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Own-Gender Bias May Affect Eyewitness Accuracy of Perpetrators' Personal Descriptions

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Eyewitness testimony remains an important element in resolving criminal investigations. Despite a great deal of research on the subject, the understanding of the effects that witness gender might have on their testimony remains rather limited. The aim of the present study was to examine own-gender bias in recalling personal descriptions of perpetrators. Participants, who were invited to take part in the study, were told they were providing real-life assistance to criminal investigators and potentially helping them to verify hypotheses concerning an actual crime. The participants comprised 256 undergraduate volunteers, who were placed in one of the four groups. Each group observed one of the four crime scenarios that were varied only in terms of gender of either the victim or the perpetrator. All scenarios were designed as footage taken by a CCTV surveillance camera and involved two-minute videos of a staged assault and robbery. After seven days, participants completed a survey on the basis of which the accuracy and quantity of perpetrators' personal descriptions were checked. Results revealed that participants' accuracy of memory recall was modest. It was found that gender had a significant main effect on the accuracy of personal descriptions in all four research conditions, while an own-gender bias was also established. The highest accuracy of perpetrators' personal descriptions was found when male participants reported details of a male perpetrator attacking a female victim, and when female participants described a female perpetrator attacking a female victim. The lowest accuracy was established when female participants described the male perpetrator molesting the male victim. However, no effect of gender on the amount of reported personal descriptions was found.

Keywords: eyewitness, personal descriptions, own-gender bias, accuracy, quantity

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1 Introduction

Eyewitness information is central to many criminal cases, often becoming a convincing source of evidence in court proceedings where jurors have little reason to disbelieve eyewitnesses who testify under oath (Kebbell & Milne, 1998). Due to its significance, a considerable amount of research focusing on eliciting reliable and detailed information from witnesses was conducted in the past (see Areh, 2004a; 2004b). Studies find that the accuracy and quantity of memory recall in eyewitness accounts are influenced by several factors, such as 1) gender (Areh, 2011); 2) age (West & Stone, 2014); 3) stress (Deffenbacher, Bornstein, Penrod, & McGorty, 2004); 4) suggestibility (Zaragoza, Belli, & Payment, 2006); and even 5) personality traits (Areh & Umek, 2007). Yet, the effect of gender in eyewitness memory has not been sufficiently examined, particularly when it comes to gender differences occurring in the descriptions of perpetrators' personal appearance. However, gender difference were generally found to be small (e.g. Wells & Olson, 2003), albeit such findings are not consistent. Therefore, generalisations (such as "women are more reliable in providing eyewitness testimony than men") were found to be unjustified. Such findings not only call for further scientific endeavour, but may also point to the existence of a frustrating issue in criminal proceedings (Gudjonsson, 2010). Thus, the present study examines gender differences and, in particular, the possible existence of own-gender bias in personal descriptions of both mock female and male perpetrators.

Broadly speaking, prior research was inclined to conclude that women performed better than men in several memory tasks (see Hall, Gunnery, & Horgan, 2016). Some of these research findings are relevant to eyewitness memory, such as 1) episodic memory (Herlitz & Rehnman, 2008); 2) story recall (Zelinski, Gilewski, & Schaie, 1993); 3) recall of words, object location, and pictures of objects (Herlitz, Nilsson, & Bäckman, 1997; Voyer, Postma, Brake, & Imperato-McGinley, 2007); 4) recall of information concerning the appearance of others (Areh, 2010; Horgan, Schmid-Mast, Hall, & Carter, 2004); and 5) face recognition (Herlitz & Lovén, 2013). These differences were explained either by 1) women's superior verbal abilities

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that contribute to superior recall (Herlitz & Rehnman, 2008); 2) other attributes, such as greater interpersonal sensitivity (e.g. Hall, 1984); 3) neurofunctional differences in working memory (see Hill, Laird, & Robinson, 2014), or 4) women's ability to divide attention more evenly among different sensory targets (see Wenzlaff, Briken, & Dekker, 2015).

