

Supplemental Materials

Table S1
Reliability (Interjudge Agreement) on Thirteen Specific and Five Broad Categories for Terms

Category	Maa	Senufo
Dispositions	.61	.61
Temperament and character traits	.73	.68
Abilities, talents, etc.	.96	.67
Temporary conditions	.61	.57
Experimental states	.90	.90
Physical-bodily states	.90	.91
Behavioral states, observable activities	.57	.70
Social and reputational aspects	.55	.58
Social roles and relationships	.83	.71
Social effects	.52	.38
Pure evaluations	.57	.62
Attitudes and worldviews	.79	.80
Overt characteristics and appearance	.80	.79
Anatomy, constitution, morphology	.93	.90
Appearance, deportment, etc.	.41	.86
Terms of limited utility	-*	.04*
Context specific or technical	-*	-*
Ambiguous, vague, outmoded	.24	-*

Note. Reliabilities (interjudge agreement) are alpha coefficients based on intercorrelations among 5 judges across the English translations of Maa and Senufo terms

The dash indicates negative average covariance between items.

* Some judges assigned no terms to these categories.

Passive, Pessimistic Quiet, Reserved Sad, Sedentary Shy, Silent Solitary, Somber Taciturn, Timid Timorous, Unimaginative Untalented, Withdrawn		
Order: Accurate, Aspiring Balanced, Businesslike Capable, Concrete Consistent, Decisive Determined, Diligent Disciplined, Efficient Goal-oriented Hard-working Industrious, Logical Methodical, Organized Practical, Precise Purposeful, Qualified Rational, Responsible Self-disciplined Sedulous, Stable Steadfast, Steady Systematic, Thorough Well-balanced <i>Versus:</i> Absent-minded Changeable, Chaotic Erratic, Forgetful Frivolous, Hasty Improvident, Imprudent Inattentive, Incautious Irresolute, Neglectful Scatterbrained Uncontrolled Unrealistic, Unwise Wishy-washy	(5) <i>ɔ-idim:</i> is able, <u>capable</u> <i>ɔ-dópa:</i> is effective, <u>efficient</u> <i>e-nyúáátá:</i> <u>hard-work(ingness)</u> <i>k-árriyíá:</i> skilled, skillful, <u>precise</u> <i>Versus:</i> <i>o-íúl' ó:</i> is <u>unstable</u>	(5) <i>màbàn:</i> courage; <u>diligence</u> ; <u>industry</u> <i>tara:</i> firm, tight, <u>diligent</u> ; <u>responsible</u> <i>kùŋkwû:</i> <u>responsibility</u> <i>zompyìwàà:</i> faithfulness; <u>steadfastness</u> <i>Versus:</i> <i>u funqwoòrā nyaha:</i> forgetting, <u>forgetfulness</u>
Conscientiousness <i>Both</i> ⁴ : Careful Conscientious Negligent, Systematic Thorough <i>Versus:</i> Inconsistent 7LC: Diligent, Precise <i>Versus:</i> Lazy Neglectful Thoughtless	(9) <i>abárani:</i> <u>careful</u> , perfect, ordered <i>o-isósion:</i> is <u>diligent</u> , fast <i>k-árriyíá:</i> skilled, skillful, <u>precise</u> <i>ɔ-dópa:</i> is effective, <u>efficient</u> <i>Versus:</i> <i>malmáli:</i> <u>negligent</u> <i>ɔ-imálimal:</i> is <u>negligent</u> ; fools about <i>tásháláti:</i> <u>lazy</u> <i>ɔ-shál:</i> is weak, <u>lazy</u> , unable to work	(8) <i>màbàn:</i> courage; <u>diligence</u> ; <u>industry</u> <i>tara:</i> firm, tight, <u>diligent</u> ; <u>responsible</u> <i>Versus:</i> <i>kayama fòò:</i> <u>lazy person</u> <i>sààfòò:</i> <u>lazy person</u> <i>fábá:</i> <u>lazy</u> ; indolent, weak

