lineup has been constructed, the actual perpetrator should not be more likely to be selected than the foils, given that mock witnesses are operating on a descriptive basis alone, without having actually seen the film. Chi-square analysis of results from mock witness foil selection revealed that no candidate was more likely than any other to be identified as the thief, based on descriptive analysis alone.

The z test for the probability of a proportion revealed that the actual “thief” in the film was not selected by mock witnesses at a rate greater than expected by chance. Thus, the measures indicated that a “fair” lineup was constructed.

**Procedure**

**Solicitation of participants.** This study was part of a larger research project in which the witness capacity of adults with and those without intellectual disabilities was compared. All participants were paid $20 for taking part in the study. Those without intellectual disabilities were initially contacted by their primary worker/therapist at Surrey Place Centre to discuss the purpose of the study and their possible participation. Individuals in the comparison groups were solicited through posted notices in colleges and universities, by word-of-mouth through friends and colleagues, and through a newspaper advertisement inviting participation. Those individuals who expressed an interest were subsequently contacted by the experimenter and were provided with a brief explanation about the format and purpose of the study. An appointment was set up for those who indicated a willingness to participate.

**Research proceedings.** Prior to commencement of the study procedures, an information letter was provided to all participants and read aloud to those with intellectual disabilities. An informed consent for the study procedures was obtained. All procedures and forms for this study received ethical clearance by a review board at Surrey Place Centre composed of internal and external referees.
All participants observed one of the three films in an interview room at Surrey Place Centre. Each participant watched the film alone. As much as possible, we attempted to maintain consistency across individual interviews with respect to environmental factors, such as lighting in the room during observation of the film; color, contrast, and brightness of the film; and viewing distance from the television screen.

For the photo identification task, the participant was asked to examine a suspect-absent photo spread. These pictures were attached to a large white cardboard backing. Five pictures were presented simultaneously. Each individual in the spread was shown from five different angles, using a 3” × 5” photographs. A full frontal view, a closeup frontal shot of the face and upper body, one view of each three quarter profile, and a (left) side view were shown for each suspect. Prior to viewing the photo lineup, each participant was provided with these instructions:

Now I am going to ask you to look at some pictures. I would like you to look carefully at the pictures and tell me if you see the man who played the thief (first man who ran out of the store). He may be in the pictures you see or he may not be in the pictures. If you don’t remember/aren’t sure of what he looks like, don’t guess, just say ‘I don’t know.’ If you are sure that you see the thief, tell me which person that you think it is. You can have as much time as you want to look at the pictures.

Participants indicating that they did not think the thief was in the lineup were then shown the suspect-present lineup. If participants expressed uncertainty about their choice, or asked if they should make a choice when uncertain, they were reminded not to guess and to make a selection only if they were sure of which person was the thief.

Following the suspect-absent photo spread, all participants were presented with an 8-photo spread of five different candidates in which the perpetrator was present. The same instructions were given, including the warning that the suspect may or may not be present. Thus, in total there were 10 individuals from which to choose, 5 in each of the suspect-present and suspect-absent lineups. The 9 foils included were those derived from the mock witness paradigm previously described and identified as the best candidates for foils for the actual perpetrator. The actual perpetrator never appeared in the first or last position in the suspect-present lineup but was systematically assigned to one of the middle positions (Positions 2, 3, or 4) in accordance with recommended practice (Wells & Luus, 1990).

When participants did not make a selection from either lineup, the reason for lack of selection was noted. This procedure allowed for more in-depth analysis of the reasons why participants choose or do not choose suspects from a lineup. All participants were fully debriefed about the study upon completion of the procedures.

Statistical Analyses
A logistic regression (which is equivalent to a logit analysis for a dichotomous dependent variable), with group and film condition serving as the independent variables and selection or no selection as the dependent variable, was used to examine rates of correct identification in the suspect-present lineup, overall rates of false identification, and “no choice” selection in both the suspect-absent and suspect-present lineups combined.

