ǂŪsigu: A Mixed-Methods Lexical Study of Character Description in Khoekhoegowab

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A pre-registered analysis plan and study materials (data, syntax, qualitative summaries, etc.) are available on the Open Science Framework: https://osf.io/sa698/.

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Abstract

Personality psychology relies heavily on evidence from North America and Europe. Lexical studies, based on the rationale that the most important psychological distinctions between people will be encoded in the natural languages, can provide input from underrepresented contexts by defining locally-relevant personality concepts and their structure. We report the results of a psycholexical study in Khoekhoegowab, the most widely spoken of southern Africa's (non-Bantu) click languages. It includes the largest sample of any lexical study conducted in Sub-Saharan Africa, is the first anywhere to include qualitative interviews to systematically assess the interpretability of terms, and is one of few to rely on a more representative community sample of adults rather than students. Refinement of the survey included frequency-of-use ratings by native speakers from throughout Namibia and input on relevance to personality by those with a psychology degree. The survey was administered by interview to 622 participants by a team of 15 schoolteachers of Khoekhoegowab. The 11 dimensions of the optimal local model were labelled: Intemperance, Prosocial Diligence, Intrusive Gossip, Good Nature, Bad Temper, Predatory Aggression, Haughty Self-Respect, Vanity/Egotism, and Fear versus Courage. A Big One model of evaluation was strongly replicated. Moderate replication was found for the Big Two, Pan-Cultural Three, and a hypothesized pan-African model based on prior lexical results in two languages. Replication criteria were not achieved for the Big Five, Big Six, or South African Personality Inventory models. What results suggest about the local cultural context and about culturally specific aspects of the imported models are discussed.

Keywords: Lexical studies; Africa; emic etic; personality; Namibia

ǂŪsigu: The Structure of Character Description in Khoekhoegowab

Human beings have a great deal in common across cultural settings; despite our differences, many universals can be defined (e.g. Brown, 1991). On the other hand, many aspects of psychology, even basic perceptual processes, have been shown to vary across contexts (Henrich et al., 2010). We navigate a mix of the familiar and varied, without a good map – we do not yet know exactly which aspects of human feeling, behavior, and experience are universal, and which are not. For this reason, it is concerning the extent to which psychology is assumed to be the study of the mental processes of human beings in general, while relying predominantly on evidence from Western, industrialized nations, a minority of the world's population (Arnett, 2008; Henrich et al., 2010; Thalmayer et al., 2020). A large research base has led to a sophisticated understanding of the inhabitants of certain kinds of cultural contexts. Assumptions about generalizability to other places, however, must be conservative until work in more diverse populations is undertaken.

The current study adds such information to our knowledge-base. The aims are twofold: First, to systematically define a model of personality traits from the personality and character (ǂŪsigu[1] in Khoekhoegowab) terms most salient to speakers of Khoekhoegowab, an indigenous, southern-African click language, the most commonly spoken extant click language, and the second most-commonly spoken language in Namibia (Namibia Statistics Agency, 2013). This local model of individual psychological differences, based on a large, relatively representative

1 The word commences with a palatal click, realized by placing the tongue flat against the palate and creating a small suction between the tongue and the palate, then quickly releasing. The macron across the first *u* indicates a long vowel, and *g* is phonetically the same as *k*. Hence, ***ǂŪsigu*** can be articulated as **[ǂʔu:siku]**.

sample of adult native speakers and enriched and clarified with qualitative follow-up interviews, provides a basis for future work in this cultural setting. Secondly, this data allows for a test of the universality of current models in personality psychology, including the Big Five. This is accomplished by collecting data using the same methodological approach used in prior lexical studies around the world, including those that led to the Big Five model. Using the same approach in a context that is culturally and linguistically distant from those in which current popular structural models were developed allows for an objective view of the extent to which a similar or different model arises. The use of marker scales for the Big Five and other structural models also allows for a test of their replication, and thus of their universality. This study adds to recent work in Maa and in Supyire-Senufo (Thalmayer et al., 2019) to fulfil a long-term goal to contribute psycholexical data from each of the three main language families of Sub-Saharan Africa, and to test the universality of current models in each, in contexts with differing social and geographical characteristics.

Personality Traits across Cultures

Culture and personality interact in a number of ways, and a comprehensive study of traits also elucidates important aspects of the local culture. For example, although basic temperamental differences in talkativeness or curiosity may be present everywhere, these traits will be elaborated with greater variation in places with more situations in which to express those differences, or where those differences have more social value. In North America, high relational mobility (Zhang & Li, 2014) means many opportunities to interact with strangers, making differences in Extraversion very visible. In two prior studies in African languages, however, content for Extraversion was poorly represented, and for Openness almost non-existent. Instead,

in Supyire-Senufo society, horticulturalists living in small villages in Mali, West Africa, diligence versus laziness emerged as an important local dimension, with a variety of words to denote subtle differences in degree (Thalmayer et al., 2019). Among the Maasai, a highly age-stratified society with strict social roles by age and gender, a factor that associated age with power, and perhaps with taking advantage of that power, was locally relevant (Thalmayer et al., 2019). Local models built in Asian contexts have included social-relational content beyond the Big Five, for example the Chinese concepts of *harmony* and *face*, Japanese *amae* (sweet indulgence), and Korean *chong* (affection; as reviewed by Cheung et al., 2003). Similarly, the South African Personality Inventory, built in a context that is considered more collectivistic than Western industrialized societies, included two highly elaborated factors related to social relations, with little content and poor psychometric properties for a factor related to Openness (Fetvadjiev et al., 2015). Content related to Openness has also been reported to be absent from local lexicons in the region of French-speaking Africa (Rossier et al., 2017).

What aspects of personality trait structure are universal? Big Five inventories have been translated and imported throughout the world, even to hunter-gatherer groups in the Amazon (Gurven et al., 2013) though the model was originally generated with data from North America, Germany, and the Netherlands (e.g. Saucier & Goldberg, 1996). Large recent studies indicate measurement validity problems for the Big Five in the majority world (e.g. Laajaj et al., 2019; Ludeke & Larsen, 2017) and question the optimism of those who deemed the Big Five universal (e.g. McCrae & Costa, 1997). Furthermore, even if an imported inventory functions to some extent in other places, this does not make it a universal model. The Chinese Personality Inventory, for example, might also meet this standard (Cheung et al., 2013). A model built in a

collectivistic setting might place more emphasis on relationship-relevant attributes, and exclude Openness. While such a model might not capture all content salient to Americans or the Dutch, it would likely be coherent to people in these contexts, and could show acceptable reliability in translation (e.g. Cheung et al., 2013). Thus, it is interesting to consider what our dominant models of personality traits might look like if empirical research had started in Asia, the home of the majority of the world's population, or in Africa, the birthplace of the human species, and to question the assumption that models and derived inventories built in the West should be the best choice around the world.

Lexical studies, the Big Five, and related structural models

Lexical studies of personality provide a standard methodology to define the most meaningful local personality concepts and to test replication of models created in other places. Words which differentiate between individuals, in terms of personality and character traits, appear to exist in every human language (Dixon, 1982). Lexical studies are based on the rationale that the most useful distinctions between people in a given cultural context will be encoded in this natural language. The procedure of lexical studies is transferable to any language with a written lexicon. The four basic steps include: (1) extract all terms used to describe psychological differences between people from a comprehensive lexicon, (2) reduce the list to a tractable number by removing redundant terms and those that are not commonly used, per frequency ratings by native speakers, (3) administer as an inventory to participants, asking them how well each term describes a target (the self or a well-known other), and (4) use factor analysis to determine which terms group together and best distinguish between individuals in the population.

Leaders in cultural psychology recommend that studies of personality across cultures combine *emic* (locally derived) and *etic* (imported) approaches (e.g. Cheung et al., 2011). Lexical studies of personality do this well by building an emic model of the most relevant personality constructs from the ground up, then directly testing etic models created in other places for replicability. The strength of the emic approach is that locally relevant concepts and dimensions are at the forefront. In contrast, the etic approach helps compare and integrate local concepts with larger or existing models. Because the methodology is standardized, results can be compared descriptively and quantitatively across studies and languages. This potential for comparison across accumulated lexical evidence from diverse languages offers a powerful means to separate more universal from more culturally specific aspects of psychological variation.

Convergences in the results of lexical studies in English, German, and Dutch, as well as factor-analytic studies of temperament and personality scales, led to the currently prominent Big Five model (Extraversion, Emotional Stability versus Neuroticism, Conscientiousness, Agreeableness, and Intellect/Openness to experience; Saucier & Goldberg, 1996). The Big Five has been replicated to some extent in subsequent lexical studies in Polish, Czech, Turkish, and Croatian, but lexical studies in languages increasingly culturally and linguistically distant from the original set are more equivocal about the universality of the Big Five (a recent summary is provided in Thalmayer et al., 2019). A structure adding a sixth factor, including content related to integrity versus taking advantage of others, demonstrated better convergence among seven lexical studies (all European except Korean; Ashton et al., 2004). This six-factor proposal was supported by Saucier (2009) in a sample of seven lexical studies that was less European-centric and that used a wider selection of attributes. Comparison of two-factor results from an even more

globally diverse sample of studies was seen to support a "Big Two" model, with common factors labelled Social Self-Regulation and Dynamism (Saucier et al., 2014). Around the same time, De Raad and colleagues (2014) jointly analyzed lexical data from ten European languages plus Filipino, and identified a three-factor solution with dimensions summarized as Dynamism, Affiliation, and Order as the core of the taxonomies.

Africa is home to a substantial portion of the world's population and to nearly a third of all living languages (Simons & Fennig, 2017), but very little work has explored locally important personality traits and their structure. A recent pair of lexical studies from Sub-Saharan Africa (Thalmayer et al., 2019) described the emic structure of the most frequently used personality terms among the Maasai people of Kenya, herders in East Africa, and speakers of Supyire-Senufo, horticulturalists in Mali. A five-factor solution in Maa and a 10-factor solution in Supyire were found to be the optimal emic structures. Results indicated convergence between the two languages at the three-factor level, with factors related to virtue and general character evaluation, to well-being, and to being powerful versus disempowered. The structures included more culture-specific content at subsequent levels. In both cases, the Big Two model was replicated using marker scales and varimax-rotated factor solutions of the appropriate number of factors, but the Pan-Cultural Three, the Big Five, and the Big Six were not.

Another ambitious recent emic/etic project led to a personality inventory developed specifically for South Africa (Fetvadjiev et al., 2015; Nel et al., 2012). Free personality descriptions were collected in each of South Africa's 11 official languages, and qualitative content analysis was used to identify clusters, then defined as traits to be measured with short phrases. A similar project has since been carried out with speakers of Arabic in the Levant

(Zeinoun et al., 2017). In both cases, local models were found to be more elaborated than the Big Five, but to include most Big Five content, though this was weakest for Openness. The results of these projects are of interest, especially as the South African Personality Inventory (SAPI) provides a candidate structure for comparison that was developed within a similar cultural context to that of Khoekhoe speakers. However, the goals of the SAPI project, to create an inventory for applied use, were different from those of a lexical study, which takes a more exhaustive and perhaps conservative starting point, with a published dictionary. Free responses may be ideal when considering phrasing for an inventory that will be easily comprehensive by local people, but they are also likely to be influenced by slang and other temporal shifts in usage, leading to more variable responses depending on region, age, and subculture. Furthermore, the resulting model is arguably less objectively achieved – the SAPI structure includes comparatively weak dimensions of Openness and Extraversion, and it is equivocal whether these dimensions would have been chosen for inclusion without the strong influence of the Big Five.

For answering the question of what is universal versus culturally specific in personality structure, a formal lexical study is advantageous. This methodology is more objectively and precisely replicable across cultures, allowing for a more direct comparison of the most commonly used personality terms and their empirical structure across groups. A lexical study in Khoekhoegowab, using a large sample and longer list of variables than in the previous Sub-Saharan African studies, and using a community rather than a student sample unlike most prior lexical studies, can provide a strong test of the universality of current personality trait models. Importantly, a lexical study in Khoekhoe adds to those completed in Maa (a Nilo-Saharan language) and Supyire-Senufo (a Bantu language), thus providing lexical studies in each of the

main language groups/families endemic to Sub-Saharan Africa, among groups in diverse regions with differing ethnographic characteristics.

Khoekhoegowab

Khoekhoegowab (literally 'the Khoekhoe language', also variably referred to as Nama, Nama/Damara, or Damara) is the most widely-spoken of the approximately 15 extant Khoesan (also *Khoisan*) click languages of southern Africa (Güldemann & Fehn, 2014; Haacke, 2011). According to recent research by Kim and colleagues (2014), the original speakers of the Khoesan languages, the southern African hunter-gatherers and pastoralists, constitute an early branch in human history. Modern Khoesan-language speakers descended from a group that migrated into the area before later groups split off from East African populations in the migrations that populated the globe. Interestingly, due to climatic conditions that benefited southern Africa, this group may have been the largest human population throughout most of modern-human history (Kim et al., 2014). Some Khoesan groups retained aspects of their traditional hunting and gathering culture into modern times (Kim et al., 2014), making their contemporary culture likely to be still shaped by this economic lifestyle.

Two main groups in Namibia, with differing cultural and ethnic backgrounds, speak Khoekhoegowab today. The Damara were hunter-gatherers (later even pastoralists) related genetically to Bantu speakers (Pakendorf, 2014; Pickrell et al., 2012) who may have lived in the area now known as Namibia before the arrival of Khoisan groups, including the Nama, from other parts of southern Africa (Barnard, 1992). They were later displaced and in many instances became subjugated by powerful Nama polities, which is likely when they shifted from a possible 'Khoe' language to the Khoekhoe language spoken by the Nama (Barnard, 1992; Güldemann &

Fehn, 2014; cf. Haacke, 2008, 2011). Compared to the Damara, the Nama traditionally had larger clans, more elaborate political organization, and more emphasis on hierarchy and the role of chiefs (Barnard, 1992). Clan memberships and the royal families associated with each are still important in Nama culture. The Damara appear to have traditionally lacked the concept of land ownership and maintained simpler encampments (Barnard, 1992). During apartheid, Damara people were restricted to a central and north-western part of the country north of Windhoek, and Nama to the southern part of the country around Keetmanshoop and Mariental. While this separation is no longer maintained by law, it is still largely in place culturally.

Currently, Khoekhoe-speakers comprise about 11% of the population in Namibia (Namibia Statistics Agency, 2013). Although English replaced Afrikaans as the sole official language of the country after independence in 1990, Khoekhoegowab is recognized as one of 10 "national languages" (Frydman, 2011) and as such is available in schools at least through the first 3 years, and at the university level. In its effort to deemphasize the differences between groups that were elevated by colonizers during apartheid, Namibia does not collect population statistics by ethnic group. The Namibian population as a whole in 2011 was reported (Namibia Statistics Agency, 2013) to be 57% rural (down from 67% in 2001), with a median age of 21 years, and an average age at first birth of 21.4 years. The majority of residents had access to radio, followed by access to a cell phone, but with many fewer having access to a television, only 15% to a computer, and 5% to home internet connectivity. Adult literacy was 89% and 75% had completed either primary or secondary schooling, and 6% tertiary education. Unemployment was 37%, and about 50% of the adult population had income from wages or salaries. The single largest economic sector (30%) was agriculture, fishing, and forestry.

Qualitative Interviews for a Mixed-Methods Lexical Study

Published lexical studies of personality traits are listed in Supplemental Table S1 with details about the characteristics of the samples and the methods used (with emphasis on a complete list of languages assessed, rather than all historical examples within English and German). With the exception of Thalmayer and colleagues (2019), all lexical studies of personality traits known to these authors have been conducted in languages for which there are many published resources to aid in the precise translation of terms in English. These resources allow study teams to translate terms to English confidently, even where multiple-term glosses are required, for interpretation and integration by the international research community. In Khoekhoegowab, however, as in other more-recently written languages, only a single, first-edition dictionary exists to translate terms into English. There are undoubtedly errors and incomplete or dated glosses in such a resource, and there are few if any published resources available with which to clarify them. In the one other published lexical study in recently-written languages, Thalmayer and colleagues (2019) noted the challenges that this lack of resources poses when interpreting factor-analytic results, especially in the cases of most interest, where emic dimensions are the least similar to familiar traits in the West. Over-reliance on a single native-speaker, even an expert linguist, is an imperfect solution to this problem, and the authors recommended seeking feedback on ambiguous terms from a sample of native speakers through structured qualitative interviews, allowing for consensus to emerge about the meaning attributed to a term, or for important differences or inconsistencies in interpretation to come to light.

Adding structured qualitative interviews entails a mixed methods approach, which is also recommended by cultural psychologists as way to ask complex psychological questions without

imposing Western norms or ignoring contextual factors, and as a means to integrate depth and breadth of knowledge (Bartholomew & Brown, 2012). Conversations with a sample of native speakers drawn from the same population as the quantitative lexical study were planned as a way to enrich and clarify the usage and meaning of concepts, and to explore other questions about character description in this cultural context. For example, views of traits missing from the lexical results can be explored, as well as views on personality trait consistency versus adaptability, which have been shown to vary across cultural contexts (Kanagawa et al., 2001).

Goals for the Present Studies

There are two central goals. First, we seek to define the optimal emic structure of character and personality terms in Khoekhoegowab, to elucidate aspects of the local culture, and provide groundwork for the development of a culturally-appropriate measure of personality traits and for subsequent studies focused on psychological disorder symptoms. Secondly, these results provide a strong test of the replication of popular and proposed models of personality trait structure, to help distinguish their universal from their culturally specific aspects. Importantly, this study does so by contributing evidence from an African perspective, which is underrepresented in psychology (e.g. Thalmayer et al., 2020), specifically building on prior work (Thalmayer et al., 2019) to contribute evidence from each of the roughly three main language families in Africa, among cultural groups with different ethnographic characteristics in far-separated regions. Finally, this study expands and develops the current corpus of lexical data, not only in terms of cultural diversity, but by using a large and relatively representative community sample of adults rather than university students (unlike virtually all lexical studies so far

conducted) and by integrating the quantitative study with follow-up qualitative interviews for a mixed-methods approach.

This project involves three studies. In Study 1, a comprehensive list of person descriptors in each language was refined to a usable number with frequency-of-use ratings from native speakers of Khoekhoegowab, and the resulting survey was administered to over 600 Khoekhoegowab speakers from throughout Namibia, who were asked to describe a well-known other. A preliminary emic structure was estimated using a systematic approach to maximize model elaboration and robustness, as defined by Saucier and Iurino (2019) and Thalmayer and colleagues (2019), and items that posed challenges to the interpretation of the models were identified. In Study 2, follow-up interviews with 23 adult Khoekhoegowab speakers from throughout Namibia included assessment of the meaning of the hard-to-interpret terms in order to address the challenge of definitive interpretation in a context where few resources for translation exist. Additionally, local understanding of aspects of important etic traits (Extraversion and Openness) that were absent from the list of frequently-used Khoekhoegowab person-descriptors and from the structural model was explored. In Study 3, the updated variable list was used to identify the final optimal emic structure, and a traditional analysis approach (i.e. using ipsatized data and varimax rotation, as in almost all lexical studies listed in Supplemental Table S1) was used to create factors for comparison with marker scales representing the Big One, Big Two, Pan-Cultural Three, Big Five, and Big Six models. Marker scales were also developed to represent two recent models developed within Africa: one based on the South African Personality Inventory (e.g. Fetvadjiev et al., 2015) and one on the convergent model between two prior lexical studies in African languages (Thalmayer et al., 2019).

Study 1: Creation and Administration of Khoekhoegowab Lexical Survey

Method

The University of Namibia conducted an ethical review of the studies, titled "Personality and Cultural Values among Khoekhoe-Speakers in Namibia" (no protocol number assigned), in June, 2018. A pre-registered analysis plan and study materials (data, syntax, qualitative summaries, etc.) are available on the Open Science Framework (https://osf.io/sa698/).

Creation of the lexical survey. The creation of the survey is described in detail in the pre-registered analysis plan noted above. To summarize, it included four steps:

1. All terms (about 2,600) used to describe differences between persons were extracted from a comprehensive dictionary of Khoekhoegowab with English language glosses (Haacke & Eiseb, 2002).
2. This list was organized by the second author, a native speaker of Khoekhoegowab and trained linguist, to identify words sharing the same root, and to distinguish those likely useful for the survey from terms mainly describing physical features or otherwise not useful for describing persons or their psychological characteristics.
3. 2,314 words were rated by two groups:
    a. Five native speakers of Khoekhoe with either a bachelor's (n = 2) or a master's degree (n = 3) in psychology rated 1,544 terms each, in terms of their relevance to describing a personality trait. An average relevance rating was calculated. Using z-scores, the half of the terms with the lowest relevance scores were excluded from further consideration.

   b. Twelve native speakers of Khoekhoe from throughout Namibia rated about 1,400 words each in terms of how often they hear the word used to describe people on a five-point scale from “never” to “all the time”. 58 words with two or more “never” responses were excluded. For the remaining words, average frequency was computed. The top 285 terms were selected and retained in consultation among the first two and the last authors, excluding any that exclusively described an occupation or social role, or any that could only be used to describe people of one gender.

4. Seven terms were then added to the survey to assess: level of acculturation to urban/western culture, to aid the creation of maker scales, in particular Openness/Intellect, and depression and serious mental illness. These were not included in the lexical analyses.

The Likert scale was translated into two options, one based on a metaphor of quantity (a little, a lot) the other based on level of agreement. These two options were presented to the team of interviewers, described below, who practiced administering and completing the survey using both options, and came to consensus on a final 5-level version.

Materials. The 292 Khoekhoe terms were listed on a five-page survey. Of these, 200 adjectives were preceded by a statement translating to “He/she is ….”, 54 attribute nouns were preceded by a statement meaning “he/she has …”., 34 type-nous were preceded by “he/she is a …”, and four other types of words were preceded by “he/she has the quality of …” Half the participants were administered the terms in each of two orderings of the pages.

Participants. A total of 622 participants provided written informed consent and joined the study. Of these, 120 were excluded based on the following criteria:

- marked for exclusion by interviewer or auditor due to major issue with interview; usually the surveys was not completed (16 cases)
- participant under age 18 (25)
- more than 10% (>29) item responses missing (37)
- inconsistency score 2 or higher, calculated by averaging the absolute difference in ratings on nine items that were duplicated on the survey (12)
- cases that appeared to have been random responses, based on being extreme outliers in a cluster analysis of person-total correlation values (12)
- person-total correlation outliers < -.20, the few cases where participants appeared to have describe a markedly unliked target (18), which would tend to unduly effect results.

Note that in a few cases specific item responses were removed. These were for items that were elicited incorrectly at the beginning of the survey due to a misunderstanding of the proper tone to use for the word intended, assessed by interviewer report and subsequent audio review by the second author, but later corrected. They include 144 responses for !gâisib (item 159); 27 for sorasá (item 61); 20 for sorasà (item 105), and 48 total for six other items.

For remaining cases, the pattern of missingness in the responses was assessed using Little's MCAR test. This suggested that these were missing completely at random, and values were imputed using expectation maximization in SPSS 24. The 502 cases analyzed were relatively evenly distributed from the different regions of the country, 30% from the more

Damara-identified towns in the West and central-North (Usakos, Karibib, Otavi, Grootfontein, and Khorixas), 20% from the more Damara-identified East (Witvlei and Gobabis), 24% from the central region around Windhoek, and 27% from the Nama-identified South (Mariental, Keetmanshoop, and nearby villages). Age ranged from 18 to 77 years (M = 35; SD = 11). Gender was noted by the interviewers, based on appearance (and sometimes on personal acquaintance); the sample was 58% women.

Further socio-demographic details were not collected. However, the same team of interviewers collected survey data from the same population a year later, and these statistics are likely to be highly similar for the current sample. The later sample (N= 652) reported their level of education (14% primary school or less; 33% grade 10 secondary; 28% grade 12 secondary; 5% vocational education after grade 10 or 12; 13% some university courses; 5% Bachelor's degree, 1% Master's or other post-graduate degree), their mother or female caregiver's education (49% primary school or less; 40% grade 10 or 12; 8% vocational, university, or further education), their father or male caregiver's education (44% primary school or less; 36% grade 10 or 12; 14% any vocational, university, or further education), their employment status (36% no paid work; 22% students; 43% regular part- or full-time paid work), and their income per month (15% none; 26% under US$30, 29% US$30 - $180, 20% US$180 to $600, 9% over US$600). In terms of education and employment status, these proportions appear to match the averages for the country as a whole.

Procedure. Many potential participants were expected to lack confidence in reading and writing Khoekhoegowab, because many attended school in Afrikaans (prior to Namibian independence in 1990) or in English (after 1990, depending on choices and region), despite

speaking Khoekhoegowab at home. For this reason, the survey was filled out by an interviewer based on the oral responses of participants. The team of 15 interviewers was recruited from among teachers of Khoekhoegowab. One was a university-level lecturer, another was a retired teacher of Khoekhoegowab to foreigners, and the remaining interviewers were all concurrently (or had been until the previous term) educators of Khoekhoegowab at public primary and secondary schools. This insured (1) their strong knowledge of and interest in written and spoken Khoekhoegowab, (2) their respected status in their communities, and (3) similarity in how interviewers were perceived across participants. The interview and the preliminaries regarding informed consent and instructions were conducted in Khoekhoegowab. Informed consent was written, with the document available to participants in Khoekhoe, English and Afrikaans.

Participants were recruited by the interviewers in their home communities from among neighbors, church members, colleagues, the parents of students, and strangers from nearby villages and neighborhoods. Interviewers asked participants their age and their home language, and they noted gender, the location of the survey, and notes about how the interview went and how the participant was recruited. Each participant was asked to bring to mind a real person whom they knew well and with this person in mind to respond to 292 single-word descriptors, indicating how well each term applied to that person. Based on the advice of local collaborators, peer-reports were considered to be more approachable in this cultural context. Previous lexical studies have relied mostly on self-report, a methodology well-suited to samples in western, industrialized settings where people are accustomed to characterizing themselves and celebrating their uniqueness. In more traditional settings, individuals are less commonly asked to describe their own qualities, and there may be less emphasis on defining the unique attributes of a

"private self" (Triandis, 1989). Luckily, previous work suggests that self- and peer- ratings lead to similar results (e.g. Goldberg, 1990). After the interview, participants were thanked for their time and given a small token of appreciation.

Analyses. Per Saucier and Iurino (2019) and Thalmayer and colleagues (2019) data analyses followed a series of steps to determine the optimal emic solution:

1. Parallel analysis and Velicier's map test (O'Connor, 2000) were used to determine the maximum number of factors in the data.
2. Starting with this maximum number of factors, we generated candidate models by running principal components analyses (PCA) in SPSS version 24 for Mac with three rotations (varimax, equamax, oblimin), separately in both raw and ipsatized data. Ipsatization has generally been used in lexical studies as a simple way of managing response biases, often leading to more interpretable results because an individual's general tendency to agree or disagree is removed. However, we decided to directly compare the two.
3. For each of these six rotation-strategy/data-type combinations, we examined results and worked down to the maximum interpretable number, excluding models with factors including fewer than two variables loading at least .30 or higher on the factor. Interpretability was judged and preliminary names for interpretable factors were proposed by the first and last authors. In the case of discrepancies, we took the conservative option, assuming uninterpretability if there was no consensus between the two judges.
4. We compared the six candidate models for robustness across two method variations as a form of 'sensitivity analysis' (Saucier & Iurino, 2019): raw vs. ipsatized data, and

orthogonal versus oblique rotation. The first comparison was made by canonical-correlation analysis between saved factor scores, the second using correlations of factor scores, after matching pairs of factors with a PCA including the factors of both models to determine best matches.

Results

To identify the preliminary emic structure as detailed above, 272 lexical terms were included in the analyses. Of the original 285, 11 were repeated on the survey. These were used as a validity check for the data, as described above, and only one of the two administrations (randomly alternating between the first and second across participants) was retained in the analytic dataset. Two items were excluded because discussions with interviewers and audio-auditing by the second author revealed that the terms had been elicited inconsistently with regard to tone and because the meanings associated with the different tones were too disparate or contradictory to be able to interpret their resulting factor placement.

According to parallel analysis (O'Connor, 2000), 15 factors in ipsatized data had higher eigenvalues than would be expected by chance, and the MAP test (O'Connor, 2000) suggested a model of 16 factors. For raw data, estimates were 11 and 20. Thus, analyses in ipsatized data began with 16 factors and in raw data with 20, in both cases using each of the three rotation strategies in turn. Explained variance in ipsatized data for the first nine factors was 38.6, 6.8, 5.0, 4.2, 3.9, 3.7, 3.4, 3.1 and 3.1%. Factors 10-28 explained between 2.0 and 2.9% of variance, factors 29-86 explained 1.0-2.0% of variance, all others were under 1%. For raw data, explained variance the first eight factors was: 52.9, 11.2, 5.5, 4.1, 3.8, 3.5, 3.1, and 3.0. Factors 9-22 explained between 2.0 and 2.9% of variance, factors 23-76 explained 1.0-2.0% of variance, all

others were under 1.0%. The maximum interpretable models in ipsatized/raw data, respectively were: 11/9 factors for varimax rotation; 11/17 for equamax, and 14/15 for oblique. As described above, each of these models was then correlated with two comparator models, changing a single parameter: raw versus ipsatized data, and orthogonal versus oblique rotation. Mean correlations were .83/.82 for ipsatized/raw varimax models, .82/.70 for equamax, and .75/.77 for oblimin.

Given its slightly higher robustness across method variations, interpretation proceeded with the 11-factor model in ipsatized data with varimax rotation. The complete solution for this preliminary emic solution (excluding terms that loaded < .30 on any factor) is presented in Supplemental Table S2. The first factor includes a mix of terms describing virtue versus bad character, consistent with the general concept of Social Self-Regulation (Saucier et al., 2014). The second factor focuses on the expression of anger and aggression, the third on being a hard and difficult person, the fourth on substance abuse, and the fifth on extremely negative, even 'evil' criminal behaviour. The sixth factor includes terms focused on a tendency to be frightened, shy, and quiet, and the seventh on those related to being agitated and energetic versus withdrawn. The eighth factor included humor and outgoingness, but it included only three terms, one of which had a somewhat ambiguous metaphorical gloss and was added to the list of terms to explore further. The ninth factor focused on pride in a haughty but also authentic, self-respecting way, and the tenth on arrogance – pride with a more insecure foundation. The eleventh factor was interpreted as being interpersonally demanding.

In the process of interpreting factors, 26 terms that posed challenges to clear interpretation were identified. Following our pre-registered analysis plan, interpretability was not ruled out by the presence of a single uninterpretable term. However, two or more could lead to a

model being excluded, and for the utility of the model in future research, maximum interpretability was desired. Thus, as planned from the outset, such terms were identified as of interest for further inquiry.

