Long-term Consequences of Providing a Perpetrator's Description on a Subsequent Lineup Performance

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Purpose:
Descriptions of perpetrators are routinely provided by witnesses during criminal interrogations. Psychological research suggests that recalling a suspect's appearance negatively influences the ability to subsequently recognize the described face – a phenomenon referred to as verbal overshadowing effect (VOE). VOE has been confirmed in previous research, but its duration remains unclear.

Design/Methods/Approach:
Participants watched a film depicting a robbery and then, depending on the group: 1) did not describe a perpetrator's appearance or 2) provided a description. Two weeks time interval between providing perpetrator's description and recognition attempt from among 6 photographs, was introduced. In half of the lineups each group were perpetrator-present, half – perpetrator-absent.

Findings:
In forensically relevant conditions, verbal overshadowing seems no longer a threat to lineup performance, at least when manifested by an increase in misidentifications rates. Nevertheless, some research suggests that providing description after two weeks results in enhanced reluctance to identify anyone in the lineup.

Research Implications:
As facial composite construction involves recalling perpetrator's appearance, future research should concentrate on its influence on a subsequent lineup performance.

Practical Implications:
Findings suggesting that verbalizing perpetrator's face lead to an assumption that his absence in the lineup may have a positive aspect, i.e. protecting innocent persons from being identified as suspects.

Originality/Value:
This research demonstrates that only the knowledge of long-term effects of verbalization, allows the assessment of the risk that VOE carries for investigative practice.

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Keywords: perpetrators, eyewitness, identification, description, verbal overshadowing effect

Dolgoročne posledice pri zagotavljanju storilčevega opisa pri poznejši prepoznavi

Namen prispevka:

Med zaslišanjem ali informativnim razgovorom priče pogosto podajajo opise storilcev. Psihološke raziskave razkrivajo, da priklic podobe storilca negativno vpliva na sposobnost kasnejše prepoznave sicer že opisane podobe storilca. Gre za t. i. učinek besednega zasenčenja (ang. verbal overshadowing effect – VOE). Psihološke raziskave so potrdile pojav omenjenega fenomena, ni pa znano, koliko časa učinek traja.

Metode:

Prispevek temelji na pregledu literature in empirični raziskavi. Udeleženci raziskave so si ogledali posnetek, kjer je bil prikazan rop. Razdeljeni so bili v dve skupini, pri čemer se je od ene skupine zahtevalo, da opiše videz storilca, druga pa te zahteve ni bila deležna. Po dvotedenskem intervalu (od zahteve po opisu storilca) so od udeležencev raziskave zahtevali prepoznavo storilca izmed 6 fotografij. Pri vsaki skupini so v polovici skupine za prepoznavo bili prisotni storilci in v polovici skupine le teh ni bilo.

Ugotovitve:

V forenzično relevantnih pogojih se učinek besednega zasenčenja ne kaže kot nevarnost pri prepoznavi, vsaj ne kot povečana stopnja napačne prepoznave. Kljub temu, pa po opisu nekaterih raziskav, se po preteku dveh tednov poveča zadržanost (odpor) do identifikacije (torej pokazati) osebo v skupini za prepoznavo.

Omejitve/uporabnost raziskave:

Ker konstruiranje obrazne strukture storilca zahteva priklic storilčeve podobe, bi morale bodoče raziskave raziskati, kako to posledično vpliva na prepoznavo.

Praktična uporabnost:

Ugotovitve kažejo, da verbalni opis storilčevega obraza vodi do sklepanja, da oseba ni prisotna v skupini za prepoznavo, kar ima pozitiven učinek – prepreči, da bi bila kot storilec prepoznana napačna oseba.

Izvirnost/pomembnost prispevka:

Predstavljena raziskava je pokazala, da samo znanje o dolgoročnih učinkih verbalnih opisov omogoča oceno tveganja, ki ga ima VOE na preiskovalni proces.

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Ključne besede: storilci, priče, identifikacija, opis, učinek besednega zasenčenja

1 INTRODUCTION

Descriptions of perpetrators are routinely provided by witnesses during criminal interrogation. Although descriptions are most often useful for locating suspects

immediately after a crime is committed, they are also used in other phases of the criminal investigation, i.e. to identify potential suspects from mug books, to construct facial composite of a suspect and as a basis for selecting fillers, when investigators construct a lineup and subsequently assess the "fairness" of that lineup (Meissner, Sporer, & Schooler, 2007). Despite the importance of person descriptions as eyewitness evidence, they are considered to be fragmentary and indistinct (Brown, Lloyd-Jones, & Robinson, 2008; Sporer, 1996). Moreover, their investigative value is being questioned by recent psychological research, which suggests that culprit's description may constitute a threat to routine identification procedures, since recalling culprit's appearance negatively influences the ability to subsequently recognize the described face – a phenomenon called the *verbal overshadowing effect* (VOE) (Schooler & Engstler-Schooler, 1990).