The task of providing personal descriptions of perpetrators, particularly when prompted by open-ended questions, might be considered a recall task without memory cues and requires a direct retrieval of reconstructed information about an event (Kahana, Rizzuto, & Schneider, 2005). It was generally found that personal descriptions given by eyewitnesses tend to be vague, non-discriminative and sensitive to many sources of error, which makes eyewitness testimony unreliable (Meissner, Sporer, & Schooler, 2007). However, when salient details were described, such as gender, ethnicity, age, built, hair colour, hairstyle and height, the descriptions might be fairly precise and accuracy climbed up to 80% (e.g. Farrington & Lambert, 1997; Meissner, Sporer, & Susa, 2008). Furthermore, when considering such features of perpetrators, research typically finds that an eyewitness provides 7–10 personal descriptors (e.g. Lindsay, Martin, & Webber, 1994; Sporer, 1996; van Koppen & Lochun, 1997).

Nevertheless, as already mentioned, research scarcely examined the association between witness gender and the accuracy of perpetrator's descriptions. Therefore, these results are less clear. While some researchers found no effect of gender (Butler & Pallone, 2002; Butts, Mixon, Mulekar, & Bringmann, 1995; Yarmey & Tressillian Jones, 1983; Yarmey & Yarmey, 1997), others found that female witnesses were generally more accurate than male witnesses (e.g. Lindholm & Christianson, 1998; Lipton, 1977). However, research studies mostly present gender differences as a more complex and multi-faceted phenomenon. Powers, Andriks and Loftus (1979) found that female witnesses tended to be more accurate when describing either the clothing of both male and female perpetrators, or when giving their account of the criminal incident. Meanwhile, male witnesses tended to be more accurate when describing the perpetrator's general appearance and the scene of the offence. Lipton (1977) found that women were more accurate than men when describing a 'filmed' offender, however, he also found no gender differences in the quantity of information reported. It appears that men often outperform women in recognising 'male-oriented' objects, such as cars and phones, while women tend to show superior performance in recall accuracy and the quantity of motivation-neutral objects and 'female-oriented' objects, such as hair colour/style, clothing and jewellery (Christiaansen, Ochalek, & Sweeney, 1984; Loftus, Banaji, Schooler, & Foster, 1987). Research also shows an own-gender bias in the recall of suspects' height and weight, with male witnesses being better at identifying details about male suspects (while female eyewitnesses recalled more information concerning the descriptions of female suspects) (Biernat, Manis, & Nelson, 1991; Shaw & Skolnick, 1994). In a more recent study, Vredevelt, Knol and van Koppen (2017) found no significant gender differences in the quantity and accuracy of reported information, but they did find that men recalled significantly more information than women concerning 'male-oriented' objects. Furthermore, support for an own-gender bias was also found in the accuracy of facial recognition (Shapiro & Penrod, 1986; Wang, 2013), particularly in women (Wiese & Schweinberger, 2018; see also Man & Hills, 2016). To summarise, while some studies find no significant gender differences in eyewitness recall, others indicate certain disparities. One of the possible reasons for such an ambiguity may stem from the fact that gender differences depend on the nature of the observed event and the type of reported detail (Loftus et al., 1987; Macleod & Shepherd, 1986). As such, this finding suggests that neither gender possesses a more accurate or detailed memory *per se*. In sum, men and women differ in terms of the type of information they remember best.