Discussion

The goals of Study 1 were to create a lexical survey of Khoekhoegowab, to administer it to a relatively representative community sample of adult native speakers of the language, and to conduct a systematic series of analyses to identify a preliminary emic model. A comprehensive list of person descriptors in Khoekhoegowab was refined to 285, plus seven additional terms. This number was manageable for administration by oral interview using frequency of use ratings from native speakers. Responses to the terms were collected from throughout the Khoekhoe-speaking regions of Namibia, by a team of 15 school-teacher interviewers. A total of 502 cases were analyzed. Parallel analysis and the MAP test were used to identify the maximum emic dimensional structure. Starting at the maximum, a series of principal components analyses with varying extraction approaches were used. Using these methods, an 11-dimensional structure using ipsatized data and varimax rotation was found to be the most robust model across method variations. Twenty-six items for which more precise, detailed, or updated definitions might aid interpretability were identified. The factors of the preliminary emic model were named, but more detailed exploration and interpretation of the model was put off for after the qualitative study could refine our understanding of ambiguous terms.

Study 2: Follow-up interviews

The goals of the qualitative interviews relevant to the lexical study were (1) to determine the local attribution of meaning and common usage of targeted terms identified in the lexical

study, and (2) to explore key etic traits that were absent from emic results. Terms were chosen for qualitative clarification where the English definition of a Khoekhoe word in the (first edition and only modern) Khoekhoe-English dictionary seemed surprising or incongruent given its association with other Khoekhoe terms loading on the same component in the results of Study 1. To explore the near-absence of certain content from the Khoekhoe lexicon, namely Extraversion and Openness, we sought individual interpretations, incorporating descriptions of a 'known other', of aspects of these Western-derived constructs of personality from Khoekhoe speakers' perspective. These dimensions are considered useful and important in the west as ways to distinguish between individuals. However, as described above, these traits appear much less consistently in bottom-up studies outside of a Western context (e.g. Cheung et al., 2001; Thalmayer et al., 2019), and also pose the biggest measurement challenges when using imported inventories (e.g. Rossier et al., 2017). Relatedly, we explored the use of personality trait terms adopted from other languages used in Namibia, given the multi-lingual context in which Khoekhoegowab speakers, like most Africans, live. We asked about words commonly borrowed from other languages in an open-ended way, to explore whether the absence of any particular content in the Khoekhoegowab lexicon might be a product of commonly borrowed words. Note that six other questions asked in the interviews are beyond the scope of this project, but are described briefly below.

In keeping with goals of transparency in the reporting of qualitative and mixed method designs (Levitt et al., 2018), we provide a full rationale for our approach to inquiry, reflection on the influence of our theoretical orientations and backgrounds, and detailed accounts of the

context of interviews and our data-analytic process. Further details are provided in online supplementary materials.

Method

Approach to Inquiry. Our approach was question driven, with semi-structured interview questions developed by examining our quantitative outcomes, and qualitative outcomes reflectively informing our quantitative interpretation. In this respect, we adopted a pragmatic approach to integrating quantitative and qualitative methods in a sequential process whereby "inductive results from a qualitative approach can serve as inputs to the deductive goals of a quantitative approach, and vice versa" (Morgan, 2007, p.71). This pragmatic frame allowed us to adopt an intersubjective stance (Morgan, 2007), favoring the identification of a consensus or mutual understanding across participants, while remaining committed to an exhaustive reading, with less frequent or unique attributions considered valid in reflecting the diversity and variation of possible meanings. Unusual viewpoints were therefore not discarded, but reported together with more common meanings, along with an indication of the relative frequency of answers. Finally, as our study aimed to explore both universal and culture-specific elements, a pragmatic approach is fitting in that it enables a discussion of the transferability of findings, rather than the designation of results as either fully generalizable or fully context dependent (Morgan, 2007).

Reflexivity. All interviews were conducted by two researchers, the first and second authors of the paper. The first author and lead interviewer was trained in personality and clinical psychology with an emphasis on quantitative methods at a North American University, and has experience conducting semi-structured interviews, in leading structured therapeutic groups, and in clinical interventions. She lived for a month in Namibia during the period when interviews

were collected, and had previously spent six weeks in the country leading Study 1 data collection, which included visiting the towns and meeting members of the communities in which the interviewers were conducted. In particular it had brought her into close contact with the team of 15 Khoekhoe-speaking interviewers. The second author and interpreter in the interviews grew up in a village in Northwestern Namibia speaking Khoekhoegowab at home and Afrikaans at school. As a teenager he moved to Windhoek, where he spoke English at high school and as an undergraduate university student. He completed a teacher training program and an undergraduate degree in linguistics in Namibia, and a master's degree in African studies with a focus on Khoi-san languages in Europe. At the time of the interviews, he was a doctoral student in African studies in Europe, visiting Namibia during an academic break.

Materials. The 30- to 40-minute structured interviews included nine initial questions, followed by queries about the meaning and usage of some of the 26 Khoekhoegowab words identified for further inquiry in Study 1. All questions are listed in Supplementary Table S3. The first six addressed topics beyond the scope of this project: they explored views of moral character in terms of personality concepts by asking about valued and admired traits and virtue, and explored views on personality consistency. The questions analyzed here explore etic personality traits which were not present among the high frequency lexical terms: creativity, Extraversion, and an open-ended question about terms borrowed from other languages (especially English or Afrikaans). Additionally, of the total 26 Khoekhoegowab words in question, participants were asked about 10 to 23 terms each, regarding the word's meaning and examples of how they use the term to describe people. If they provided a brief initial response, some participants were asked follow-up questions, such as about whether this is a good, bad, or

neutral trait. If they seemed uncertain about the word, they were asked if it was a word they ever use themselves, or hear other people use.

Participants. Participants were 23 adult, native speakers of Khoekhoegowab. Fourteen (64 %) were female. Nine were recruited in predominantly Nama-identified areas (Keetmanshoop and Mariental), ten in Damara-identified areas (Karibib, Otavi, and Witvlei), and five in Windhoek, the capital city, which includes members of all ethnic and linguistic groups. Per commonly accepted standards in qualitative research (e.g., Guest et al., 2006; Wertz, 2005), the number of interviews completed allowed for saturation of responses.

Procedure. Interviews were conducted by the first and second authors: respectively, a Western female academic, who had previously visited the towns and teachers in Namibia during prior research stays (about two months total), and a local Namibian male, a native-speaker of Khoekhoegowab originally from a village in a Damara-identified region, currently completing a PhD. in linguistics in Europe. The interviews occurred during a two-week period in early 2019. Some days prior to the visit to each of the six total towns or areas, the school teachers who had served as interviewers in the previous study were asked to recruit participants from among the same population interviewed for the lexical survey, but not people who had completed the survey. Participants were generally acquainted with the teachers, but not especially well-known to them. Participants were asked by the teachers if they would speak to visiting researchers about personality description in Khoekhoegowab for about 30 minutes, and were assured that no expertise was needed.

The interviews occurred in classrooms or private homes as organized by each teacher, where others were unlikely to overhear responses. They were audio recorded with the

participant's written consent. Information and consent forms were provided in English and in Khoekhoe, and participants chose which version to read and sign. In one case, a participant did not consent to be recorded and notes were taken of the responses instead. In three cases, a participant requested to include a friend or family member in the interview, and the pair were interviewed together. In the other 17 cases, the interview included only one participant. Instructions and questions were presented first in English and then in Khoekhoe, by the first and second authors respectively, and participants were invited to answer in either language. With a few exceptions, most participants understood English well, but a majority preferred to give most responses in Khoekhoegowab. Responses given in Khoekhoe were immediately interpreted in order to keep the first author apprised of the conversation. In many cases, follow-up questions were asked in order to add detail to a response. In other cases, feedback was given to communicate to participants that their answers were interesting and helpful, especially where a participant had expressed unease at their lack of expertise. After completion of the interview, participants were thanked and given a small gift as a token of appreciation.

Interviews, including the responses translated by the interpreter, were transcribed verbatim by an English-speaking assistant. The second author then reviewed the transcripts while listening to the audio recordings and added to or corrected any of his *in situ* translations in order to most accurately convey the participants' statements.

Analyses. Responses were grouped by question or word, and descriptive summaries were created utilizing a directed approach to content analysis (Hsieh & Shannon, 2005).

Content analysis themes. Because questions targeted specific terms in regard to participant attributions of meaning and associations, or asked individuals to reflect on specific

persons who they believed embodied specific Western-framed personality dimensions, the content analysis themes were prespecified by the question subject matter.

Codes and code groupings. We used a non-linear and reflexive process to identify codes and group them into associated categories. Our orientation toward content analysis incorporated the following objectives: (1) reflect on the wording of the question and whether the vocabulary used in translation colored, or directionally influenced the associations of respondents, (2) identify all trait-associated descriptive terms in responses, and their association to each other, (3) consider their similarity or difference compared to commonly held understandings of personality dimensions, (4) attend to how examples were provided, such as the use of contrasts or negations, as well as the type of situational illustrations used, (5) be exhaustive, for example, considering minority and counterviews, and expressions of confusion, uncertainty, or lack of knowledge, and (6) consider respondent evaluative judgments.

For questions which asked participants to describe larger constructs, such as Extraversion or creativity and to describe people who embody those characteristics, we selected units of meaning from the text that relied on conventional understandings of the terms from a Western perspective, but also focused on locating counterviews, narrower or broader conceptions, or variations in viewpoints. Categories of associations were then grouped and ranked from more to less common in a summary in order to have an exhaustive description of ways in which respondents attributed meaning to the construct or terms, while also tracking levels of consensus for those associations. For questions about Khoekhoe terms, new, refined, or confirmed definitions of solicited terms were constructed by consolidation and summarization of shared meanings from respondents.

Results and Discussion

The usage of words from outside the emic lexical study. Some descriptive quotes are provided below for each theme identified in the responses to each question. Detailed summaries, including all examples, are provided in online supplemental materials, along with the full transcripts.

Extraversion. Participants were asked, in English, "Do you know someone who is especially Extraverted? What makes you think of them that way?" In the Khoekhoegowab translation that followed, two terms were used in place of Extraversion: the Khoekhoe term "Hara" which translates directly as "being open (to others)", and the Afrikaans word "ekstrovert" a direct translation of English. The personality construct of Extraversion is multi-faceted and adopted from the Western academic perspective, therefore even though most participants were familiar with either or both English and Afrikaans, we reasoned that it may not be an especially familiar or commonly used word. We therefore adopted a more familiar word in Khoekhoegowab, one frequently-used enough to appear on our lexical survey, to convey at least one important aspect of the Western construct. This was understood from the outset to potentially narrow the scope of responses. Importantly, however, using the single best Khoekhoe word available to convey the construct seemed preferable to selecting several terms intended to convey the multiple sub-components, as this might have cued participants to group together what Western personality-psychologists consider to be associated, in a way that might have been imposed or artificial in the local context.

The Extraversion question was posed in 19 interviews, to 22 people. One person said that they were unable to think of someone with those qualities, and one said that they could not really

say because it would be "hard to tell" if someone was really this way or not. Most participants (14 out of 17 interviews) described someone open towards others in terms of being friendly, talkative and conversationally engaged, enjoying being with people in general, and having a willingness or desire to communicate or spend time with others regardless of another's background. Extraverted people were described as interactive and able to get along with or connect well with others. For example:

> Even on the street, if they meet somebody on the street, they would greet this person, and they would easily ask them about their life and about where they are headed to, and so on.
>
> One aunt of mine. She's open with anyone. Even if someone visits the family for the first time, she is just open to that person. She does not discriminate. She just talks. She's just friendly and she makes friends quite fast. She talks a lot, and if you talk a lot, you just get around with everyone.
>
> She was in this one project and there was this little boy who didn't talk much with anyone, but she connected easily to this little boy and eventually got him to talk openly to others, and, with awe, people were asking her "But, how did you get him to speak so openly with others?

Other traits that participants attributed to individuals who they believed to be especially Extraverted (or open to others) coincide with other established facets of the Extraversion construct. For example, interpersonal warmth or caring for others (8 interviews):

> So, I would think about a lady who sings in the same choir as I do. This lady is open to everybody, she has an open heart, and she is also welcoming at home, she knows how to take care of a person that comes to her place, and she's also a kind of a person that knows how to help others in their problems.
>
> She visits at home, she would come at home, she would engage in, like discussions, talk about interesting topics, they would cook donkey meat at home, and then they would talk about things.

Another common theme revolved around positive emotions, humor and affinity for jokes (5 interviews), for example:

> And then she just discuss with people there, and then they talk, they are happy. She's also kind of a person who is happy, and a peaceful person, and she gives others ideas, so she speaks, kind of, brings others to good ideas, or makes others think about things.

> This person loves jokes, and he makes jokes with everyone he meets. He doesn't make age difference, young, old, etc. People just know when that guy comes here, we will surely laugh.

On the one hand, two participants discussed the ability of extraverts to express opinions easily or loudly, alluding to assertiveness or to boldness:

> And when they see something wrong, they should be able to say 'No, this thing is wrong!' And they should talk openly with people and express themselves, like, this is how I feel (about things)

> They can express their views and opinions very easily, very loudly

On the other hand, two respondents specifically disassociated this quality from arrogance, instead linking it to humility:

> …and, she doesn't give that impression that she's a teacher, and here teachers are kind of respected people, but when she gets there she doesn't give off that she's a teacher.

> My grandmother. Yes, she has these qualities. Openness and humble, and everything positive that goes with it, she has all those qualities.

Almost all respondents (14 of 17 interviews) evaluated Extraversion as positive, or used implicitly positive trait descriptions, with a few participants suggesting that people should cultivate this quality. Reasoning for this revolved around being able to gain information or improve opportunities for oneself or others through networking with strangers. For example:

> It's important that you are open with everybody that you get your opportunities, so she says, one example is that, next door there's a lady from the governor's office, who's working there, with which she has close relations, and then she gets the insider information of what is happening in the governor's office, and what opportunities that office offers. And then she makes use of these opportunities.

> It's the best (quality to have)

Although participants judged Extraversion to be positive, in three interviews circumstances were noted where it could be negative, such as in situations where others could be offended or believe that they were being mocked, or when saying too much could be socially problematic (3 interviews):

> Seventy-five percent of it, from the person I'm thinking of, has specifically, it's good. But then sometimes some people [get easily offended]. Since they don't know the person, they feel like she's just making fun of me or something like that.
>
> It can be bad sometimes because you may end up talking more than you actually were supposed to. And that way share what is supposed to have been your deep secret.

As noted above, the use of only one specific term in Khoekhoe (hara: openness to others) although coupled with the term 'Extraversion' in English and Afrikaans, may have narrowed the scope of meaning. A two-component neuroanatomical delineation of Extraversion (Grodin & White, 2015) contrasts affiliative (social warmth, affection, gregariousness) with agentic (assertiveness, social dominance, persistence, and leadership) extraversion. Although the names differ, this content maps onto the two aspects of Extraversion found to be the least correlated, when factor analyzing facet scales of popular Big Five inventories: enthusiasm (friendliness, warmth, gregariousness, poise, positive emotions, self-disclosure and sociability) and assertiveness (leadership, assertiveness, provocativeness, activity, talkativeness, excitement seeking; DeYoung et al., 2007). Given our prompt, participant responses, unsurprisingly, focused most on the sociable, gregarious side. However, it is significant to note that assertiveness, talkativeness, and even social dominance and leadership were mentioned and associated with this openness to others. There is less mention of high activity or sensation seeking, but otherwise the spontaneous open-ended responses to a simple prompt supported an understanding of Extraversion that is largely similar to that of Western personality psychologists. This is notable given the thin coverage of the Extraversion domain not only in Khoekhoegowab, but in other African languages (Rossier et al., 2017; Thalmayer et al., 2019; cf. Fetvadjiev et al., 2015), and the lack of a dimension similar to Extraversion in the emic lexical results.

Openness/Intellect (creativity). Participants were asked in English, "Do you know someone who is especially creative? What makes you think of them that way?" This was followed by the question in Khoekhoegowab, again using two terms, the first in Khoekhoe, *ǂâiǂuixa* (tends to think things out, or tends to come up with ideas), and the second in Afrikaans *kreatief*, a direct translation of the English. Creativity is only one of the multiple facets to the Openness/Intellect domain, which is arguably the least consistently defined trait of the Big Five and Big Six models. The common core of the domain was defined by DeYoung, Grazioplene and Peterson (2012) as cognitive exploration, with the intellect component reflecting engagement with abstract or semantic information, and the openness component with perceptual or sensory information. We believe that the most familiar term for lay people that captures this kind of exploration is creativity. We also found creativity to be of particular interest given the absence of this descriptor in the West from many African lexicons. As a case in point, the Khoekhoe word used, the closest match available, is rather narrow, suggesting a specific cognitive form of creative thinking. However, as noted above for Extraversion, we found it most appropriate to focus on one key aspect of this broad, multi-faceted Big Five trait rather than presuppose (and cue participants) that all its aspects that group together empirically in the West should also do so among Khoekhoe speakers.

This question was posed in 19 interviews (to 22 people). Two people (in one interview) said they did not know anyone who is creative, and one person reported not knowing or using the terms. (None of these were the same participants who reported not knowing someone with the extraversion-related quality.) One person linked creativity with visions or prophecy of future events. Of the remaining 17 interviews, participants tended to respond in one of two ways, either

referencing creativity in terms of original thinking or ideas (7 interviews), or in terms of producing novel or original works (7). Some respondents referenced both thinking and doing (3), with novel or original ideas leading to original works.

Those who described creativity in terms of producing original thinking or ideas, also described creative individuals as being clever or quick with their ideas and expression, and of thinking in unconventional ways, for example:

> That lady thinks so fast. Like, if you end up in some situation, she would quickly think of what to do and might offer you a solution quite fast.
>
> Whenever she would talk, she would not read things from a written speech, she would explain things, but really just from her mind, thinking out from all the rules, and then just reading…like saying it from the heart, and not reading it out, so that is…and I think she is also a clever person

Those that described creativity in terms of producing original or novel works talked about multiple medias mediums of expression such as painting, writing novels, poems or praise songs, and music. Creative individuals were also described as being able to adapt ideas from others to create original objects and capable of creation using diverse and limited resources. For example:

> I see the little daughter … that she makes some little things out of some material. They are different things. For example, bed[side] lamps, and things, little cupboards made of [old] newspapers, threads and balloons, and so on.
>
> She likes creating things, and once she watched a YouTube video of somebody creating paintings. She got inspired by that and started making paintings herself. People liked her work, and some even requested that she makes some painting for them too.
>
> The person thought outside of the box, and came up with something in town that nobody else could came up with. Using cement, he created artistic shapes on walls and painted them beautifully.
>
> A man here in town who creates animals from old newspapers.
>
> When I go to bed at night, I may get an idea, so I stand up and write it down on a piece of paper, and the next few days I would work on this idea until I get it right…. I may have an idea of how I could bring together certain music pieces and melodies to get the song that I want.

Thinking and projects were also coupled in dialogue about creative individuals, with some persons described as creative in terms of finding solutions to problems, an ability or power to adapt, and to accomplish projects in new ways, or with limited resources. For example:

> He lives on the farm here, he's never been to school, but … he can just do about anything that he puts his mind to, he can even create things out of nothing, he can open up an engine of a tractor, and then just fix it and gets it started, and then it just works, and it makes me think, where does he get this from, I mean he has a really sharp mind.

> She comes up with another idea, she will say ok, let's try this one if that one is not working out, so then she'll say, ok, why not, why not this, yeah, and then, by that…after she said like this, why not that, she's the one taking the lead, or just push you inside and say, ok, try this. She will say why can you not try this one and she will take the lead.

Only four participants were asked directly as a follow-up question whether they thought of creativity as a good or a bad trait to have, however, almost all participants implied positive evaluation. Two interviews, for example, referenced beauty, and five inspiration to others, solution finding, or teaching ideas, and fourteen portrayed those they were speaking of as skilled or admirable.

In two interviews, respondents also described creativity as relating to people who are also able to manipulate or influence others through obscuring facts, or who use creative excuses or reasoning. In these cases, creativity was not colored in positive terms, but it was also not overtly construed as negative, for example:

> This may be a situation where the person does not want her to come with her on a certain trip, and the person has some reasons for this but […] comes up with other reasons to make her believe that she cannot come, and then after a while she realizes that the reasons were actually different one, […] so it's in a sense a kind of creative thinking…. It can be good sometimes, and it can also be bad sometimes.

> Even if you ask like this, she have to back it up, like even you still have something and move to remind her later, like 'Miss, you are wrong like this, then she have to say, ah, no I didn't say that, I said this and that, so, she's more creative and all that, she's more creative, she can cover up for what she did or said …

The meaning of creativity for the Khoekhoegowab speakers interviewed here appears to align with traits or qualities commonly associated with the dimension of Openness/Intellect in Western personality trait research. Given our prompt, it makes sense that the Big Five aspect of intellect (quickness, creativity, intellect, ideas, ingenuity, competence, depth, introspection) is a bit better represented than that of openness (aesthetics, imagination, reflection, fantasy, feelings, actions, values; DeYoung et al., 2007). As with Extraversion, however, it is notable that we found a similar breadth of associations, with hints of the entire Big Five/Big Six domain emerging in spontaneous descriptions following a prompt confined to a single aspect.

Words borrowed from other languages. In 16 out of 20 interviews, to 18 total participants, we posed the question, "Are there terms you borrow from English or Afrikaans to describe people because the word isn't in Khoekhoe? Or vice versa?" We observed that this question was difficult to answer, and in two cases it was re-posed as, "… terms that you especially like in English or Afrikaans to describe people?" The question seemed to be more cognitively challenging than intended, because it required people to search their memory for words fulfilling multiple criteria, e.g. person-descriptive, appearing in one language but not another. Six participants said that they could not think of an example. In 10 interviews participants provided examples of English and/or Afrikaans words, in none of a Khoekhoegowab word. All answers given are provided in online supplementary materials, but are not reported here due to the lack of identifiable regularities or patterns. Several English terms (genius, funny, amazing, extraordinary) fit within the Big Two domain of Dynamism, which was not especially well-represented in the Khoekhoegowab lexicon, and thus might indicate a need to borrow terms to fill an area of meaning not covered by the local lexicon. Other terms, however, relate to

respect and manners, topics that are well-represented in frequently-used Khoekhoegowab person-descriptors. In this case they would seem to illustrate the attractiveness of new words that describe nuances in locally relevant topics. Thus, no conclusions are drawn from the responses to this question. Ideally follow-up work would find ways to explore imported terms in a way that presents less cognitive load to participants, for example by identifying such terms in a corpus of spoken language.

The meaning of 26 ambiguous terms from Study 1. Based on the results of Study 1, 26 terms were identified for qualitative exploration. These were terms that posed difficulties for the interpretation of factors, often because a term seemed incongruent (surprising or confusing) given its English definition. In 20 interviews, 23 total respondents were asked for their view of the meaning of the word and for examples of its use. The list of 26 terms, with their original definition from Haacke and Eiseb (2002) and the new proposed/updated definitions based on participant responses are presented in Table 1. Additionally, summaries of the participant responses that led to these updates are included in Supplemental Table S4. Documents for each word including all responses are available in online supplemental materials. As noted in Table 1, three terms were removed from the variable list. For 22 terms, glosses were updated. For two terms, original definitions were confirmed.

Table 1

Original and Updated Definitions for 26 Words Queried in Follow-Up Interviews

Word (participants)	Original definition (Haacke & Eiseb, 2002)	Proposed/updated definition
ǂnīsa (n = 10)	being proud; self-respecting	to be proud or to display self-respect and pride in relation to an achievement, or to group belonging

kai-am!nâ (*n* = 10)	loud-/big-mouthed. 'He is all talk and no do'	someone who is overly talkative, indiscriminate with information shared or who they share it with, or a know-it-all
!gari-am!nâ (*n* = 7)	stentorian, with a loud voice; hard-mouthed (of: horse)	a person who talks with a high volume, with a loud voice or speech
ǀaexa (*n* = 14)	fiery; ardent, zealous	adept, skilled, exceptional, masterful, in relation to a domain of expertise
ǂhansenxa (*n* = 13)	concerned, (overly)	to be motivated and/or active, or go from place to place in a restless manner, typically in the context of seeking solutions to or aid for a current problem or dilemma
ǁhapoxa (*n* = 12)	dreamy, inclined to daydream; inclined to dream	(1) a person with goals, ambitions, wishes, or desires for the future and is motivated toward fulfilling them; (2) someone who is visionary; (3) someone who dreams at night while sleeping.
!gâitsâsens (*n* = 11)	well-being (feeling of)	to feel good, positive, or joyful for or about oneself
ǀhupuǀhupuxa (*n* = 13)	troublesome; tiring, exhausting	NONE, remove from analysis. Not recognized or used
!haokhoesâuxa (*n* = 12)	hospitable towards strangers, (who is)	NONE, remove from analysis. Incoherent use, guesses, not recognized or used.
!ereamxa (*n* = 3)	responsible	responsible *(no change)*
ǂgan!gâsa (*n* = 13)	secret, covert; fig. Concealed, hidden, obscured; clandestine	(1) someone who is secretive or has a hidden agenda with regard to personal history, intentions, or information; (2) someone who is reserved, shy, or private
ǂgaobasenxa (*n* = 13)	covetous	someone who wants everything for themselves, selfish, covetous
!khompōb/s (*n* = 10)	blockhead, fool, simpleton, dim-wit, silly fell, ass	a stupid person, a person of low intelligence, ignorant, idiot
ǂamkhoeb/s (*n* = 10)	snob, upstart	(1) person of special status, high position, class, authority, or seniority who is accorded respect; (2) person who is snobbish, acts as if

		they are of high position or better than others without merit; (3) a person who is the best, at the top level.
dūraxasib (*n* = 10)	covetousness, cupidity	desire, motivation, ambition, or eagerness to achieve, or obtain goals
amabesib (*n* = 10)	authenticity, genuineness; sincerity, honesty; truthfulness	authentic, genuine, honest, truthful, frank *(no change)*
ǂkhaiǂkhaisens (*n* = 10)	ostentatiousness	(1) show-off, pretentious, ostentatious, pompous, grandiose; (2) self-respecting, prideful.
au (*n* = 10)	anxious/uneasy, feel	(1) bitter, negative, resentful, stingy, antisocial; (2) tough, austere, hardy
oaxaedīsen (*n* = 10)	unattached/eligible for marriage, act/behave as if	to dress up, make oneself beautiful or look good in order to stand out or attract the attention of others – especially with regard to the opposite sex
dî!nâxa (*n* = 10)	cross-examine, inquire; examine (oral), tend to, inquisitive	someone who is inquisitive, who asks lots of questions in a persistent manner (curious [+]; nosy, prying [-])
ǂūxa (*n* = 11)	eccentric, freakish; bad=-mannered; moody; antisocial	(1) bad mannered, negative attitude that repulses others, lack of respect; (2) bad-ass, excellent, deserves credit for something; (3) good mannered, respectful. (Depends on context)
supudana (*n* = 10)	bright, quick to grasp, quick in/on the uptake (esp of: child)	(1) gullible, easily manipulated, too easily convinced, persuaded, or influenced (naïve); (2) intelligent, quick to grasp, learns and understands easily.
ǁgoaraxa (*n* = 10)	blackmail, browbeat, (prone to)	someone who wants to be begged by others, creates situations where others are in a position to beg, withholds in order to be begged.
ǂkhāxa (*n* = 8)	non-compliant; likely to refuse/etc.	resistant, refusal to do, help, give, etc, stubborn, uncooperative
ǂâi!gâxa (*n* = 9)	inclined to rethink; thoughtful; heedful, meditative, pensive; strong-minded.	(1) someone who reflects and considers before acting; (2) someone who reflects on a past action with regret or remorse, then corrects or apologizes.
!gamǂâixa (*n* = 7)	deep-thinking, contemplative, meditative	a deep, complex thinker, contemplative, a prophet, visionary (associated with being

	reserved, misunderstood by society); someone who looks deeply into things, profound introspection.

Note. In 20 interviews, 23 total respondents were asked to describe: what they thought the word meant to them, if they ever use it or hear it used, and (if so) for examples of a time they recently used it or heard it used. Summaries of participant responses, which led to the updated definitions, are available in Supplemental Table S4. Documents for each word including all responses are available in online supplemental materials.

Study 3: Optimal Emic Model and Tests of Etic Models in Updated Data

Method

From the list of 272 non-redundant lexical terms included in Study 1, three terms were removed and 20 definitions were updated based on the results of Study 2. This new lexical list of 269 terms was re-analyzed using the same analysis steps described for Study 1. For comparison with etic scales, factor scores for solutions containing specific numbers of factors (1, 2, 3, 5, and 6) were obtained. In this case, to best approximate norms used in other published lexical studies (from which many of these adjective lists were derived), we used ipsatized data and varimax rotation.

Scoring of Marker Scales for Etic Models. Marker items for etic scales were selected from the variables administered prior to analyses and were scored as scales. For each of the terms used to represent the structures described below, a search was made through the English-language glosses of Khoekhoe terms administered by word-root, so an entry could be counted regardless of whether it was adjective, noun, or verb, and could be used for either the positive or negative pole of the scale, depending on how it was framed. The Khoekhoe terms identified for each marker scale are detailed in Supplemental Table S5. The number of matching terms found among the sets of descriptors described below varied from a high of 39 for the Big One, to a low

of five and six for Big Six Extraversion and Openness, respectively. In general, they assign roughly equal numbers of terms-per-factor for each model.

Big One. Terms for a one-factor moral evaluation factor came from (Saucier and colleagues' (2014); Supplemental Table 2) list of the most recurrent terms, in translation, among one-factor solutions from nine lexical studies representing highly diverse provenance (Chinese, Korean, Filipino, Turkish, Greek, Polish, Hungarian, Maasai, and Supyire-Senufo).

Big Two. Terms for the Social Self-Regulation and Dynamism scales came from the list provided by (Saucier and colleagues (2014; Table 2).

Pan-cultural three-factor model. De Raad et al. (2014) jointly analyzed lexical data from eleven languages (ten European, plus Filipino) and identified a three-factor solution with dimensions summarized as Affiliation (including affective and altruistic connotations), Dynamism (being extraverted, energetic, active, enterprising), and Order (being systematic, organized, capable, rational, decisive). We used their lists of the 25–35 highest loading items on each of the component poles (De Raad et al., 2014, Table 6).

Big Five. Two sets of Big Five terms were used. A seven-language, cross-cultural composite of conceptions defining the core of each factor were derived from De Raad et al. (1998), who compared five-factor structures in seven languages. Their Table 2 presents 16 adjectives for each factor in each language, half for each bipolar dimension. Supplemental Table S5 identifies the 45 of these terms identified as salient for the same factor in at least three of the seven languages. Another commonly used representation of the Big Five in adjective form is the 100 adjectives selected by Goldberg (1992; later abbreviated by Saucier, 1994) from studies with the English lexicon, the basis for International Personality Item Pool (IPIP) measures of the Big

Five (Goldberg et al., 2006). Supplemental Table S5 includes the 85 adjectives with non-redundant word-roots. Note that in Goldberg's representation Agreeableness emphasizes warmth and sympathy, whereas the cross-language version emphasizes peacefulness versus aggressive dominance.

Big Six. A six-factor structure has been derived from lexical studies using relatively narrow selections of variables (Ashton et al., 2004), represented in the HEXACO inventories and from those using relatively broad selections (Saucier, 2009) represented in the Questionnaire Big Six inventories (QB6; Thalmayer et al., 2011). The HEXACO structure is based on "cross language six (CL6)" adjectives, those identified in each domain in at least three of the eight studies analyzed by Ashton and colleagues (2004), as shown by Saucier (2009), Table 1). The "Wide variable selection cross language six (WCL6)" adjectives in Supplemental Table S5 are those identified in at least two of eight studies considered by Saucier (2009, Table 4).