Results
As predicted, there were no differences between groups with respect to the number of correct identifications made across film conditions. Contrary to predictions, however, there was no film effect in the number of correct identifications nor was there an interaction effect. In general, the rate of correct identification was low for all groups, regardless of film condition, as indicated in Table 1.

As expected, there were differences between groups with respect to overall rates of false identification in the suspect-absent and suspect-present lineups. Wald’s χ²(2, N = 180) = 9.05, p = .011. Overall, in the suspect-present and suspect-absent lineups combined, individuals with intellectual disabilities were more likely than those without intellectual disabilities to make false identifications. The overall rate included participants who had made one or two false identifications. For all groups, rates of false identification were higher in the suspect-absent compared to the suspect-present lineup. Regardless of film condition, false identifications were very rare for participants without intellectual disabilities in the suspect-present lineup. In contrast to expectations, there was no film effect for rates of false identification nor was there an interaction effect. Results for overall rates of false identification for all groups and film conditions, and in both the suspect-absent and suspect-present lineups, are also presented in Table 1. Given the high rates of false identification for individuals with intellectual disabilities in both the suspect-absent and suspect-
### Table 1: Number of Correct Identifications, False Identifications, and ‘No Choice’ Selections by Group

<table>
<thead>
<tr>
<th>Film condition</th>
<th>Clea</th>
<th>Less distinct</th>
<th>Ambiguos</th>
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<tbody>
<tr>
<td><strong>Group</strong></td>
<td>n</td>
<td>Prop. a</td>
<td>n</td>
</tr>
<tr>
<td><strong>Intellectual disabilities</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Target absent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>False ID</td>
<td>14</td>
<td>.70</td>
<td>7</td>
</tr>
<tr>
<td>No choice</td>
<td>6</td>
<td>.30</td>
<td>13</td>
</tr>
<tr>
<td>Target present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct ID</td>
<td>3</td>
<td>.15</td>
<td>4</td>
</tr>
<tr>
<td>False ID</td>
<td>7</td>
<td>.35</td>
<td>5</td>
</tr>
<tr>
<td>No choice</td>
<td>10</td>
<td>.50</td>
<td>11</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. made false ID</td>
<td>16</td>
<td>.80</td>
<td>10</td>
</tr>
<tr>
<td>No. no choice</td>
<td>3</td>
<td>.15</td>
<td>9</td>
</tr>
<tr>
<td><strong>High school</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target absent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>False ID</td>
<td>2</td>
<td>.10</td>
<td>6</td>
</tr>
<tr>
<td>No choice</td>
<td>18</td>
<td>.90</td>
<td>14</td>
</tr>
<tr>
<td>Target present</td>
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</tr>
<tr>
<td>Correct ID</td>
<td>6</td>
<td>.30</td>
<td>6</td>
</tr>
<tr>
<td>False ID</td>
<td>2</td>
<td>.10</td>
<td>1</td>
</tr>
<tr>
<td>No choice</td>
<td>12</td>
<td>.60</td>
<td>13</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. made false ID</td>
<td>4</td>
<td>.20</td>
<td>6</td>
</tr>
<tr>
<td>No. no choice</td>
<td>10</td>
<td>.50</td>
<td>10</td>
</tr>
<tr>
<td><strong>University</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target absent</td>
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<td></td>
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<tr>
<td>False ID</td>
<td>3</td>
<td>.15</td>
<td>6</td>
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<tr>
<td>No choice</td>
<td>17</td>
<td>.85</td>
<td>14</td>
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<tr>
<td>Target present</td>
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<tr>
<td>Correct ID</td>
<td>7</td>
<td>.35</td>
<td>4</td>
</tr>
<tr>
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<td>.10</td>
<td>0</td>
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<td>No choice</td>
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<td>Overall</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No. made false ID</td>
<td>4</td>
<td>.20</td>
<td>6</td>
</tr>
<tr>
<td>No. no choice</td>
<td>9</td>
<td>.45</td>
<td>12</td>
</tr>
</tbody>
</table>

*Proportion of individuals who made selection.*
present lineups, the frequency with which participants made false identifications in both lineups (i.e., two false identifications) was examined. Although only 1 university and 2 high school participants made two false identifications, 13 participants with intellectual disabilities made two false identifications.