Considering this rather unclear picture, more research is required, particularly in more realistic crime scenarios where perpetrators and victims of both genders are included in the research design. Therefore, the goal of the present study was to examine the own-gender bias in memory recall, which has generally received relatively little attention among all matters concerning own group biases (Palmer, Brewer, & Horry, 2013). However, such a research study might be expected to face the issue of social stereotyping, which could affect witnesses' descriptions of perpetrators who are not of the same gender. People tend to interpret the personal traits of others according to certain social expectations that are assigned to members of specific social groups (Susskind, Maurer, Thakkar, Hamilton, & Sherman, 1999). While men are believed to be associated with traits that commonly imply agency (e.g. men are more assertive, aggressive, dominant and active than women), women are typically described as passive and having lower emotional self-control and communal traits (e.g. abasement, succour, empathy and affiliation) (e.g., Williams, Satterwhite, & Best, 1999; Wood & Eagly, 2010). When the expected stereotypical behaviour is disregarded, social targets may be evaluated negatively (e.g., Moss-Racusin, Phelan, & Rudman, 2010; Smith, Ulch, Cameron, Cumberland, Musgrave, & Tremblay, 1989). Therefore, due to the obvious violations of gender role expectations, a crime scenario with a female perpetrator and a male victim may prove more provocative to witnesses than a scenario in which the roles of the two protagonists are reversed. Accordingly, it is reasonable to assume that a witness may describe the appearance of a female perpetrator differently than of a male perpetrator. Thus, a potential effect of

stereotyping should be controlled when conducting research studies focusing on own-gender bias memory. In the present study, gender differences in the descriptions of male and female perpetrators were tested on the basis of the following assumptions: female participants would outperform male participants either in the accuracy of personal descriptions (H1) or in the quantity of recalled data (H2), as was previously found (e.g. Areh, 2011; Herlitz & Rehnman, 2008; Lindholm & Christianson, 1998). It was also hypothesised that, in terms of either accuracy of personal descriptions (H3) or the quantity of information recalled (H4), an own-gender bias would be present, as revealed by previous studies (e.g., Horgan, Schmid-Mast, Hall, & Carter., 2004; Vredevelt et al., 2017) where participants were found to recall own-gender oriented objects more successfully than the objects oriented towards the opposite gender.

2 Method

2.1 Participants

After receiving ethical clearance, 256 first-year undergraduate students were recruited as participants. They were randomly placed in one of the four groups, depending on research condition (see Table 1). On average, participants were 19 years old (M = 18.78; SD = .71; Range: 18-21) and volunteered to take part in the research, with no beneficial gain for their participation nor any consequences for their non-engagement. Following a short introductory discourse with each group of participants conducted by the first author, the researchers assumed that they were not familiar with the literature concerning eyewitness testimony. Participants expressed no knowledge about memory encoding and recall, such as the misinformation effect, suggestibility or own-gender bias.

Table 1: Participants divided into sub-groups

Footage	Male perpetrator		Female perpetrator		Total
	Female victim	Male victim	Female victim	Male victim	
Men	29	31	30	31	121
Women	33	36	32	34	135
Total	62	67	62	65	256

2.2 Material

The four two-minute video recordings, all showing a mock assault and robbery, were created. All recordings started with person A descending stairs. While descending, A is greeted and stopped by a person B who asks A to 'lend' B five euros. As A keeps refusing, B becomes increasingly agitated and verbally aggressive. Finally, in a burst of aggression, B unexpectedly shoves A into a corner and hits A twice in the abdominal region, then snatches A's bag and runs away. A collapses on the ground in the corner of the staircase and covers their face with their palms. After 10 seconds, A slowly gets up and leaves the scene going upstairs. The colour video with sound was created as a ceiling CCTV surveillance camera footage, located approximately three metres from a position where the incident took place. The dialogue was scripted and was the same in all recordings (as were the scenery and choreography). After a thorough examination of the first recording and rehearsals, other versions of recordings were made. Only those three versions that best matched the first recording were chosen through a discussion among participating actors and researchers.