Pan African three-factor model. In Thalmayer and colleagues (2019) optimal emic models of 5 factors for Maa and of 10 factors for Supyire-Senufo (both using ipsatized data and oblimin rotation) were identified. The models appeared to have the most convergence at the three-factor level, with each having factors related to (1) virtue versus vice, (2) being powerful and having agency versus being troubled and disempowered, and (3) happiness and well-being. The content of each of the three factors was compared to define these convergences in as much detail as possible. These summaries of each of the hypothesized pan-African three factors were then presented alongside the list of Khoekhoegowab terms administered (with English translation). Three raters (the first and last authors, both experts in personality psychology, and a Khoekhoe-speaking psychologist who had also provided ratings during survey development)

rated each Khoekhoe term in regards to its correspondence to the definitions from 2 (term fits into content-domain well), 1 (term fits to some extent), 0 (no relation), -1 (fits to some extent with opposite meaning), or -2 (term fits well as the opposite of content-domain). The Cronbach alpha on standardized items for these ratings by the three raters were, respectively, .86, .71, and .78. Terms were selected as markers for the domains if they had an absolute average score of 1.67 or higher, meaning that two raters had given it a 2 (or -2) and the other a 1 (or -1), with the signs in the same directions. Twenty-five, nine, and five items were chosen for the scales, respectively.

South African Personality Inventory (SAPI). The same process described above was used to select marker terms for the six scales of the SAPI. For a description of each of the six, we used the names of each domain's facets as provided in Table 2 of Fetvadjiev and colleagues (2015). The interrater reliabilities on standardized items were, respectively: .86, .82, .80, .62, .75, and .86. The lowest value, for SAPI 4, Extraversion, was likely due to the rather narrowly defined factor (Sociability and Playfulness), which in turn was likely due to the relative absence of Extraversion-related terms in South Africa, as compared to more Western contexts. In turn, very few terms related to this domain were identified; only two with the cut-off of absolute value 1.67. For this reason, the cut-off for this domain only was moved to 1.33 (meaning that at least one of the three raters gave it a 2). Following that, the number of items in the six markers scales were, respectively: 20, 10, 9, 7, 7, and 6.

Analysis. Analyses to identify the preliminary optimal emic structure proceeded as described for Study 1. The replication of etic factors was tested with correlations between the sets of marker scales and sets of emic factors for the same-sized models, using varimax rotation

and ipsatized data to best match the conditions under which these models were created. Following Ostendorf's influential work (Ostendorf, 1990, Table 61, p. 93), where mean correlations over .70 between emic German factors and the Big Five scales was used to show that the model replicated, we used a criterion of correlation greater than or equal to .70 to qualify as having significant correspondence, or a "strong" replication. Based on R^2, a correlation of .70 means that half their variance is shared, we set a criterion of .50 for partial or moderate replication, as this indicates that about a quarter of their variance is shared.

Due to suggestions from experts after preregistration of our analysis plan, we added post hoc assessment using target rotation and canonical-correlation analysis. Target rotation was used by De Raad and colleagues (2010) to compare across 14 sets of marker scales, as a way to compensate for the distortions caused by the variation in numbers of terms used to describe the traits, and is recommended by Fischer & Karl (2019) for use in cross-cultural comparative work. Here we use the guidelines provided by Lorenzo-Seva and ten Berge (2006) for interpretation: .95, good similarity, the two factors can be considered equal; 85–.94, fair similarity; below.85, lack of similarity. Canonical-correlation analysis provides a way to assess overall redundancy between sets of personality dimensions (Saucier & Iurino, 2019), with the redundancy-index being unaffected by arguably arbitrary differences in rotational position from one set of factors to another. In canonical correlation, the redundancy between the two sets is indexed by average squared cross-loadings summed across the canonical variates. The proportion of variance in one set that can be accounted for by the other set will be zero if variables in one set are all orthogonal to all variables in the other set, but approach 1.00 to the extent the two sets generate identical

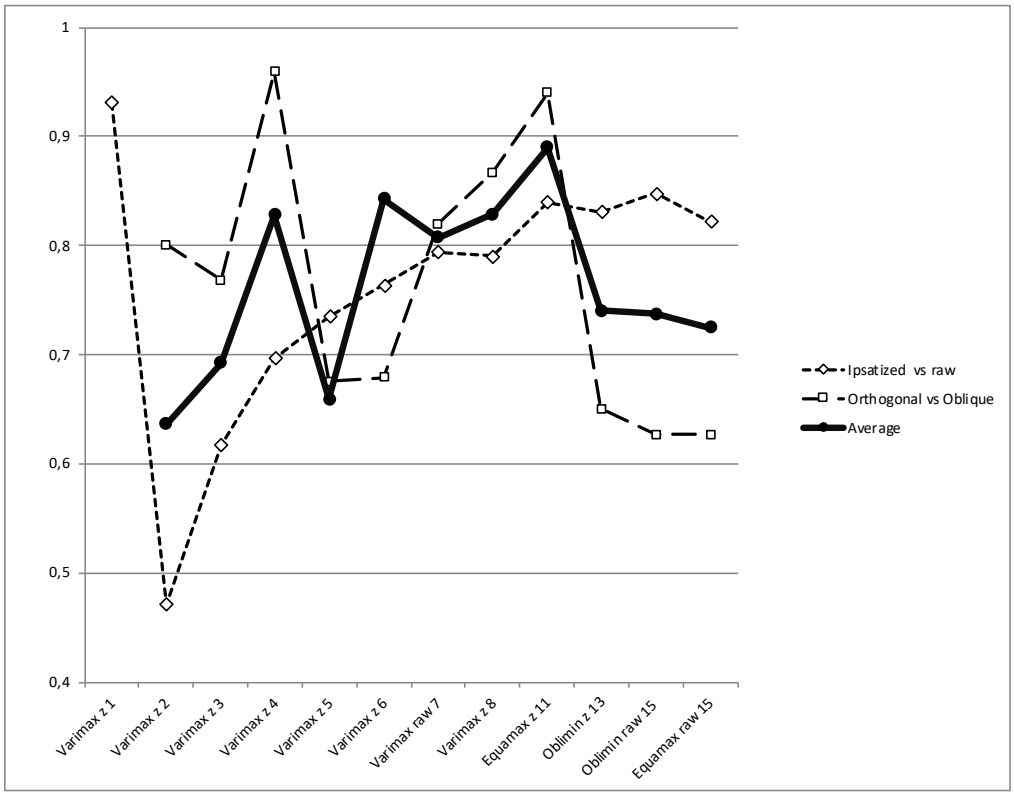
canonical variates (or roots). In this case, we simply compare the proportion of variance explained between the models.

Results

Emic analyses. According to parallel analyses (O'Connor, 2000) 18 factors (ipsatized data) had higher eigenvalues than would be expected by chance, but the MAP test (O'Connor, 2000) suggested a model with 15 factors. For raw data, estimates were 11 and 18. Thus, analyses began with 18 factors in each of the data types, using each of the three rotation strategies in turn. Explained variance in ipsatized data for the first nine factors was 38.5, 6.8, 5.0, 4.1, 3.9, 3.7, 3.3, 3.1 and 3.1%. Factors 10-28 explained between 2.0 and 2.9% of variance, factors 29-85 explained 1.0-2.0% of variance, all others were under 1%. For raw data, explained variance the first seven factors was 52.7, 11.1, 5.5, 4.1, 3.7, 3.4, and 3.1%. Factors 8-21 explained between 2.0 and 2.9% of variance, factors 22-76 explained 1.0-2.0% of variance, all others were under 1.0%. Interpretable models, with at least 2 highest loading terms in a factor that could be interpreted, included 8 factors for varimax rotation in ipsatized data and 7 in raw, 11 (ipsatized) and 15 (raw) for equamax, and 13 and 15 for Oblimin. As in Study 1, each of these models was then correlated with 2 comparator models changing a single parameter: raw versus ipsatized data, and orthogonal versus oblique rotation. Mean correlations were .83/.81 for ipsatized/raw varimax models, .89/.72 for equamax, and .74/.74 for oblimin. The values broken down by comparison type and averaged are displayed in Figure 1, alongside those for the models that would typically have been compared in a more typical lexical analysis: one to six factors using varimax rotation on ipsatized data.

Figure 1

Robustness Comparison for Six Candidate Models and for Six Traditionally Derived Models using Ipsatized Data and Varimax Rotation



The most robust model, with 11 equamax-rotated factors in ipsatized data, is a clear winner. It can be seen in Figure 1 that its mean robustness correlations were higher than those of the other candidates, and notably it is more robust than one- to six- factor models. These smaller models, using varimax rotation, are included to provide a point of comparison with the only models typically presented extracted and presented in lexical studies. Although robustness is high for these 4- and 6- factor models, it is not as high as for our optimal emic 11-factor structure, despite that structure's much greater complexity. A summary of the optimal emic

model with proposed factor labels, including the top 15 terms for each (only including those with loading .30 or greater in magnitude) is displayed in Table 2. The complete factor loading matrix for this solution is presented in Supplemental Table S6. For comparison, the most robust solution using raw data (varimax rotation, seven factors) is shown in Supplemental Table S7.

Table 2

Terms with the Highest Loadings on the Optimal Emic Model of 11 Factors (Equamax Rotation, Ipsatized Data)

Khoekhoegowab	English	Loading
Intemperance		
ǀhoroxa	**tend to be (always) drunk**	**.73**
ā‡ûna	**greedy for drink**	**.70**
ǀhorosemâb/s	**drunkard**	**.62**
ǀgoexa	**disposed to using obscene language; insult**	**.52**
ǀgore(tsâ)xa	prayerful, inclined to prayer	-.42
!khamxa	pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight	.40
ǀhomaxa	**untidy, messy, slovenly; hap-hazard/slipshod (of**	**.39**
ǂgae-aob/s	smoker; ro(o)ker (Afrikaans); dagga smoker	.37
ǂgomsabeb/s	believer; follower	-.34
gāgāsi	spiritual	-.32
aoǀnā-aob/s	preacher	-.31
Prosocial Diligence		
sîsenhuixa	**helpful, ready to help**	**.55**
sîsenǀopesa	**work-shy, shirking work; aversion to work**	**-.51**
!khaera(si)b/s	**untidiness, slovenliness; slipshod(di)ness**	**-.49**
sîsendūraxa	**keen/eager to work;**	**.48**
sîsendūraxasib	**eagerness to work**	**.41**
!ûi!gâxa	attentive; mindful of (people/material things); painstaking, meticulous	.40
!amku	decent, respectable; proper, orderly; tidy, neat	.39
ǀopesa	lazy, slothful, indolent	-.38
!anu(si)b	**cleanness, cleanliness; pureness; holiness, sacredness, sanctity**	**.37**

sîsen(tsâ)xasib	diligence, industriousness, keenness to work; activeness	.37
xore(tsâ)xa	joking/etc., fond of	-.36
ǀgôaǀnam	fond of children	.34
!gôaǁnāxa	disdain, scorn, have a low opinion of others	-.33
ôasasib	diligence, assiduousness industriousness, willingness	.33
!gabu	insipid/lifeless/full (of)	-.32
Intrusive Gossip		
ǂhôatani-aob/s	**scandalmonger; messenger**	**.51**
ǂhôaǂûna	**nos(e)y, inquisitive**	**.48**
ǂhôaxa	**gossipy, tattling; full of news, bursting w. news**	**.47**
ǀhoe-aob/s	scandalmonger, gossiper	.47
!gâi(si)b	goodness; (good) quality; good-naturedness; excellence	-.37
mari!gunu(xa)	greed for/love of money, avarice	.36
anusib	dignity, suitability, appropriateness, seemliness	-.35
ǀō-aisa	special; unique; distinctive; exceptional	-.35
mîǁnâxa	likes talking people down, defame	.33
am!nâxa	prone to tell lies	.33
dî!nâxa	someone who is inquisitive, who asks lots of questions in a persistent manner (curious	.31
gā-aisib/s	cleverness, intelligence, wisdom; sagacity	-.31
xū!gunuxa	greedy, rapacious, avaricious, covetous	.31
xorexab/s	tease/-joker, a	.30
ǂoaǂamsa	exceptional, particular, outstanding, distinctive; special	-.30
Immorality		
ǁore-aob/s	**sinner; offender, miscreant; transgressor; wastrel; good-for-nothing**	**.51**
ǁore(tsâ)xa	naughty/wicked (of child); refractory; sinful; inclined to transgress	.45
gāxa!nâxasib	fraudulence, wiliness, deceitfulness	.44
ǀhôakao(xa)sib/s	roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence	.41
gāxa!nâsib	cunning, slyness, craftiness, wiliness; trick(ery), deceit	.40
tsûtsû-aob/s	tormentor; torturer	.38
!ûi-aob/s	shepherd, herdsman; nurse; guard; watchman, security guard; scout (mil.); sentry; bodyguard	-.37
gonxa	restless, fidgety, mischievous; lively	.36
ǂhumi-aob/s	liar, (habitual/inveterate)	.35
tsūdīxa	wrong/harm, prone to do, harm, inclined to (cause), w. criminal tendency	.35

ǂamkhoeb/s	a person of special status, high position, class, authority, or seniority who is accorded respect, 2) a person who is snobbish, acts as if they are of high position without merit or acts better than others, 3) a person who is the best, at	-.34
ǂnoaguxa	quarrelsome, argumentative	.33
ǂgaeǂgui-aob/s	leader; manager, director; person in charge	-.33
ǂūo	without manners; characterless, without personality; base	.33
karosaǂgao	hard-hearted, relentless; cruel	.32
Bad Temper		
!haeǁaixa(si)b	**hot-temperedness, irascibility; choleric temperament**	**.56**
ǁaixasa	**rage, fury, anger; (poet.) wrath; (poet.)**	**.55**
!haeǁaixa	**hot-tempered, irascible; choleric**	**.53**
ǁē	**audacious; insolent, impudent, impertinent; bold, dauntless, reckless**	**.47**
ǂkhabaxa	aggressive, antagonistic; liable to antagonise, likes to pick fights; militant; antagonistic; liable to antagonise	.46
ǀaraxa	quick to show annoyance/etc.; short-tempered	.44
mîxa	sardonic, tending to run down/ridicule people (esp. of adults w. regard to children)	.42
!garidanasib	obstinacy, stubbornness, mulishness; dullness, dim-wittedness; determination, headstrongness; resolution, resoluteness	.39
kai-am!nâ	someone who is overly talkative, indiscriminate with information shared or who they share it with, or a know-it-all	.39
ǂkhupixa	noisy, loud; inclined to be noisy/loud (of	.38
ǂkhabadī-aob/s	wrong-doer, evil-doer	.36
!nâudanaxa	obstinate, stubborn, pig-headed; obdurate; mulish, determined, resolute	.36
ǂhanu	straight; correct, proper; right	-.36
tsauraǂgaosib	soft-heartedness	-.35
sâsa	calm/restful/relaxed/tranquil (of	-.35
Implacability		
surixa	envious, inclined to envy/begrudge	.42
huiǀnam(xa)	helpful, eager/keen to help (always)	-.39
!khausa	wild; intractable, refractory; vivacious, excessively active, hyperactive	.39
!gam!gamsenxa	humble; meek, docile, submissive; self-deprecating	-.38
ǂkhîo!nâ	dissatisfied, discontented, disgruntled; unhappy; upset	.38
māsenxa	available, willing, ready	-.36
ǂanapega	willful; stubborn; perverse; intentional, deliberate	.36
ǂhomixa	mendacious, deceitful, inclined to lie	.35

ǁnâu|namxa	obedient; tractable, amenable	-.34
!gâi	good, excellent; good-natured	-.34
|khomo!nâ	ruthless, pitiless; merciless	.34
ǁgai	bad; rotten; evil; of poor quality, shoddy; wicked/vile/ill-natured/malicious	.33
sorasa 1	disdain, disregard; undervaluation, underestimation	.33
ǂkhôaxa	harmful; likely to damage/etc., damaging	.33
sorasa 2	contempt, disdain; low esteem; underestimation; being underrated	.32
Predatory Aggression		
!gamaob/s/i	**killer; murderer, assassin, homicide**	**.65**
!khompōb/s	**a stupid person, a person of low intelligence, ignorant, idiot**	**.56**
!gaixa	**who is (habitually) in possession of black medicine**	**.55**
!nari-aob/s	**thief; kidnapper**	**.48**
!gai(dī)-aob/s	**shaman, medicine-man, sorcerer; herbalist (w. mainly sinister intentions)**	**.48**
!gammekhôa-aos	**adulteress**	**.41**
ǂgaeǂhapu-aob/s	seducer; deceiver; s.o. leading astray	.41
tsūdī-aob/s	wrongdoer, evildoer, malefactor; culprit, offender; criminal	.39
ui-uisa, ui-uixa	disgusting/revolting/abhorrent/horrible/sickening	.39
|apexūxa	inclined to betray	.37
|āxare(he)sa	cursed	.37
!ao!ao-aob/s	intimidator; s.o. who frightens/etc.	.34
!hāsara-aob/s	denouncer; s.o. prone to insult	.32
Haughty Self Respect		
(ǁî)!gôasen	**self-respect (having)**	**.58**
|gapiǂâixa	**proud, haughty, arrogant; snobbish**	**.55**
ǁî!gôasenni	**haughtiness, arrogance**	**.52**
ǂnīǂnīsenxa	**proud, haughty, inclined to act …**	**.48**
ǂnīsa	to be proud or to display self-respect and pride in relation to an achievement, or in relation to group belonging	.39
Elo!ao!gâb	religiousness, fear of God, devotion, piety	-.37
Elo!ao!gâxa	god-fearingness, piety, piousness	-.36
!hausenxa	remorseful; compunctious; inclined to be regretful/ to regret/etc.	-.33
|gôadīxa	fond of caring for/of handling (children)	-.33
tsâbaǁhao(xa)sib	compassion, sympathy, pity	-.33
!ao!gâxasib	respectfulness, inclination to revere/etc.	-.32
tani|namxasib	willingness to tolerate/forbear, tolerance	-.31
hō!âsens	**self-pride/ -respect**	**.31**
kaikhoe!ao!gâxa	respect for/awe of elders/superiors; honour accorded to elders etc.	.30

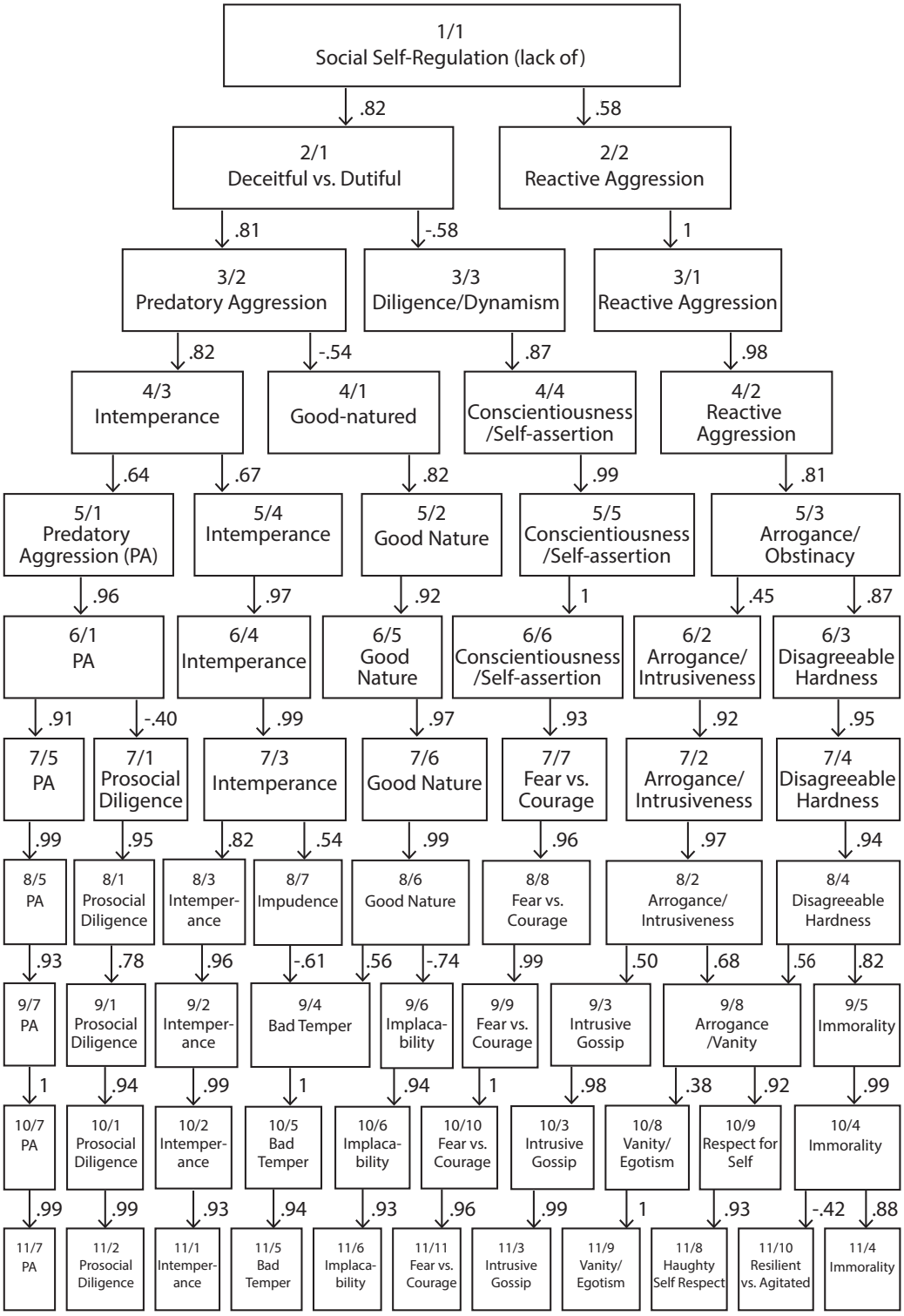
Vanity/Egotism		
ǂkhaiǂkhaisens	**1) show-off, pretentions, ostentatious, pompous, grandiose, 2) self-respecting, prideful.**	**.48**
au	**1) bitter, acidic, negative, resentful, stingy, antisocial, 2) tough, austere, hardy**	**-.46**
ǂamaxa	boastful, vaunting; bombastic, pompous; prone to show off/etc.	.38
ûitsama, ~tsaba	living, animate; lively, vivacious, full of life	-.37
koasenxa	fond of praising self	.35
oaxaedīsen	to dress up, make oneself beautiful or look good in order to stand out or attract the attention of others – especially with regard to the opposite sex	.34
gangano!nâ	unthankful, ungrateful, thankless	.32
!aob	fear, dread, fright; anxiety; terror; alarm; disquietude, apprehension	-.32
ǀkharaǀkharasa	changed, altered, converted, improved	-.31
ǂanbasen	careful/cautious, be	-.30
Resilient vs. Agitated		
taniǀnamxa	tolerant/etc., given to being	.36
mâxōǀkhā-aob/s	supporter; pers. who stands by one/sides w. one; assistant	.36
!gâiaǂgaoxa	of a happy disposition; tends to rejoice/etc.	.36
sâo!nâsib	**restlessness; fidgetiness**	**-.36**
ǁgûsiǀnammi	love, parental	.35
ǂâiǂhansen	**be anxious; worry**	**-.35**
ǁkhātama-īsib/s	**incapacity, incompetence, inability**	**-.33**
Fear vs. Courage		
ǀaexa	**"fiery"; adept, skilled, exceptional, masterful, in relation to a domain of expertise**	**-.39**
!haokhoedīsenxa	**stand-offish; acting like a stranger**	**.36**
ǁkhoaǂgao(xa)sib	**bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness**	**-.35**
ǁgoaraxa	someone who wants to be begged by others, creates situations where others are in a position to beg, withholds in order to be begged	.35
!hurixa	**jumpy, jittery, easily frightened**	**.34**
ǂkhariǂgomxa	faithless; mistrustful; of little faith, lacking in faith	.34
!ao!nâ	timid, timorous; cowardly, faint-hearted	.32
îga(n)ǀgēxa	sceptical, given to doubt; inclined to hesitate, irresolute, vacillating	.30
!ereamo!nâsib	irresponsibility	.30
ǁom(tsâ)xa	**fond of sleeping a great deal**	**.30**

Note. N = 502, 269 terms. For each factor, up to 15 total highest loading terms, with a minimum loading of .30. are shown in order of loading magnitude. Bold is used for univocal terms, those with a primary loading at least twice as large in magnitude as any cross loading.

The first factor of the optimal emic model, termed 'Intemperance' contrasts substance abuse and other externalizing behaviors with being a religious person. The second factor, 'Prosocial Diligence', contrasts readiness to help and to work, and attentive, orderly, clean, and diligent conduct with work avoidance, sloppiness, and laziness. The third factor, 'Intrusive Gossip', contrasts being a nosey gossip and tending to talk others down, with being a good and wise person. The fourth factor, termed 'Immorality' contrasts being deceitful and dishonest with being trustworthy. The fifth, termed 'Bad Temper' captures a tendency for reactive aggression and anger. The sixth, 'Implacability', is about being a humble, helpful, obedient person versus being difficult and antisocial. The seventh factor, 'Predatory Aggression', includes the most extremely negative content, referring to predatory, criminal, or even 'evil' behavior. The eighth factor, 'Haughty Self-Respect', contrasts pride, haughtiness, arrogance, and positive aspects of self-respect with more peripheral loadings related to religiousness, compassion and humility. The ninth, 'Vanity/Egotism', includes terms for vanity, boastfulness, and pretentiousness, a more clearly negative egocentrism. The tenth factor, 'Resilient versus Agitated', contrasts having a good and happy character with being restless and anxious, and the eleventh, 'Fear versus Courage' contrasts positive dynamic courage with being withdrawn, mistrustful, and timid. The pattern of factor emergence from 1 through 11 factors is displayed in Figure 2.

Figure 2

*Pattern of Factor Emergence (*N = *502)*


1/1
Social Self-Regulation (lack of)
.82
.58
2/1
Deceitful vs. Dutiful
2/2
Reactive Aggression
.81
-.58
1
3/2
Predatory Aggression
3/3
Diligence/Dynamism
3/1
Reactive Aggression
.82
-.54
.87
.98
4/3
Intemperance
4/1
Good-natured
4/4
Conscientiousness /Self-assertion
4/2
Reactive Aggression
.64
.67
.82
.99
.81
5/1
Predatory Aggression (PA)
5/4
Intemperance
5/2
Good Nature
5/5
Conscientiousness /Self-assertion
5/3
Arrogance/ Obstinacy
.96
.97
.92
1
.45
.87
6/1
PA
6/4
Intemperance
6/5
Good Nature
6/6
Conscientiousness /Self-assertion
6/2
Arrogance/ Intrusiveness
6/3
Disagreeable Hardness
.91
-.40
.99
.97
.93
.92
.95
7/5
PA
7/1
Prosocial Diligence
7/3
Intemperance
7/6
Good Nature
7/7
Fear vs. Courage
7/2
Arrogance/ Intrusiveness
7/4
Disagreeable Hardness
.99
.95
.82
.54
.99
.96
.97
.94
8/5
PA
8/1
Prosocial Diligence
8/3
Intemper-ance
8/7
Impudence
8/6
Good Nature
8/8
Fear vs. Courage
8/2
Arrogance/ Intrusiveness
8/4
Disagreeable Hardness
.93
.78
.96
-.61
.56
-.74
.99
.50
.68
.56
.82
9/7
PA
9/1
Prosocial Diligence
9/2
Intemper-ance
9/4
Bad Temper
9/6
Implaca-bility
9/9
Fear vs. Courage
9/3
Intrusive Gossip
9/8
Arrogance /Vanity
9/5
Immorality
1
.94
.99
1
.94
1
.98
.38
.92
.99
10/7
PA
10/1
Prosocial Diligence
10/2
Intemper-ance
10/5
Bad Temper
10/6
Implaca-bility
10/10
Fear vs. Courage
10/3
Intrusive Gossip
10/8
Vanity/ Egotism
10/9
Respect for Self
10/4
Immorality
.99
.99
.93
.94
.93
.96
.99
1
.93
-.42
.88
11/7
PA
11/2
Prosocial Diligence
11/1
Intemper-ance
11/5
Bad Temper
11/6
Implaca-bility
11/11
Fear vs. Courage
11/3
Intrusive Gossip
11/9
Vanity/ Egotism
11/8
Haughty Self Respect
11/10
Resilient vs. Agitated
11/4
Immorality

To explore this model and to better understand its factors in familiar terms, the correlations of the 11 factors with the etic marker scales are presented in Table 3. Following conventional interpretations of effect size, emphasis is placed on stronger correlations of .50 or higher in absolute value, and on moderate correlations .30 or higher in magnitude. What can be seen here is that only three of the eleven factors have "strong" correlations (though none over .58 in magnitude) with etic factors, though all but one show moderate correlations that help us to interpret the emic content. Prosocial Diligence associates with Big Six Conscientiousness (.53), and moderately with Pan-Cultural Three Order (.47), SAPI Conscientiousness (.43), and Big Five Conscientiousness (.38). Bad Temper correlates negatively with Big Six Agreeableness (-.53), and moderately so with Pan-Cultural Three Affiliation (-.43) and Big Five Agreeableness (-.32). (This is logical, as Big Six Agreeableness is more explicitly about the lack versus presence of antagonism and irritability, whereas Big Five Agreeableness focuses more on warmth versus coldness.) Fear versus Courage correlates negatively with Big Two Dynamism (-.52), and moderately so with Pan-Cultural Three Dynamism (-.47).