Overall, in the suspect-absent and suspect-present lineups, as predicted there were differences between groups with respect to the number of choices or selections made, Wald's $\chi^2(2, N = 180) = 9.40, p = .009$. Participants with intellectual disabilities were significantly more likely to make choices in the suspect-absent and suspect-present lineups compared to participants without intellectual disabilities. In contrast to predictions, there was no film effect or interaction effect. There was a trend for university participants to be less likely to make a choice in the suspect-present condition as the film became increasingly ambiguous. High school participants, however, were consistent across films in rates of choosing, and those with intellectual disabilities were also relatively consistent for the suspect-present lineup. As can be seen in the table, university participants were conservative about choosing in all film conditions in both lineups. High school educated participants were fairly conservative in all film conditions, with only 50% of participants making a selection overall. In contrast, the majority of participants with intellectual disabilities in all film conditions selected a candidate from at least one of the lineups, and film ambiguity did not lower rates of choosing.

Participants who did not make a selection from the lineup were asked for the reason why they had not made a selection. Possible responses were: (a) the participant did not think that the suspect was in either lineup, (b) the participant could not remember what the perpetrator looked like, and (c) the participant was not sure which candidate was the perpetrator (i.e., could not distinguish between perpetrator and foils or did not feel sure enough to make a selection). The number of participants in each group and film condition who did not make a choice and their reason for not making a choice are presented in Table 2.

As can be seen in the table, the main reason why university and high school participants did not make a selection was because they did not believe that the suspect was present in either lineup. The main reason why participants with intellectual disabilities did not make a selection was because they were not sure which candidate was the perpetrator. Approximately as many participants with intellectual disabilities and university participants did not make a selection because they were unsure of which candidate was the perpetrator. The reasons why both participants with and those without intellectual disabilities did not make selections have important implications with respect to understanding and explaining discrepancies in rates of choosing or guessing behavior between individuals with and those without intellectual disabilities, as shall be described in more detail in the Discussion section. Chi-square analyses revealed that the position of the perpetrator in the suspect-present lineup had no effect on rates of correct identification or false identification.

### Discussion

The results of this study indicate that individuals with intellectual disabilities make as many correct identifications as do individuals without intellectual disabilities, but they are more prone to guessing, as indicated by their higher rates of choosing and higher rates of false identifications.

#### Table 2 Reason for Not Making a Selection From Lineup Within Groups

<table>
<thead>
<tr>
<th>Group/Reason</th>
<th>Film condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less distinct</td>
</tr>
<tr>
<td>Intellectual disabilities</td>
<td></td>
</tr>
<tr>
<td>Not present</td>
<td>0</td>
</tr>
<tr>
<td>Don’t remember appearance</td>
<td>0</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
</tr>
<tr>
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*n in parentheses.
As may be recalled from the introduction, the social utility of decision-making refers to the witness’s estimation of the risks and values associated with choosing. Social approval as a cooperative and helpful witness may be an important factor that promotes making a decision. The results of this study suggest that both cognitive and social-demand factors differentially affected the social utility of decision-making in adults with intellectual disabilities compared to those without intellectual disabilities on an identification task. There were several indications that confusion with respect to the task demands contributed to discrepancies in performance between groups. When participants who did not select a candidate from either lineup were asked why they did not make a choice, the majority of those without intellectual disabilities did not select a candidate because they did not believe that the suspect was present in either lineup. This response was an error because the suspect was present in the second lineup. This erroneous response, however, indicated an understanding on the part of these participants of the possibility of a suspect not being present in a lineup. In contrast, only one participant with an intellectual disability indicated that a candidate was not selected based on the belief that the suspect was not present in either lineup. This finding suggests that many participants with intellectual disabilities were under the impression that the suspect must be present in at least one of the lineups or thought that the task was to select the candidate who looked most like the suspect. In addition, it is important to note that participants were not aware that they would view two lineups. The fact that 13, or nearly one quarter, of the participants with intellectual disabilities made two false identifications (i.e., made selections from both lineups) also suggests that many of these participants believed that because they were being presented with a lineup, the suspect was probably present or, alternatively, thought that the task was to select the candidate who looked most like the suspect. In fact, there were usually more individuals with intellectual disabilities who selected from both lineups because a single individual selected the wrong candidate from the suspect-absent lineup and then selected the correct candidate from the suspect-present lineup (i.e., made a selection from both lineups).

