

Wanted Posters: A Call for Research

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Abstract: Wanted posters are an important investigative tool, yet there has been no psychological research on their effectiveness. This paper demonstrates that wanted poster tasks are significantly different from other police procedures, such as lineups and composites, making generalizations from these other procedures questionable. A call is made for research on this as yet unexplored topic.

INTRODUCTION

The American public's exposure to pictures of individuals wanted by the authorities is undoubtedly at an all time high. Terrorists' pictures appear daily in the newspaper, on television, and on web sites (e.g., the F.B.I. website; American's Most Wanted web site). High profile cases involving missing persons such as Chandra Levy, Lacey Peterson, Natalie Holloway, and Elizabeth Smart (the only one in this list to be found alive) had their pictures displayed daily in newspapers, magazines, and on television. There are television shows totally devoted to using the public to help find suspects or victims (e.g., *Unsolved Mysteries* and *America's Most Wanted*). Web sites containing most wanted pictures are becoming more and more extensive. For example, the F.B.I. web site contains pictures and descriptions of wanted individuals on the following pages: (a) Most Wanted Terrorists, (b) Ten Most Wanted, (c) Kidnappings and Missing Persons, (d) Parental Kidnappings, (e) Crime Alerts, (f) Unknown Bank Robbers, (g) Seeking Information, (h) Violent Criminal Apprehension Program, and (i) Featured Fugitives. Recently, the FBI launched a new program to use large digital billboards to display pictures of fugitives and missing persons to the passing motorists. During the early days of the war in Iraq, the US military gave the troops a set of playing cards with the most wanted members of Saddam Hussein's government. Although web pages, pictures shown on TV, pictures shown in newspapers, digital billboards, and playing cards are not all technically wanted *posters*, the term *wanted poster* will be used throughout this article as a general term applying to all procedures in which visual information is provided in an attempt to locate a person.

Clearly, the US criminal justice system and the US society are vitally interested in wanted posters as an important tool in apprehending terrorists and criminals as well as for locating victims of crime. However, in spite of its importance, there is virtually no psychological research on wanted posters. As a simple demonstration of the paucity of research, a recent PsycINFO search using *wanted poster* as the term returned just 2 articles; however, a search using the term *lineup* which returned 384 articles. Neither of the articles that contained a reference to wanted posters was actually

testing the effectiveness of wanted posters. Although there is anecdotal evidence of the effectiveness of wanted posters, there is a lack of research on even the most basic of questions. For example, we do not know the answers to such questions as: (a) How accurately can people be identified from wanted posters? (b) Are there the same problems of false positive identifications found in eyewitness identifications? (c) Are wanted posters equally effective for remembering a person seen before viewing the wanted poster as for recognizing a person seen that will be seen in the future after viewing a wanted poster? (d) What information should be included on the posters—written description, full face picture, profile picture, full body picture, color/b&w, portraits? (e) There has been increased use of video clips both on web pages such as the FBI's as well as on TV; what impact does this have on correct identifications and false positive identifications? (f) Which outlet is the most effective for wanted posters – TV, internet, billboard, newspapers, post office, telephone poles, etc.? (g) Does the type of response required make a difference – phone, e-mail, internet? (h) How does the anonymity of the response affect accuracy rates? (i) Does the amount of reward impact on effectiveness? (j) Do wanted posters work equally well for all types of crimes – terrorists, fugitive, adult kidnap victims, child kidnap victims? (k) Does the time between when the poster is seen and when the individual is (or was) encountered make a difference? (l) Does there need to be repeated exposure for the poster to be effective? (m) Does viewing someone in a wanted poster make it more likely that this person will be falsely identified if seen a lineup (similar to the mug book exposure effect)? This is not an all inclusive list by any means, there are a myriad of other questions that could be addressed. One could devote an entire research career this topic alone. However, in spite of the abundance of researchable questions none have been addressed.

COMPARISON TO PHOTOSPREADS AND MUG BOOKS

Given the extensive research literature on eyewitness testimony (see reviews in Lindsay, Ross, Read, & Toglia, 2007; Toglia, Read, Ross, & Lindsay, 2007), one would think that many of the questions about wanted posters would have been answered for some other technique (such as lineups or mug books) which could then be simply generalized to the case of wanted posters. However, in spite of some

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surface similarities with these other techniques, there are important differences that make any such generalizations questionable. A consideration of these differences will be helpful in determining the direction for future research.