Quick-tempered		<i>yukwɔ́n: quarreler</i> <i>u lùùn̄ā pen: bad-tempered</i>
Resiliency vs. Emotionality	(11) <i>ɔ-pí:</i> is <u>brave</u> , fierce, <u>fearless</u> <i>mágiláni:</i> clever, <u>brave</u> <i>o-gól óshóke:</i> is <u>courageous</u> <i>o-itagól* úó:</i> is <u>courageous</u> <i>o-gól:</i> is <u>strong</u> , hard, <u>courageous</u> <i>Versus:</i> <i>o-súújí:</i> <u>coward</u> <i>ɔl-bárié:</i> timid person, <u>coward</u> <i>kurêt:</i> timid, afraid, <u>fearful</u> , <u>cowardly</u> <i>ɔ-dvókéná:</i> is timid, <u>fearful</u> <i>o-itolil* ó:</i> is <u>sad</u> , <u>depressed</u> , worried <i>o-ijulúus:</i> <u>sad</u> moods, is in; not happy	(11) <i>u jàg'a tárà:</i> <u>brave</u> <i>u jàg'a nòrò:</i> <u>brave</u> <i>u jùñk'á waha:</i> bold, <u>courageous</u> , foolhardy <i>mayàárá fóó:</i> person who does whatever they want, <u>independent</u> of constraint <i>cuuŋx:</i> healthy, live long, resistant; <u>strong</u> ; get well <i>shiile:</i> <u>strong</u> , tough <i>niticùuwò:</i> healthy; <u>strong</u> ; resistant; long-lasting person <i>shinticúuwó:</i> healthy person; <u>strong</u> person <i>yyepiŋe nyé u à:</i> carefreeness; free from <u>anxiety</u> ; peace; well-being <i>Versus:</i> <i>funmpenre fòò:</i> worry; <u>anxiety</u> <i>fyagara fóó:</i> <u>fear</u> <i>u fùŋjk'á pen:</i> <u>sad</u> <i>u yyâh'á tanha:</i> worried, <u>sad</u>
Extraversion	(5) <i>ɔ-áta en-kótók:</i> is <u>talkative</u> <i>Versus:</i> <i>molayâ:</i> not <u>sociable</u> <i>ɔ-gíra:</i> is <u>silent</u> , <u>quiet</u> , soft-spoken <i>i-sóra:</i> <u>shyness</u> , timidity <i>dí* á:</i> <u>unfriendly</u>	(3) <i>waraga:</i> <u>cheerful</u> , <u>lively</u> <i>Versus:</i> <i>fyáhà:</i> <u>quiet</u> , say nothing <i>u màha jùñke sògò:</i> <u>shy/easily embarrassed</u> (lit. hangs the head)
Originality/Talent	(3)	(4)

kití	little, small, young	.24	.13	-.01	.44	-.09
o-uré	afraid of, is	.12	-.05	.02	-.16	.56
i-sóra	shyness, timidity	.43	-.30	.12	.07	.46
ε-sáyíét	poison; stingy, attractive	.01	-.06	-.41	-.06	.46

Table S6

Correlations between Supyire-Senufo Factors and etic marker scales in raw data, less-admired targets only (N=107)

	B2S	B2D	PC3A	PC3D	PC3O	B5C	B5A	B5ES	B5E	B5I	B6C	B6H	B6A	B6ES	B6E	B6O
F1 of 2	<u>.56</u>	-.04														
F2 of 2	<u>.74</u>	<u>.79</u>														
F1 of 3		-.47	-.08		<u>-.12</u>											
F2 of 3			<u>.81</u>	<u>.52</u>	<u>.60</u>											
F3 of 3			.05	<u>-.36</u>		-.11										
F1 of 5						<u>.82</u>	-.17	<u>-.52</u>	.04	-.05						
F2 of 5						.37	<u>.76</u>	.16	.38	<u>.60</u>						
F3 of 5						-.11	-.10	-.48	<u>.54</u>	.14						
F4 of 5						-.08	-.42	<u>-.34</u>	-.23	-.33						
F5 of 5						-.11	.01	-.22	-.40	<u>-.07</u>						
F1 of 6									.18	.33	<u>.75</u>	.46	.03	<u>.71</u>		
F2 of 6										<u>.75</u>	<u>-.63</u>	-.26	-.15	-.15	-.05	
F3 of 6										-.32	<u>-.61</u>	<u>-.42</u>	.11	.20	.07	
F4 of 6										-.15	-.03	-.21	<u>-.61</u>	-.16	-.35	
F5 of 6										-.06	-.06	.18	-.08	<u>-.47</u>	-.02	
F6 of 6										<u>.22</u>	-.11	-.01	.24	.00	-.05	