Table 3

Correlations between Khoekhoegowab Optimal Emic Solution Factors and Etic Marker Scales

	1	2	3	4	5	6	7	8	9	10	11
Big One	-.23	*.40*	*-.31*	-.27	-.23	*-.38*	-.23	-.17	*-.31*	.29	-.22
Big Two Social Self-Regulation	-.26	*.35*	-.29	*-.38*	-.25	*-.30*	-.19	-.25	*-.31*	.26	-.15
Big Two Dynamism	.08	-.20	.12	.18	.22	.01	-.16	-.19	.12	.19	*-.46*
Pan-Cultural Affiliation	-.15	.23	*-.34*	-.27	*-.43*	*-.34*	-.03	*-.37*	-.28	.26	-.04
Pan-Cultural Dynamism	.05	.11	.03	.08	.24	-.03	-.21	.17	-.12	.27	*-.48*
Pan-Cultural Order	-.26	**.50**	-.11	-.11	-.06	*-.31*	-.24	-.15	-.27	.28	-.26
Pan-African Virtue	-.25	.21	*-.37*	*-.41*	*-.31*	*-.35*	-.29	-.15	-.26	.26	-.11

Pan-African Empowered	-.03	.20	-.07	-.03	-.04	-.25	-.17	.29	-.15	*.36*	*-.35*
Pan-African Well-Being	-.02	.19	-.12	-.16	-.29	*-.34*	-.18	.10	-.15	*.43*	-.02
B5 Conscientiousness	*-.36*	*.40*	-.22	-.11	-.11	*-.33*	-.18	-.12	*-.32*	.26	-.22
B5 Agreeableness	-.20	*.34*	-.26	-.25	-.31	*-.36*	-.21	-.24	*-.32*	*.31*	-.15
B5 Emotional Stability	-.20	.19	-.21	-.04	-.14	-.11	.00	-.10	-.11	.26	*-.39*
B5 Extraversion	.10	.15	.07	.07	.27	.08	-.13	.20	-.14	.13	-.29
B5 Intellect	-.18	.16	.08	-.09	-.07	-.17	*-.32*	.01	-.04	.23	-.20
B6 Conscientiousness	*-.31*	**.58**	-.15	-.11	-.10	*-.32*	-.17	-.11	-.25	.23	-.22
B6 Honesty/Humility/Propriety	-.26	.27	*-.37*	*-.47*	-.19	-.24	-.23	-.24	*-.30*	.25	-.12
B6 Agreeableness	-.28	.26	-.23	*-.31*	**-.54**	-.28	-.08	-.19	-.28	.28	.03
B6 Emotionality vs. Resiliency	-.13	.17	-.17	-.12	-.10	-.12	-.04	.03	-.02	*.34*	**-.55**
B6 Extraversion	*.30*	-.02	.22	.28	.30	.07	-.10	.19	-.03	.13	-.17
B6 Openness	-.21	.06	*-.31*	-.10	-.15	-.25	-.15	-.05	-.18	.19	-.25
SAPI Positive Social-Relational	-.25	.28	*-.40*	*-.30*	-.26	*-.33*	-.24	-.17	-.27	*.38*	-.11
SAPI Negative Social-Relational	*.33*	-.25	*.46*	*.42*	.11	.26	.24	.11	.24	-.12	.04
SAPI Neuroticism	-.02	-.15	-.12	-.11	.03	.27	.03	-.18	.02	*-.36*	*.37*
SAPI Extraversion	.18	-.10	.13	.19	.22	-.20	-.19	-.00	.13	.12	-.17
SAPI Conscientiousness	*-.43*	*.35*	-.19	-.16	-.19	-.27	-.16	-.26	-.20	.22	-.18

Note. Khoekhoegowab factors: 1 Intemperance; 2 Prosocial Diligence; 3 Intrusive Gossip; 4 Immorality; 5 Bad Temper; 6 Implacability; 7 Predatory Aggression; 8 Haughty Self-Respect; 9 Vanity/Egotism; 10 Resilient vs. Agitated; 11 Fear vs. Courage. B5 = Big Five; B6= Big Six; SAPI = South African Personality Inventory. Stronger correlations ≥.50 in magnitude are bolded for emphasis. Moderate correlations ≥.30 in magnitude are italicized.

Tests of etic models. Correlations between the marker scales and emic factors, using varimax rotation and ipsatized data to best match the conditions under which these models were created, are presented in Table 4. A one factor model in Khoekhoegowab strongly replicated the "Big One" model of moral evaluation content (.93), which was created from a list of the most recurrent terms, in translation, among one-factor solutions from nine lexical studies representing Asia, Africa, and Europe (Saucier et al., 2014). Best match correlations for a two-factor Khoekhoegowab model with the Big Two indicated a strong match for Social Self-Regulation, but a weaker one for Dynamism, leading to moderate overall replication (average .57). The average best-matches for three rotated factors with the Pan-Cultural Three (.66) and with the

pan-African model (.52) also indicated moderate replication. Average best-match correlations of the five-factor model with the Big Five (.38) and of a six-factor model with the Big Six (.42) and with the South African Personality Inventory (.37) did not meet replication criteria.

Table 4

Correlations Between Models of 1, 2, 3, 5, and 6 Khoekhoegowab Factors (Varimax Rotation) and Etic Marker Scales

	F1_1	F1_2	F2_2	F1_3	F2_3	F3_3	F1_5	F2_5	F3_5	F4_5	F5_5	F1_6	F2_6	F3_6	F4_6	F5_6	F6_6	Average
Big One	**-.93**																	.93
B2 SSR		**-.76**	-.30															.57
B2 D		.52	**-.39**															
PC3 A				-.48	-.23	**-.66**												.66
PC3 D				**.76**	-.25	.31												
PC3 O				.11	**.55**	.38												
PAfrican 1				**-.74**	.53	.11												.52
PAfrican 2				-.37	.00	**.53**												
PAfrican 3				-.41	**.30**	.28												
B5 C							-.53	**-.63**	-.33	.06	-.26							.38
B5 A							-.43	-.45	-.15	-.16	**-.31**							
B5 ES							-.29	-.45	**-.28**	.23	.02							
B5 E							-.31	-.14	-.37	**-.41**	-.24							
B5 O							**-.25**	-.09	-.12	.11	-.12							
B6 C												**-.72**	-.74	-.58	-.35	.14	-.51	.42
B6 H/H/P												-.23	**-.49**	-.48	-.19	.29	-.09	
B6 A												-.23	-.22	-.28	-.11	**.35**	-.18	
B6 ES												.05	.02	.20	.02	-.23	**.07**	
B6 E												.07	.09	**.39**	.18	-.03	.17	
B6 O/I												-.29	-.01	.11	**-.51**	-.31	-.13	
SAPI PSR												**-.80**	-.36	-.19	.04	.26	-.03	.37

SAPI NSR	.72	**.30**	.33	.01	-.01	-.07
SAPI N	.18	-.07	-.06	.06	-.33	**.50**
SAPI E	-.04	.25	**.26**	-.20	.09	-.21
SAPI C	-.64	-.30	-.33	**.12**	.11	-.15
SAPI O	-.54	-.12	-.17	-.02	**.23**	-.22

Note. Ipsatized data, N = 502. F = Factor, (Factor 1_1 means factor 1 of 1, 2_3 = 2 of 3, etc.); Average = average best match correlations by model (best matches per joint PCA are bolded). B2 S = Big Two Social Self-Regulation, B2 D = Big Two Dynamism, PC3 A= Pan-Cultural Three Affiliation, PC3 D = Pan-Cultural Three Dynamism, PC3 O = Pan-Cultural Three Order, B5 C = Big Five Conscientiousness, B5 A = Big Five Agreeableness, B5 ES = Big Five Emotional Stability , B5 E = Big Five Extraversion, B5 I = Big Five Intellect, B6 C = Big Six Conscientiousness, B6 H = Big Six Honesty, Humility, Propriety, B6 A = Big Six Agreeableness, B6 ES = Big Six Emotionality vs. Resiliency, B6 E = Big Six Extraversion , B6 O = Big Six Openness or Originality. SAPI = South African Personality Inventory, SAPI PSR= Positive Social-Relational, SAPI NSR = Negative Social-Relational, SAPI N = Neuroticism, SAPI E = Extraversion, SAPI C = Conscientiousness, SAPI O/I = Openness/Intellect.

As described above, post hoc tests of the congruence of factors involved target rotation and canonical correlation. Congruence coefficients after target rotation are reported in Supplemental Table S8. The average values for the models indicate strong replication for the Big Two (.96), moderate for the Pan Cultural Three (.85), and a lack of replication for the remaining models (.69-.79). Using canonical-correlation analysis, the proportion of variance accounted for in the set of emic factors by the marker scales (without regard for mere differences in rotational position between the sets of factors) was: .54 for the Big Two, .50 for the Pan-Cultural Three, .40 for the pan-African three, .28 for the Big Five, .35 for the Big Six, and .30 for the SAPI model. These results suggest an advantage for the Big Two over the alternatives. In general, the simpler models replicate better, though the Big Six notably does better than the Big Five or SAPI. The superior replicability of the Big Two over models with more factors likely arises because the first two unrotated factors show less cross-population variability than extractions adding a third and especially a fifth and sixth factor.

Discussion

The goal of Study 3 was to conduct a systematic series of analyses in order to identify the optimal emic model of Khoekhoegowab person description, using responses to 269 terms from 502 native speakers of Khoekhoegowab living throughout Namibia. Starting at the maximum potential dimensional structure in both raw and ipsatized data, determined by parallel analysis and the MAP test, a series of principal components analyses with three different extraction approaches were used. After sensitivity analysis was used to compare the six candidate models, an 11-factor model using ipsatized data and equamax rotation was identified as the most robust across method variations. The dimensions were interpreted and labelled as: Intemperance,

Prosocial Diligence, Intrusive Gossip, Immorality, Bad Temper, Implacability, Predatory Aggression, Haughty Self-Respect, Vanity/Egotism, Resilient versus Agitated, and Fear versus Courage. What these factors suggest about the local culture, and how they relate and do not relate to the popular Big Five model are explored in detail in the overall discussion.

A more common PCA approach, with varimax rotation and ipsatized data, was used to create models of suitable factor numbers for comparison with marker scales representing seven etic models, two of which were created in Africa. Results indicated strong replication for the "Big One" model of moral evaluation content, moderate replication of the Big Two, Pan-Cultural Three, and pan-African models, and a lack of replication for the more elaborated Big Five, Big Six, or South African Personality Inventory models. Average congruence coefficients indicated the strongest replication for the Big Two model (.96), as did canonical-correlation analysis.

Overall Discussion

This project sought to define the optimal emic structure of character-descriptive terms in Khoekhoegowab and to test the replication of popular and proposed models of personality trait structure, to help distinguish their universal from their culturally specific aspects. In the process, we provide evidence from a highly underrepresented sub-Saharan African perspective. This study builds on prior work (Thalmayer et al., 2019) to contribute evidence from each of the three main language groups in Africa, among cultural groups with meaningfully different ethnographic characteristics and in separate geographic regions. We also contribute to the growing corpus of lexical data by using a more representative community sample of adults rather than university students and by integrating the quantitative analyses with follow-up qualitative interviews, realizing a mixed-methods approach.

In Study 1, a comprehensive list of person descriptors was refined to the 272 most frequently used and relevant to personality differences, and the resulting survey (including 11 redundant terms and 9 non-lexical additional terms for a 292-term survey) was administered to over 600 Khoekhoegowab speakers from throughout Namibia. A preliminary 11-factor emic structure using varimax rotation and ipsatized data was identified as the (marginally) most robust across method variations, using a systematic approach to maximize model elaboration and robustness. Twenty-six items that challenged the interpretation of the models were identified.

In Study 2, follow-up interviews with 23 adult Khoekhoegowab speakers assessed the meaning of 26 hard-to-interpret terms to assist in addressing the challenge of definitive interpretation in a context where very few resources for translation of local terms exist. Additionally, the usage of terms from etic models that were not identified in the local model were explored. We found that aspects of Extraversion (with emphasis on openness to others, friendliness) and of Openness (specifically, creativity) were understood by Khoekhoegowab speakers in ways which parallel the Western understanding, including associations with other components that are understood by personality psychologists to constitute these broad traits. Given the importance of these personality dimensions in the West, future work should explore a broader complement of their facets, to assess for their relative familiarity, utility, and evaluative nature. Participants were also asked about and described some of the person-descriptive terms that they borrow for daily communication from English and Afrikaans.

In Study 3, after the variable list was updated with 22 new definitions and three highly-inconsistent words were removed, the optimal emic structure was identified as that of 11-factors, using equamax rotation and ipsatized data. Marker scales for seven existing models were scored

from among the variables in the dataset (also relying on seven additional items added to the study for this purpose), after matching their content in translation to published lists of their key terms. A more typical lexical analysis approach was used to create factors for comparison with these marker scales. Of them, the Big One was strongly replicated. Moderate/partial replication was seen for the Big Two, Pan-Cultural Three, and a pan-African model based on convergences between two prior African lexical studies (Thalmayer et al., 2019). The Big Five and Big Six models, and a set of scales based on the South African Personality Inventory (e.g. Fetvadjiev et al., 2015), were not replicated.

The optimal emic model, including the most locally relevant personality content and its structure, was seen to go beyond the content covered by etic models. These 11 factors provide clues to the local culture, and ideas for future explorations. Only three of the 11 had correlations higher than .50 in magnitude with marker scales, indicating meaningful overlap with Conscientiousness and Order (Prosocial Diligence), with Agreeableness (Bad Temper), and with Dynamism (Fear versus Courage). The other eight emic dimensions had only small or moderate correlations with etic marker scales, including those from other African samples, indicating a strong component of cultural-specific content in the emic model. Future work should seek to assess the significance of this content. For example, a personality inventory based on this model could be compared to the etic inventories in translation in terms of convergent and discriminant validity and of comparative or incremental predication of life outcomes. The Chinese Personality Inventory, for example, has been found to provide incremental validity beyond imported scales in predicting life, career, and health outcomes beyond the Big Five, in Chinese and in Western samples (Cheung et al., 2013).

The first Khoekhoegowab factor, ‘Intemperance’, which contrasts religious engagement with substance use and abuse, appears to be unique in the corpus of lexical studies. In Europe such terms would be unlikely to load together on a single factor, even if a negative correlation between substance abuse and religiosity might be found. In the cultural context of Khoekhoegowab speakers, however, this contrast may make sense. Namibia is one of the most Christian countries in the world, with nearly 98% of the population identifying as Christian (Skirbekk et al., 2011). The Namibian co-authors and team members attest that religious groups and leaders strongly discourage drinking. Stating that one never drinks or even that one has never tried alcohol is not an unusual way to express one's commitment to living a moral Christian life. On the other hand, bars, breweries, and alcohol advertisements are present throughout the country, and the national rate of alcohol consumption is higher than in some other parts of Africa and the United States, though lower than in most of Europe (World Health Organization, 2014), although rates for specific language groups are unknown. Unlike in Europe, however, drinking seems to be relegated to a context of "debauchery" in Namibia. Social drinking in family, religious, or professional contexts is uncommon. It would be interesting to explore whether a similar factor might be identified in other communities, for example among Muslims, where drinking is forbidden.

The second factor, ‘Prosocial Diligence’, is somewhat more correlated with Conscientiousness than with Agreeableness marker scales, but combines elements of the two. Helpfulness and attentiveness to others is related to order, cleanliness, and diligence, and being hard working. Conscientiousness and Agreeableness are typically positively correlated with each other in the West, to a low or moderate extent (e.g. Thalmayer, Saucier, & Eigenhuis, 2011,

Appendix 1). This association could conceivably be stronger in collectivistic settings, particularly those under economic stress. In a highly individualistic context, one person's Conscientiousness might be considered their own business: your lower grades, lower earning power, or worse long-term health might be your own problem. But in Namibia where obligations to extended family are considerable and form a social safety net, your hard work, or your laziness, will unquestionably impact those around you.

The third factor, termed 'Intrusive Gossip' contrasts terms related to asking too many questions, spreading lies and rumors, and talking others down, with those related being a good and wise person. It is moderately positively correlated with SAPI Negative Social-Relational, and moderately negatively correlated with general evaluation, Affiliation, Agreeableness, Honesty/Propriety, and SAPI Positive Social-Relational. It fits into this general, broad content area, with a specific local flavor of talking too much, in an aggressive and intrusive way.

The fourth factor, 'Immorality', contrasts being deceitful and dishonest with being trustworthy. Its highest magnitude correlation is with Honesty (-.47), and it is also moderately correlated with pan-African Virtue, SAPI Negative Social-Relational and Big Two Social-Self-Regulation. While these are considered negative qualities, they are mild compared to those captured in the seventh factor, 'Predatory Aggression', which includes criminal, sinister, and violent content. This factor is the least correlated of any with etic scales. Such highly evaluative content has generally been excluded from lexical studies of personality and from personality inventories. When considering this content in terms of forming a self-report personality scale from the emic model, we found that all the terms in Khoekhoegowab are rather offensive to the

extent that it would not be appropriate for an interviewer to ask a participant if they have this quality themselves.

The fifth factor, Bad Temper captures a tendency for reactive aggression and anger. This is related to the content of the sixth, Implacability, which contrasts being envious, difficult, and dissatisfied with being a helpful, humble person, but seems to capture a quieter (rather than openly hostile) side of disagreeableness. They are both moderately correlated with Pan African Virtue, Affiliation, and Big Five Agreeableness. Their biggest distinction is that Bad Temper more specifically captures the Big Six conception of low Agreeableness, which is designed to distinguish reactive from predatory aggression (at the low end of Honesty/Propriety; Thalmayer, 2018). Another difference is that Implacability is moderately negative correlated with Order and Conscientiousness, suggesting broader passivity or passive aggression.

The eighth and ninth factors also make a rather specific distinction. Haughty Self-Respect contrasts pride, haughtiness, arrogance, and positive aspects of self-respect with more peripheral loadings related to religiousness, compassion and humility. This factor suggests some ambivalence among Khoekhoe speakers: an appreciation of the merits of dynamic self-confidence, coupled with awareness that such qualities can conflict with a desire to show humility. Its only moderate correlation with an etic scale is a negative one with Affiliation, suggesting quite culture-specific content. This contrast would be interesting to explore further with Khoekhoe speakers. Vanity/Egotism, which includes terms for vanity, boastfulness, and pretentiousness, is a more clearly negative egocentrism. It is moderately negatively correlated with Big One Evaluation, Big Two Social Self-Regulation, Big Five Conscientiousness and Agreeableness, and Big Six Honesty/Humility.

The tenth factor, Resilient vs. Agitated, contrasts having a good and happy character with being restless and anxious. It is moderately positively correlated with two of the pan-African factors (Empowered and Well-Being), with Big Five Agreeableness, with Big Six Resiliency and with SAPI Positive Social-relational, and negatively with SAPI Neuroticism. Thus, this factor is relatively interpretable in terms of etic scales. Likewise, Fear vs. Courage contrasts positive dynamic courage with being withdrawn, mistrustful, and timid, is relatively interpretable in terms of etic scales. It is particularly negatively correlated with Big Six Resiliency, and also moderately so with Big Five Emotional Stability, SAPI Neuroticism, with Big Two and Pan-Cultural Three Dynamism, and with pan-African Empowered.

It is also interesting to consider which etic scales were unrepresented the emic model. Most significantly, the Big Five and Big Six Extraversion and Openness/Intellect scales had very low correlations with all Khoekhoegowab dimensions. This result was not surprising, given prior research indicating the absence of content related to Openness in the region of French-speaking Africa (Rossier et al., 2017), and the minimal representation of Extraversion-related terms and near-lack of Openness terms in the two other African-language lexical studies (Thalmayer et al., 2019), in addition to the problems with these scales in the South African Personality Inventory (Fetvadjiev et al., 2015). Cheung and colleagues (2001) pointed out that across Asian samples, principal components analysis of NEO Big Five facets lead to a realignment of Extraversion and Agreeableness facets -- warmth, gregariousness, and positive emotions facets of Extraversion combine with trust, altruism, and tender mindedness facets of Agreeableness to form an "Affiliation" factor. In those contexts, the assertiveness, activity, and excitement-seeking facets of Extraversion combine with low compliance, modesty, and straightforwardness to form a

"Surgency" factor, configurations which differ from those seen in samples from Western, individualistic cultures. This aligns with what was found in the Maa and Supyire-Senufo lexical studies, where terms relating to boldness and surgency were associated with terms indicative of low Agreeableness (Thalmayer et al., 2019). A strongly positive view of Extraversion, as a dimension of active reward seeking, positive emotions, and being attractive and well-liked, may be not only Western specific, but even culturally specific to (or arguably culturally-defining of) the United States.

The dearth of items related to these domains was apparent when preparing the survey, and words were added to be able to construct marker scales. For this reason, these topics were explored in the qualitative interviews. On the one hand, the results of the interviews suggest that, when prompted, these concepts are understood in highly similar ways to the West. On the other hand, the lack of equivalent single and frequently-used terms encoded in the lexicon suggests that they have been of less concern relative to other person-descriptors. These distinctions can be made when prompted, but they are not the most relevant distinctions for this group. We hypothesize that this result might generalize to speakers of Maa and Supyire-Senufo, and to other groups in Africa, Asia, and potentially throughout the majority world where Extraversion and Openness content is less present. We think it likely that people in diverse societies can understand what is meant by these distinctions once they are explained, and can provide examples of people they know with these characteristics. This might be analogous to describing an imported concept such as *amae* (a Japanese term meaning sweet indulgence) to American interviewees, and asking if they can think of anyone they know who embodies the trait. The behavioral examples people would give are likely to match those given by Japanese participants:

the concept can be easily understood and used once it is explained. It is not, however, a key or frequent concept in American culture.

We are faced then with an interesting contrast, of certain Big Five domains potentially containing universal aspects -- perhaps everyone can understand them in a somewhat similar way once they are explained -- as well as culturally specific aspects -- these are not domains that arise as uniformly relevant across cultural groups. Cheung and colleagues (2001) pointed out that if a personality trait measure had been created in China first instead of the West, we might now use something different than the Big Five. Specifically, Cheung and colleagues (2001) argued that an Asian-generated model would more strongly emphasize social relations, de-emphasize creativity, exclude Openness all together, and would merge Conscientiousness and Agreeableness factors. People have a lot in common, and such a measure would probably work well in the West. It could, for example, be translated, and it would likely have adequate scale reliability and validity, and predictive validity. Its authors might claim it as a universal model. We know though that it would be missing some content that is important to those in the West, that it might combine dimensions in ways less suited to Western populations, and that it might overemphasize distinctions that are of less relevance in a Western cultural setting. It would be valid, but incomplete and a bit biased. It would tell us something meaningful about people's personalities, but also something meaningful about the culture in which it was developed. We hope the 21st century will see more flexible consideration of Big Five constructs, allowing for more rigorous investigations of what this model tells us about individuals, and what it tells us about the culture in which it emerged. We hope that the field of personality psychology will continue to expand, allowing a richer integration of universal and culturally specific aspects of individual variation.

Limitations and Future Directions

This study was designed and implemented to address key gaps in the psycho-lexical literature (African language, majority world participants, community rather than student sample) and to address limitations in the few such studies from majority world contexts (larger sample, longer variable list, significant involvement the local community in the project). Going forward, it is worth reflecting on what other aspects could be improved, and on what additional data would help to clarify or disambiguate our results.

One potential limitation of the study was the use of marker scales scored from within the single terms administered, including the several additional terms added for this purpose. This is the most common way to test etic models in lexical studies, and for several good reasons: For one, lists of adjectives work have been established as effective measures of traits (e.g. Goldberg, 1992; Saucier, 1994). Secondly, using terms allows for a consistent task for participants, important in a population unaccustomed to survey research. Third, adding translated inventories would both limit how many models could be tested given time constraints in the oral interviews, and would bring up a host of other validity issues, since there are no translated personality inventories in Khoekhoegowab, let alone any with established measurement invariance and local validity. Thus, we are not convinced that including imported trait measures is tractable in majority-world lexical studies, or that it can significantly increase the reliability of the etic tests. However, it is an excellent candidate for follow up work. A separate effort could ideally be made to translate and validate etic inventories, and then to compare them to the emic model.

Some issues that arose during data cleaning suggest possible improvements. In peer ratings, some lexical studies have specified whether the respondent should describe a liked or

admired other, or a less liked or admired person. In our case, to avoid strong evaluation and focus on normal range personality trait variation, we simply asked participants to describe someone they knew well. Patterns in the data suggested that the vast majority chose someone they thought of quite favorably, and thus, the 18 people who appeared to have described someone they strongly disliked created heterogeneity which would have reduced the factor structure, and thus these were removed. Another possible prompt that might lead to a desirably varied but not evaluatively heterogenous sample could be to describe someone for whom "you know their strengths as well as their weaknesses". Alternatively, a follow-up question about the participant's feelings or general evaluation of the target could allow for unambiguous distinctions and potentially analysis by subgroups. It would also be useful to compare self to peer reports in the context, to assess whether these are as comparable as in the West (e.g. Goldberg, 1990).

Additionally, asking closing demographic questions about the target person described could help put the results into fuller context, potentially revealing the unique social embeddedness of certain personality characteristics in this culture (e.g., are individuals high in prosocial diligence more likely to be women, older in age, or have certain roles in the community? Are those higher in intemperance likely to be young men, or those who are more ambivalent about religion?) Furthermore, additional information about the participants themselves could be useful, for example, in order to assess whether education and/or confidence level in Khoekhoegowab influences the factor structures.

Relatedly, it would be interesting to assess and attempt to quantify the degree to which this population is exposed to Western media and other Western influences, or not, and thus to

better understand the cultural distance between this population and that in which the Big Five and other models were developed. Anecdotally, we can report that the population of our study generally has a cell phone, and many a smart phone, but that data access is very expensive by local standards, which minimizes access to content such as YouTube videos that provide access to Western trends. In public discourse, it is commonly said that online presence in Namibia, especially among the youth, is predominantly restricted to social media platforms. Publicly available television stations do not offer dedicated movie channels and broadcast mainly local content, with some from South Africa, but very little from overseas. Paid TV stations run by multinationals from South Africa offer such content, but the cost is prohibitive to the general public, including our sample group. Radio (as noted in the census report, Namibia Statistics Agency, 2013) has by far the largest, almost universal coverage in Namibia. Public radio stations, about 80% of stations in the country, focuses on local content, with news bulletins, and some "youth music shout out" programs that might include some international music. Historically, of course, Khoekhoe-speaking groups in Namibia had exposure to western culture through colonization by Germans and later by Apartheid South Africa. In the study samples, many participants or their parents may have worked at some point on a farm or in a shop owned by a German or an Afrikaner. In the South of Namibia, especially among the Nama, the exposure can be traced to pre-colonial times when Cape Dutch first started to enter the country. It should be noted however that outside of work-relations, even today, indigenous groups share very little space with individuals of European descent (a remnant of the Apartheid era).

Finally, it would be interesting to explore how results might vary if free responses, such as those collected in the South African Personality Inventory project (Fetvadjiev et al., 2015; Nel

et al., 2012), were used. The lexical approach has the advantages of a conservative, comprehensive, approach that is directly comparable across the accumulated lexical evidence from around the world. On the other free responses might provide greater insight into how individuals most commonly talk about each other, and thus what distinctions are the most salient at this moment and in different contexts and among different subgroups around the country.

Conclusion

Lexical studies have been central to personality trait psychology, leading to the advent of the popular Big Five structural model. Lexical studies are also well suited to combining emic and etic approaches, as they can both define the most locally-relevant personality concepts and structure in a society, and provide a strong test of the universality of imported models. This study expanded the corpus of lexical results by providing evidence from an underrepresented context in Africa, in a language family that has not previously been explored with regard to character description. It also relied on a more representative community sample of adults rather than on university students, and it is novel in adding a mixed methods component of qualitative interviews in order to explore the meaning and context of terms in the study, as well as those missing from it. The resulting optimal emic 11-factor model (Intemperance, Prosocial Diligence, Intrusive Gossip, Immorality, Bad Temper, Implacability, Predatory Aggression, Haughty Self-Respect, Vanity/Egotism, Resilient versus Agitated, and Fear versus Courage.) provides the basis for a locally-adapted personality inventory, and it elucidates important aspects of the cultural context. A Big One model of general evaluation was strongly replicated. Moderate replication was found for the Big Two, Pan-Cultural Three, and a hypothesized pan-African model based on

prior lexical results in two other African languages. Replication criteria were not achieved for the Big Five, Big Six, or South African Personality Inventory models.

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Supplemental Materials

Table S1

Geographic, Linguistic, Method, and Samples Characteristics of Prior Lexical Studies

Region	Language Group	Language	Citation	Variable selection	Rater	N	Terms	Sample	Age	Gender	Etic approach
Africa	Nilotic	Maa	Thalmayer, Saucier, Ole-Kotikash, & Payne, 2019	Broad	Peer	320	190	Rural villagers		50% women	Marker scales for 2, 3, 5, and 6 factor models
	Niger-Congo	Senoufo (Supyire)				217	208				
America (North)	Indo-European	English	Goldberg, 1990	Broad	Self	187	1710	University students		-	*Not yet relevant*
			Saucier, 1997	Broad	Self	723	500	Community	*M* = 52, *SD* = 13	57% women	Marker scales for Big Five
Asia (Central)	Altaic	Turkish	Goldberg & Somer, 2000	Broad	Self	631	498	University students		-	Marker scales for Big Five
Asia (South)	Indo-European	Hindi	Singh, J. K., Misra, G., & De Raad, B. 2013	-	-	511	295	University students	M = 23	38% women	Markers Dutch eight-factorial-trait system
Asia (South East)	Austronesian	Malay	Mastor, Thalmayer, Swami, & Saucier, *in preparation*	Broad	-	-	-	University students		-	Marker scales for 1, 2, 3, 5, and 6 factor models
Asia (East)	Sino-Tibetan	Chinese	Zhou, Saucier, Gao, & Liu, 2009	Broad	Peer Self	500 (peer) 451 (self)	413	University students	17 to 24	49% women	Marker scales for 1, 2, 3, 5, and 6 factor models
	Korean	Korean	Hahn, Lee, & Ashton, 1999	Narrow	Self	435	406	University students	not reported	not reported	Markers scales for Big Five
Austronesia	Austronesian	Filipino	Church, Katigbak, & Reyes, 1998	Broad	Self	740	502	University students		-	Big Five, English by bilinguals
Europe	Indo-European	Croatian	Mlacic & Ostendorf, 2005	-	Self Peer	515 (self) 513 (peer)	483	University students	-	-	2 Big Five measures

Czech	Hrebickova, 1995 (not published)	-	Self	397	358		17 - 81	-	Big Five with NEO-FFI
Dutch	De Raad, Hendriks, & Hofstee, 1992	-	Self Peer	600 (400 Brokken	551	University students	, 1978, + 200 new)	more women	Comparison of content
French	Boies, Lee, Ashton, Pascal, & Nicol, 2001	-	Self	418	388	University students	*M* = 23	74% women	Marker scales for Big Five and Six
German	Ostendorf, 1990; Angleitner, Ostendorf, & John 1990 (created taxonomony of terms)	-	Self Peer	408 (self) 394 (peer)	430	University students?		-	Marker scales for a Goldberg Big Five list?
Greek	Saucier, Georgiades, Tsaousis, & Goldberg, 2005	Broad	Self	901	400	University students	M = 23	-	Markers for B1, B2, B5
Italian (North)	Di Blas & Forzi, 1999	-	Self	369	369	78% University Students	16-172 (M = 23.5)	69% women	Big Five and EPQ
Italian (South)	Caprara & Perugini, 1994	-		862	260	not reported	17 - 60 (*M* = 25.8; *SD* = 9.7).	50% women	Compared content
Polish	Szarota, 1996	Narrow	Peer	369	287	High school students	*M* = 16.6	not reported	Compared content
Romanian	Burtăverde & De Raad, 2017	-	Self	515	412	University students		-	Big Five
Serbian	De Raad, Smederevac, Čolović, & Mitrović, 2018	-	Self	500	340	2/3 students, 1/3 community,	18-72, *M* = 25.5	57% women	Compared content

		Spanish	Benet-Martinez & Waller, 1997	Broad	Self	894	299	University students		-	Big Five inventories
	Finno-Ugric	Hungarian	Szirmak & De Raad, 1994	Narrow	Self	388	561	University students (mostly)	*M* = 25	43% women	Compared content
			De Raad, Nagy, Szirmak, & Barelds, 2018	-	Self	1503	560	community sample?	29,7	70% female	Big Five, Six and other inventories
Middle East	Afro-Asiatic	Hebrew	Almagor, Tellegen, & Waller, 1995	Broad	Self	637	252	University students	M = 26	62% women	Compared content to Big Seven

Note. Variables selection types are classified as "broad" if they include evaluative terms, emotional statues, characteristic effects, as in Saucier (2008, p. 1581). Emphasis here is on a complete list of languages assessed, rather than inclusion of all historical examples within English and German.

