J Forensic Sci, Sept. 2005, Vol. 50, No. 5 Paper ID JFS2005090 Published 3 Aug. 2005 Available online at: www.astm.org

Commentary on: Saks MJ, VanderHaar H. On the "general acceptance" of handwriting identification principles. J Forensic Sci 2005;50(1):119–26.

Sir:

I wish to address several errors and omissions that appear in a paper by Michael Saks and Holly VanderHaar published in the January issue of this journal. In their paper, the American Society of Questioned Document Examiners (ASQDE) was identified as one of two groups who participated in the study. My commentary will demonstrate this statement is false and identify a few, but not all, areas of the study that are flawed or misleading.

The authors state, "The sample of forensic document examiners consisted of all 140 members of the ASQDE who, at the time of data collection, had email addresses included with their listings in the Society's membership directory available on its website." The composition of the so-called "ASQDE sample" is extremely important to the researchers who acknowledged the limitations of basing their findings on a mere thirteen responses—a very small number indeed considering 140 document examiners were apparently surveyed.

I would first like to point out that the ASQDE has never had as many as 140 members any time during its entire history. In 2001, the year the authors distributed their questionnaire, only 124 members were on the Society's roster and of this number, approximately 65 had their email addresses posted on the ASQDE's website in a directory clearly titled, "ASQDE Members' Email."

Consequently, the authors could not have used the "ASQDE Members' Email" directory to prepare the distribution list for their survey as stated in the article. Instead, their distribution list likely originated from another directory on the website titled, "Forensic Document Examiners' Email" or from a combination of the two. This directory is provided as a service to our membership and is not an endorsement of the qualifications of those listed. The "Forensic Document Examiners' Email" directory presently contains the names and email addresses of 156 document examiners, most of whom are not ASQDE members. A significant number of these individuals reside outside North America and a few are ink chemists who have no expertise with respect to handwriting identification at all. One can hardly imagine a more diverse and fragmented group of "forensic document examiners."

It is also difficult to imagine how the authors could describe the ASQDE membership as an "unusually homogeneous population". This would be accurate had the authors truly relied on the Society's testing requirements to guaranty uniformity. Instead, they failed to recognize that of the ASQDE's six membership categories (*Honorary, Affiliate, Provisional, Corresponding, Regular and Life*), only Regular and Life members have passed the series of written, practical and oral examinations.

These demographic issues raise serious doubts about the origin of the "13 usable replies." The survey respondents likely have a much broader range of training, experience and background than the "unusually homogeneous population" advanced by Saks and VanderHaar.

Next, I would like to address the construct of the questionnaire itself. Surveys conducted on an ad hoc basis often bring the GIGO

(garbage in, garbage out) principle into play. Although the authors collected information about each respondent's background, they failed to determine if each participant was an ASQDE member and, if so, what his/her membership class or category was. A study designed to collect information about a target organization should have included such important details. Had this precaution been taken, the heterogeneous nature of the data would have been immediately obvious.

Although the authors claim to have taken several purported principles from the literature, none are direct quotations. Instead, the propositions are reworded statements couched in the authors' own phraseology, terminology and jargon. For example, Proposition 5 states, "Inter-writer variation far exceeds intra-writer variation". The terms "inter-writer" and "intra-writer" rarely appear in the discipline's literature and it is certainly possible these words were not clearly understood by all respondents. If this proposition had read, "Differences between the writings of two people far exceed variations in the writing of one person." the results would likely have been more consistent.

Table 1 on page 122 indicates where the 10 principles were apparently taken from the 1910 first edition of A.S. Osborn's *Questioned Documents*. Using a textbook written nearly 100 years ago might explain why responses by the forensic document examiner group varied so much. A century ago, most writing was done with nib pens. These writing instruments usually produce handwriting that clearly reveal: the presence of stops and starts, the muscular action used to produce the writing and the direction of pen strokes. Such determinations are difficult and oftentimes impossible to judge when dealing with writing produced by ballpoint, fibre tip, felt tip and roller ball pens. Principles 8 through 10 were likely evaluated in the context of documents prepared with modern writing instruments rather than nib pens that were popular in Osborn's time.

Proposition 2 states, "An individual's writing pattern is sufficiently distinctive that it is virtually impossible to duplicate it (forge it) without detection by an experienced expert. (In other words, handwriting experts are able to determine whether a writing is genuine or forged.)". The authors report that responses from the forensic document examiner group differed significantly from "well accepted as true". Several unspecified details that include the quantity of writing involved, the technique used by the forger (i.e., direct tracing, freehand simulation, etc.) and the writing skill of the victim all influence the relative ease or difficulty with which a contested writing can be declared genuine or fictitious. The "potentially significant and avoidable ambiguity" that the researchers admit applies to Proposition 6 also exists in Proposition 2.

It is unfortunate the authors chose to reject the assistance offered by forensic document examiners during the early stages of their research. Had they accepted the proffered advice, their study might have produced convincing and meaningful results. Instead, the aforesaid limitations cast serious doubt on the reliability of the data and justifiably weaken the reader's confidence in the research itself.

Dan C. Purdy ASQDE President