Physical attractiveness was found to influence social interaction, judgements and attitudes towards other people (see Freeman & Ambady, 2011; Langlois, Kalakamis, Rubenstein, Larson, Hallam, & Smoot, 2000). Furthermore, people tend to share stereotypes regarding the physical appearance of criminals which could influence eyewitness's recall (Flowe, Klatt, & Colloff, 2014). Therefore, actors in the crime scenarios were selected to avoid triggering such stereotypic script recalls. The two actors and two actresses all had brown hair, were in their late 20's and were dressed casually in dark clothes. A test was conducted prior to the recording to ensure they did not stand out due to certain characteristics (e.g. physical). Two sets of photo composites of six men and six women (including the four actors) were presented separately and sequentially to a group of 51 undergraduate students (none of these were involved in the subsequent study). The photographs of each person were printed vertically on a colour A4 sized photograph, which depicted each person from head to toe. Each student had around 30 seconds to study each of the two sets of photographs. The 51 participants were instructed to pick a man or a woman who, for any reason, drew their attention. They could choose any number from the 12 who particularly caught their attention. Results showed that the actors involved in the research did not stand out significantly from other persons presented in photos (difference between observed and theoretically accidental frequencies of men's choice: X^2 (5, N = 51) = 1.82, p >.90; and of women's choice: X^2 (5, N = 51) = 3.71, p >.50).

2.3 Instrument

A specific survey was created to assess the accuracy and quantity of memory recall. In the first part, participants were

asked to provide a written account of the event on a single page of a standard A4 sheet of paper. Participants were instructed to take time and think about the event, and then individually report everything they remembered without any editing. The goal of this part of the survey was to facilitate free recall and, by doing so, to recreate a mental context of the observed event which could be beneficial for a more effective retrieval (Tulving & Thomson, 1973). In the second part of the survey, participants were asked to describe the perpetrator with the help of 28 multiple-choice questions that served as retrieval cues. For example, when asked 'what was the colour of the man's trousers?' participants had to choose one of nine possible answers, among which the answer 'I don't know' was also available. Both types of questions (i.e. open-ended and multiple-choice questions) were designed to obtain more information, such as central and peripheral details (see Shapiro, 2006).

The accuracy of memory recall (AMR) was calculated by using the following formula:

$$AMR = \frac{(TD - FD - CD)}{(TD + FD + CD)}$$

where

AMR means the accuracy of memory recall;
TD stands for the number of true details;
FD stands for the number of false details; and
CD denoted the number of confabulated details.

False details referred to the inaccurate details supplied by the witness participants ascertained by surveying the video. The confabulated details comprised of added fabrications not present in the original recording. All participants' subjective comments were excluded from analyses (e.g. the perpetrator was impulsive or was not thinking of consequences). Repeated items were not duplicated in the final count. The accuracy quotient varied form -1 (no true but only false and/or confabulated details) to +1 where a participant would only provide true details. The formula was designed as an illustrative display of accuracy. If the quotient was positive, the recall would be scored as mainly accurate, while a negative outcome would be rated as a testimony that was largely inaccurate. If the participant repeated a detail, it was only ever counted once, regardless of whether it was false, confabulated or true.

2.4 Procedure

The study employed a 2 (participant gender) × 2 (perpetrator gender) × 2 (victim gender) between-subjects factorial design. The students were randomly assigned to four groups to observe all four recordings separately and subsequently seated in a traditional classroom arrangement (i.e. theatre style). The viewing schedule was planned throughout a single day, so that students from different groups were prevented from meeting each other and discussing the recordings, which were viewed on a big screen (2 × 3 metres). To achieve a higher external validity of results participants were told, before watching the videos, that the reason for watching the recording was to help criminal investigators test the validity of assumptions concerning a real criminal offence (assumptions were not specified). It was assumed that participants would be more motivated to take part in the research, if they were convinced that the event was real. Participants were also requested not to talk to anyone about the event to preserve their original memory. A week later, they were asked to complete the survey. Participants were divided into four groups of approximately 60 apiece and monitored by the first author to prevent copying their neighbours' accounts. They were not under any time pressure to complete the survey, though they mostly finished their report within 30 minutes.