Table S2

Preliminary Emic Model, Ipsatized Data, Varimax Rotation

	Component										
	1	2	3	4	5	6	7	8	9	10	11
i33 !gam!gamsenxa: humble; meek, docile, submissive; self-deprecating	-.61	.28	-.12	-.10	.02	-.06	-.07	-.11	-.02	.11	.00
i55 ǁnâu|namxa: obedient; tractable, amenable	-.59	.20	-.19	-.10	.08	-.10	.04	-.05	-.03	.02	-.06
i273 |namxa!nâ: loving, affectionate (w. element of compassion); tender	-.59	.16	-.16	.01	-.11	-.05	.02	.07	.08	.10	.05
i106 mîǁnâxa: likes talking people down, defame	.58	-.10	-.01	.03	.01	.12	.10	-.03	-.05	.02	.02
i66 kaikhoe!ao!gâxa: respect for/awe of elders/superiors; honour (accorded to elders/etc.)	-.57	.17	-.25	-.14	.00	-.16	.00	.02	.05	.07	-.01
i263 tani|namxa: tolerant/etc., given to being	-.57	.16	-.21	.01	.01	.07	.01	.25	-.07	.12	.08
i99 !gôaǁnāxa: disdain, scorn, have a low opinion of others	.56	-.17	.03	-.03	.06	.08	-.05	-.04	-.10	.09	.09
i239 sîsendūraxa: keen/eager to work;	-.56	.01	.02	-.14	-.03	.08	.07	.18	.10	.05	-.20
i221 !amku: decent, respectable; proper, orderly; tidy, neat	-.56	.04	.00	-.08	.04	.05	-.01	.15	-.01	.09	-.13
i50 |khomxaǂgao: easily moved to pity, soft-hearted; merciful, sympathetic	-.55	.21	-.05	.02	.03	-.01	-.02	.03	-.03	.13	-.07
i1 hui|nam(xa): helpful, eager/keen to help (always)	-.55	.11	.10	.00	-.03	.07	-.01	-.09	-.16	.07	.02
i287 koasa-anu: praise-worthy, commendable, laudable	-.54	.10	-.22	-.15	-.13	.03	-.09	.06	-.07	.04	.08
i14 ǂhomixa: mendacious, deceitful, inclined to lie	.53	.03	-.04	.12	.04	.11	.21	.08	.17	-.05	.00
i164 ôasasib: diligence, assiduousness industriousness, willingness	-.53	.08	.00	-.12	.02	.16	.08	.04	.12	.07	-.10
i232 !gâidīxa: charitable; inclined to…	-.53	.04	-.17	.04	.04	.04	-.04	.11	-.01	.11	.00
i124 mâxō|khā-aob/s: supporter; pers. who stands by one's side; assistant	-.53	.08	-.10	-.02	.01	.11	.07	.08	-.08	-.01	.13
i163 ganganxasib: thankfulness, gratefulness, gratitude	-.53	.13	-.25	-.08	-.03	-.05	-.03	.04	-.05	.09	-.05
i176 tani|namxasib: willingness to tolerate/forbear, tolerance	-.52	.09	-.18	-.15	-.01	-.06	-.01	.06	.14	.11	.02
i279 sîsenhuixa: helpful, ready to help	-.52	-.02	-.01	.02	.09	.11	.14	.20	.20	-.02	-.20

i61 sorasa 1: disdain, disregard; undervaluation, underestimation	.52	-.17	.06	.07	-.08	.12	-.13	.05	.04	-.04	.03
i80 ǀûba(ǂgao)xa: forgiving; (generally) willing to forgive/etc.	-.52	.30	-.10	-.01	.11	-.03	.07	-.03	.02	.04	-.09
i151 ǂgomsabeb/s: believer; follower	-.52	.12	-.19	-.27	.04	.04	-.05	-.07	.05	-.05	.10
i159 !gâi(si)b: goodness; (good) quality; good-naturedness; excellence	-.52	.15	-.11	.08	.01	.07	-.11	.08	-.04	-.09	.15
i167 ǂhanu-aisib: justice; justness; righteousness; fairness, equity; integrity (quality of)	-.51	.15	-.23	-.10	.09	.02	-.04	.07	-.02	.10	.11
i224 ǂhomi!nâ: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account)	.51	.02	.08	.16	.02	-.05	.18	-.13	.14	-.07	.04
i4 !gâi: good, excellent; good-natured (of: pers.)	-.51	.19	-.02	.03	-.12	.07	.07	-.08	-.22	.04	.12
i111 mari!gunu(xa): greed for/love of money, avarice	.51	-.05	-.01	-.03	-.08	-.05	.23	.02	.00	.03	-.06
i158 ǂhau!nâ(xa)sib: honesty, uprightness; straightforwardness; integrity	-.51	.22	-.22	-.14	.09	.03	-.11	.14	-.04	-.06	.10
i187 sîsen(tsâ)xasib: diligence, industriousness, keeness to work; activeness	-.50	.05	.04	-.05	-.03	.03	.08	.06	.07	.10	-.17
i17 surixa: envious, inclined to envy/begrudge	.50	-.09	-.18	.04	.05	.05	.05	.15	.04	-.07	.13
i102 ǂhôaxa: gossipy, tattling; full of news, bursting w. news	.50	.05	-.05	.10	.04	.13	.20	-.07	.10	-.08	-.20
i153 !anu(si)b: cleanness, cleanliness; pureness; holiness, sacredness, sanctity	-.50	-.04	-.16	-.15	.01	.20	.01	.24	.04	.01	-.05
i22 ǂgomǂgomsa: trustworthy, reliable, dependable; credible	-.49	.28	-.06	-.12	.06	.01	-.04	-.05	-.21	.03	.06
i197 !gâisîsenǁkhāsib : effectiveness	-.49	.01	-.06	-.03	-.14	.17	.03	.08	.01	.10	-.06
i201 sîsendūraxasib: eagerness to work	-.48	-.09	-.01	-.09	-.01	-.01	-.06	.07	.09	-.06	-.18
i177 ǀhôakao(xa)sib/s: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence	.48	.10	.20	.18	.06	.21	.14	-.08	.12	.08	.05
i89 aiǂhomisenxa : prepare (o.s.), (advance), inclined to	-.48	.08	-.01	-.18	.05	.03	-.17	-.02	-.07	-.02	-.21
i165 ǁnâu!āxasib: intelligence; prudence; sagacity	-.48	.29	-.03	.05	-.03	.04	.04	.05	.05	.07	.04
i8 ǀopesa: lazy, slothful, indolent	.48	.13	-.02	.05	-.12	-.10	.14	.07	.03	.02	.25
i157 tsauraǂgaosib: soft-heartedness	-.47	.38	-.20	-.03	-.03	-.03	.00	.08	.10	.07	.00
i84 ǂkhî : satisfied, contented; content, willing to accept circumstances, happy; peaceful; tranquil (of: mind)	-.47	.31	-.03	.02	-.17	-.01	.11	.07	-.07	-.08	-.06
i31 ǂkhôaxa: harmful; likely to damage/etc., damaging	.47	.00	-.01	.21	.09	.04	.16	.13	.09	.02	-.05

i82 ǂgom!gâsa: trustworthy, reliable	-.47	.23	-.16	-.16	-.07	.10	-.10	.02	-.09	.07	.22
i18 xū!gunuxa: greedy, rapacious, avaricious, covetous	.47	-.03	-.09	.00	.04	-.09	.19	.06	.02	-.01	-.04
i7 ǀnamǀnamsa: loveable, likeable, ami(c)able; respected, cherished	-.47	.17	-.02	.10	-.06	-.01	.08	-.09	-.16	.15	.10
i170 tsâbaǁhao(xa)sib: compassion, sympathy, pity	-.47	.19	-.23	-.07	.01	.03	-.27	.02	.07	.01	.02
i85 danxa: inclined to be victorious, given to winning	-.47	.12	-.03	-.07	-.01	.16	-.10	-.03	-.18	-.06	-.01
i29 khoe(xa)!nâ: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors)	-.46	.34	-.06	.01	-.11	.10	-.09	-.06	-.03	.10	-.02
i189 !khaera(si)b/s: untidiness, slovenliness; slipshod(di)ness	.46	.23	.05	.05	-.09	-.07	.11	-.20	.04	-.03	.23
i186 !gôao(!nâ)sib: disrespectfulness; irreverence	.46	-.19	.20	.04	.05	.03	-.01	-.19	.07	.01	.07
i199 ǁgaisib: badness; rottenness; evil; shoddiness; wickedness, vileness, ill-naturedness, maliciousness; malice	.46	-.04	.23	-.06	.13	.15	.02	-.04	.04	.00	.11
i120 ǀhoe-aob/s: scandalmonger, gossiper	.46	-.01	-.13	-.05	.04	.09	.19	-.27	-.01	.12	-.05
i190 tsū(si)b: badness; evil, baseness, wickedness, sinfulness; wrong; unwholesomeness; inferiority	.46	-.16	.17	.03	-.01	.06	-.11	-.12	.10	-.02	.03
i166 !ûisens: good behavior; habit/characteristic of taking care of o.s.	-.45	.08	-.06	-.18	-.17	.09	.04	.05	.00	.19	.06
i247 ǀgôaǀnam: fond of children	-.45	.09	-.15	.11	-.04	-.02	-.02	.15	.03	.19	-.12
i154 gā-aisib/s: cleverness, intelligence, wisdom; sagacity	-.45	.11	-.08	-.10	-.10	.19	-.09	-.08	-.03	-.04	.26
i54 ǁgai : bad; rotten; evil; of poor quality, shoddy; wicked/vile/ill-natured/malicious (of: character)	.45	-.07	.12	-.03	.15	.11	.03	.15	.10	.06	-.07
i202 ǁgûsiǀnammi: love, parental	-.45	.08	-.25	-.05	-.16	.03	.09	-.02	-.05	.05	.15
i19 ǁkhāǁkhāsen(ǂgao)xa: studious; eager to learn, desirous of learning	-.44	.21	.02	-.17	.04	.13	-.02	.01	-.14	-.11	-.17
i168 Elo!ao!gâb: religiousness, fear of God, devotion, piety	-.44	.19	-.26	-.23	.00	-.03	-.04	-.17	.09	.04	.11
i24 gāgāsi: spiritual	-.44	.18	-.22	-.27	.01	.04	-.16	-.08	.00	.04	-.06
i259 !ûi!gâxa: attentive; mindful of (people/material things); painstaking, meticulous	-.44	.05	-.11	-.14	-.09	.14	.03	.18	.11	.10	-.21
i86 sîsenǀopesa: work-shy, shirking work; aversion to work	.44	.12	-.06	-.01	-.06	-.05	.13	.01	-.01	.06	.41
i45 !norasa: free; independent; unimpeded, unrestricted; safe; secure	-.43	.19	-.11	-.13	-.09	.09	-.10	-.02	-.08	.02	.07
i21 māsenxa: available, willing, ready	-.43	.21	.05	.07	.13	.03	-.07	-.10	-.06	.05	-.11

i169 gāxa!nâsib: cunning, slyness, craftiness, wiliness; trick(ery), deceit	.43	.03	.24	.00	.08	.20	.06	-.04	.19	-.03	-.04
i119 ǂgae‡gui-aob/s: leader; manager, director; person in charge	-.43	-.02	-.27	-.22	.02	.15	-.14	.05	-.14	-.13	-.05
i262 anusa: worthy	-.43	-.01	-.06	-.07	-.11	.06	.02	.07	-.03	.01	.18
i292 !gâia‡gaoxa: of a happy disposition; tends to rejoice/etc.	-.42	.15	-.10	.06	-.05	-.01	.25	.10	-.06	-.04	.02
i136 !hāsara-aob/s: denouncer; s.o. prone to insult	.42	-.11	.15	.03	.22	.18	.06	-.19	-.10	.07	.04
i105 sorasa 2: contempt, disdain; low esteem; underestimation; being underrated	.42	-.01	.05	.18	-.14	-.03	-.11	.12	.02	.08	.04
i121 ǂgae‡hapu-aob/s: seducer; deceiver; s.o. leading astray	.42	-.10	-.03	.08	.32	.08	.15	-.22	-.01	.08	-.04
i288 ǀapexūxa: inclined to betray	.42	.13	.16	.04	.30	.02	.22	-.16	.06	-.06	-.12
i250 ǂūo: without manners; characterless, without personality; base	.42	.01	.24	.13	.08	.23	.04	-.20	.03	-.14	.05
i155 gāxa!nâxasib: fraudulence, wiliness, deceitfulness	.41	.12	.25	.04	.25	.20	.16	-.03	.18	.07	.01
i26 ǀkhomo!nâ: ruthless, pitiless; merciless	.41	-.21	.05	-.09	.02	.04	.13	.12	.05	.03	.06
i270 ǁnâuǀnamo!nâ: disobedient, disrespectful, stubborn	.41	-.13	.17	-.03	.07	.04	.08	-.24	.13	-.05	.11
i131 ǀkhae-aob/s: donor, person who makes a gift, giver; pers. who blesses	-.41	.08	-.22	-.12	.22	-.01	-.11	.03	-.11	-.07	.03
i138 !ûi-aob/s : shepherd, herdsman; nurse; guard; watchman, security guard; scout (mil.); sentry; bodyguard	-.41	.07	-.29	-.06	.14	-.03	-.12	.01	-.12	.03	-.13
i230 gangano!nâ: unthankful, ungrateful, thankless	.41	.04	.19	-.09	.18	-.11	.04	.04	.11	-.20	.11
i229 hara: open-hearted, extroverted, kind - from hara (wide, roomy, spacious)	-.41	.22	-.16	.11	-.20	.18	-.11	-.08	.03	.17	.00
i142 ǂkhabadī-aob/s: wrong-doer, evil-doer	.40	-.31	.14	.23	.11	.23	.09	-.21	.12	.07	.02
i87 tsū!ō: ill-fated, unlucky, unsuccessful (in an endeavour)	.40	-.02	.04	.06	.15	-.06	.05	.14	.07	-.04	.02
i88 ǂgomai‡nûixa: rely on others, inclined to	-.40	.18	.00	-.04	.04	.07	-.22	.03	.03	-.04	-.08
i135 !gari-ao : brave/courageous man/woman; hero	-.40	.14	-.29	-.03	.04	.13	-.20	-.04	-.06	-.03	.04
i244 ǀō-aisa: special; unique; distinctive; exceptional	-.40	.17	-.12	.01	-.14	.02	-.08	.18	-.05	.00	.22
i266 sâsa: calm/restful/relaxed/tranquil (of: mind), placid; calming	-.39	.31	-.23	-.19	.08	-.05	.02	.25	-.01	.02	-.03
i200 gangano!nâsib: unthankfulness, ingratitude, thanklessness	.39	-.01	.14	-.14	.07	.01	.05	-.11	.22	-.08	.00
i231 ǂâio!nâ: thoughtless; unthinking; absent-minded, inattentive	.39	-.05	.27	.04	.11	-.20	.10	.00	.13	-.09	.09

i148 tsūdī-aob/s: wrongdoer, evildoer, malefactor; culprit, offender; criminal	.39	-.15	.21	.16	.31	.09	.06	-.10	.05	.04	.04
i65 ǀgore(tsâ)xa: prayerful, inclined to prayer	-.38	.19	-.23	-.37	.01	-.03	-.07	-.02	.04	.08	.03
i286 dīǁkhā: feasible, practical, able to do, competent	-.38	.10	.02	-.12	-.17	.25	-.05	.15	.11	.00	-.04
i56 ǁnâuo!nâ: disobedient (out of neglect, as e.g.child)	.37	-.04	.01	.07	.00	.07	.03	.09	.17	-.17	.14
i123 ǂhôatani-aob/s: scandalmonger; messenger	.37	-.02	-.18	.00	.19	.10	.05	-.24	-.07	.10	-.27
i58 ǂhôaǂûna: nos(e)y, inquisitive	.37	-.04	-.20	.12	-.13	.15	.21	.01	.06	-.11	-.23
i214 ǂō(!om): thrifty, parsimonious, frugal; narrow; tight/constricting (of: clothes); confined (of: house);	.37	.00	.08	-.18	-.06	-.19	.13	-.09	.01	-.08	-.08
i161 anusib: dignity, suitability, appropriateness, seemliness	-.37	.01	-.16	-.11	-.11	.06	-.03	.07	-.09	-.01	.36
i237 ǀhūǀhūsa: distressing; annoying	.37	-.19	.17	.09	-.11	-.05	-.05	-.24	.00	-.17	.09
i94 kare(tsâ)xa: praise/etc., prone to	-.37	.20	-.21	-.03	.05	.11	-.11	-.10	.00	.04	-.18
i150 ǀapemā-aob/s: adviser, counselor, s.o. giving unsolicited advice	-.37	.11	-.31	-.21	-.01	.08	-.18	.00	.02	.01	-.07
i233 dī(tsâ)xa: industrious, active	-.37	.04	-.01	-.02	-.14	.11	-.02	.17	-.10	.12	-.14
i139 tsûtsû-aob/s: tormentor; torturer	.37	-.18	.29	.13	.15	.12	.09	-.09	.15	.09	.01
i35 tsūdīxa: wrong/harm, prone to do, harm, inclined to (cause), w. criminal tendency	.36	-.20	.25	.17	.01	.15	.06	.19	.16	.03	.01
i267 !gapaǀîhesa: appealing/pleasing (to look at); attractive	-.36	.19	-.27	-.22	-.09	-.11	-.22	.09	.01	.13	-.07
i143 ǂhumi-aob/s: liar, (habitual/inveterate)	.36	.13	.13	.22	.11	.21	.06	-.09	.24	.05	-.09
i43 !khamxa: pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight	.35	-.21	.14	.34	.02	.14	.03	.06	.09	-.05	.09
i117 ǀkhāǁhûixa: biased, partisan, partial (inclined to choose sides)	.35	-.15	-.06	-.07	-.12	-.08	.08	.09	-.18	-.06	-.01
i32 ui-uisa, ui-uixa: disgusting/revolting/abhorrent/horrible/sickening	.35	.11	-.02	.03	.33	.01	.12	.20	.18	-.06	.03
i127 ǁore-aob/s: sinner; offender, miscreant; transgressor; wastrel; good-for-nothing	.35	-.11	.27	.19	.03	.28	.17	-.10	.25	.04	.07
i107 ǂgomxa: gullible, credulous, over-trusting	-.34	.23	-.08	-.15	-.06	.13	-.05	.14	.12	.07	-.06
i71 Elo!ao!gâxa: god-fearingness, piety, piousness	-.34	.21	-.23	-.26	-.11	-.04	-.08	-.22	.09	.08	.03
i243 gāxa: wily, foxy, tricky	.34	-.05	.22	.16	-.09	-.04	.23	-.12	.00	-.12	.14

i15 ǂoaǂamsa: exceptional, particular, outstanding, distinctive; special	-.34	.23	.06	-.03	.03	.13	-.14	-.04	-.20	-.08	.16
i220 tsū: bad (f: name/reputation); evil (of: reputation); wicked, evil, foul, mean, malevolent, depraved, base (of: character)	.34	-.29	.22	.17	.01	-.03	-.10	-.12	.06	-.04	.03
i227 ǀgôadīxa: fond of caring for/of handling (children)	-.34	.13	-.23	.01	.01	.01	-.18	.07	.17	.00	-.04
i162 ǀnamo(!nâ)sib: lovelessness, unlovingness, coldness	.33	.07	.23	-.08	.05	-.04	.05	-.05	.15	.02	.04
i175 dūraxasib: covetousness, cupidity	-.33	.03	-.06	-.10	-.10	.10	-.13	.04	.09	-.15	-.03
i196 !ao!gâxasib: respectfulness, inclination to revere/etc.	-.33	.19	-.24	-.20	-.02	-.16	-.27	-.07	.01	.16	.03
i207 ǂanbasen: careful/cautious, be	-.33	.02	-.10	-.15	-.04	.12	.01	.07	-.18	.20	-.02
i269 ǁaexa: composed, calm; having/w. ample time	-.32	.11	.02	-.02	-.14	.06	-.18	.18	-.10	.11	-.15
i13 ǂanapega : willful; stubborn; perverse; intentional, deliberate	.32	-.11	.02	.25	-.17	.03	.01	.12	.29	-.08	.20
i275 ǂnoaguxa: quarrelsome, argumentative	.32	-.27	.29	.08	-.31	.15	.00	-.12	.06	.01	-.02
i95 ǂgom!gâo!nâ: distrusting	.31	-.13	.13	-.07	.23	-.16	.00	.04	.09	-.17	.15
i182 !ereamo!nâsib: irresponsibility	.31	.07	.27	.05	.03	-.23	.09	-.07	.16	.05	.19
i100 ǀāxare(he)sa: cursed	.31	.02	.05	.19	.31	-.01	-.07	.09	-.07	.06	.11
i52 ǀûbao!nâ: unforgiving, implacable	.31	-.16	.05	-.08	.02	-.12	-.09	.09	.13	-.09	-.07
i81 ǂanǂansa: well-known, famous, renowned; notorious (of: criminal)	-.30	.10	-.06	-.01	-.15	.22	-.07	-.06	-.05	.05	.00
i276 am!nâxa: prone to tell lies	.30	-.22	-.04	.07	-.27	.17	.10	-.21	-.06	-.14	-.07
i272 hîǀhuruxa: squander/etc., prone to	.30	-.05	.25	.15	-.06	.01	.15	-.14	.02	-.20	.12
i96 omkhôaxa: burgler, inclined to burgle	.30	.14	-.01	.20	.21	.02	-.05	.17	.05	.03	.03
i28 !khausa: wild; intractable, refractory; vivacious, excessively active, hyperactive	.30	-.27	-.05	.21	.16	-.05	-.03	.27	.12	.01	-.03
i284 !hōxa: derisive, quick to deride/etc.	.29	-.10	.22	.06	.08	.14	.26	-.22	-.08	-.03	.01
i174 ǁkhoaǂgao(xa)sib: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness	-.29	.03	-.12	-.14	.00	.22	-.24	.02	.06	-.18	.00
i252 !hao|goraxa: segregative; separatist; wh. tends to divide/segregate people/etc.	.28	.12	.03	-.10	.11	.11	-.01	.02	-.02	-.20	.12
i93 !onkhaoxa: late, unpunctual, tardy, prone to be	.28	.08	.09	.05	-.13	-.11	.06	.09	.04	-.05	.19
i222 ǁae tama: careless, indifferent, nonchalant; inconsiderate	.28	-.06	-.02	-.10	.02	-.04	.08	-.20	.11	-.03	.05

i195 !gâi!ō(si)b: luck, luckiness, good fortune; bliss, blessedness, joy	-.28	.19	-.04	-.10	.02	.05	-.20	.03	-.09	.05	.00
i112 ǂâi!gâxa: inclined to rethink; thoughtful; heedful, meditative, pensive; strong-minded	-.27	.18	-.05	-.11	-.11	.08	-.12	.10	-.19	.18	-.25
i37 ǂkhaisa: awake, vigilant	-.27	.11	.02	-.08	-.12	.17	-.07	-.06	-.16	-.12	-.10
i23 ǂkhîo!nâ: dissatisfied, discontented, disgruntled; unhappy; upset	.27	-.25	-.02	-.05	-.08	-.12	-.17	.20	.13	.03	.12
i194 !ûisentama-īsib: self-neglect, indifference concerning o.s.	.26	.12	.14	.16	.11	-.19	.07	-.17	.15	-.13	.00
i280 supuǂgao(xa): soft, inclined to weep (esp. of: man)	-.26	.20	-.08	-.03	-.09	-.11	.09	.20	.12	.02	.10
i51 ǀkhopexa: inclined to begging, (wh. is) in habit of begging; mendicant	.25	.16	-.03	.21	.05	-.14	.10	.15	.04	-.06	-.02
i48 ǀgaisa: strong, powerful, forceful, robust; mighty, potent; loud (of: sound); burly/sturdy (of: physique); vigorous	-.25	.01	-.01	-.09	.05	.22	-.12	.22	-.24	.03	.04
i251 dāsāxa: adulterous/etc., tendency/propensity to stumble	.25	-.01	.23	.10	.00	-.08	-.02	-.06	-.07	-.20	-.04
i219 tauxa: jealous	.24	-.23	.08	.14	.00	-.12	.10	-.06	.01	-.18	-.06
i141 ǂansabeb/s: well-known person, public figure	-.24	.08	-.05	.07	-.17	.20	-.12	.08	.04	-.02	.03
i223 ǂgomheǁoasa: untrustworthy, unbelievable, incredible;	.20	-.05	.06	-.08	.12	-.02	-.06	.00	.04	-.07	.01
i179 dūrao!nâsib: dullness, listlessness, apathy; disinclination, lack of appetite	.20	-.17	-.03	-.10	.03	-.19	.08	.08	.05	.09	.03
i78 ǀhapixa: guilty	.20	-.16	.10	.06	-.03	-.14	.00	.00	.06	.03	-.04
i3 !gom!gâxa: difficult to resolve; settle; complicated, not clear-cut (of: e.g. legal case), or understand (:of person/issue)	.19	-.14	.14	-.12	-.04	-.02	-.09	.08	-.02	.18	.14
i75 ǁomo!nâ: sleepless (of: pers.), unable to sleep	.18	-.06	.06	-.08	.00	-.05	-.14	.15	.13	.05	.01
i98 !ereamxa: responsible	-.18	-.11	-.10	-.06	-.12	.15	-.15	-.03	.02	-.02	-.13
i63Z ǁaixasa: rage, fury, anger; (poet.) wrath; (poet.)	.23	-.59	.05	.00	-.04	-.06	.06	-.01	.03	-.15	.06
i97 !haeǁaixa: hot-tempered, irascible; choleric	.16	-.56	.05	.03	-.10	.07	.08	.07	.02	-.05	.04
i156 !haeǁaixa(si)b: hot-temperedness, irascibility; choleric temperament	.13	-.56	.12	-.03	-.11	.07	.14	-.04	.00	-.01	.09
i53 ǁē: audacious; insolent, impudent, impertinent; bold, dauntless, reckless	.29	-.49	.13	.06	-.17	.07	-.06	.01	.04	.08	.00
i274 ǀaraxa: quick to show annoyance/etc.; short-tempered	.17	-.46	.25	-.02	-.09	-.08	-.06	-.15	.17	-.07	-.05

i27 ǂkhabaxa: aggressive, antagonistic; liable to antagonise, likes to pick fights; militant; antagonistic; liable to antagonise	.43	-.45	-.07	.22	-.09	.15	.01	.05	.12	.04	.11
i40 mîxa: sardonic, tending to run down/ridicule people (esp. of adults w. regard to children)	.33	-.42	-.16	.09	-.11	.04	.11	-.13	-.07	.02	-.12
i16 kai-am!nâ: loud-/big-mouthed, ǁîb ge kaise a ~ "He is all talk and no do"; braggart	.34	-.38	-.21	.15	-.20	.20	.10	-.08	.02	-.03	-.06
i36 !ao(he)sa: feared, dreaded; frightening, frightful; fearsome; (wh. is) constantly feared	.05	-.38	.09	.09	.26	.02	-.02	.13	-.02	-.05	.05
i57 ǂhanu: straight; correct, proper; right	-.37	.38	-.06	-.09	-.03	.06	-.15	.01	-.17	.06	.06
i185 !garidanasib: obstinacy, stubbornness, mulishness; dullness, dim-wittedness; determination, headstrongness; resolution, resoluteness	.26	-.37	.22	-.06	-.22	-.04	.01	-.15	.04	-.04	.07
i225 ǂkhupixa: noisy, loud; inclined to be noisy/loud (of: pers.)	.26	-.37	-.01	.22	-.21	-.02	.11	-.23	.09	-.24	-.02
i236 !nâudanaxa: obstinate, stubborn, pig-headed; obdurate; mulish, determined, resolute	.21	-.35	.29	-.02	-.10	.06	.02	-.14	-.05	.00	.05
i34 !gari-am!nâ: stentorian, w. a loud voice (2); hard-mouthed (of: horse) (1)	.23	-.33	-.23	.17	-.28	.21	.14	-.01	.05	-.06	-.06
i260 ǂau: tame; docile, tractable; slow; slow (and soft), suave (of: speech); gentle	-.13	.33	-.11	-.10	.11	-.30	-.10	.13	.08	.12	.05
i44 !khom!nâxa: tend to jeorpadise, destroy	.24	-.27	.14	.14	.23	-.07	.14	.03	-.06	.05	-.07
i198 !gariǂgao(xa)sib: stoicism, toughness	.00	-.23	.02	-.04	.02	.10	-.04	-.06	-.06	.05	.01
i283 !gom|gausa: 1 arduous, difficult to attain; 2 important, significant; precious	.06	-.21	.14	-.15	-.05	-.05	-.09	.08	-.09	.08	-.03
i76 ǁhapoxa: dreamy, inclined to daydream; inclined to dream	-.05	.19	.02	-.10	-.07	.09	.02	.14	-.07	-.07	-.10
i278 karosaǂgao: hard-hearted, relentless; cruel	.19	-.13	.40	-.12	-.02	.00	.07	-.01	-.03	.01	-.12
i265 ǁore(tsâ)xa: naughty/wicked (of: child); refractory; sinful; inclined to transgressing/etc.	.31	-.19	.38	.13	-.07	.12	.11	-.24	.14	-.06	.15
i255 karosa: strict, stern, harsh	.05	-.09	.35	-.12	-.02	-.06	.06	.03	.06	-.08	.02
i264 ǁnâu|oa: disobedient; stubborn	.19	-.02	.34	.03	-.11	-.08	-.05	-.13	.08	-.09	.24
i240 tsū(ke)!gâxa: difficult, dangerous (of: e.g. foe/road), hazardous; accident-prone (of: pers.), w. high risk of accident	.29	-.04	.33	.04	.15	.03	-.02	.02	.11	-.09	.05
i140 !âitsâ-aob/s: examiner; tempter, temptress	.20	-.02	.33	-.03	.05	-.08	.14	-.01	-.10	.06	-.07