Schooler and Engstler-Schooler (1990) showed participants a videotape of a bank robbery. About half of them were subsequently asked to describe the robber in as much detail as possible, while others were engaged in an unrelated filler activity. In the final stage of the experiment, all participants were asked to identify the robber from among 8 photographs – one of the actual culprit and seven foils. Results revealed that while 64% of subjects in the no-description control group correctly recognized the culprit in the photo-lineup, only 38% of participants who described his appearance made a correct identification. This led to an assumption that describing a previously seen face impairs a subsequent recognition performance. Verbal overshadowing effect does not exclusively involve faces but also other stimuli that are difficult to verbalize, such as colors (Schooler & Engstler-Schooler, 1990), voices (Perfect, Hunt, & Harris, 2002), abstractive figures (Brandimonte, Schooler, & Gabbino, 1997) and flavors (Melcher & Schooler, 1996).

Schooler and Engstler-Schooler (1990) suggested that the verbal overshadowing effect results from recoding interference, in which the verbalisation of a visual memory fosters the formation of a verbally biased representation, corresponding to the original stimulus. In other words, the result of verbalisation – i.e. culprit's description – collides with the original visual memory of the face, making access to that memory more difficult or even changing it (Wilcock, Bull, & Milne, 2008). It has also been suggested that the cause of verbal overshadowing lies in an inappropriate processing shift (Schooler, 2002). According to this hypothesis, describing a face induces a change of general processing to operations that are appropriate for stimuli suitable for verbalisation. As a result, verbal description makes participants become "stuck" in a verbal mode of processing faces, which is then inappropriately transferred to the recognition task resulting in disruption (Meissner et al., 2007). The newest explanation indicates, in turn, that the verbal overshadowing is responsible for the growth in the tendency to not indicate anyone in a lineup. According to this proposition verbalisation of a perpetrator's appearance results in a more rigorous criterion for identification decision in witnesses, and hence more often leads to assumption of the absence of a perpetrator in a parade than indicating one of the participants in the lineup (Clare & Lewandowsky, 2004). Most likely the verbal overshadowing effect should be seen to be due to different mechanisms in different conditions. However, it is premature to speculate what precise conditions should

determine when one account versus another is most viable (Chin & Schooler, 2008).

Since its original demonstration, the occurrence of the verbal overshadowing effect has been confirmed in numerous experiments (e.g. Dodoson, Johnson, & Schooler, 1997; Fallshore & Schooler, 1995). Despite the growing body of research on VOE, it remains a matter of controversy, whether VOE is a fragile laboratory phenomenon or an actual threat to real-life police investigations and investigative procedures. On one hand, some research such as one of the follow-up experiments conducted by Schooler and Engstler-Schooler (1990), suggest a relatively long-lasting memory interference, as the negative influence of prior description on a subsequent recognition was found after 2-day post-description delay. On the other hand, Finger and Pezdek (1999) found that the negative effect of prior recall was eliminated when a 24-minute delay was introduced between the description and recognition task. A meta-analysis of the verbal overshadowing effect conducted by Meissner and Brigham (2001) shed some light on this matter. Across a sample of 15 studies (29 effect size comparisons; N=2018) a small, yet significant negative effect of describing target's face on a subsequent recognition attempt was found, indicating that participants who described target's face were 1.27 times more likely to misidentify the target when compared with participants in no-description control condition. But a closer look at the meta-analysis reveals that in 25 experiments (out of 29) the recognition followed description immediately or shortly thereafter, within 30 minutes (in 3 studies – after 48 hours and only in 1 study – after one week). In real life investigations, the delay between providing a description and a subsequent recognition attempt during a lineup (organized after a suspect is apprehended) lasts days, weeks or even months! The lack of forensic realism in experimental procedures applied in the verbal overshadowing paradigm, makes recommendations for investigative practice formulated on their basis unauthorized.