Immediately after watching the recordings and analysing 25 randomly selected and filled in surveys regarding all four recordings, three assessors individually and separately determined which details were accurate, false and confabulated. The assessors were the third-year students, who attended lectures about eyewitness memory and were additionally trained by the first author to complete their task. Once each assessor had completed the task, the three assessors came together to compare their generated lists, discuss the differences and elaborate the final lists of true, false and confabulated details. The discussion was moderated by the first author to ensure that every assessor participated relatively equally in the discussion. Afterwards, the surveys were analysed using the shared final lists of true, false and confabulated details. Two of the three assessors each volunteered to examine the entire volume of 256 completed surveys (blind of each other's assessments). Each set of surveys was assigned to them in different orders to avoid possible serial effects (rater A: 1-256; rater B: 256-1). Inter-rater reliability was tested by the intra-class correlation coefficient (ICC). The degree to which the two independent assessors agreed on the accuracy of information reported in all surveys was .916 (ICC estimates and their 95% confident intervals were based on a mean-rating (k = 2), absolute-agreement, 2-way mixed-effects model).

3 Results

After completing the surveys, participants were asked whether they believed the event in the recording they had watched was real. Eighty-six percent (n = 111) answered affirmatively for the 'violent man' recordings, while eighty-one

percent (n = 103) of participants confirmed they believed the event shown in the 'violent woman' recordings was real.

Tables 2 and 3 depict a rather poor performance of participants, since their accuracy coefficients were close to zero. This finding suggests that the mean number of true details (M = 10.74; SD = 2.30; Range = 11) ran parallel with the mean sum of false and confabulated details (M = 10.76; SD = 2.79; Range = 16). Tables 2 and 3 show that the highest accuracy was found in two particular crime scene recordings, i.e. when male participants reported details of the male perpetrator attacking the female victim, and (in turn in Table 3) when female participants described the female perpetrator attacking the female victim. Furthermore, as shown in Table 2, the lowest accuracy was established among female participants when observing the male perpetrator molesting the male victim. Generally, the number of all reported personal details was somewhat fewer for the male characters than for the female characters (Tables 2 and 3).

A 2 × 2 × 2 ANOVA showed that gender had a significant main effect on the accuracy of perpetrators' personal descriptions in all four recordings (see Table 4). The largest effect sizes were found in the group where participants observed the male perpetrator who attacked the male victim (d = 1.02), and in the scenario where the female perpetrator assaulted the female victim (d = .83). In both cases, effect sizes exceed Cohen's (1988) convention for a large effect (d = .80). In contrast, Table 4 shows that the analysis of variance showed that gender had no significant main effect on the amount of obtained perpetrators' personal descriptions.

Table 2: Mean values of perpetrators' personal descriptions reported by female participants

Female participants						
Footage	**Male perpetrator**		**Male perpetrator total**	**Female perpetrator**		**Female perpetrator total**
	Female victim	**Male victim**		**Female victim**	**Male victim**	
Accuracy	-.06 (.32) [-.80, .75]	-.20 (.32) [-.78, .43]	-.13 (.33) [-.80, .75]	.14 (.21) [-.16, .67]	.06 (.16) [-.20, .40]	.10 (.19) [-.20, .67]
Quantity	9.48 (1.91) [6, 13]	10.28 (2.35) [6, 16]	9.90 (2.17) [6, 16]	11.34 (2.50) 6, 19	12.38 (3.08) 7, 18	11.88 (2.84) 6, 19
n	33	36	69	32	34	66

n = 135.
Values represent M (SD) and [range].

