

28-Jan-19

ASB Std 090: Standard for Sex Assessment in Forensic Anthropology

#	Section	Type of Comment	Comments	Proposed Resolution	
		(E- Editorial, T- Technical)			Final Resolution
1	Title	E	<p>Use of the term "assessment"- this term has been defined multiple ways in the literature and implies the historic approach of the gestalt and/or invalid and unreliable approaches. Sex Assessment vs. Sex Determination vs. Sex Estimation</p> <ul style="list-style-type: none"> <li>Sex assessment has been defined by Spradley and Jantz (2011:290) as the use of "morphological traits with no estimable error rates, classification rates, or any associated statistics" seemingly based on a conversation with Stanley Rhine (Moore, 2012). This has been the historic approach to both sex and ancestry estimation in bioarchaeological and forensic contexts, whereby features or the gestalt were used to subjectively produce a sex assessment. We know today, that this approach is not only invalid and unreliable, but also lacks the scientific rigor required of our methodology.</li> <li>Sex determination implies levels of confidence approaching 100% accuracy. The term itself is defined as "establishing something exactly" (Oxford dictionaries). At present, the only employable method with which to determine biological sex with 100% accuracy is through DNA analyses and even this is not without its own caveats and limitations. Using the term "determination" in our case and/or site reports infers a level of confidence that simply cannot be obtained using currently available metric and morphological estimates of sex; therefore, use of this terminology should be restricted to DNA analyses alone.</li> <li>Spradley and Jantz (2011:290) define sex estimation as the use of "metric traits of the pelvis, skull, or any single bone or any combination of bones...because it provides an estimate in the form of an error rate or expected classification rate." Moore (2012) suggests the "current consensus in sexing research" focuses on metric methods, but I would argue that morphological methods are equally if not more popular due to their ease of use, broad applicability, and high agreement levels. Also, one could argue the modern morphological methods also include these statistical parameters and therefore, the term "sex estimation" should be opened up to include an estimation of sex with associated classification accuracy and error rates.</li> <li>In the 21st century we need to move away from using the term (and practice) of sex assessment and instead rely on the estimation of sex using valid and reliable methods (either morphological or metric) and/or determination of chromosomal sex using DNA.</li> </ul>	change to estimation	Accept. Additional comment added to Term #3 for clarification. "Assessment" and "Determination" changed to "Estimation" throughout the document.
2	Foreword		There is an incomplete sentence in the Foreword: "Using the document initially published by the Scientific Working Group of Forensic Anthropology (SWGANTH)."		Accept
3	Foreword	E	I think that the addition of 'assignment' after Sex' (first word in sentence of the editorial) may improve the meaning of the sentence	Insert 'assignment' after the word 'sex' in the first sentence paragraph	Reject: The insertion of "assignment" does not further clarify the sentence.
4	Foreword	E	"Using the document initially published by the Scientific Working Group of Forensic Anthropology (SWGANTH)." is not a proper sentence.	Link with sentence that comes before it or after it	Accept - edit made
5	All	T	Assessment/assess/assessing implies more antiquated/old-school approaches that lacked significant standards, testing, and statistics.	Suggest changing "Assessment" to "Estimation"; "Assess" to "Estimate"; and "Assessing" to "Estimating" throughout the document to better reflect the methodologies and underlying statistics	Accept. Additional comment added to Term #3 for clarification. "Assessment" and "Determination" changed to "Estimation" throughout the document.

#	Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
		(E-Editorial, T-Technical)			
6	3		This document should include a discussion of the terminology used to describe anthropological analysis of sex. The phrase <i>sex assessment</i> has been described by Spradley and Jantz (2011:290) as the use of "morphological traits with no estimable error rates, classification rates, or any associated statistics." Spradley and Jantz (2011:290) further define <i>sex estimation</i> as the use of "metric traits of the pelvis, skull, or any single bone or any combination of bones...because it provides an estimate in the form of an error rate or expected classification rate." The phrase <i>sex determination</i> implies a near 100% accuracy. This is a level of confidence which may be appropriate for DNA analyses, but does not accurately reflect the accuracy or confidence of our current anthropological methods, both metric and morphological. The terminology that we use should accurately reflect the analyses that we are doing and this document should define those terms/phrases.	Add discussion and definition of phrasing/terminology used to describe anthropological analysis of sex.	Accept. Additional comment added to Term #3 for clarification. "Assessment" and "Determination" changed to "Estimation" throughout the document.
7	3		The definition of "gender" should be modified so that it is not limited to the gender binary system that presumes and includes the spectrum. The definition should incorporate "genderqueer," to capture persons who "possess identities that fall outside of the widely accepted sexual binary" and "do not identify with conventional gender identities, roles, expression and/or expectations". this is especially critical as we are increasingly called to identify spectrum cases.   (see links:  <a href="https://www.tolerance.org/magazine/a-gender-spectrum-glossary">https://www.tolerance.org/magazine/a-gender-spectrum-glossary</a>   <a href="https://www.genderspectrum.org/the-language-of-gender/">https://www.genderspectrum.org/the-language-of-gender/</a>   I would be of value to mention how, after sex assessment, the FA should be aware of remains' context (personal effects/clothing, location/environment of recovery) in order to reconcile sex assessment with non-biological sex information for persons who are presumed to be transgender - another growing casework category.		Reject: This definition originated and is used as suggested by the Anthropology and Odontology used terms that are included in NIST/OSAC lexicon. Also, as described in section #4.2.4, "Gender cannot be determined from skeletal remains". Regarding the second part of your comment this will be a partial accept: please refer to section #4.2.4 paragraph #5.
8	4.1	E/T	In fourth section, "cranial" comes before "postcranial", but postcranial approaches are generally superior to cranial methods.	Suggest changing sentence to: "Estimation of sex shall be based upon the available age-appropriate postcranial and cranial variables,..."	Reject: It does not add clarity to the sentence.
9	4.2.1	E	Use of term "non-metric" which implies epigenetics rather than form differences	change to morphological	Accept
10	4.2.3	T	In second section: postcranial measurements produce more accurate results than cranial metrics AND morphology.	Suggest changing sentence to: "In most cases, postcranial measurements produce more accurate estimations of sex than cranial measurements or cranial morphological traits."	Reject: It does not add clarity to the sentence. The scope of section #4.2.3 is specific to metrics.
11	4.2.3		Citation typo Section 4.2.3 "Measurements shall be taken following method-specific definitions and/or measurement guidelines.[2,7]"	I think it should be number 6	Accept
12	4.2.4	E	In fifth section: "Indicators inconsistent with assessed sex" is a little vague.	Suggest changing sentence to: "Conflicting morphological and/or metric indicators of sex should be documented and described."	Accept with modification. Second sentence revise to read: "Contextual indicators inconsistent with the estimated sex may also be noted." "Assessed" replaced with "Estimated"
13	4.2.4	E	Space needed between section 6 and 7 (last two sentences)	Add space between last two sentences.	Accept
14	4.2.5	E	Use of terms "probable" male and female. What does this mean and how is it defined?	options as male, female, indeterminate/undetermined	Reject: This document is using/assuming the common definition of probable.
15	Bibliography	E	many of the references listed are out-dated, not Daubert compliant, and do not meet the guidelines established above	removal	Reject: The bibliography is informative and not exhaustive. Introduction to the Bibliography section was updated.