Tattoos in Investigation: Profiling Cases and Interpreting Tattoo Designs[1]

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The purpose of this presentation is to present the results of a study in which investigators examined tattoos in order to profile subjects and to demonstrate investigators' abilities to predict subject's background characteristics based on an interpretation of a tattoo and limited background information from the subject.

The use of profiling is valuable in any investigation; however, it is often useful in "cold" cases, high profile cases, or when there are few investigative leads. Profiling provides investigators additional leads to pursue in advancing the investigative process.

In some cases the image of the tattoo or its design can be a clue for the investigator. However, investigators should use caution when interpreting the meanings associated with tattoos, because the symbolism is not always apparent. In addition, numerous variables influence tattoo designs and need to be taken into consideration when investigators' make assessments based on tattoos.

This study examines how accurately police officers can profile information from an unidentified subject based on the evaluation of a single tattoo with limited information on the tattooed subject. Investigators were given a color photograph of a tattoo with a description of its location on the body. Also, information such as the victim's gender, approximate age, height, weight, hair and eye color were provided. The ethnicity of the subject was excluded because skin tone or physical appearance in a profiling case involving an unidentified person may not be evident. The investigators reviewed the cases and profiled six categories of information about the subjects. The categories were selected based on their usefulness in the investigation and identification of the subject.

Forty officers from a southeastern North Carolina police agency were selected to participate as evaluators in this study. Thirty-five were male and five were female with an average tenure of six years as a sworn police officer and two years as an investigator. The range of service was from one year to twenty-three years for sworn officers and one year to eighteen years for investigators.

The evaluators were asked to review the tattoo cases and profile the six categories of information based on each tattoo's image, design, color and the descriptive information. The profiling categories included: hobbies and interests, geographical background, educational level, military background, criminal background, and period of residence.

In order to quantify the profiling data, the profilers had to select from specific answers for each category. Based on the image, color, design of the tattoo and the information about the subject, the evaluators had to determine if the tattooed subjects preferred inside or outside hobbies and interests. The geographical background choices included: rural, urban or undecided. (Geographical background was defined as where the subject grew up.) Evaluators were asked to determine whether the subjects' educational levels were divided into some elementary, some high school, some college, or undecided. Military background and criminal background choices for each subject were yes, no or undecided. (Criminal background was defined as being charged with a felony.) The current period of residence category was divided into three periods of time, one year or less, two to five years, or five years or longer.

The tattooed subjects included five males and seven females. Ten of them were from North Carolina, one from New Hampshire, one from Illinois and one from Canada. The average

age for both males and females was twenty-three years of age. The range of age for the males was from nineteen to twenty-six and females twenty to thirty-one years of age. All subjects had some college for their educational level, no military service and no criminal background. Ten of the subjects preferred outside hobbies and interests, and two preferred inside activities. Eight of the subjects were from urban areas, and four were from rural areas. Seven subjects resided in one location for one year or less, four subjects for two to five years and one subject for five or more years. Subject 1 had a tattoo of a tiger; 2 had an outline of a volleyball player; and 3 had a rose with the words "sweet cheeks" written in script. Subject 4 had a line drawing of a person with dread locks with an abstract symbol above it; 5 had an elaborate multi-colored female image; 6 had a spiral symbol with oriental markings above it; 7 had a small dragon; and 8 had an oriental character. Subject 9 had the word "Aijia" written in script; 10 had the letter "J" written in script; 11 had the word "TOT" written below a small butterfly; and 12 had a rose with a stem and leaves.

A summary of the evaluators' top two correctly profiled selections in each of the profiling categories follow. In the hobbies and interests category, the percentage of evaluators who correctly identified the subjects preferences were recorded for tattoos 5 at 57.5% and 9 at 62.5%. 80% of the evaluators correctly identified the subjects' geographical locations for both tattoos 2 and 5. The two highest correct percentages for educational levels were tattoo 7 at 67.5% and tattoo 8 at 45%. The highest percentages and most correct answers among all categories was military background determined by tattoo 2 at 90% and tattoo 3 at 87.5%. The highest percentages of the subjects' criminal backgrounds were correctly recorded for tattoos 8 at 72.5% and tattoo 7 at 70%. More than half of the evaluators correctly identified the period of residence for tattoo 7 at 65% and tattoo 5 at 62.5%.

The highest combined percentage for all tattoos was tattoo 7. This tattoo was from a female, age twenty-one. The reason given by the subject for selecting a small dragon was she had a fascination with dragons. The total high percentage of evaluators who correctly identified characteristics associated with the subject in each of the categories follows: hobbies and interests - 42.5%, geographical background - 80%, educational level - 67.5, military background -85%, criminal background - 70% and period of residence - 65%.

Overall, the study indicates that some investigators can correctly interpret tattoo information pertaining to unknown subject; however, investigators should be very cautious in making conclusions based on tattoo interpretations.

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