Table 3: Mean values of perpetrators' personal descriptions reported by male participants

Male participants						
Footage	**Male perpetrator**		**Male perpetrator total**	**Female perpetrator**		**Female perpetrator total**
	Female victim	**Male victim**		**Female victim**	**Male victim**	
Accuracy	.15 (.30) [-.67, .75]	.10 (.28) [-.50, .56]	.13 (.29) [-.67, .75]	-.02 (.18) [-.33, .40]	-.03 (.20) [-.43, .45]	-.03 (.19) [-.43, .45]
Quantity	10.17 (1.81) [6, 13]	9.32 (2.24) [3, 15]	9.73 (2.07) [3, 15]	11.63 (2.27) [7, 16]	11.82 (2.54) [6, 16]	11.74 (2.39) [6, 16]
n	29	31	60	30	31	61

n = 121.
Values represent M (SD) and [range].

Table 4: Effect of gender on the accuracy and amount of perpetrators' personal descriptions (ANOVA)

Perpetrator	Victim	df	F	p	η^2	r[a]	d[b]
Accuracy							
Male	Male	1, 65	17.264	.001	.210	-.38**	1.02
	Female	1, 60	6.879	.011	.103	-.28**	.67
Female	Female	1, 60	10.720	.002	.152	.32**	.83
	Male	1, 63	4.362	.041	.065	.24*	.52
Quantity							
Male	Male	1, 65	2.872	.095	.042	.16	.42
	Female	1, 60	2.101	.152	.034	-.17	.37
Female	Female	1, 60	.228	.635	.004	-.07	.12
	Male	1, 63	.594	.444	.009	.06	.19

[a] Kendall's tau. Coefficients marked by * are significant (* $p < .05$; ** $p < .01$). Gender coded as 1 for man and 2 for woman.
[b] Cohen's d.

The analysis of variance also showed that the participants' gender had no significant main effect on the quantity of personal descriptions of the male perpetrator, $F(1, 127) = .19$, $p = .661$, $\eta^2 = .002$. The same result was found for descriptions of the female perpetrator, $F(1, 125) = .09$, $p = .764$, $\eta^2 = .001$.

In all four research conditions, participants most often reported similarly accurate personal descriptors of perpetrators: gender (98%), hair colour (61/69%), weight and built (54/56%), hair length (40/52%), age (41/52%), colour of upper body clothing (44/56%), type of upper body clothing (38/54%), colour of lower body clothing (24/34%), type of footwear (24/26%), and colour of the stolen bag (21/26%). The most often reported false descriptors included the type of footwear (59/61%), colour of lower body clothing (53/57%), facial hair (50/55%), bag colour (43/53%), and hair length (37/43%)[3]. When considering false details related to the male perpetrator, participants often reported that he was unshaved (55%), wore army boots (59%) and visible studs or ornaments on his leader jacket (52%). His height and weight were sometimes overestimated (26%). Regarding the female perpetrator, many participants wrongly reported that she wore either blue jeans (53%), some sort of accessories (52%) or heels (61%).

[3] The first percentage refers to the description of male, while the second relates to the description of the female perpetrator.

4 Discussion

The goal of the research study presented herein was to examine any gender differences in the accuracy and quantity of perpetrators' personal descriptions. To achieve a somewhat higher external validity of the research, recordings of mock crimes were presented as a real video footage of a robbery and participants were asked to help criminal investigators in testing the validity of specific investigative assumptions. Through the employment of a 2 (participant gender) × 2 (perpetrator gender) × 2 (victim gender) factorial design, own-gender bias in the recall of personal descriptions of mock perpetrators was also examined.

Generally, it was found that the accuracy of personal descriptions was weak, as it was hovering around zero. Therefore, participants were found to be less reliable witnesses, which corresponds to the findings of Meissner et al. (2007). The fact that participants were not emotionally involved in the observed event, which may have affected the completeness of personal descriptions, could potentially explain such a low accuracy level (Houston, Clifford, Phillips, & Memon, 2013). As such, it is possible that they were not motivated enough to concentrate on perpetrators' personal details. However, since most participants affirmed that they believed the event they had observed was real, they were probably motivated to make a useful contribution to solving the criminal case. The perceived seriousness of an observed criminal offence was found to prompt witnesses to make full use of their attentional and encoding abilities in eyewitness situations (Leippe, Wells, &

Ostrom, 1978). As such, our participants may have possessed an eagerness to assist that might well have led them to provide a greater wealth of detail that they recounted in the present study, when compared to prior ones (e.g. Sporer, 1996; van Koppen & Lochun, 1997). In turn, such larger amounts of both accurate as well as inaccurate details provided by our participants may be associated with the low accuracy rates that were found in the present study.