Casual observations also suggest that participants with intellectual disabilities may have been making selections based on an assumption that they should pick the candidate who most closely resembled the suspect or believed that the suspect must be present because they were being shown a lineup. We note that some participants with intellectual disabilities who made false identifications in the suspect-absent lineup and who subsequently made correct identifications in the suspect-present lineup commented that the actual suspect “looked more like the guy” or thought they had selected the same person from both lineups.

High rates of false identifications and guessing behavior were observed in participants with intellectual disabilities, despite instructions advising that the perpetrator may or may not be present in the lineup and that they should not guess. It is difficult to be certain about the reasons why these adults disregarded the admonishment against guessing and advice that the suspect may or may not be present. However, the fact that these instructions have little effect on rates of false identification and choosing suggests a fundamental misunderstanding about the nature of the witness identification task.

Unexpectedly, there were no differences across film conditions with respect to rates of correct identifications, false identifications, and rates of choosing. There was only a nonsignificant trend for lower rates of choosing among university participants as the film condition became increasingly ambiguous. Overall, these results are very important for both adults with intellectual disabilities and those without intellectual disabilities because they suggest that situational variables at the time of the crime (e.g., opportunity to clearly observe the perpetrator) may be significantly less important in the equation of witness identification accuracy than the individual personality characteristics and cognitive and social factors that affect the social utility of decision-making. In other words, witnesses with a propensity to “guess,” will guess, and witnesses with a cautious attitude towards guessing will tend to be cautious, regardless of the situational factors affecting their ability to identify the perpetrator.

The issue of false identification is unlikely to be problematic for individuals with intellectual disabilities in most cases of sexual and physical abuse because in the majority of cases, the perpetrator is someone well-known to the individual, often a relative or caretaker (Furey, 1994; Sobsey & Doe, 1991). In criminal cases where the individual does not know the perpetrator, however, the results of this study indicate that there may be considerable
risk of false identifications by individuals with intellectual disabilities when there is some uncertainty about the identity of the perpetrator. Because individuals with intellectual disabilities do not differ from those without intellectual disabilities with respect to the number of correct identifications, the differences in performances between these groups are not attributable to memory differences but, rather, to factors affecting the social utility of decision-making, such as understanding of the nature of the task and/or a desire to be cooperative with authority figures. In view of this observation, there are a number of steps that may be taken to improve accuracy and confidence in the witness identifications by individuals with intellectual disabilities.

Perhaps of greatest priority, there is a need to educate people with intellectual disabilities about their rights in the legal system. This education should occur in the public school systems, family group home, and community settings. In a recent study on knowledge of legal terms and court proceedings, only 1 of 40 adults with intellectual disabilities in the study reported formal education in the school system with respect to the legal system. In contrast, the majority of adult participants without intellectual disabilities who were in the same study reported visiting courts or taking courses in the law as part of their public school experience (Ericson & Perlman, 2001). It is unreasonable to expect that anyone who has not been provided with exposure to the basic functioning of various aspects of the legal system would have an appreciation of important issues pertinent to identification tasks, such as the need for certainty in identifying a person who has been accused of a crime. It is worthy of note that there are several reports (e.g., Ericson & Perlman, 2001; Sobsey & Doe, 1991; Tharinger, Horton, & Millea, 1990; Wilson & Brewer, 1992) in which researchers have indicated a high incidence of victimization and bystander witnessing of offenses by individuals with intellectual disabilities for serious crimes, ranging from sexual and physical assault to robbery and theft. Wilson and Brewer found that individuals with intellectual disabilities were unlikely to report a crime themselves, which in part was attributed to lack of cognizance of how to access criminal justice services when a crime has occurred. When police contact was made, it was usually instigated by a third party. In view of the fact that people with intellectual disabilities are known to be victims and/or witnesses in serious offenses, specific education and instruction about personal rights and the legal system, including police lineups and identification tasks, should be considered essential and a point of advocacy in school or educational training.