i217 supudana: bright, quick to grasp, quick in/on the uptake (esp of: child), intelligent	-.01	.29	-.31	-.06	.03	-.05	-.03	.03	.15	-.01	.00
i132 ǁama-aob/s: buyer, purchaser; shopper; customer; bidder	-.26	-.07	-.29	-.15	.14	.03	.05	-.01	.04	.10	-.02
i271 gonxa: restless, fidgety, mischievous; lively	.25	-.17	.27	.18	-.15	.16	.21	-.12	.05	-.08	-.02
i268 îga(n)|gē(he)sa: doubtful, dubious, questionable; uncertain	.15	-.06	.24	-.14	-.06	-.06	-.06	.07	.04	.16	-.04
i181 sâo!nâsib: restlessness; fidgetiness	.21	-.06	.23	.07	-.12	-.19	-.11	-.07	.09	.04	.00
i115 ǂhanuo!nâ: unjust, wrongful; illegal; unfair	.18	-.11	.22	-.04	.13	-.07	.09	.06	-.02	-.04	-.06
i205 kairakhoedīsen: elderly, pretend to be/behave as elderly pers.,	.12	-.04	-.22	-.08	.21	-.09	-.12	-.03	.02	-.04	-.01
i73 |horoxa: tend to be (always) drunk	.17	-.08	.00	.71	.08	-.10	.06	-.17	.07	-.03	-.05
i38 āǂûna: greedy for drink	.17	-.05	-.12	.68	.02	-.12	.05	-.07	.02	-.01	.01
i134 |horosemâb/s : drunkard	.16	-.02	.09	.60	.14	-.09	-.07	-.21	.03	-.02	.04
i72 |goexa: disposed to using obscene language; insult	.42	-.17	-.01	.44	-.10	.15	.01	-.12	.00	.04	.10
i234 !gabu: insipid/lifeless/full (of: pers.), fig.	.19	.00	.11	-.37	.01	-.10	.02	-.18	.05	-.02	.20
i128 ǂgae-aob/s: smoker (1); ro(o)ker (< Afr.), i.e. dagga smoker; hence: freak, eccentric (2)	.07	.00	.08	.34	.12	-.09	-.07	-.31	.08	.11	.01
i30 |homaxa: untidy, messy, slovenly; hap-hazard/slipshod (of: work)	.25	-.06	-.09	.33	.05	.06	-.07	-.05	.09	-.17	.10
i122 aoǁnā-aob/s: preacher	-.17	.18	-.25	-.30	.25	.04	-.19	-.11	-.06	-.09	-.14
i126 !khamaob/s: fighter; soldier	.18	-.20	.23	.26	.19	.15	.06	-.03	.06	.00	.17
i146 !gamaob/s/i: killer; murderer, assassin, homicide	.07	.14	.05	.03	.65	.02	-.09	-.01	.05	.05	.03
i256 !gaixa: who is (habitually) in possession of black medicine	.02	.14	-.17	.01	.57	-.03	-.09	.02	.10	-.05	-.01
i130 !khompōb/s: blockhead, fool, simpleton, dim-with, silly fellow, ass	.20	.15	.04	.02	.53	-.01	.08	.06	.03	.02	-.01
i137 !gai(dī)-aob/s : shaman, medicine-man, sorcerer; herbalist (w. mainly sinister intentions)	-.12	-.05	-.15	-.03	.51	-.04	.05	-.03	.18	.00	.02
i125 !nari-aob/s: thief; kidnapper	.18	.11	.03	.08	.42	.12	.05	-.17	.14	.18	.14
i129 !gammekhôa-aos: adulteress	.02	.16	-.04	.14	.42	.02	.05	-.08	-.08	.07	.02
i147 !ao!ao-aob/s: intimidator; s.o. who frightens/etc.	.20	-.18	.04	.09	.30	.08	.03	-.12	.01	.04	-.01
i12 |khonxa: funny, hilarious, laughter-provoking, humorous	-.14	.09	.08	.07	-.18	.06	.06	-.07	.04	-.13	-.01
i77 !hurisa: frightened, alarmed	.02	-.04	-.03	.01	-.01	-.39	-.09	.13	-.05	-.13	-.07

i228 !ao!nâ: timid, timorous; cowardly, faint-hearted	-.01	.07	-.14	.07	.06	-.38	.04	-.07	-.01	.02	.05
i180 ǁkhātama-īsib/s: incapacity, incompetence, inability	.14	-.06	.13	.03	.05	-.34	-.20	-.06	.09	-.03	.12
i11 taoxa: shy, bashful; shamefaced; embarrassed, ashamed	-.02	.18	-.01	-.06	-.05	-.34	-.10	.13	.06	.02	.16
i257 !hurixa: jumpy, jittery, easily frightened	-.01	-.01	.02	.14	-.04	-.32	.16	.02	.02	-.06	-.12
i47 ǀgaio(!nâ): powerless, weak; insipid	.07	.00	-.09	-.07	.15	-.31	-.01	-.05	.06	-.04	.05
i6 !nōsa: silent, being; quiet	-.18	.14	-.02	-.17	.25	-.31	-.16	.17	-.03	.04	-.06
i184 !aoxa!nâsib: fear (inclined toward, tends to experience this state)	-.09	.08	-.04	-.03	-.05	-.30	-.04	-.04	-.02	.19	.09
i242 ǀkhomǀkhomsa: pitiable, piteous	.06	.13	.06	.01	-.01	-.30	.03	.03	.09	.03	-.11
i261 !haokhoedīsenxa: stand-offish; acting like a stranger	.02	.03	.03	-.04	.04	-.29	.20	.09	-.10	.11	.03
i108 ǁom(tsâ)xa: fond of sleeping a great deal	.07	.06	.13	.06	-.10	-.28	.09	.09	-.02	.11	.03
i204 !ū(ke)-ai: lonely/desolate/lonesome, feel	-.09	.01	.14	-.01	-.03	-.28	-.16	-.12	.14	-.02	-.05
i160 ǂkhabu(sa)sib: weakness; infirmity, frailness, decrepitude; dimness, faintness	.11	-.11	.12	-.04	.00	-.25	-.09	.11	.20	-.03	.17
i235 !oaxa: distressing; lamentable; tragic; ironic miraculous; marvellous, wonderful; incredible, amazing	-.10	-.01	.05	.02	.10	-.24	.17	.06	.01	-.05	.02
i59 ǂkhariǂgomxa: faithless; mistrustful; of little faith, lacking aith	.21	-.13	.06	.09	-.01	-.24	.21	-.02	.14	-.14	.07
i25 ǀgôadīǀgôasenxa : fond of childlike behavior	.21	-.01	-.10	.04	-.04	-.24	.10	.09	.06	-.10	.14
i62 !hausenxa: remorseful; compunctious; inclined to be regretful	-.06	.18	-.13	-.05	-.12	-.22	-.18	-.15	.17	.14	-.05
i5 āxa: over-sensitive, disposed to cry; complain (inclined to), grumble; crow, bellow, bleat, neigh, bray (inclined to)	.01	.11	-.20	.05	-.02	-.22	.13	.13	.14	-.18	.13
i20 îga(n)ǀgēxa: sceptical, given to doubt; inclined to hesitate, irresolute, vacillating	.15	-.09	.00	-.11	-.20	-.22	.17	.14	.09	.14	.14
i92 ǂâisāxa: prone to think wrongly, misjudge	.15	-.13	.10	.02	-.07	-.21	.10	-.02	-.04	.06	.03
i42 !ao-o!nâ: fearless, intrepid; dauntless	.01	.01	-.01	-.03	.00	.18	-.06	.16	-.07	-.02	.03
i113 ǀkhomsenxa: self-pity	.07	.03	.03	-.14	-.10	-.15	-.11	-.02	-.12	.12	-.15
i215 ǂūxa: [has manners] eccentric, freakish; bad=-mannered; moody; antisocial	.20	-.03	.14	.05	-.05	-.04	.44	-.05	-.03	-.03	-.06
i46 ǀaexa: fiery; ardent, zealous	.06	-.02	-.01	.04	.08	.22	-.40	.12	.04	-.07	.06
i79 ǀhupuǀhupuxa: troublesome; tiring, exhausting	.13	.07	.02	.02	.00	-.04	-.40	-.01	.04	-.09	-.03

i104 buruburuxa: astonishment, amazement, wonderment, awe; surprise	-.16	.07	-.11	.07	.00	.10	-.32	.07	-.11	.07	.01
i70 ǂhansenxa: concerned, (overly)	-.13	.10	-.01	-.02	-.06	-.02	-.30	.06	.03	.10	-.05
i203 ǂâiǂhansen: anxious, be; worry	.03	-.05	.05	.02	-.08	-.17	-.28	-.06	.10	.06	-.14
i67 !noe(aǂgao)xa: hurry (in a); hasty	-.08	-.12	.03	-.05	-.11	.07	-.28	.05	.03	-.08	-.13
i212 ǂûna: greedy (for), be; crave, have craving for (e.g. food/women)	.24	.00	.06	.06	-.10	-.13	.26	-.18	.02	-.23	-.08
i248 ǁgoaraxa: blackmail, browbeat, (prone to)	.23	-.17	.12	.03	-.12	-.21	.23	-.16	.05	-.02	.12
i145 ǀae-ams: vicious gossip OR difficult/troublesome person (depends on tone)	-.04	-.06	-.06	-.14	.01	.11	-.22	-.07	-.09	.03	-.04
i216 dīxūxa: active, busy, industrious; engaged/involved	.18	-.05	.19	-.02	.02	.14	.22	.02	-.07	-.05	-.13
i218 tao-o!nâ: shameless, unashamed; not embarrassed; impudent, indecent	.04	-.11	.04	-.11	-.03	.02	.18	-.07	.05	-.08	.02
i238 ǂhau!nâdīsenxa: feign honesty/etc., prone to	-.10	.08	.11	-.10	-.08	.00	.18	.04	-.09	-.05	-.04
i249 xore(tsâ)xa: joking/etc., fond of	.26	-.07	.18	.01	.05	.08	.13	-.34	.00	.14	.17
i133 xorexab/s: tease/-joker, a	.25	-.02	.01	-.01	.12	.14	.18	-.31	.03	.27	.02
i109 ǂgan!gâsa: secret, covert; fig. Concealed, hidden, obscured	.02	.09	.05	-.09	.02	-.13	-.04	.30	-.11	.08	-.02
i258 sâubasenxa: miserly; inclined to hoard/to save up for o.s.	-.11	.02	-.07	-.16	-.08	-.09	-.04	.26	.03	.19	-.23
i285 ôa!nâxa: investigate; probe; examine; evaluate, assess; research, (inclined to)	.11	-.09	.16	.07	-.05	.08	.04	-.18	.03	-.10	-.12
i2 ǂnīsa: being proud; self-respecting	-.16	-.09	.18	.05	-.08	.12	-.09	.15	-.39	-.05	.05
i183 amabesib: authenticity, genuineness; sincerity, honesty; truthfulness	-.23	.10	-.08	-.11	-.04	.01	.01	.14	-.38	.07	-.03
i209 (ǁî)!gôasen: self-respect (having)	.25	-.20	.24	.06	-.08	-.04	.27	.03	-.38	-.19	-.03
i178 !gâitsâsens: well-being (feeling of)	-.08	.05	-.11	.03	.02	.08	.00	.04	-.37	.02	.07
i173 ǁî!gôasenni: haughtiness, arrogance	.29	-.25	.14	-.01	-.07	-.02	.30	-.09	-.36	-.13	-.04
i49 ǀgapiǂâixa: proud, haughty, arrogant; snobbish	.27	-.23	.16	.03	-.02	.08	.21	.22	-.34	-.14	.00
i39 ama-ai: reliable, worthy, commendable, valuable	-.14	.10	-.08	-.08	-.04	.02	-.04	.00	-.32	.06	-.01
i171 hō!âsens: self-pride/ -respect	.06	-.12	.03	-.07	-.07	.03	.04	-.03	-.32	-.04	-.02
i110 ǂgaobasenxa: covetous	-.08	.08	.03	.00	-.08	.01	.12	.03	-.26	-.01	-.07

i144 ǂamkhoeb/s: snob, upstart	-.12	.14	-.21	-.02	.05	.03	-.24	-.01	-.25	-.08	.08
i9 ǀuruxa: forgetful, tending to forget; amnesic	.14	.07	-.03	-.08	-.01	-.17	.09	.19	.22	-.04	.19
i74 ǀkhomaxa : inclined to implore/etc.	.05	.03	.09	.20	-.05	.04	-.14	.10	.20	-.08	-.02
i193 ǂkhaiǂkhaisens: ostentatiousness	.13	-.02	-.01	.10	-.11	.00	.03	-.10	-.14	-.51	-.07
i281 ǂnīǂnīsenxa: proud, haughty, inclined to act …	.21	-.11	.10	-.02	-.07	-.01	.15	-.04	-.36	-.40	.05
i206 au: anxious/uneasy, feel	-.20	.11	-.04	.09	-.07	-.01	.03	-.02	-.16	.39	-.04
i226 ǂamaxa: boastful, vaunting; bombastic, pompous; prone to show off/etc.	.35	-.04	.09	.08	-.14	.06	.05	-.08	-.07	-.36	-.22
i208 oaxaedīsen: unattached/eligible for marriage, act/behave as if	-.04	.01	-.05	-.05	-.13	-.01	-.02	.06	.00	-.36	.00
i10 koasenxa : fond of praising self	.29	-.29	-.12	.10	.00	.08	.04	.03	-.13	-.34	-.11
i91 ǂkhāxa: non-compliant; likely to refuse/etc.	.00	-.17	-.16	-.06	-.03	-.12	.04	-.03	.08	.33	-.07
i172 !aob: fear, dread, fright; anxiety; terror; alarm; disquietude, apprehension	-.07	.07	.04	-.01	-.07	-.27	-.13	-.06	-.10	.29	.10
i41 ûitsama, ~tsaba: living, animate; lively, vivacious, full of life	-.26	.07	.01	.06	-.16	.18	-.02	.02	-.16	.28	.03
i60 ǀkharaǀkharasa: changed, altered, converted, improved	-.19	.11	-.10	-.04	.14	.08	-.20	.07	-.15	.23	-.15
i90 !haokhoesâuxa: hospitable towards strangers, (who is)	-.16	.09	-.10	.00	-.02	-.07	-.19	.05	.02	.21	-.03
i211 dî!nâxa: cross-examine, inquire; examine (oral), tend to, inquisitive	.03	-.13	-.11	-.02	-.15	.06	.11	-.07	.02	-.11	-.31
i68 ǂhâ!khoexa: quick to look to others for help	-.04	.09	.03	.01	.02	.03	-.06	.07	.00	-.04	-.30
i101 ǁgoasen(tsâ)xa: inclination to cringe (implore, entreat; supplicate)	-.01	.13	-.05	.15	-.10	-.20	-.19	.00	-.05	.18	-.27
i254 ǂâiǂâisenxa: pensive	-.13	.07	-.06	-.08	-.16	-.19	.07	.08	-.01	.03	-.24
i149 ǁgaeǁgae-aob/s: imitator, mimic; impersonator	.11	.10	-.01	-.09	-.18	.07	-.01	-.03	-.05	.07	-.23
i192 tsausasib: tiredness, exhaustion, fatigue	.08	-.07	-.05	-.02	.07	-.21	.14	-.06	-.01	.12	.22
i277 dūraxa: eager; covetous; lustful; desirous	-.06	.16	.01	-.13	-.17	.08	-.03	.09	.05	-.16	-.21

Note. $N = 505$, 272 total terms. Terms loading <.30 on any factor are not shown. Bolding indicates a univocal term, with all secondary loadings less than or equal to half of the absolute value of the primary loading. The tentative summary titles proposed for these factors: 1 Social Self-Regulation, 2 Angry, Aggressive, 3 Harsh Hard Person, 4 Substance Abuser, 5 Evil Person, 6 Fearful, 7 Energetic, Active, 8 Humorous, Outgoing, 9 Self-Confident, 10 Arrogant, 11 Demanding.

Table S3

Structured Qualitative Interview Questions

Part One, questions linking views of morality to personality terms:

1. What do you think are some especially good, valuable traits that people can have?
2. What do you think it means to be virtuous?
3. Tell me about someone you admire and why you admire them.

Part Two, the meaning of emic dimensions, and views on personality consistency:

4. Can you think of someone who is !gam!gamsenxa1, ǁnâuǀnamxa2, ǀnamxa!nâ3 ? Do you think someone like this is always this way, or just some of the time?
5. What about someone who is !haeǁaixa4 and ǁē5 -- are they always like that?
6. What about someone who is ǂnīsa6 ,amabesib7, and (ǁî)!gôasen8?

Part Three, exploration of etic personality traits that did not appear in the high frequency lexical terms, for their usage perhaps despite this:

7. Do you know someone who is especially creative? What makes you think of them that way?
8. Do you know someone who is especially Extraverted? What makes you think of them that way?
9. Are there terms you borrow from English or Afrikaans to describe people because the word isn't in Khoekhoe? Vice versa?

Part four: For a total of 26 words, about half of which were presented to each participant, participants were asked, "In a few words, what do the following terms mean to you? What are the associations you have with them?" After giving an initial response, many participants were asked follow-up questions, such as, "Is this a good quality or a bad one, or is it more neutral?" If they seemed uncertain about the word, they were asked, "Is this a word that you ever use yourself? Do you hear people use it?"

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1 i33 humble; meek, docile, submissive; self-deprecating
2 i55 obedient; tractable, amenable
3 i273 loving, affectionate (w. element of compassion); tender
4 i97 hot-tempered, irascible; choleric
5 i53 audacious; insolent, impudent, impertinent; bold, dauntless, reckless
6 i2 being proud; self-respecting
7 i183 authenticity, genuineness; sincerity, honesty; truthfulness
8 i209 self-respect (having)

Table S4

Original and Updated Definitions for 26 Words Queried in Follow-Up Interviews

Word and original dictionary definition	Summary of responses	Proposed/updated definition
ǂnīsa (*n* = 10) "being proud; self-respecting"	The general consensus is that this means to be proud or have self-respect, or to feel good about oneself with regard to a personal achievement or success, or group belonging (such as one's cultural or language group). It is primarily seen as a positive quality, although there is acknowledgment that it can be negative if someone is overly proud, or proud without merit.	"to be proud or to display self-respect and pride in relation to an achievement, or to group belonging"
kai-am!nâ (*n* = 10) "loud-/big-mouthed. 'He is all talk and no do'"	Described primarily as someone who talks too much in terms of amount (although auditory volume is sometimes referenced); someone who is noisy or overly talkative. This is mostly evaluated negatively in terms of: 1) people who are indiscriminate with whom they share information, 2) in regard to which subjects are talked about (such as taboos or private matters), 3) someone who is a know-it-all, who has something to say about everything. Although this is mostly seen as negative, a few positive aspects of having this trait were identified, for example, in social situations that require talking, or when in need of help.	"someone who is overly talkative, indiscriminate with information shared or who they share it with, or a know-it-all"
!gari-am!nâ (*n* = 7) "stentorian, with a loud voice (2); hard-mouthed (of: horse) (1)"	Most describe this as referring to someone who speaks with a high auditory volume, loud speech, or even shouting. This is seen as a neutral quality with positive or negative aspects depending on context. For example, the person may be recognizable from far away or may be able to better deliver speeches to large groups. However, people with this trait may also wake up their neighbors with their talking, or have a hard time keeping their voice low enough when conveying private information. One interviewee reported that it could refer to someone who uses sophisticated vocabulary or obscene language.	"a person who talks with a high volume, with a loud voice or speech"
ǀaexa (*n* = 14) "fiery; ardent, zealous"	Primarily referenced as a term to describe someone who is very good at, adept, skilled, or has mastered a certain thing, or who is exceptional (for example very clever in school, sport, but also in fighting,	"adept, skilled, exceptional, masterful, in relation to a

	stealing, etc.) in a certain regard. Some participants say that it is not used much or that they have rarely used it or heard it used. While it seems to mostly be used in a positive sense, as a 'praise' term, it can also be used to describe someone who is masterful at something considered negative (a thief). One participant states that it could also mean someone who is short-tempered, depending on the context.	domain of expertise"
ǂhansenxa (*n* = 13) "concerned, (overly)"	There is some consensus that this refers to someone who is motivated and active in finding solutions to a problem, such as the head of a household who needs to work to put food on the table. Specifically it seems to refer to someone who goes from place to place seeking help (e.g. for a food or a funeral), however, it can also refer to someone who is simply restless, always active and moving, never staying in one place, or having a hard time relaxing. Most describe this trait (of being active in the search for solutions) as quite positive. Others say that it depends, that the person could feel bad about themselves if they always have to ask and never can pay it back, or if the person is not able to rest.	"to be motivated and/or active, or go from place to place in a restless manner, typically in the context of seeking solutions to or aid for a current problem or dilemma"
ǁhapoxa (*n* = 12) "dreamy, inclined to daydream; inclined to dream"	A few definitions are referenced by participants. The most common description of a 'dreamer' is someone with goals and ambitions, or wishes and desires, who imagines a good future for themselves. These dreams are sometimes described as giving them drive and the will to work in order to make it a reality. This is seen as very positive. The literal definition of dreaming while asleep was also mentioned. Less commonly, a definition of someone who 'sees things' in the future, a visionary, maybe referenced in a religious or spiritual sense was given. One participant says this could refer to someone who is 'coming up with stories that are not factual. Note that no participants referred to the qualities implied by the original English definition, which suggests being "spacey", checked out, or unrealistic.	1:"a person with goals, ambitions, wishes, or desires for the future and is motivated toward fulfilling them", 2: "someone who is a visionary", 3: "someone who dreams at night while sleeping".
!gâitsâsens (*n* = 11) "well-being (feeling of)"	There was general consensus that this word means feeling good, positive, or joyful for or about oneself, either in relation to something positive that happened or as a strategy of facing life circumstances by feeling happy, relaxed, and good	"to feel good, positive, or joyful for or about oneself"

	about oneself. This was evaluated as positive by all respondents.	
ǀhupuǀhupuxa (*n* = 13) "troublesome; tiring, exahausting"	No one understands or uses this word. Attempted interpretations appear to be guesswork, breaking down the word (one part refers to running out of breath, the other to dealing with or being occupied by other people's feelings). Participants do not use it and mostly report that they have never heard it.	NONE, remove from analysis. Not recognized or used
!haokhoesâuxa (*n* = 12) "hospitable towards strangers, (who is)"	This word was described as unrecognizable and not used by virtually all participants. Many suggested a possible meaning based on the word's compound parts (having guests to one's house and secretively keeping them out of view of others). Participants guessed this might mean protecting guests or not wanting to share them with others. Only one person gave a meaning related to hospitality (providing accommodation or assisting those who need help).	NONE, remove from analysis. Incoherent use, guesses, not recognized or used.
!ereamxa (*n* = 3) "responsible"	Consensus by the first three people asked matched the dictionary and the linguist's view. It was dropped from further exploration.	-
ǂgan!gâsa (*n* = 13) "secret, covert; fig. Concealed, hidden, obscured; clandestine"	Primarily used for a person who is secretive about personal history, attributes, or information that they have, or who has a hidden agenda. Can refer to someone who is deceitful, dishonest, keeping things from others, or who is difficult to read in terms of their intentions. In this sense it is mostly considered a negative trait. It can also mean someone who is reserved, shy or keeps secrets such that information is kept private. In this sense, participants suggested it could be a positive attribute.	"1) someone who is secretive or has a hidden agenda with regard to personal history, intentions, or information. 2) someone who is reserved, shy, or private"
ǂgaobasenxa (*n* = 13) "covetous"	The consensus is that this is used to describe someone selfish and demanding, who wants everything for themselves and covets what others have (objects, relationships). This is seen as quite negative. A few people say it can also mean that a person is motivated and strives to get something in a way that may be positive, such as wishing good things for self or family or wanting a car. However, this trait is mostly seen as negative.	"someone who wants everything for themselves, selfish, covetous"
!khompōb/s (*n* = 10) "blockhead, fool, simpleton, dim-wit, silly fell, ass"	Someone who lacks understanding or knowledge they should have, who is foolish, stupid, does things incorrectly or is silly due to lack of mental acuity or intelligence. This is mostly described as someone who is unintentionally this way, therefore the person is merely foolish rather than immoral. A few people	"a stupid person, a person of low intelligence, ignorant, idiot"

	say that it's possible that the person knows better but pretends to not to or does not put in enough effort to know what they should. There is consensus that this is a rude or unkind word to use, and it seems to not be used much to describe people because they may become offended or angry.	
ǂamkhoeb/s (*n* = 10) "snob, upstart"	The evaluative valence (negative or positive) for this word depends on the context of its use. On one hand, it can refer to someone who is in a special position in terms of social class, authority, seniority, or respect, and who is accorded respect due to this position or achieved status. On the other hand it can be used derisively or sarcastically to describe someone who is behaving as if they deserve more special designation than they have earned or merit (i.e. snob upstart). This can also refer to the 'favorite' child in a family. It may also refer to 'the top' or 'best' at something socially unacceptable, for example the worst "drunk".	"1) person of special status, high position, class, authority, or seniority who is accorded respect; 2) person who is snobbish, acts as if they are of high position or better than others without merit; 3) a person who is the best, at the top level."
dūraxasib (*n* = 10) "covetousness, cupidity"	The consensus is that this refers to desire, motivation, ambition, or eagerness to obtain objects or goals. This includes being active or engaged, and willingness to make effort toward desired aims. Considered a positive quality for the most part, some participants describe it as being negative or positive depending on the specific goal or 'appetites'. For example, wanting drugs can be negative, while wanting to achieve in school or help others is positive.	"desire, motivation, ambition, or eagerness to achieve, or obtain goals"
amabesib (*n* = 10) "authenticity, genuineness; sincerity, honesty; truthfulness"	The consensus is that this trait is positive, describing someone who speaks the truth, is honest, frank, a straight talker, and fair; someone who 'does things from the heart' and who does not cheat. This is referenced as a stable trait. A few participants did not recognize this word, while others were confident in their definitions.	"authentic, genuine, honest, truthful, frank"
ǂkhaiǂkhaisens (*n* = 10) "ostentatiousness"	This word is described as having negative or positive connotations depending on the context. On the one hand, it can mean to take pride in oneself, one's attire, accomplishments, and to be happy to show these to others, and this can be positive (for example wearing traditional attire with pride). On the other hand, the word can refer to someone who	"1) show-off, pretentions, ostentatious, pompous, grandiose; 2) self-respecting, prideful.

	is pretentious or a show-off, either in what they are wearing or how they act – such as acting in a manner that is overly prideful, as they are above others or as if they know more than they do.	
au (*n* = 10) "anxious/uneasy, feel"	This word appears to refer to a few things. The primary description is someone who is bitter, troublesome, difficult, and not social (who doesn't like to associate or socialize with others, or even hates them), or someone who is negative in terms of personality or attitude, jealous, resentful. It is also described as meaning someone who is stingy or 'tough', not willing to give, who is greedy and does not reciprocate. One participant described a person like this as tough in terms of resilience through difficulty, able to persevere. A couple of participants said they did not recognize this word. It was generally evaluated as a negative trait. It can also refer to bitter or acidic food.	"1) bitter, negative, resentful, stingy, antisocial; 2) tough, austere, hardy"
oaxaedīsen (*n* = 10) "unattached/eligible for marriage, act/behave as if"	This describes someone who dresses up, puts on make-up, or otherwise makes themselves beautiful or attractive, especially in regard to the opposite sex. This attention seeking is considered typical of and likely appropriate to the age group of girls eligible for marriage, referred to as oaxae. It is considered positive to be neat and to make oneself presentable and attractive, and can be used as a compliment, such as to or about an older woman who is energetic and attractive like a younger person. But it can also be negative or used as an insult, for example, for someone who is married but trying to attract others, or someone who is chided for not acting manly or strong. This may mainly be used for women. There appears to be some variation with it is used, and some do not recognize or use it at all.	"to dress up, make oneself beautiful or look good in order to stand out or attract the attention of others – especially with regard to the opposite sex"
dî!nâxa (*n* = 10) "cross-examine, inquire; examine (oral), tend to, inquisitive"	The consensus is that this refers to someone who asks a lot of questions, who is curious, inquisitive, and persistent in seeking information, or someone who is nosy or prying. Evaluation depends on context. A child or student who lacks information benefits by asking questions, and a parent who queries their child can protect them, "you must ask so that you know". On the other hand, someone who persists in questioning others may become annoying, or may get information that is harmful	"someone who is inquisitive, who asks lots of questions in a persistent manner (curious[+]; nosy, prying[-])"

ǂūxa (*n* = 11) "eccentric, freakish; bad=-mannered; moody; antisocial	For the most part, this is said to describe someone with bad manners or negative attitude problems who pushes others away, is stubborn and has a lack of respect, or is unstable (good mannered one day and bad the next). Four participants had alternative definitions. One saw the word as generic, meaning 'manners', which could refer to either good or bad manners. (This matched the linguist's view of the word.) Two saw it in a positive light with reference to respect or good manners, self-composure, and being looked up to by others. One said that older generations were more likely to use the word as bad mannered, in reference to someone they did not like, while younger people might use it as a praise term, describing someone who is essentially 'bad-ass', giving credit to someone who has achieved something good.	"1) bad mannered, negative attitude that repulses others, lack of respect; 2) bad-ass, excellent, deserves credit for something; 3) good mannered, respectful" (depending on context)
supudana (*n* = 10) "bright, quick to grasp, quick in/on the uptake (esp of: child)	For the most part, this was described as negative: being gullible, too easily convinced or persuaded, too easily influenced and therefore can be manipulated by others without difficulty. This may refer to young women who are too easily seduced. The other definition, perhaps when specifically applied to a student, is positive, referring to someone who is intelligent, who learns or understands easily, who quickly grasps ideas and concepts. One participant did not know the word and another reported that it means someone quick to anger, reactive, impulsive or lacking judgment.	"1) gullible, easily manipulated, too easily convinced, persuaded, or influenced (naïve); 2) intelligent, quick to grasp, learns and understands easily."
ǁgoaraxa (*n* = 10) "blackmail, browbeat, (prone to)"	All respondents described this as referring to someone who wants to be begged by others for things which they withhold, someone who is non-reciprocal, and who creates or maintains situations where others must be subordinate or beg them. Only one participant described it as referring to someone who is the beggar themselves, a bootlicker or hanger-on. In all cases it is considered a negative trait.	"someone who wants to be begged by others, creates situations where others are in a position to beg, withholds in order to be begged".
ǂkhāxa (*n* = 8) "non-compliant; likely to refuse/etc."	Participants agreed that this refers to someone who outright refuses to do what is asked or needed no matter what it is, or whether it benefits them. For example a child who says no to a parent about all directives, or a person who refuses to help or give or do something no matter the lack of respect implied and no matter how many times they are asked. One	"resistant, refusal to do, help, give, etc, stubborn, uncooperative"

	participant said that it could also sometimes mean undecidedness, but it generally refers to resistance.	
ǂâi!gâxa (*n* = 9) "inclined to rethink; thoughtful; heedful, meditative, pensive; strong-minded".	The consensus is that this is a positive trait meaning either to think things through or to reflect on the possible consequences of one's words, decisions, or actions beforehand, or to reflect with remorse or regret after acting without adequate forethought, and to then seek to apologize or make amends. One participant was not familiar with the word.	"1) someone who reflects and considers before acting; 2) someone who reflects on a past action with regret or remorse, then corrects or apologizes."
!gamǂâixa (*n* = 7) "deep-thinking, contemplative, meditative"	This word does not appear to be used frequently, as it was not recognized by a few respondents. Others say this describes someone who is deeply introspective, a deep-thinker about complex, unusual, or problematic material. These thoughts may relate to deep problems or difficulties that are not sharable or are hard to understand by others. This trait can reference someone who thinks about 'things that will come', who is a prophet, including the quality of being wise. The quality also potentially makes people uncomfortable because it involves probing, saying uncomfortable things, or being misunderstood by society. It is not clear if this is a clearly good or bad quality.	proposed/updated definition: "a deep, complex thinker, contemplative, a prophet, visionary (associated with being reserved, misunderstood by society); someone who looks deeply into things, profound introspection".