The findings of the present study do not comply with those of previous studies, in which female respondents were found to generally outperform their male counterparts in the accuracy of memory recall (e.g. Lindholm & Christianson, 1998). In the present study, the highest accuracy of recalled personal details of a perpetrator was found among male participants in the crime scenario, which involved the male perpetrator attacking the female or male victim. In contrast, female participants (in the same crime scenario) were found noticeably less accurate than their male counterparts when describing the male perpetrator. In what might be viewed as a less typical scenario (where the woman attacked either the male or the female victim), the results regarding the accuracy of details were found to be broadly similar between male and female participants (although female participants were found slightly more accurate than male participants when providing descriptions of the female mock perpetrator).

Correlation coefficients and medium to large effect sizes, which were found between gender and the accuracy of reported details, suggest that the own-gender effect might have appeared in this study (see Table 4). These results accord with other studies (e.g. Biernat et al., 1991; McGivern et al., 1997; Shaw & Skolnick, 1994), where it was found that men and women were slightly more accurate when they describe the appearance of their own gender. Additionally, it seems that the unusual scenario with the female perpetrator attacking the male and female victim did not affect the accuracy of descriptions. In this scenario, effect sizes are somewhat smaller, yet this finding does not allow the formulation of firm conclusions concerning the possible effects of potentially unusual scenarios on memory recall.

In the present study, it was hypothesised that significant gender differences would be found in the number of perpetrators' personal descriptors (regardless of their gender). However, these differences were found to be both small and non-significant, which is consistent with prior studies (see Horgan et al., 2004; Lipton, 1977; Vredevelt et al., 2017). Therefore, no own-gender bias was found in the volume of memory recall. Moreover, the amount of reported personal details of perpetrators was comparable to the results found in previous research studies (e.g. van Koppen & Lochun, 1997). However, unlike the study conducted by Meissner et al. (2008), who found such details to be very accurate, the present study found that the accuracy of personal descriptions was at a lower accuracy rate at around 50%. In sum, it was found that there was an own-gender bias in the accuracy of memory recall. Yet, when considering gender differences in the amount of recalled personal descriptors, no significant own-gender effect was detected.

The limitations of this research design stem from the fact that it was not possible to present perpetrators of the same gender with exactly the same characteristics and that only two male and female targets (perpetrators) were used. This problem was partly mitigated by the pilot study, which was an attempt to ensure that targets did not stand out in any way. Furthermore, the participants represent a small and purposive sample of first-year undergraduates. As such, the results of the present study may be only partly generalisable. That said, many results in four different research groups show not only internal consistency, but also correspond to the results of prior studies.

The present study is neither a field nor an archival study, yet laboratory simulations are important and applicable. Field studies are difficult to conduct due to ethical considerations and, similarly to archival research (which relies on police records), it is rarely possible to fully ascertain how accurate a witness testimony really is (Sporer, 1996). The present study was designed to somewhat heighten the external validity of obtained results. As such, participants were led to believe that the event they had observed was a real-life incident and that they had been requested to help criminal investigators in testing their assumptions regarding the observed crime. Nevertheless, the research design still represents a simulation, rather than a real situation, in which eyewitnesses would be more directly exposed to a stressful event. Furthermore, participants were probably aware of underlying expectations, in that they needed to focus on the crime scenes, and could thus be expected to be better prepared to observe the actual crime scene than witnesses. Future research studies might consider building unexpected scenarios into their design to counter such a limitation. Finally, the present study did not examine gender differences in victim descriptions, but focused on those concerning perpetrators. When examining own-gender bias in personal descriptions, it might be beneficial to also analyse victim descriptions.