2   PREVIOUS RESEARCH

If the verbal overshadowing effect is to be considered by investigative bodies when scheduling actions involving eyewitnesses, questions concerning long-term consequences of providing culprit's description need to be answered. Two experiments were conducted, which intended to overcome the shortcomings of previous research in the verbal overshadowing paradigm. In the experiment by Kabzińska and Niedźwieńska (2011), participants (N=75) were shown a videotape of a robbery of a young female. They were then randomly assigned to one of three groups. In the first group, participants were asked to describe the culprit's face in as much detail as possible. The second group was asked to complete a Face Rating Schedule – an expanded questionnaire of characteristics of appearance, in which the indicated characteristics are described on rating scales (Sporer, 2007). It is composed of 53 items, the majority of which are bipolar dimensions describing a given category, e.g. a narrow – wide face, straight – curly hair. The task of the person is to assess, on a 5-point scale, which dimension most closely matches

the perpetrator's face. Finally, the third group was the no-description control group engaged in an unrelated filler activity. To reflect the authentic situation of eyewitnesses in a criminal investigation a 2-week delay was introduced between a description and a subsequent recognition task. After 2 weeks, participants from all 3 groups came back to the laboratory to participate in a lineup consisting of 6 photographs – one of the actual culprit from the previously seen video and 5 foils. Their task was to indicate the photograph of the perpetrator. As in authentic lineup instructions, participants were counseled that the perpetrator's photograph may not be present in the photoarray. A photo-lineup was chosen even though there is a common view among forensic practitioners that a live lineup produces more accurate identification responding than any kind of photoarray. However, there is no empirical data supporting this notion (Brewer & Palmer, 2010).

Results revealed no significant intergroup differences in the pattern of correct and incorrect answers. Participants who provided the perpetrator's description (either by free recall or filling in a questionnaire), were not less likely to identify the actual culprit compared to no-description controls, as expected in accordance with the verbal overshadowing effect. However, significant differences in the pattern of two possible incorrect answers, i.e. false identification and making no identification, were found between the free description and control groups. Participants providing a free description less frequently identified somebody who was not a perpetrator, in comparison with no-description control group. At the same time, they more often stated that the lineup did not contain the picture of the perpetrator, in comparison with no-description controls. Participants filling in the questionnaire differed neither from the control group nor from the group providing a free description in any of the indicators (see Table 1).

Results of the cited study revealed that in a long-term perspective providing a culprit's description does not affect the number of correct identifications during a lineup. Participants who described the perpetrator's appearance manifested an increased reluctance to indicate anyone from the lineup when compared to the no-description control group, who were more likely to indicate an innocent foil than refrain from identification. This reluctance to make an identification was attributed to a more rigorous criterion for identification decision of participants describing the perpetrator's face. According to Kabzińska and Niedźwieńska (2011), this criterion shift results in an assumption of the perpetrator's absence in the lineup. Obtained results seem consistent to at least some extent with criterion shift explanation introduced by Clare and Lewandowsky (2004). In accordance with Clare and Lewandowsky (2004) authors believe that a long-term effect of providing description on subsequent recognition is a change in strategy at the moment of identification, rather than disruption of memory as suggested by Schooler and Engstler-Schooler (1990).

**Table 1.
Response type
for the three
verbalization
conditions
in the
experiment by
Kabzińska and
Niedźwieńska
(2011)**

Response type	No-description control group (N=25)	Free description (N=25)	Face Rating Schedule (N=25)
Correct	5	6	4
Incorrect*	20	19	21
False identification	14**	6**	11
No identification	6**	13**	10

*False identification and no identification represented two possible types of incorrect responses

** Indicates a significant difference between free description and no-description control group at p<.05

3 METHOD

If describing a culprit's face in a long-term perspective results in an assumption of his absence in the lineup, then introducing perpetrator-absent lineups should result in a higher rate of correct rejections of perpetrator-absent lineups in the participants' group describing culprit's appearance, when compared to no-description controls. An experiment was conducted in which 80 law students of the Faculty of Law and Administration at Jagiellonian University in Cracow took part. They were all recruited from the course "Criminalistics" held by the Chair of Criminalistics and Public Safety. Among the 80 participants, 41 were women and 39 – men. The mean age of participants was 20,57 (SD=1,49). Participation was voluntary and subjects did not receive any compensation as a result of their participation. Subjects were shown a short video depicting a robbery of a young female and then randomly assigned to one of two groups: a) providing perpetrator's description, and b) a no-description control group. To ensure ecological validity, descriptions of perpetrators were collected in an investigative manner: participants were asked to provide a free recall of the culprit's appearance and then asked a series of open-ended questions. A 2-week post-description delay was introduced between description and identification task. Both target-present and target-absent lineups were introduced. The lineup consisted of 6 photographs, but half of the photo-arrays included perpetrator's photograph and half consisted of photographs of 6 foils.

4 RESULTS AND DISCUSSION

Results of the experiment for the perpetrator-present lineups are presented in Table 2. As in the study conducted by Kabzińska and Niedźwieńska (2011), no significant intergroup differences in the pattern of correct and incorrect answers were found. Once more the classical verbal overshadowing effect was not observed in a long-term perspective. Contrary to expectations, however, there were no significant intergroup differences in the pattern of two possible types of incorrect responses: false identification, $\chi 2(1)=0,15$, p=0,69 and making no identification, $\chi 2(1)=1,06$,

p=0,3. In contrast to the results of the previous experiment, providing a description of the suspect did not protect innocent foils from being identified during a lineup.

