

Project Proposal

Since the mid-1980's, child abduction has gained widespread attention in both social and research-oriented realms. The National Center for Missing and Exploited Children (NCMEC) reports that an average of 2,185 children are reported missing each day. These children may be victims of family abduction, which occurs when a child is taken by a noncustodial parent or other family member, or non-family abduction, when a stranger or unrelated acquaintance abducts the child. Other occurrences included in the reported statistic are runaway or "throwaway" children. While non-family abduction is the least frequent of the three, it is usually the most publicized, and the children more often suffer further forms of physical or emotional abuse than in familial abductions.

It is logical that there are adverse effects as a result of the abduction of a child, both for the child and his or her family and friends. Many researchers have reported on the effects of such criminal victimization, though they differ in each situation and are dependent on things such as social support network, previous stress levels and perception of control or loss of control. Children who are returned to their homes often struggle with interpersonal relationships and fear issues even after a somewhat minor episode of abduction. For this reason it is important to evaluate the current methods for preventing and resolving child abductions.

Currently, a common method of attempting to resolve a missing child case is to present photos of the child to the public in hopes that the public can be on the lookout for the child. These photos are usually present in commonly visited areas such as supermarkets and department stores. This method relies on the prospective memory of those passersby who take note of the photos. Prospective memory is the process of remembering to perform a certain action that was previously planned at a specific point in the future. Here, it would be called event-based prospective memory because the future task is to be performed when a particular situation is present in the environment as opposed to time-based prospective memory where the future task is to be performed after a specified amount of time has passed. The viewer has to respond to the actual child if he or she is seen in the environment and recall that they should call the Helpline to report the sighting. Research has indicated many conditions that may influence the successful prospective memory action and has debated on the strategic or automaticity of prospective memory. One theory – the multiprocess view – postulates that prospective memory is both strategic and automatic depending on certain conditions in the environment. Another theory – the preparatory attentional and memory processes theory (PAM) – considers prospective memory to be only strategic and argues that it requires the use of certain limited cognitive resources. This leads to a resource cost to the ongoing task, while the multiprocess view states that this cost is smaller or non-existent when the intended response is simple, the cue is salient, ongoing tasks encourage cue processing, or the cue is highly related to the intended response. In relation to child abductions, it is therefore important to utilize the most efficient methods

available when presenting photos of missing children in order to foster successful prospective memory responses.

In the event that a child has been missing for an extended period of time, there is a need for an up-to-date photo of the child to display to the public. This is often created using forensic age progression techniques, creating a photo of what the child would be assumed to look like at their present age based on development norms and familial similarities. This area is still somewhat new, with the first successful use of forensic illustration to locate a missing child occurring in 1985. Scott Barrows and Lewis Sadler were instrumental in this development, gathering data on craniofacial growth and development to create aged progressed photos of two sisters that were taken by their noncustodial father in 1977. These photos were aired on an NBC program entitled "Missing" in 1985 and by the following morning the children were found and the abductor was in custody. The success of these forensic illustrations then gained popularity and further research has led to further advancement in the field.

Forensic age progression can focus more on quantitative data in reference to the growth and development of the human face or on hereditary similarities in features. The NCMEC uses a computer based program based largely on the genetic features of the relatives of the missing child. The most recent photo of the child before he or she went missing can be evaluated based on the comparative facial changes that occur over time to create a preliminary photo. Then family photos of parents and siblings at the projected age are compared and merged with this photo to manipulate it further and take genetic likenesses into account. Through this process, the final age progressed photo is made and presented to the public to presumably enhance the likeliness of a viewer recognizing the child in their environment.

This project attempts to evaluate the effectiveness of such forensic age progression in the task of identifying missing children. A sample population will be allowed to view photos of "missing" children at age 6, age 11, or an age progressed projection of the child at age 11 based on the above-described methods. Participants will then take part in a recognition task that contains photos of 11 year old foil photos and actual 11 year old photos of the "missing" children that differ from those presented at test for the age 11 condition. They will be assigned an ongoing task of separating the children into two separate teams with an equal number of boys and girls on both teams while the prospective memory task will remain, so that when they see a photo of a child that they viewed in the study session as missing they are to alert the authorities by pressing a corresponding key on the keyboard.