Note. Original dictionary definitions are from Haacke and Eiseb (2002). Summaries draw on a total of 20 interviews with 23 total respondents asked to describe: what they thought the word meant to them, if they ever use it or hear it used, and if so for examples of a time they recently used it or heard it used. The number of people from whom responses were received is noted for each. Words were described by 10 interviewees on average (maximum 14; minimum 3).

Table S5

Marker Terms for Etic Models

Model and Scales	Khoekhoegowab terms with English glosses
Big One (Saucier et al., 2014 supplemental table):	(39)
Active	*hui*|*nam(xa):* helpful, eager/keen to help (always)
Brave	*!gâi*: good, excellent; good-natured (of: pers.)
Careful	|*opesa*: lazy, slothful, indolent
Conscientious	*taoxa*: shy, bashful; shamefaced; embarrassed, ashamed
Consistent	*surixa*: envious, inclined to envy/begrudge
Dependable	*xū*!gunuxa: greedy, rapacious, avaricious, covetous
Diligent	ǂ*gom*ǂ*gomsa*: trustworthy, reliable, dependable; credible
Disciplined	ǂ*khîo!nâ*: dissatisfied, discontented, disgruntled; unhappy; upset
Dutiful	*khoe(xa)!nâ*: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors)
Generous	*kaikhoe!ao!gâxa*: respect for/awe of elders/superiors; honour (accorded to elders/etc.)
Good	*tsū!ō*: ill-fated, unlucky, unsuccessful (in an endeavour)
Happy	!*ereamxa*: responsible
Honest	ǂ*âi!gâxa*: 1) someone who reflects, reconsiders before acting, 2) someone who reflects after a decision or interaction with regret or remorse, or has second-thoughts, and corrects or apologizes.
Kind	|*hoe-aob/s*: scandalmonger, gossiper
Patient	!*gari-ao* : brave/courageous man/woman; hero
Respectful	ǂ*hau!nâ(xa)sib*: honesty, uprightness; straightforwardness; integrity
Responsible	!*gâi(si)b*: goodness; good-naturedness; excellence
Thoughtful	*ôasasib*: diligence, assiduousness industriousness, willingness
Friendly	ǁ*khoa*ǂ*gao(xa)sib*: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness
Gentle	|*hôakao(xa)sib/s*: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence
Helpful	!*ereamo!nâsib*: irresponsibility
Humane	*amabesib*: authenticity, genuineness; sincerity, honesty; truthfulness
Polite	!*gôao(!nâ)sib*: disrespectfulness; irreverence
Shame (having it)	*sîsen(tsâ)xasib*: diligence, industriousness, keenness to work; activeness
Stable	*!ao!gâxasib*: respectfulness, inclination to revere/etc.
Versus: Egocentric	ǂanbasen: careful/cautious, be
Envious	*dīxūxa*: active, busy, industrious; engaged/involved
Lazy	
Gossip(y)	
Greedy	
Sad	
Selfish	
Stingy	

	tao-o!nâ: shameless, unashamed; not embarrassed; impudent, indecent ǁ*ae tama*: careless, indifferent, nonchalant; inconsiderate ǂ*homi!nâ*: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account) *hara*: open-hearted, extroverted, kind ǂ*âio!nâ*: thoughtless; unthinking; absent-minded, inattentive *dī(tsâ)xa*: industrious, active ǂ*hau!nâdīsenxa*: feign honesty/etc., prone to ǂ*au*: tame; docile, tractable; slow; gentle ǁ*nâu*ǀ*namo!nâ*: disobedient, disrespectful, stubborn *sîsenhuixa*: helpful, ready to help !*gâia*ǂ*gaoxa*: of a happy disposition; tends to rejoice/etc.
Big Two (Saucier et al., 2014)	
Social Self-Regulation: Diligent Generous Gentle Good Honest Kind Obedient Respectful Responsible *Versus*: Selfish	(21) *ôasasib*: diligence, assiduousness industriousness, willingness ǂ*au*: tame; docile, tractable; slow; gentle *!gâi*: good, excellent; good-natured *!gâi(si)b:* goodness; (good) quality; good-naturedness; excellence ǂ*hau!nâ(xa)sib:* honesty, uprightness; straightforwardness; integrity *amabesib*: authenticity, genuineness; sincerity, honesty; truthfulness *hara*: open-hearted, extroverted, kind - from hara (being wide, roomy, spacious) *khoe(xa)!nâ:* being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors) ǁ*nâu*ǀ*namxa:* obedient; tractable, amenable !*amku*: decent, respectable; proper, orderly; tidy, neat *kaikhoe!ao!gâxa:* respect for/awe of elders/superiors; honour (accorded to elders/etc.) *!ao!gâxasib*: respectfulness, inclination to revere/etc. *!ereamxa*: responsible Versus: ǀ*hôakao(xa)sib/s*: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence ǂ*homi!nâ*: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account) ǂ*hau!nâdīsenxa*: feign honesty/etc., prone to ǁ*nâu*ǁ*oa*: disobedient; stubborn ǁ*nâu*ǀ*namo!nâ*: disobedient, disrespectful, stubborn ǁ*nâuo!nâ*: disobedient (out of neglect, as e.g. child)

	!gôao(!nâ)sib: disrespectfulness; irreverence *!ereamo!nâsib*: irresponsibility
Dynamism: Active Brave Bold Lively *Versus*: Shy Timid Weak	(12) *!khausa*: wild; intractable, refractory; vivacious, excessively active, hyperactive *dīxūxa*: active, busy, industrious; engaged/involved *dī(tsâ)xa*: industrious, active ‖*ē*: audacious; insolent, impudent, impertinent; bold, dauntless, reckless *!gari-a:* brave/courageous man/woman; hero ‖*khoa*ǂ*gao(xa)sib*: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness *gonxa*: restless, fidgety, mischievous; lively *ûitsama*: living, animate; lively, vivacious, full of life Versus: *taoxa*: shy, bashful; shamefaced; embarrassed, ashamed *!ao!nâ*: timid, timorous; cowardly, faint-hearted |*gaio(!nâ):* powerless, weak; insipid; without nutritional value; empty, lacking force/impact; impotent, effete; inefficatious (of: medicine) ǂ*khabu(sa)sib*: weakness; infirmity, frailness, decrepitude; dimness, faintness
Pan-cultural three-factors (De Raad et al., 2014)[1]	
Affiliation: Affectionate, Benign Compassionate Conciliatory, Caring Charitable, Gentle Good, Good-natured Helpful, Hospitable Humane Magnanimous Merciful Mild-tempered Soft, Soft-hearted Sympathetic, Kind Kindhearted, Nice Understanding, Warm Warmhearted Well-intentioned *Versus*: Abrupt Aggressive Arrogant Authoritarian Bigmouthed, Bossy	(26) |*namxa!nâ*: loving, affectionate (w. element of compassion); tender *tsâba*‖*hao(xa)sib*: compassion, sympathy, pity *!gâidīxa*: charitable; inclined to… ǂ*au*: tame; docile, tractable; slow; slow (and soft), suave (of: speech); gentle *!gâi*: good, excellent; good-natured (of: pers.) *!gâi(si)b*: goodness; (good) quality; good-naturedness; excellence *hui*|*nam(xa)*: helpful, eager/keen to help (always) *sîsenhuixa*: helpful, ready to help *khoe(xa)!nâ*: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors) *!haokhoesâuxa*: hospitable towards strangers, (who is) |*khomxa*ǂ*gao*: easily moved to pity, soft-hearted; merciful, sympathetic *tsaura*ǂ*gaosib*: soft-heartedness Versus: *!khamxa:* pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight

Callous	ǂ*khabaxa*: aggressive, antagonistic; liable to antagonise,
Conceited	likes to pick fights; militant; antagonistic; liable to
Covetous	antagonise
Despotic	ǀ*gapiǂâixa*: proud, haughty, arrogant; snobbish
Domineering	*kai-am!nâ*: loud-/big-mouthed, ǁîb ge kaise a ~~ He is all
Egocentric	talk and no do, He is loud-mouthed
Egotistical, Hard	ǂ*gaobasenxa*: covetous
Hard-hearted, Harsh	*dūraxa*: eager; covetous; lustful; desirous
Obstinate	*dūraxasib*: covetousness, cupidity
Overbearing	*karosaǂgao*: hard-hearted, relentless; cruel
Quarrelsome	*karosa*: strict, stern, harsh
Rapacious	*!garidanasib*: obstinacy, stubbornness, mulishness;
Revengeful	dullness, dim-wittedness; determination,
Ruthless	headstrongness; resolution, resoluteness
Supercilious	ǂ*noaguxa*: quarrelsome, argumentative
Selfish	*xū!gunuxa*: greedy, rapacious, avaricious, covetous
Self-important	ǀ*khomo!nâ*: ruthless, pitiless; merciless
Tyrannical	*!haeǁaixa(si)b*: hot-temperedness, irascibility; choleric
Vindictive	temperament
Dynamism:	(14)
Active, Adventurous	ǁ*ē*: audacious; insolent, impudent, impertinent; bold,
Assured, Bold	dauntless, reckless
Brisk, Cheerful	ǁ*khoaǂgao(xa)sib*: bravery, courage, valour; boldness;
Communicative	dauntlessness; fearlessness, intrepidity; chivalrousness
Demonstrative	*gonxa*: restless, fidgety, mischievous; lively
Dynamic, Energetic	ǂ*âiǂuixa*: creative, imaginative, artistic, etc.
Enterprising, Enthusiastic	*ûitsama*: living, animate; lively, vivacious, full of life
Extroverted, Exuberant	!*norasa*: free; independent; unimpeded, unrestricted; safe;
Fast, Hot-blooded	secure
Laughs a lot, Lively	!*khausa*: wild; intractable, refractory; vivacious,
Loquacious, Merry	excessively active, hyperactive
Open, Outspoken	ǀ*gaisa*: strong, powerful, forceful, robust; mighty, potent;
Self-confident, Sociable	loud (of: sound); burly/sturdy (of: physique); vigorous
Sparkling, Spontaneous	Versus:
Spirited, Talkative	!*gabua!nâ*: listless; dispirited, lethargic; dejected,
Temperamental	despondent; depressed (by/about); morose
Unrestrained, Vigorous	*!ū(ke)-ai*: lonely/desolate/lonesome, feel
Vivacious, Winning	*tsū!ō*: heart-ache, grief, sorrow; sadness
Versus: Bashful, Boring	*!nōsa*: silent, being; quiet
Closed, Coy	*taoxa*: shy, bashful; shamefaced; embarrassed, ashamed
Fainthearted, Depressed	*!ao!nâ*: timid, timorous; cowardly, faint-hearted
Diffident, Hesitating	
Inhibited, Insecure	
Introverted, Lonely	
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 *Versus*: Absent-minded Changeable, Chaotic, Erratic, Forgetful, Frivolous, Hasty Improvident, Imprudent Inattentive, Incautious Irresolute, Neglectful Scatterbrained, Uncontrolled Unrealistic, Unwise, Wishy-washy	(15) *!ûi!gâxa*: attentive; mindful of (people/material things); painstaking, meticulous ǂ*anbasen*: careful/cautious, be *ôasasib*: diligence, assiduousness industriousness, willingness *sîsendūraxasib*: eagerness to work *sîsendūraxa*: keen/eager to work *dī‖khā*: feasible, practical, able to do, competent ‖*nâu!āxasib*: intelligence; prudence; sagacity !*ereamxa*: responsible Versus: |*uruxa*: forgetful, tending to forget; amnesic *sîsen|opesa*: aversion to work *!noe(a*ǂ*gao)xa*: hurry (in a); hasty ǂ*âio!nâ*: thoughtless; unthinking; absent-minded, inattentive !*ereamo!nâsib*: irresponsibility |*garu(adana)*: bec. insane, bec. mentally disturbed, deranged, disordered; bec. scatterbrained; lose o.'s head
Big Five Seven-language composite (7LC): De Raad, Perugini, Hrebícková, & Szarota (1998; Table 2); Goldberg 100 adjectives: from Goldberg (1992; abbreviated by Saucier, 1994) [3]	
Conscientiousness *Both*[2]*:* Careful Conscientious Negligent, Systematic Thorough *Versus*: Inconsistent *7LC:* Diligent, Precise *Versus*: Lazy Neglectful Thoughtless Unstable	(9) ǂ*anbasen*: careful/cautious, be ǂ*gom*ǂ*gomsa*: trustworthy, reliable, dependable; credible *ôasasib*: diligence, assiduousness industriousness, willingness !*amku*: decent, respectable; proper, orderly; tidy, neat *dī‖khā*: feasible, practical, able to do, competent ǂ*âi!gâxa*: inclined to rethink; thoughtful; heedful, meditative, pensive; strong-minded Versus:

Goldberg: Efficient Organized Practical, Prompt Neat, Steady *Versus*: Haphazard Sloppy, Undependable	ǀ*homaxa*: untidy, messy, slovenly; untidy/unkempt (of: hair); busy/crowded/bustling (of: e.g. street); hap-hazard/slipshod (of: work) ǀ*opesa*: lazy, slothful, indolent ǂ*âio!nâ*: thoughtless; unthinking; absent-minded, inattentive
Agreeableness *Both:* Helpful *7LC:* Peaceful Tolerant *Versus*: Aggressive Bossy Domineering Egotistical/Egocentric *Goldberg:* Agreeable Considerate Cooperative Generous Kind Pleasant Sympathetic Trustful Warm *Versus*: Cold Demanding Harsh Rude Selfish Uncharitable	(15) !gâidīxa: charitable; inclined to… huiǀnam(xa): helpful, eager/keen to help (always) sîsenhuixa: helpful, ready to help khoe(xa)!nâ: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors) ǂkhî: satisfied, contented; content, willing to accept circumstances, happy; peaceful; tranquil (of: mind) ǀkhomxaǂgao: easily moved to pity, soft-hearted; merciful, sympathetic tsâbaǁhao(xa)sib: compassion, sympathy, pity taniǀnamxasib: willingness to tolerate/forbear, tolerance taniǀnamxa: tolerant/etc., given to being Versus: ǂkhabaxa: aggressive, antagonistic; liable to antagonise, likes to pick fights; militant !khamxa: pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight ǀnamo(!nâ)sib: lovelessness, unlovingness, coldness ǂgom!gâo!nâ: distrust karosa: strict, stern, harsh ǂkhariǂgomxa: faithless; mistrustful; of little faith, lacking in faith
Emotional Stability *Both:* Imperturbable *Versus*: Anxious Emotional, Nervous *7LC:* Self-Assured *Versus*: Hyper-/Over-Sensitive, Vulnerable *Goldberg:* Relaxed Undemanding *Versus*: Envious Fearful, Fretful High-strung Insecure, Irritable Jealous, Moody Self-pitying Temperamental	(11) *!ao-o!nâ*: fearless, intrepid; dauntless ǁ*khoaǂgao(xa)sib*: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness *sâsa*: calm/restful/relaxed/tranquil (of: mind), placid; calming Versus: ǂâiǂ*hansen*: anxious, be; worry *au*: anxious/uneasy, feel *surixa*: envious, inclined to envy/begrudge *!aoxa!nâsib*: fear (inclined toward, tends to experience this temporary state) *tauxa*: jealous ǂ*ūxa*: eccentric, freakish; bad-mannered; moody; antisocial *āxa*: over-sensitive, disposed to cry; complain (inclined to), grumble; crow, bellow, bleat, neigh, bray (inclined to)

Touchy, Unexcitable	|*khomsenxa*: self-pity
Extraversion	(11)
Both: Energetic	*dī(tsâ)xa*: industrious, active
Extraverted, Talkative	*dīxūxa*: active, busy, industrious; engaged/involved
Versus: Bashful	ǁ*ē*: audacious; insolent, impudent, impertinent; bold,
Introverted	dauntless, reckless
Reserved, Shy	ǁ*khoa*ǂ*gao(xa)sib*: bravery, courage, valour; boldness;
Timid, Withdrawn	dauntlessness; fearlessness, intrepidity; chivalrousness
7LC: Dynamic	*!ao!nâ*: timid, timorous; cowardly, faint-hearted
Sociable, Vivacious	|*gaisa*: strong, powerful, forceful, robust; mighty, potent;
Versus: Passive	loud (of: sound); burly/sturdy (of: physique); vigorous
Silent, Temperamental	!*khausa*: wild; intractable, refractory; vivacious,
Goldberg: Active	excessively active, hyperactive
Assertive, Bold	*ûitsama*: living, animate; lively, vivacious, full of life
Daring, Unrestrained	Versus:
Verbal, Vigorous	!*nōsa*: quiet; reserved; reticent, inclined to keep o.'s silence
Versus: Inhibited	*taoxa*: shy, bashful; shamefaced; embarrassed, ashamed
Quiet, Unadventurous	
Intellect	(11)
Both: Imaginative	ǂ*hôa*ǂ*ûna*: nos(e)y, inquisitive
7LC: Clever	ǂ*âi*ǂ*uixa*: creative, imaginative, artistic, etc.
Intelligent	*gā-aisib/s*: cleverness, intelligence, wisdom; sagacity
Knowledgeable	ǁ*nâu!āxasib*: intelligence; prudence; sagacity
Versus: Undereducated	*dî!nâxa*: cross-examine, inquire; examine (oral), tend to,
Goldberg: Artistic, Bright	inquisitive
Creative, Complex	*supudana*: bright, quick to grasp, quick in/on the uptake
Deep, Innovative	(esp of: child), intelligent
Intellectual	ǁ*khā*ǁ*khāsen(*ǂ*gao)xa*: studious; eager to learn, desirous of
Introspective	learning[3]
Philosophical	ǂ*âi!gâxa*: inclined to rethink; thoughtful; heedful,
Versus: Imperceptive,	meditative, pensive; strong-minded[4]
Shallow, Simple	!*gam*ǂ*âixa*: deep-thinking, contemplative, meditative[4]
Uninquisitive	Versus:
Unintelligent	*!khompōb/s*: blockhead, fool, simpleton, dim-wit, silly
Unsophisticated	fellow, ass
Unreflective	*farmnîb/s:* unsophisticated rural person, plaasjapie
Big Six Cross-language Six (CL6): derived from Ashton et al. 2004; Wide-variable-selection Cross- Language Six (WCL6): from Saucier (2009)	
Conscientiousness	(16)
Both[5]*:* Disciplined	ǂ*anbasen*: careful/cautious, be
Meticulous	*ôasasib*: diligence, assiduousness industriousness,
Orderly	willingness
Organized	*sîsen(tsâ)xasib*: diligence, industriousness, keeness to
CL6: Industrious	work; activeness
Diligent	*dīxūxa*: active, busy, industrious; engaged/involved

Thorough	!*ûi!gâxa*: attentive; mindful of (people/material things);
Conscientious	painstaking, meticulous
Dutiful, Precise	!*amku*: decent, respectable; proper, orderly; tidy, neat
Versus: Absentminded	!*ereamxa*: responsible
Careless	*sîsendūraxasib*: eagerness to work
Frivolous	*sîsendūraxa*: keen/eager to work;
Irresponsible	Versus*:*
Lazy	ǂ*âio!nâ*: thoughtless; unthinking; absent-minded,
Rash	inattentive
Reckless	ǁ*ae tama*: careless, indifferent, nonchalant; inconsiderate
WCL6: Consistent	*sîsen*|*opesa*: aversion to work
Hard-working	!*ereamo!nâsib*: irresponsibility
Moderate	|*opesa*: lazy, slothful, indolent
Neat	ǁ*ē*: audacious; insolent, impudent, impertinent; bold,
Responsible	dauntless, reckless
Systematic	|*homaxa*: untidy, messy, slovenly; hap-hazard/slipshod (of:
Tidy	work)
Honesty and Humility or Propriety	(22)
	ǂ*hau!nâ(xa)sib*: honesty, uprightness; straightforwardness;
CL6: Just	integrity
Honest	*amabesib*: authenticity, genuineness; sincerity, honesty;
Sincere	truthfulness
Loyal	ǂ*hanu-aisib*: justice; justness; righteousness; fairness,
Versus: Boastful	equity; integrity (quality of)
Calculating	Versus:
Conceited	ǁ*gai*: bad; rotten; evil; of poor quality, shoddy;
Greedy	wicked/vile/ill-natured/malicious (of: character)
Hypocritical	*tsū(si)b*: badness; evil, baseness, wickedness, sinfulness;
Sly	wrong; unwholesomeness; inferiority
WCL6: Awful	*tsū*: bad (in gen.) (1); 2 bad (of: name/reputation); evil (of:
Bad	reputation); 3 wicked, evil, foul, mean, scurvy,
Beastly	malevolent, depraved, base (of: character); 4 poor (of:
Corrupt	prospects/outlook); 5 vulgar obscene gross low
Cruel	improper indecent vile (of: behavior pornography
Dangerous	speech); 6 naughty (of: children); 9 detrimental
Disgusting	unwholesome (of: influence); 10 unwholesome (of:
Evil	habits); 11 wrong immoral unethical (of: deed)
Inhuman	ǁ*gaisib*: badness; rottenness; evil; shoddiness; wickedness,
Insane	vileness, ill-naturedness, maliciousness; malice
Vicious	ǂ*amaxa*: boastful, vaunting; bombastic, pompous; prone to
Wicked	show off/etc.
	*karosa*ǂ*gao*: hard-hearted, relentless; cruel
	ui-uisa: disgusting, revolting, abhorrent, horrible, sickening
	ǂ*khabadī-aob/s*: wrong-doer, evil-doer

	tsūdī-aob/s: wrongdoer, evildoer, malefactor; culprit, offender; criminal *xū!gunuxa*: greedy, rapacious, avaricious, covetous *mari!gunu(xa):* greed for/love of money, avarice ǂ*ûna*: greedy (for), be; crave, have craving for (e.g. food/women) ǂ*homi!nâ*: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account) ǀ*hôakao(xa)sib/s*: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence ǂ*hau!nâdīsenxa*: feign honesty/etc., prone to ǂ*hanuo!nâ*: unjust, wrongful; illegal; unfair ǀ*garu(adana):* bec. insane, bec. mentally disturbed/deranged/disordered; bec. scatterbrained; lose o.'s head *gāxa!nâsib*: cunning, slyness, craftiness, wiliness; trick(ery), deceit ǁ*ore(tsâ)xa*: naughty/wicked (of: child); refractory; sinful; inclined to transgressing/etc.
Agreeableness *Both:* Peaceful Tolerant *Versus*: Irritable Stubborn *CL6:* Patient Agreeable Good-natured Mild *Versus*: Aggressive Authoritarian Choleric Hot-headed *WCL6:* Kind Calm Easygoing Generous Gentle Understanding *Versus*: Brawling Fiery Impatient Impulsive Irascible Quarrelsome Quick-tempered	(18) *sâsa*: calm/restful/relaxed/tranquil (of: mind), placid; calming ǁ*aexa*: composed, calm; having/w. ample time ǂ*au*: tame; docile, tractable; slow; slow (and soft), suave (of: speech); gentle *!gâi:* good, excellent; good-natured (of: pers.) *!gâi(si)b*: goodness; (good) quality; good-naturedness; excellence ǂ*khî*: satisfied, contented; content, willing to accept circumstances, happy; peaceful; tranquil (of: mind) *tani*ǀ*namxasib*: willingness to tolerate/forbear, tolerance *tani*ǀ*namxa*: tolerant/etc., given to being Versus: ǂ*khabaxa*: aggressive, antagonistic; liable to antagonise, likes to pick fights; militant; antagonistic; liable to antagonise *!khamxa*: pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight ǀ*aexa*: fiery; ardent, zealous !*hae*ǁ*aixa(si)b*: hot-temperedness, irascibility; choleric temperament *!hae*ǁ*aixa*: hot-tempered, irascible; choleric ǁ*nâu*ǀ*namo!nâ*: disobedient, disrespectful, stubborn ǂ*anapega*: willful; stubborn; perverse; intentional, deliberate

	ǁ*nâu*ǁ*oa*: disobedient; stubborn |*araxa*: quick to show annoyance/etc.; short-tempered ǂ*noaguxa*: quarrelsome, argumentative
Emotionality vs Resiliency	(11)
CL6: Brave	*!gari-ao*: brave/courageous man/woman; hero
Courageous	ǁ*khoa*ǂ*gao(xa)sib*: bravery, courage, valour; boldness;
Imperturbable	dauntlessness; fearlessness, intrepidity; chivalrousness
Independent	*!ao-o!nâ*: fearless, intrepid; dauntless
Resolute	*!norasa*: free; independent; unimpeded, unrestricted; safe;
Self-assured	secure
Strong	|*gaisa*: strong, powerful, forceful, robust; mighty, potent;
Versus: Anxious	loud (of: sound); burly/sturdy (of: physique); vigorous
Emotional	Versus:
Fragile	ǂ*âi*ǂ*hansen*: anxious, be; worry
Sentimental	*au*: anxious/uneasy, feel
Vulnerable	*!ao!nâ*: timid, timorous; cowardly, faint-hearted
WCL6: Cowardly	*!gabua!nâ*: listless; dispirited, lethargic; dejected,
Depressed	despondent; depressed (by/about); morose
Fearful	*!aoxa!nâsib*: fear (inclined toward, tends to experience this
Frustrated	temporary state)
Gloomy	*îga(n)*|*gēxa*: sceptical, given to doubt; inclined to hesitate,
Sad	irresolute, vacillating
Extraversion	(5)
Both: Cheerful, Sociable	*!khausa*: wild; intractable, refractory; vivacious,
Talkative, Vivacious	excessively active, hyperactive
Versus: Silent, Withdrawn	*ûitsama*: living, animate; lively, vivacious, full of life
CL6: Extraverted, Lively	*gonxa*: restless, fidgety, mischievous; lively
Versus: Introverted	Versus:
Passive, Quiet	!*nōsa*: silent, being; quiet
Shy, Solitary	*taoxa*: shy, bashful; shamefaced; embarrassed, ashamed
Reserved, Taciturn	
WCL6: Friendly, Gregarious	
Outgoing, Smiling	

Openness/Originality/Talent *Both:* Intelligent Intellectual, Original *CL6:* Clever, Sharp Creative, Gifted, Ironic, *Versus*: Conservative Conventional *WCL6:* Admirable, Brilliant, Important, Impressive Knowledgeable, Outstanding Unusual, Talented, Wise *Versus*: Average Ordinary, Traditional	(6) ǂ*âi*ǂ*uixa*: creative, imaginative, artistic, etc. *gā-aisib/s*: cleverness, intelligence, wisdom; sagacity ǁ*nâu!āxasib*: intelligence; prudence; sagacity *supudana*: bright, quick to grasp, quick in/on the uptake (esp of: child), intelligent *!gom*|*gausa*: (of person) valued, important, esteemed; arduous, difficult to attain; important, significant, precious ǂ*oa*ǂ*amsa*: exceptional, particular, outstanding, distinctive; special

Note. In cases where the English glosses of a term led to word root matches with more than one scale in a model, the term was excluded from both scales (with the exception of "anxiety" terms included on Big Six Emotionality but not Agreeableness, despite being on that list).

[1] The pan-cultural 3 lists included many direct opposites using the same word root, e.g. sociable and unsociable. In these cases only the first term is shown.

[2] "Both" refers to words that appear in both the 7LC and Goldberg lists.

[3] This term was treated as a sufficient match for "educated" because of the great overlap in meaning and the small number of terms available for this scale.

[4] These terms were included on Big Five Intellect because of their strong association with the content of these scales (meditative for introspective; deep-thinking for intellectual), and the small number of relevant terms available.

[5] "Both" refers to words that appear in both the CL6 and WCL6 lists.