Note. Varimax rotation, “psychological broad” variable selection (164 terms). F = Factor, B2S = Big Two social self-regulation, B2D = Big Two dynamism, PC3A= Pan-Cultural Three affiliation, PC3D = Pan-Cultural Three dynamism, PC3O = Pan-Cultural Three order, B5C = Big Five conscientiousness, B5A = Big Five agreeableness, B5ES = Big Five emotional stability , B5E = Big Five extraversion, B5I = Big Five intellect, B6C = Big Six conscientiousness, B6H = Big Six honesty, humility, propriety, B6A = Big Six agreeableness, B6ES = Big Six emotionality vs. resiliency, B6E = Big Six extraversion , B6O = Big Six openness or originality. Correlations $\geq .50$ in magnitude are bolded for emphasis. The best match correlations (relying on a joint PCA of the scales and factor scores) are underlined. The average best match correlations by model: Big Two, .68; Pan-Cultural Three, .43; Big Five, .51; Big Six, .51.

Table S7

Correlations between Supyire-Senufo Factors and etic marker scales, all targets (N=211) ipsatized data and raw data (*in italics*)

	B2S	B2D	PC3A	PC3D	PC3O	B5C	B5A	B5ES	B5E	B5I	B6C	B6H	B6A	B6E S	B6 E	B6 O
F1 of 2	<u>-.57</u>	<u>-.73</u>														
	<u>-.49</u>	<u>-.05</u>														
F2 of 2	<u>-.74</u>	<u>-.03</u>														
	<u>.78</u>	<u>.81</u>														
F1 of 3		<u>-.79</u>	<u>-.40</u>	<u>-.52</u>												
		<u>-.45</u>	<u>-.07</u>	<u>-.12</u>												
F2 of 3		<u>-.14</u>	<u>-.39</u>	<u>-.15</u>												
		<u>.82</u>	<u>.55</u>	<u>.57</u>												
F3 of 3		<u>-.43</u>	<u>.20</u>	<u>.16</u>												
		<u>.16</u>	<u>-.37</u>	<u>-.13</u>												
F1 of 5			<u>-.65</u>	<u>-.51</u>	<u>-.40</u>	<u>.00</u>	<u>-.22</u>									
			<u>-.74</u>	<u>-.18</u>	<u>-.48</u>	<u>.06</u>	<u>.03</u>									
F2 of 5			<u>-.17</u>	<u>-.58</u>	<u>-.40</u>	<u>-.28</u>	<u>-.32</u>									
			<u>.38</u>	<u>.74</u>	<u>.18</u>	<u>.35</u>	<u>.57</u>									
F3 of 5			<u>.09</u>	<u>-.32</u>	<u>-.38</u>	<u>.22</u>	<u>-.15</u>									
			<u>.03</u>	<u>-.15</u>	<u>-.36</u>	<u>.62</u>	<u>.17</u>									
F4 of 5			<u>.31</u>	<u>.01</u>	<u>.24</u>	<u>.53</u>	<u>.33</u>									
			<u>-.24</u>	<u>-.38</u>	<u>-.45</u>	<u>-.27</u>	<u>-.26</u>									
F5 of 5			<u>-.46</u>	<u>-.01</u>	<u>-.15</u>	<u>-.18</u>	<u>-.03</u>									
			<u>-.23</u>	<u>.12</u>	<u>-.28</u>	<u>-.08</u>	<u>-.08</u>									
F1 of 6									<u>-.43</u>	<u>-.65</u>	<u>-.60</u>	<u>-.07</u>	<u>.06</u>	<u>-.21</u>		
									<u>-.68</u>	<u>-.74</u>	<u>-.33</u>	<u>-.06</u>	<u>-.13</u>	<u>-.01</u>		
F2 of 6									<u>-.05</u>	<u>-.52</u>	<u>-.53</u>	<u>-.12</u>	<u>.03</u>	<u>-.29</u>		
									<u>.24</u>	<u>.32</u>	<u>.74</u>	<u>.54</u>	<u>.07</u>	<u>.70</u>		
F3 of 6									<u>-.18</u>	<u>-.11</u>	<u>-.34</u>	<u>-.61</u>	<u>-.05</u>	<u>-.34</u>		