One difference between eyewitness identification procedures (e.g., lineups/photospreads, showups, and mug book searches) and the viewing of wanted posters concerns differences in the nature of the memory task. Harris (1984) made a distinction between *retrospective* memory tasks and *prospective* memory tasks. A retrospective memory task involves remembering events or information from the past whereas a prospective memory task concerns remembering to perform some task in the future. Clearly, a lineup/photospread, showup, or mug book task involves retrospective memory; the witness is comparing a currently viewed picture with the memory of a perpetrator seen in the past. In contrast, some types of wanted poster situations have a prospective memory aspect to them. Consider a situation in which persons viewing the wanted poster are asked to report if they encounter the pictured person in the future. After seeing the wanted poster it is unlikely that people engaged in their everyday life would consciously compare every single person that they encountered to the wanted poster picture; the wanted poster task is not the only task (or even the primary task) of the person who, subsequent to viewing the wanted poster, goes to work, picks kids up, goes shopping, etc. The cue of seeing the fugitive (or someone that was similar to him e.g., a balding, middle-aged, Hispanic man) would remind them to perform the memory task of comparing the individual with their memory of the person pictured on the wanted poster. In other words, the prospective memory task involves the need to begin a retrospective memory task when you come across a certain type of individual and then perform some action (e.g., calling the police). In a lineup situation, a witness doesn't have the prospective task of remembering to compare the person in the lineup with the memory of the perpetrator; that is the retrospective task that they are actively involved in. In fact, it is their primary focus. Not only do lineups lack this prospective memory aspect, lineups and wanted posters differ even in the retrospective memory task. In the case of the eyewitness, the original scene is viewed live, and the memory is of this dynamic scene. However, the recognition stage often requires the comparison of this dynamic memory with a static picture (in the case of photospreads and mug books). In contrast, for wanted posters the originally-viewed poster is in most cases a static picture, and the recognition stage involves comparing the dynamic image of a person who is currently being viewed with the memory of a static picture.

A second type of wanted poster situation is one in which the person views a wanted poster picture and then attempts a retrospective memory search to determine if this person has been seen in the past. This situation is more similar to the typical lineup/photospread task in the sense that it involves retrospective memory; however, even here there may be important differences. In most cases, the eyewitnesses viewing a lineup know that they saw the perpetrator at the crime scene at a specific time and location; what is in doubt is whether a particular individual in the lineup is the perpetrator or not. The task for the eyewitness is not as much of a search task, but rather the task of comparing the image being viewed in the present with the image of the perpetrator stored in memory. In many cases for people viewing a

wanted poster, there is the uncertainty as to whether the person of interest has *ever* been seen. For example, those viewing a picture of a missing person would have to consider whether they had recently seen an individual like that. In contrast to the witness viewing a lineup and reflecting back on the crime scene, they would not have a specific time or place to help in their memory search. Research has shown that memory can be enhanced by increasing the number of retrieval cues (Tulving & Thompson, 1973; Tulving, 1979); eyewitnesses have cues, such as time, place, and circumstances of the event that are usually not available to the person viewing a wanted poster. There are a number of other differences. Someone who simply viewed the individual before having seen the wanted poster would have stored this information based on incidental learning (unless there was some dramatic event causing them to focus on that individual). The eyewitness many times knows that the event is important and as a consequence may intentionally learn the perpetrator's face.

The above is not an exhaustive discussion of the differences between someone reacting to a wanted poster and an eyewitness attempting an identification; however, it should be sufficient to illustrate that there are significant differences. Clearly making untested generalizations about wanted posters from research based on photospread/mugbook would be dangerous.

COMPARISON TO COMPOSITES

Another investigation procedure used by the police and having some similarity to the wanted poster task is the use of composite drawings. Composite drawings are, in fact, a type of wanted poster. As with the wanted poster using a photograph, the purpose of a composite is to help locate someone wanted by the police; however, there are some real differences that make generalizations from the limited research on composites questionable (see review by Davies & Valentine, 2007). The most obvious difference is that one involves photographs actually taken of the person while the other involves the production of a composite based on someone's memory. Regardless of the quality of the computer-composite programs, they cannot be as accurate as a photograph. Only when composites have been constructed with the image in front of the person making the composite can they even approach a still photograph; there is a significant decline in the representativeness of the composite when it is made from memory (Davies, van der Willik, & Morrison, 2000). A second difference is that composites are primarily used when the identity of the wanted person is not known. Many times when wanted photos are used, the identity of the person being sought is known (of course, there are exceptions, e.g., a picture taken used a closed-circuit camera during a bank robbery). An identification task where there is a verifiable right or wrong answer is a clearly different task from a task where no such definitive verification is possible. For example, based on a wanted poster of Fred Smith, someone is identified as resembling the picture; the person who is identified as Fred Smith can then be checked out by the police, and based on fingerprints, dental records, etc., it could be definitively determined whether the identification was correct or not. The question of whether Fred Smith actually committed the crime or not is a separate question. In contrast, for someone that is identified as resembling the com-

posite, the only way to verify the correctness of the identification is to prove that this person was the perpetrator of the crime.

CONCLUSION

The above comparison of wanted posters with other police procedures such lineups/photospread, mug book, and composites demonstrates that wanted posters are different from these other procedures in meaningful ways. Clearly, to understand the effective use of wanted posters, research addressing the unique aspects of wanted posters is called for. Hopefully, this call for research will bring research attention to a widely used technique that is as yet unexplored.

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