The research findings made on the basis of the present study may be considered as a contribution to efforts aimed at clarifying the effect of gender in eyewitness recall. As some researchers pointed out (e.g. Konecni & Ebbesen, 1979), naturalistic studies of eyewitness testimonies and findings based

on field research in real-world settings should only be generalised to the legal system. Yet, well considered and elaborated simulations of real situations are still necessary in shaping valid generalisations that can prove useful to criminal justice practitioners.

In future eyewitness memory research, it may be useful to consider the possible effects of uncommon social scenarios, in which expected gender roles in criminal scenarios are violated. Furthermore, the difference between spoken and written perpetrator descriptions should also be considered, since Sauerland and Sporer (2011) found that spoken perpetrator descriptions contained more accurate details than written ones. Contrary to the present study, eyewitnesses in real-life crime cases mostly provide verbal accounts to police officers, rather than written ones. Therefore, it may be beneficial to further examine possible differences between spoken and written eyewitness' accounts.

In sum, when criminal investigators attempt to establish the truth as to what actually happened in a criminal incident, the results of the present study suggest it may also be useful to consider the possible effects of own-gender bias upon the accuracy of information gained from eyewitnesses. However, more research needs to be conducted to gain a fuller understanding of this issue, though the present study provides an insight to assist with these aspirations.

Compliance with ethical standards

The authors declare that they have no conflict of interest. All procedures performed in the study were in accordance with the ethical standards of the University of Ljubljana Ethics Committee, as well as with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participating in the study.

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Pristranskost istega spola lahko vpliva na točnost osebnih opisov storilcev kaznivih dejanj

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Pričanje očividcev je pri preiskovanju kaznivih dejanj pomemben izvor informacij. Kljub številnim raziskavam na tem področju še vedno ni znano, kako in/ali spol očividca vpliva na značilnosti pričanja. Namen predstavljene študije je bil raziskati vpliv pristranskosti lastnega spola na priklic informacij o videzu storilcev kaznivih dejanj. Udeleženci so bili povabljeni k sodelovanju v raziskavi, ki jim je bila predstavljena kot del preverjanja hipotez v zvezi s preiskavo resničnega kaznivega dejanja. Prostovoljno je sodelovalo 256 dodiplomskih študentov, ki so bili razdeljeni v štiri skupine. Vsaka skupina je opazovala enega izmed štirih scenarijev zločina, ki so se razlikovali le v spolu žrtve in napadalca. Vsi scenariji so bili izdelani kot dvominutni posnetki varnostne kamere. Iz njih je bil razviden potek napada na drugo osebo, ki se konča z ropom. Po sedmih dneh so udeleženci izpolnili vprašalnik, s pomočjo katerega smo ugotavljali količino in točnost zapomnjenih podrobnosti o videzu storilcev. Rezultati kažejo, da je bila točnost pridobljenih podatkov v vseh štirih raziskovalnih pogojih skromna. Ugotovili smo pojav spolne pristranskosti, saj so bile udeleženke bolj točne pri opisih storilke kot pri opisih storilca. Tudi pri moških smo opazili podobno pristranskost. Najvišja točnost opisov storilcev je bila ugotovljena, ko so moški poročali o videzu moškega, ki je napadel žensko, in ko so ženske opisale žensko, ki je napadla žensko. Najnižja točnost osebnih opisov se je pojavila v scenariju, ko so opazovalke opisale videz moškega, ki je napadel moškega. Količina podanih informacij o videzu storilcev ni bila povezana s spolom prič.

Ključne besede: priča, osebni opisi, spolna pristranskost, točnost, količina informacij

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