		<u>.26</u>	<u>-.39</u>	<u><u>-.41</u></u>	<u>.14</u>	<u>.27</u>	<u>.13</u>
F4 of 6		<u>-.43</u>	<u>-.36</u>	<u>-.12</u>	<u>-.17</u>	<u>-.38</u>	<u><u>-.43</u></u>
		<u>-.24</u>	<u>-.12</u>	<u>-.18</u>	<u><u>-.56</u></u>	<u>-.25</u>	<u>-.25</u>
F5 of 6		<u>-.13</u>	<u>-.07</u>	<u>-.29</u>	<u>.04</u>	<u><u>.35</u></u>	<u>.13</u>
		<u>-.16</u>	<u>-.17</u>	<u>.18</u>	<u>.06</u>	<u><u>-.39</u></u>	<u>-.08</u>
F6 of 6		<u><u>-.44</u></u>	<u>-.02</u>	<u>-.03</u>	<u>-.45</u>	<u>-.13</u>	<u>-.05</u>
		<u><u>.30</u></u>	<u>-.24</u>	<u>-.07</u>	<u>.26</u>	<u><u>.11</u></u>	<u>.05</u>

Note. Varimax rotation, “psychological broad” variable selection (164 terms). F = Factor, B2S = Big Two social self-regulation, B2D = Big Two dynamism, PC3A= Pan-Cultural Three affiliation, PC3D = Pan-Cultural Three dynamism, PC3O = Pan-Cultural Three order, B5C = Big Five conscientiousness, B5A = Big Five agreeableness, B5ES = Big Five emotional stability , B5E = Big Five extraversion, B5I = Big Five intellect, B6C = Big Six conscientiousness, B6H = Big Six honesty, humility, propriety, B6A = Big Six agreeableness, B6ES = Big Six emotionality vs. resiliency, B6E = Big Six extraversion , B6O = Big Six openness or originality. Correlations $\geq .50$ in magnitude are bolded for emphasis. The best match correlations (relying on a joint PCA of the scales and factor scores) are underlined. The average best match correlations by model, ipsatized data: Big Two, .74; Pan-Cultural Three, .45; Big Five, .43; Big Six, .50. The average best match correlations by model, raw data: Big Two, .65; Pan-Cultural Three, .44; Big Five, .53; Big Six, .52.

Table S8

Congruence Coefficients (Tucker's-Phi) after Target Rotation of Correlations between Marker Scales for Etic models and Emic Factors

Etic Model	Average						
Maasai							
Big Two	.78	.85					.81
Pan-Cultural Three	.72	.67	.59				.66
Big Five	.71	.71	.63	.71	.62		.67
Big Six	.40	.59	.67	.60	.70	.57	.59
Supyire-Senufo							
Big Two	.89	.92					.91
Pan-Cultural Three	.96	.73	.86				.85
Big Five	.71	.71	.63	.71	.62		.67
Big Six	.78	.92	.67	.86	.87	.75	.81

Note. A procrustes rotation protocol in R package ‘paramap’ (O’Connor, 2018) was used to compare the Pearson correlations reported in Tables 3 and 6 to the target models (a matrix of 0s with 1, or -1 to identify the underlined correlation).

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