Response type	Free description group (N=20)	No-description group (N=20)
Correct	3	7
Incorrect*	17	13
False identification	10	7
No identification	7	6

Table 2. Response type for the two verbalization conditions for the perpetrator-present lineup

*False identification and no identification represented two possible types of incorrect responses

Moreover, the hypothesis concerning perpetrator-absent lineups were not confirmed as well. Table 3 presents the results for the perpetrator-absent lineups. Contrary to expectations, correct rejection rates did not significantly differ between the group providing offender's description and no-description control group in the perpetrator-absent lineups. Providing the perpetrator's description did not result in a greater number of correct identification decisions, i.e. correct rejection of lineups compared to no-description controls, $\chi2(1)=0,18$, p=0,67. Results of this study suggest that describing the offender's face has no influence on a subsequent recognition attempt, contrary to both the traditional understanding of the verbal overshadowing effect and the criterion shift hypothesis, indicating potentially positive effects of a previous recall. No gender differences were observed in any of the analyzed indicators.

Response type	Free description group (N=20)	No-description group (N=20)
Correct rejection	5	6
False identification	15	14

Table 3. Response type for the two verbalization conditions for the perpetrator-absent lineup

Short time intervals between recall and recognition in the majority of experiments on the verbal overshadowing effect, force us to be careful when generalizing the obtained results to the reality of administration of justice. Research up till now on the influence of former recall on future recognition has not allowed any recommendations to be formulated for prosecuting bodies on its basis, because of the lack of investigative realism in applied experimental procedures. These previous experiments filled the gap in description-identification studies. Both experiments revealed that the verbal overshadowing effect seems no longer a threat to recognition performance when real-life delay between description and identification tasks is introduced, at least when manifested by an increase in misidentifications rate. On the contrary, some research suggests a potentially positive effect of describing the offender's face – refraining from indicating someone

rather than identify an innocent person as a perpetrator. It is still possible that in some cases the time interval between the first interview of the witness and a lineup, organized after a suspect is apprehended will take no more than several hours. In such cases it would be wise to consider scheduling actions involving eyewitnesses in a manner that will prevent the verbal overshadowing effect from occurring.

Though the sample here was rather small, results seem consistent to at least some extent with the tendencies observed in the meta-analysis by Meissner and Brigham (2001). When a long delay was inserted (≥30 minutes) prior to identification phase differences between the control and description conditions were marginal, but in the direction of verbal facilitation. A more in-depth analysis of this results indicated that the long delay influenced only the no-description control group who demonstrated a significant degree of forgetting. Conversely, participants who described previously the perpetrator's face showed no change in performance across the delay. The verbal overshadowing effect when occurred in presented experiments, manifested by a change in strategy at the moment of identification, rather than a disruption of the memory itself. Those differences indicate that the issue of cognitive background of verbal overshadowing effect requires further research. Though research provided some insight to the problem of VOE in young children (Memon & Rose, 2002), there is still no knowledge about its influence on elderly witnesses. The fact that older individuals are staying active longer increases the probability that they will be bystander witnesses to various crimes. It has been well established that certain cognitive functions, including memory, tend to decline in normal aging (Bornstein, 1995). Unfortunately, the sample in cited experiments does not allow any search for age differences in verbal overshadowing effect.

5   CONCLUSION

Even though the above mentioned research clarifies the issue of the VOE's duration, other issues in the field of description-identification relationship await answers. First of all, it remains unclear whether constructing a facial composite results in the verbal overshadowing effect. On one hand, constructing a facial composite requires a detailed and comprehensive recall of the offender's face. On the other hand, such recall involves a visual component, when described elements of the face are confronted with facial characteristics in catalogs and software databases used during composite construction. Due to those differences findings concerning a perpetrator's description may not necessarily apply to facial composites and ambiguous research results seem to confirm this notion. Some research, as the meta-analysis of 8 experiments involving a facial composite recall task (Meissner & Brigham, 2001), indicate a significant improvement in recognition accuracy following facial composite reconstruction. Participants who made the composite were 1,56 times more likely to correctly identify the perpetrator when compared with a no-description control condition. In the experiment by Wells, Charman and Olson (2005), traditional verbal overshadowing effect was observed in participants creating a facial composite when compared with control group. Second of all, the knowledge about precise mechanisms responsible for the verbal overshadowing

effect under various conditions remains insufficient. Finally, studies on the verbal overshadowing effect up till now show a more general problem of a lack of forensic realism in experimental procedures in the field of investigative psychology. If empirical findings are to serve law enforcement officials in designing everyday investigative procedures they need to originate from well-designed methodology resembling as closely as possible the investigative police work.

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