Education for all professionals in the legal system, including police, prosecutors, and defense attorneys, may also be important in terms of minimizing risk of false identifications. Individuals with intellectual disabilities may need informal practice with identification tasks, and additional detailed instruction, to understand that the suspect may not be present in the lineup and that guessing under conditions of uncertainty is not a desired response. Many recommendations in terms of police practice for eyewitness identification tasks for adults without intellectual disabilities (e.g., Kassin, 1998; Wells et al., 1998) should also be implemented with adults who have intellectual disabilities to ensure fairness for the accused. Police officers should be advised about being cautious about their behavior and making any statements that would directly or indirectly place pressure on a witness to make a lineup selection. Ideally, the person administering the lineup should be naive or “blind” with respect to knowledge of the actual suspect to ensure that no cues or indirect suggestion is provided to the witness as to the identity of the suspect. The foils selected for a photo or live lineup should bear reasonable similarity to the suspect, based on the prior description of the witness, to ensure that the person who is selected is chosen because he or she is recognized as the perpetrator as opposed to being selected through a process of elimination as being the person who looks “most like” the perpetrator. Videotaping the lineup-selection process may provide a judge, jury, and legal representatives with an objective record of the witness’s decision regarding the selection of a suspect and the context in which that decision was made (Kassin, 1998).

Because the present study is the first eyewitness investigation involving individuals with intellectual disabilities that the authors are aware of in the literature, caution must be exercised in terms of generalization of the results. As an experimental study, the observed “crime” did not involve an event that was highly personally meaningful or stressful to participants, factors that may affect memory in either a positive or negative manner (e.g., Ceci & Bruck, 1993; Wells, 1988). Because participants in the study were being paid, there may have been an increased sense of “pressure” on their part, especially those with intellectual disabilities, who are likely
less familiar with research proceedings, to “select” a candidate from the photo lineup. Participants may also have been more inclined to think that in an experimental situation, the perpetrator of the crime must be present in the lineup. Because only participants in the study who did not make a selection from a lineup were asked about the reasons for their lack of selection, further questioning and information is needed to assess the decision-making processes that operate when people make lineup selections. Corroboration of the results obtained in this research by other investigators and additional research in which investigators address such issues as the role of education and preparation of witnesses for the lineup task, instructions to witnesses, assessment of witness “certainty” when making responses, and reported reasons for selection and non-selection of candidates from lineups will provide additional insight into the best means to support individuals with intellectual disabilities in witness situations.

Because there is considerable evidence that many individuals with intellectual disabilities can provide reliable testimony when interviewed properly and provided with the right kind of supports (Gudjonsson & Gunn, 1982; Isaacs & Ericson, 2000; Perlman et al., 1994) and because this research suggests that memory factors do not account for differences in performance between individuals with and those without intellectual disabilities, it is important that further steps be taken to understand the best means of supporting individuals with intellectual disabilities in eyewitness identification contexts. Such work will provide a means of facilitating increased participation of these individuals in the legal system, while reducing risks of false identification in situations where the perpetrator of a crime may be someone not well known by the victim or witness.

References
Goodman, G., & Reed, R. (1986). Age differences in the legal system, while reducing risks of false identification in situations where the perpetrator of a crime may be someone not well known by the victim or witness.
Eyewitness identification

K. Ericson and B. Isaacs


Eyewitness identification


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