Table S6

Full Optimal Emic Solution, Ipsatized Data, Equamax Rotation

	Component										
	1	2	3	4	5	6	7	8	9	10	11
1. Intemperance											
ǀhoroxa: tend to be (always) drunk	**.73**	-.01	-.10	.02	-.06	-.09	.10	.00	.04	-.01	.16
ā‡ûna: greedy for drink	**.70**	.02	-.08	-.09	-.04	.02	.05	.00	.00	.04	.15
ǀhorosemâb/s : drunkard	**.62**	.09	.01	.05	-.04	-.13	.17	.00	.03	-.08	.08
ǀgoexa: disposed to using obscene language; insult	**.52**	.25	-.19	.10	-.21	.16	.00	-.09	.02	-.02	-.07
ǀgore(tsâ)xa: prayerful, inclined to prayer	-.42	-.06	.10	-.20	.14	-.13	-.06	.27	-.13	.14	-.04
!khamxa: pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight	.40	.09	-.06	.22	-.21	.23	.09	-.13	.10	-.03	-.04
ǀhomaxa: untidy, messy, slovenly; hap-hazard/slipshod (of: work)	**.39**	.13	-.04	-.04	-.06	.11	.08	.04	.21	.00	-.08
ǂgae-aob/s: smoker; ro(o)ker (< Afr.), i.e. dagga smoker; hence: freak, eccentric	.37	.12	-.04	.06	-.05	-.21	.15	.12	-.09	-.14	.08
ǂgomsabeb/s: believer; follower	-.34	-.10	.23	-.19	.07	-.25	-.07	.28	-.03	.22	-.10
gāgāsi: spiritual	-.32	-.11	.09	-.24	.14	-.24	-.08	.27	-.13	.10	-.17
aoǁnā-aob/s: preacher	-.31	-.05	-.06	-.29	.17	-.19	.20	.16	.04	.01	-.21
!khamaob/s: fighter; soldier	.29	.08	.09	.26	-.22	.06	.23	-.12	.05	.02	-.04
ǀkhopexa: inclined to begging, (wh. is) in habit of begging; mendicant	.23	.02	-.08	.01	.20	.21	.08	-.05	.09	-.01	.18
ǀkhomaxa : inclined to implore/etc.	.22	-.09	.06	.12	.06	.11	-.04	.10	.10	-.11	-.08
ǂgomxa: gullible, credulous, over-trusting	-.22	-.20	.10	.01	.22	-.03	-.12	.22	-.13	.16	-.13
ǂhau!nâdīsenxa: feign honesty/etc., prone to	-.14	-.06	.01	.09	.09	-.07	-.11	-.14	.00	.09	.08
2. Prosocial Diligence*											
sîsenhuixa: helpful, ready to help	-.09	**-.55**	.13	.07	.03	-.12	-.04	.16	-.06	.24	-.02
sîsenǀopesa: work-shy, shirking work; aversion to work	.06	**.51**	-.02	.06	.05	.31	.05	-.04	.04	.07	.16
!khaera(si)b/s: untidiness, slovenliness; slipshod(di)ness	.13	**.49**	-.16	.17	.13	.10	.02	-.01	.14	-.04	.17

sîsendūraxa: keen/eager to work;	-.25	**-.48**	.16	.04	.05	-.15	-.14	.12	-.15	.16	-.06
sîsendūraxasib: eagerness to work	-.16	**-.41**	.16	-.07	-.04	-.19	-.12	.14	-.02	.04	-.06
!ûi!gâxa: attentive; mindful of (people/material things); painstaking, meticulous	-.22	-.40	.03	-.02	.08	-.05	-.18	.18	-.18	.18	-.12
!amku: decent, respectable; proper, orderly; tidy, neat	-.18	-.39	.23	-.06	.08	-.18	-.08	.09	-.22	.14	-.08
|opesa: lazy, slothful, indolent	.11	.38	-.11	.10	.09	.35	-.01	-.07	.07	.01	.21
!anu(si)b: cleanness, cleanliness; pureness; holiness, sacredness, sanctity	-.24	**-.37**	.18	-.10	-.02	-.01	-.10	.13	-.12	.30	-.19
sîsen(tsâ)xasib: diligence, industriousness, keeness to work; activeness	-.14	-.37	.13	.03	.07	-.22	-.13	.12	-.19	.12	-.01
xore(tsâ)xa: joking/etc., fond of	.06	.36	-.12	.26	-.18	-.12	.13	-.05	-.04	-.03	.06
|gôa|nam: fond of children	.01	-.34	.12	-.13	.11	-.09	-.13	.18	-.29	.17	.01
!gôa‖nāxa: disdain, scorn, have a low opinion of others	.07	.33	-.23	.06	-.19	.27	.19	-.19	.03	-.16	-.05
ôasasib: diligence, assiduousness industriousness, willingness	-.21	-.33	.14	.08	.06	-.22	-.09	.18	-.15	.23	-.10
!gabu: insipid/lifeless/full (of: pers.), fig.	-.31	.32	.00	.11	-.08	.00	.06	.03	.12	-.12	.11
|hū|hūsa: distressing; annoying	.19	.30	-.10	.11	-.22	-.01	-.03	-.13	.24	-.23	.03
‖nâu|namo!nâ: disobedient, disrespectful, stubborn	.06	.29	-.17	.27	-.2	.04	.16	-.03	.19	-.13	.06
!gâidīxa: charitable; inclined to…	-.06	-.29	.22	-.17	.04	-.15	-.07	.17	-.22	.26	-.05
!gôao(!nâ)sib: disrespectfulness; irreverence	.13	.28	-.17	.23	-.23	.09	.16	-.09	.12	-.23	.02
dī(tsâ)xa: industrious, active	-.11	-.28	.10	-.05	.08	-.07	-.20	-.03	-.23	.13	-.11
!gâisîsen‖khāsib : effectiveness	-.12	-.28	.14	-.01	.00	-.15	-.23	.11	-.21	.24	-.14
sâubasenxa: miserly;inclined to hoard/to save up for o.s.	-.20	-.27	-.06	-.08	.09	.15	-.09	.05	-.20	-.08	.04
‖nâu‖oa: disobedient; stubborn	.09	.27	.17	.26	-.07	-.01	-.07	-.05	.15	-.21	.07
ǂhâ!khoexa: quick to look to others for help	.00	-.23	-.11	-.01	.15	-.04	.00	-.02	.00	-.10	-.09
‖ae tama: careless, indifferent, nonchalant; inconsiderate	-.03	.23	-.19	.08	-.12	.02	.09	.06	.14	-.07	.10
ǂgomaiǂnûixa: rely on others, inclined to	-.10	-.22	.21	-.07	.19	-.20	-.05	.17	-.06	.02	-.2
ǂâiǂâisenxa: pensive	-.12	-.20	-.09	-.10	.12	-.04	-.19	.02	-.05	-.07	.15
dūraxasib: desire, motivation, ambition, or eagerness to achieve, or obtain goals	-.13	-.18	.15	-.07	.04	-.11	-.18	.16	.09	.07	-.18
<u>3. Intrusive Gossip</u>*											
ǂhôatani-aob/s: scandalmonger; messenger	.06	.12	**-.51**	-.06	-.03	-.04	.27	-.05	-.01	-.07	-.06

ǂhôaǂûna: nos(e)y, inquisitive	.18	-.01	**-.48**	.04	-.01	.20	-.06	-.07	.18	.09	-.01
ǂhôaxa: gossipy, tattling; full of news, bursting w. news	.18	.10	**-.47**	.16	.05	.16	.13	-.07	.19	-.03	.01
ǀhoe-aob/s: scandalmonger, gossiper	.02	.32	-.47	.09	-.09	.05	.15	-.03	.00	.02	.06
!gâi(si)b: goodness; (good) quality; good-naturedness; excellence	.00	-.15	.37	-.18	.15	-.18	-.11	.15	-.06	.24	-.15
mari!gunu(xa): greed for/love of money, avarice	.04	.18	-.36	.13	-.05	.27	.03	-.17	.09	-.06	.19
anusib: dignity, suitability, appropriateness, seemliness	-.18	.07	.35	-.16	-.05	-.03	-.18	.09	-.07	.33	-.06
ǀō-aisa: special; unique; distinctive; exceptional	-.06	-.05	.35	-.16	.17	-.01	-.22	.12	-.12	.21	-.08
mîǁnâxa: likes talking people down, defame	.12	.28	-.33	.12	-.12	.28	.14	-.19	.10	-.06	-.02
am!nâxa: prone to tell lies	.14	.18	-.33	.06	-.25	.00	-.21	-.15	.18	.01	-.08
dî!nâxa: someone who is inquisitive, who asks lots of questions in a persistent manner (curious[+]; nosy, prying[-])	-.02	-.18	-.31	-.03	-.11	-.06	-.15	-.03	.10	.02	-.01
gā-aisib/s: cleverness, intelligence, wisdom; sagacity	-.15	.05	.31	-.07	.03	-.21	-.19	.17	-.08	.27	-.22
xū!gunuxa: greedy, rapacious, avaricious, covetous	.06	.14	-.31	.02	-.01	.28	.13	-.11	.11	-.04	.19
xorexab/s: tease/-joker, a	.03	.26	-.30	.21	-.14	-.09	.20	.03	-.16	.06	.04
ǂoaǂamsa: exceptional, particular, outstanding, distinctive; special	-.09	.05	.30	-.07	.20	-.24	-.05	-.03	-.07	.14	-.21
ǂgom!gâsa: trustworthy, reliable	-.24	.02	.30	-.17	.16	-.15	-.16	.18	-.19	.27	-.15
ǂhau!nâ(xa)sib: honesty, uprightness; straightforwardness; integrity	-.22	-.17	.30	-.26	.22	-.12	-.04	.19	-.08	.25	-.13
anusa: worthy	-.14	-.09	.28	-.07	-.03	-.10	-.19	.09	-.10	.25	-.05
ǂhomi!nâ: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account)	.25	.26	-.26	.22	-.01	.15	.12	-.04	.22	-.08	.18
ǁgaeǁgae-aob/s: imitator, mimic; impersonator	-.08	-.01	-.26	.04	.11	.00	-.14	-.05	-.07	-.08	-.06
ǂō(!om): thrifty, parsimonious, frugal; narrow; tight/constricting (of: clothes); confined (of: house);	-.11	.17	-.25	.08	.00	.08	.02	-.11	.17	-.19	.24
!norasa: free; independent; unimpeded, unrestricted; safe; secure	-.19	-.05	.21	-.15	.16	-.21	-.17	.14	-.13	.16	-.18
4. Immorality											
ǁore-aob/s: sinner; offender, miscreant; transgressor; wastrel; good-for-nothing	.25	.13	-.15	**.51**	-.18	.12	.12	-.02	.10	.02	-.04

ǁlore(tsâ)xa: naughty/wicked (of: child); refractory; sinful; inclined to transgressing/etc.	.20	.25	-.04	.45	-.26	-.03	.01	-.11	.16	-.11	.03
gāxa!nâxasib: fraudulence, wiliness, deceitfulness	.08	.16	-.18	.44	.07	.14	.34	-.05	.08	-.02	-.02
ǀhôakao(xa)sib/s: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence	.25	.25	-.23	.41	.04	.16	.17	-.08	.05	-.02	-.03
gāxa!nâsib: cunning, slyness, craftiness, wiliness; trick(ery), deceit	.08	.14	-.21	.40	.00	.16	.17	-.05	.17	-.11	-.08
tsûtsû-aob/s: tormentor; torturer	.19	.11	-.13	.38	-.2	.10	.24	-.09	.03	-.14	.02
!ûi-aob/s : shepherd, herdsman; nurse; guard; watchman, security guard; scout (mil.); sentry; bodyguard	-.13	-.24	.07	-.37	.09	-.2	.04	.14	-.14	.14	-.10
gonxa: restless, fidgety, mischievous; lively	.22	.08	-.16	.36	-.2	.00	-.10	-.2	.14	.01	.02
ǂhumi-aob/s: liar, (habitual/inveterate)	.28	.09	-.26	.35	.09	.09	.20	.08	.07	-.04	-.08
tsūdīxa: wrong/harm, prone to do, harm, inclined to (cause), w. criminal tendency	.22	-.02	-.06	.35	-.16	.33	.09	-.15	.07	-.11	-.03
ǂamkhoeb/s: a person of special status, high position, class, authority, or seniority who is accorded respect, 2) a person who is snobbish, acts as if they are of high position without merit or acts better than others, 3) a person who is the best, at	-.04	.09	.11	-.34	.15	-.08	.01	-.02	-.01	.05	-.20
ǂnoaguxa: quarrelsome, argumentative	.15	.14	-.16	.33	-.3	.08	-.23	-.16	.06	-.22	-.07
ǂgaeǂgui-aob/s: leader; manager, director; person in charge	-.28	-.19	.12	-.33	.00	-.15	-.09	.08	.00	.20	-.27
ǂūo: without manners; characterless, without personality; base	.21	.27	-.17	.33	-.04	.00	.16	-.15	.23	-.07	-.13
karosaǂgao: hard-hearted, relentless; cruel	-.10	-.02	-.07	.32	-.10	-.01	.03	-.26	.03	-.24	.06
!gapaǀîhesa: appealing/pleasing (to look at); attractive	-.27	-.14	.10	-.31	.19	-.05	-.15	.27	-.20	.00	-.07
ǀkhae-aob/s: donor, person who makes a gift, giver; pers. who blesses	-.19	-.16	.20	-.31	.09	-.18	.12	.11	-.05	.20	-.09
!hōxa: derisive, quick to deride/etc.	.09	.19	-.21	.30	-.15	-.09	.14	-.25	.09	.06	.07
tsū(ke)!gâxa: difficult, dangerous (of: e.g. foe/road), hazardous; accident-prone (of: pers.), w. high risk of accident	.09	.08	.04	.30	-.02	.10	.20	-.12	.18	-.20	-.01
!gari-ao : brave/courageous man/woman; hero	-.08	-.08	.15	-.30	.11	-.18	-.05	.22	-.09	.20	-.25
ǁgaisib: badness; rottenness; evil; shoddiness; wickedness, vileness, ill-naturedness, maliciousness; malice	.02	.27	-.11	.30	-.07	.18	.24	-.15	.12	-.14	-.08
ǀnamo(!nâ)sib: lovelessness, unlovingness, coldness	-.03	.18	-.09	.29	.04	.11	.13	-.01	.11	-.17	.10
ǀapemā-aob/s: adviser, counselor, s.o. giving unsolicited advice	-.25	-.14	.05	-.29	.09	-.12	-.09	.27	-.08	.12	-.21

ganganxasib: thankfulness, gratefulness, gratitude	-.17	-.23	.15	-.27	.14	-.20	-.14	.20	-.21	.20	-.02
karosa: strict, stern, harsh	-.12	-.02	.11	.27	-.08	.00	-.01	-.14	.11	-.15	.10
gāxa: wily, foxy, tricky	.22	.25	-.08	.26	-.08	.04	-.02	-.20	.19	-.03	.19
gangano!nâsib: unthankfulness, ingratitude, thanklessness	-.05	.18	-.19	.26	-.05	.13	.15	.04	.22	-.18	.05
koasa-anu: praise-worthy, commendable, laudable	-.24	-.15	.25	-.26	.08	-.16	-.24	.18	-.17	.23	-.11
!hurisa: frightened, alarmed	.01	-.10	.08	-.24	.06	.07	-.02	-.06	.12	-.22	.24
amabesib: authenticity, genuineness; sincerity, honesty; truthfulness	-.18	-.06	.09	-.24	.14	-.07	-.09	-.23	-.21	.13	-.06
!nōsa: silent, being; quiet	-.21	-.17	.20	-.21	.21	.00	.21	.07	-.06	-.15	.13
ama-ai: reliable, worthy, commendable, valuable	-.11	.04	.03	-.20	.11	-.12	-.07	-.16	-.16	.07	-.08
ôa!nâxa: investigate (inclined to), probe; examine; evaluate, assess; research, (inclined to)	.09	.01	-.15	.18	-.11	-.14	-.03	-.08	.12	-.07	-.02
5. Bad Temper*											
!hae‖aixa(si)b: hot-temperedness, irascibility; choleric temperament	.01	.02	-.03	.13	**-.56**	.09	-.07	-.18	.08	-.01	.05
‖aixasa: rage, fury, anger; (poet.) wrath; (poet.)	.07	.01	-.03	.00	**-.55**	.15	-.01	-.17	.23	-.14	.09
!hae‖aixa: hot-tempered, irascible; choleric	.07	-.05	-.03	.06	**-.53**	.19	-.07	-.17	.11	-.03	.01
‖ē: audacious; insolent, impudent, impertinent; bold, dauntless, reckless	.13	.04	-.10	.13	**-.47**	.21	-.09	-.15	.01	-.22	-.05
ǂkhabaxa: aggressive, antagonistic; liable to antagonise, likes to pick fights; militant; antagonistic; liable to antagonise	.30	.13	-.17	.09	-.46	.37	.01	-.06	.08	-.03	-.05
ǀaraxa: quick to show annoyance/etc.; short-tempered	.05	-.02	-.03	.18	-.44	-.01	-.04	-.04	.17	-.33	.05
mîxa: sardonic, tending to run down/ridicule people (esp. of adults w. regard to children)	.15	.07	-.38	-.08	-.42	.11	-.04	-.15	.04	-.04	.05
!garidanasib: obstinacy, stubbornness, mulishness; dullness, dim-wittedness; determination, headstrongness; resolution, resoluteness	.02	.17	-.06	.17	-.39	.05	-.15	-.13	.14	-.24	.05
kai-am!nâ: someone who is overly talkative, indiscriminate with information shared or who they share it with, or a know-it-all	.22	.09	-.37	-.03	-.39	.19	-.12	-.07	.10	.06	-.09
ǂkhupixa: noisy, loud; inclined to be noisy/loud (of: pers.)	.29	.10	-.21	.05	-.38	-.02	-.17	-.06	.30	-.06	.09
ǂkhabadī-aob/s: wrong-doer, evil-doer	.31	.17	-.24	.30	-.36	.06	.21	-.07	.06	-.05	-.07
!nâudanaxa: obstinate, stubborn, pig-headed; obdurate; mulish, determined, resolute	.03	.13	-.02	.22	-.36	-.02	-.04	-.22	.05	-.19	-.02
ǂhanu: straight; correct, proper; right	-.15	.02	.22	-.16	.36	-.20	-.11	.08	-.2	.11	-.18

tsaura‡gaosib: soft-heartedness	-.12	-.18	.17	-.14	.35	-.14	-.12	.31	-.16	.23	.00
sâsa: calm/restful/relaxed/tranquil (of: mind), placid; calming	-.28	-.24	.15	-.21	.35	.00	-.02	.16	-.11	.23	.02
!gari-am!nâ: talks with a high volume, with a loud voice or speech	.22	.01	-.31	-.02	-.34	.19	-.24	-.04	.11	.15	-.07
ǂau: tame; docile, tractable; slow; slow (and soft), suave (of: speech); gentle	-.14	-.03	.15	-.15	.34	.05	.09	.23	-.13	-.04	.21
ǂkhî : satisfied, contented; content, willing to accept circumstances, happy; peaceful; tranquil (of: mind)	-.07	-.21	.16	-.06	.33	-.23	-.29	.05	-.07	.21	.01
!ao(he)sa: feared, dreaded; frightening, frightful; fearsome; (wh. is) constantly feared	.09	-.14	.12	.00	-.32	.12	.25	-.15	.06	-.04	-.02
khoe(xa)!nâ: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors)	-.06	-.09	.16	-.06	.30	-.28	-.20	.19	-.23	.16	-.16
ǁnâu!āxasib: intelligence; prudence; sagacity	-.04	-.17	.24	.00	.26	-.20	-.12	.19	-.17	.23	-.03
!gari‡gao(xa)sib: stoicism, toughness	-.03	.00	-.01	.00	-.24	-.03	.03	-.07	-.05	-.01	-.09
ǁhapoxa: 1:“a person with goals, ambitions, wishes, or desires for the future and is motivated toward fulfilling them”, 2: “someone who is a visionary”,	-.12	-.08	-.01	.00	.23	.04	-.10	-.08	.02	.03	-.12
supu‡gao(xa): soft, inclined to weep (esp. of: man)	-.09	-.11	.20	-.03	.20	.07	-.15	.17	-.05	.16	.13
dūraxa: eager; covetous; lustful; desirous	-.14	-.16	-.10	.04	.20	.00	-.20	.00	.13	-.03	-.12
!gâi!ō(si)b: luck, luckiness, good fortune; bliss, blessedness, joy	-.13	-.06	.17	-.13	.19	-.13	-.04	.08	-.14	.01	-.18
tao-o!nâ: shameless, unashamed; not embarrassed; impudent, indecent	-.10	.03	-.07	.11	-.14	-.03	-.03	-.04	.12	.06	.08
6. Implacability											
surixa: envious, inclined to envy/begrudge	.12	.22	-.19	-.04	-.08	.42	.14	-.07	.19	.02	.01
hui|nam(xa): helpful, eager/keen to help (always)	-.11	-.15	.28	-.02	.09	-.39	-.14	.00	-.20	.18	-.08
!khausa: wild; intractable, refractory; vivacious, excessively active, hyperactive	.25	-.12	-.05	-.03	-.19	.39	.21	-.05	.06	-.11	.05
!gam!gamsenxa: humble; meek, docile, submissive; self-deprecating	-.19	-.15	.23	-.17	.24	-.38	-.10	.27	-.23	.15	-.03
ǂkhîo!nâ: dissatisfied, discontented, disgruntled; unhappy; upset	.02	.07	.06	-.06	-.21	.38	-.01	.04	.07	-.24	.02
māsenxa: available, willing, ready	.00	-.19	.16	-.04	.20	-.36	.04	.09	-.17	.07	-.09
ǂanapega : willful; stubborn; perverse; intentional, deliberate	.31	.13	.01	.18	-.12	.36	-.11	.11	.19	-.02	.04
ǂhomixa: mendacious, deceitful, inclined to lie	.20	.15	-.32	.21	.03	.35	.14	-.04	.20	.05	.07
ǁnâu|namxa: obedient; tractable, amenable	-.20	-.25	.17	-.23	.19	-.34	-.05	.21	-.14	.23	.06
!gâi: good, excellent; good-natured (of: pers.)	-.07	-.04	.25	-.09	.15	-.34	-.22	-.02	-.20	.29	-.04
|khomo!nâ: ruthless, pitiless; merciless	-.02	.13	-.15	.14	-.19	.34	.11	-.14	.09	-.07	.06

ǁgai : bad; rotten; evil; of poor quality, shoddy; wicked/vile/ill-natured/malicious (of: character)	.04	.05	-.21	.22	-.04	.33	.25	-.11	.03	-.14	-.03
sorasa 1: disdain, disregard; undervaluation, underestimation	.17	.21	-.18	.10	-.17	.33	.04	-.12	.14	-.20	-.13
ǂkhôaxa: harmful; likely to damage/etc., damaging	.26	.07	-.26	.15	.02	.33	.18	-.11	.07	.00	.10
sorasa 2: contempt, disdain; low esteem; underestimation; being underrated	.25	.19	-.11	.06	.01	.32	-.05	-.08	-.01	-.22	.00
ǂgomǂgomsa: trustworthy, reliable, dependable; credible	-.22	-.06	.24	-.17	.25	-.32	-.05	.04	-.18	.22	-.06
ǀnamǀnamsa: loveable, likeable, ami(c)able; respected, cherished	.00	-.05	.22	-.08	.13	-.32	-.15	.04	-.28	.24	.04
ǀûba(ǂgao)xa: forgiving; (generally) willing to forgive/etc.	-.11	-.24	.14	-.10	.28	-.32	.00	.20	-.15	.23	.03
aiǂhomisenxa : prepare (o.s.), (advance), inclined to	-.25	-.3	.14	-.15	.11	-.31	-.05	.08	-.10	-.01	-.18
ǁkhāǁkhāsen(ǂgao)xa: studious; eager to learn, desirous of learning	-.25	-.24	.11	-.07	.24	-.30	-.07	-.02	-.03	.14	-.19
ǁnâuo!nâ: disobedient (out of neglect, as e.g.child)	.14	.16	-.06	.14	-.04	.30	.06	.00	.27	-.01	-.01
tsū!ō: ill-fated, unlucky, unsuccessful (in an endeavour)	.11	.08	-.12	.08	.01	.30	.22	-.10	.12	-.10	.11
danxa: inclined to be victorious, given to winning	-.14	-.14	.21	-.14	.12	-.29	-.12	-.01	-.10	.16	-.24
ǀuruxa: forgetful, tending to forget; amnesic	-.06	.08	.09	.05	.07	.29	.02	.13	.13	.00	.22
ǀkhomxaǂgao: easily moved to pity, soft-hearted; merciful, sympathetic	-.08	-.26	.21	-.11	.21	-.28	-.08	.16	-.26	.15	-.03
kare(tsâ)xa: praise/etc., prone t	-.07	-.18	-.02	-.18	.19	-.26	-.03	.22	-.13	.11	-.20
ǁomo!nâ: sleepless (of: pers.), unable to sleep	-.03	.01	.01	.05	-.04	.24	.05	.05	-.01	-.21	-.02
ǂkhaisa: awake, vigilant	-.11	-.09	.06	-.06	.12	-.24	-.19	-.07	.01	.06	-.24
!onkhaoxa: late, unpunctual, tardy, prone to be	.08	.22	.02	.12	.07	.23	-.07	-.07	.11	-.04	.17
ǂgan!gâsa: 1) someone who is secretive (or has a hidden agenda) with regard to personal history, attributes, intentions, or information that they have. 2) someone who is reserved, shy, or private	-.12	-.09	.10	-.06	.17	.20	.02	-.14	-.10	-.08	.07
!gom!gâxa: difficult to resolve; settle; complicated, not clear-cut (of: e.g. legal case), or understand (:of person/issue)	-.08	.15	.06	.09	-.15	.20	.02	-.08	-.13	-.18	.00
7. Predatory Aggression											
!gamaob/s/i: killer; murderer, assassin, homicide	.03	-.01	.08	.03	.14	-.04	**.65**	.06	-.01	-.01	-.05
!khompōb/s: a stupid person, a person of low intelligence, ignorant, idiot	.03	.01	-.04	.07	.16	.07	**.56**	-.03	.05	.02	.06
!gaixa: who is (habitually) in possession of black medicine	.01	-.07	.02	-.15	.15	-.01	**.55**	.18	.09	.05	-.04

!nari-aob/s: thief; kidnapper	.10	.20	-.04	.19	.02	-.02	**.48**	.14	-.07	.08	-.02
!gai(dī)-aob/s : shaman, medicine-man, sorcerer; herbalist (w. mainly sinister intentions)	-.06	-.14	.06	-.07	-.07	-.07	**.48**	.22	.07	.16	.08
!gammekhôa-aos: adulteress	.12	.05	.00	-.04	.15	-.11	**.41**	-.01	-.07	.11	.00
ǂgaeǂhapu-aob/s: seducer; deceiver; s.o. leading astray	.15	.20	-.33	.10	-.14	.02	.41	-.08	.03	.00	.05
tsūdī-aob/s: wrongdoer, evildoer, malefactor; culprit, offender; criminal	.22	.14	-.11	.26	-.16	.07	.39	-.14	.07	-.11	.01
ui-uisa, ui-uixa: disgusting/revolting/abhorrent/horrible/sickening	.07	.03	-.10	.12	.13	.32	.39	.02	.14	.04	.09
ǀapexūxa: inclined to betray	.09	.13	-.30	.27	.12	-.02	.37	-.12	.18	-.05	.12
ǀāxare(he)sa: cursed	.22	.15	.02	.01	.04	.19	.37	-.12	-.03	-.07	-.01
!ao!ao-aob/s: intimidator; s.o. who frightens/etc.	.12	.06	-.11	.07	-.19	-.01	.34	-.06	.02	-.04	-.03
!hāsara-aob/s: denouncer; s.o. prone to insult	.09	.28	-.22	.20	-.16	.03	.32	-.2	.02	-.06	-.08
!khom!nâxa: tend to jeorpadise, destroy	.16	-.06	-.10	.09	-.22	.08	.27	-.24	-.01	-.08	.16
omkhôaxa: burgler, inclined to burgle	.23	.07	-.04	.03	.17	.26	.26	-.02	.01	-.05	-.03
kairakhoedīsen: elderly, pretend to be, elderly pers., behave like an	-.05	.05	-.07	-.22	-.04	.07	.23	.11	.08	-.05	.00
ǀkhonxa: funny, hilarious, laughter-provoking, humorous	.05	-.04	.05	.10	.07	-.14	-.21	.02	.09	.06	-.02
ǂgomheǁoasa: untrustworthy, unbelievable, incredible;	-.04	.07	-.04	.04	-.04	.09	.16	-.03	.14	-.14	-.02
<u>8. Haughty Self Respect</u>*											
(ǁî)!gôasen: self-respect (having)	.07	.07	-.08	.07	-.12	.00	-.05	**-.58**	.16	-.02	.14
ǀgapiǂâixa: proud, haughty, arrogant; snobbish	.04	.01	-.05	.05	-.14	.20	.01	**-.55**	.11	.04	.01
ǁî!gôasenni: haughtiness, arrogance	.01	.14	-.20	.05	-.22	-.03	-.02	**-.52**	.14	.04	.16
ǂnīǂnīsenxa: proud, haughty, inclined to act …	.01	.16	-.05	-.07	-.05	-.05	-.07	**-.48**	.34	.04	.04
ǂnīsa: to be proud or to display self-respect and pride in relation to an achievement, or in relation to group belonging	.01	-.05	.24	-.07	-.02	-.06	-.13	-.39	-.10	.00	-.20
Elo!ao!gâb: religiousness, fear of God, devotion, piety	-.28	.01	.14	-.20	.10	-.26	-.08	.37	-.10	.21	-.01
Elo!ao!gâxa: god-fearingness, piety, piousness	-.28	.06	.03	-.17	.11	-.26	-.16	.36	-.11	.08	-.04
!hausenxa: remorseful; compunctious; inclined to be regretful/ to regret/etc.	-.03	.07	-.04	-.12	.13	-.08	-.11	.33	-.11	-.20	.09
ǀgôadīxa: fond of caring for/of handling (children)	-.03	-.20	.13	-.18	.12	-.05	-.06	.33	-.05	.09	-.12
tsâbaǁhao(xa)sib: compassion, sympathy, pity	-.12	-.16	.22	-.26	.17	-.16	-.09	.33	-.11	.09	-.20

!ao!gâxasib: respectfulness, inclination to revere/etc.	-.23	.01	.15	-.32	.15	-.15	-.07	.32	-.21	-.07	-.05
tani|namxasib: willingness to tolerate/forbear, tolerance	-.24	-.24	.20	-.13	.06	-.14	-.11	.31	-.18	.19	.05
hō!âsens: self-pride/ -respect	-.08	.07	-.06	-.09	-.09	-.06	-.06	**-.31**	.00	.01	-.03
kaikhoe!ao!gâxa: respect for/awe of elders/superiors; honour (accorded to elders/etc.)	-.23	-.23	.20	-.26	.16	-.23	-.12	.3	-.16	.19	.10
supudana: 1) gullible, easily manipulated, too easily convinced, persuaded, or influenced (naïve), 2) intelligent, quick to grasp, learns and understands easily.	-.05	.04	-.09	-.16	.27	.09	.02	.29	.04	.10	.02
!âitsâ-aob/s: examiner; tempter, temptress	-.01	.04	-.05	.24	.01	-.01	.09	-.27	-.03	-.17	.15
|namxa!nâ: loving, affectionate (w. element of compassion); tender	-.10	-.24	.25	-.13	.13	-.18	-.23	.27	-.21	.26	.05
|khā|hûixa: biased, partisan, partial (inclined to choose sides)	-.02	.14	-.19	-.10	-.10	.23	-.06	-.26	.10	-.09	.08
dīxūxa: active, busy, industrious; engaged/involved	-.02	-.03	-.17	.23	-.04	.02	.05	-.25	.08	.03	.01
ǂgaobasenxa: someone who wants everything for themselves, selfish, covetous	-.04	-.03	-.02	-.06	.12	-.10	-.11	-.24	-.06	.09	.02
!gâitsâsens: well-being (feeling of)	-.01	.07	.05	-.21	.07	-.06	.00	-.24	-.13	.17	-.09
ǂhanuo!nâ: unjust, wrongful; illegal; unfair	-.03	-.03	-.02	.15	-.07	.06	.16	-.19	.08	-.14	.11
<u>9. Vanity/Egotism</u>											
ǂkhaiǂkhaisens: 1) show-off, pretentions, ostentatious, pompous, grandiose, 2) self-respecting, prideful.	.13	.03	-.10	-.09	.02	-.11	-.13	-.22	**.48**	.04	-.02
aau: 1) bitter, acidic, negative, resentful, stingy, antisocial, 2) tough, austere, hardy	.03	-.03	.00	-.05	.08	-.11	-.08	.00	**-.46**	.07	.04
ǂamaxa: boastful, vaunting; bombastic, pompous; prone to show off/etc.	.14	.03	-.29	.08	.02	.01	-.10	-.25	.38	-.12	-.04
ûitsama, ~tsaba: living, animate; lively, vivacious, full of life	.01	-.03	.09	.01	.05	-.10	-.19	-.03	-.37	.13	-.16
koasenxa : fond of praising self	.16	-.02	-.22	-.14	-.22	.12	.03	-.25	.35	.01	-.07
oaxaedīsen: to dress up, make oneself beautiful or look good in order to stand out or attract the attention of others – especially with regard to the opposite sex	-.05	-.05	.06	-.09	.05	.00	-.17	-.04	.34	.04	-.05
gangano!nâ: unthankful, ungrateful, thankless	-.02	.19	-.01	.18	.05	.20	.25	-.09	.32	-.16	.13
!aob: fear, dread, fright; anxiety; terror; alarm; disquietude, apprehension	-.02	.14	.14	-.10	.05	-.06	-.06	.05	-.32	-.18	.16
|khara|kharasa: changed, altered, converted, improved	-.08	-.14	.02	-.18	.14	-.07	.11	.03	-.31	-.03	-.21
ǂanbasen: careful/cautious, be	-.22	-.12	.07	-.12	.01	-.09	-.10	-.03	-.30	.18	-.11

ǂâi!gâxa: 1) someone who reflects, reconsiders before acting, 2) someone who reflects after a decision or interaction with regret or remorse, or has second-thoughts, and corrects or apologizes."	-.18	-.21	-.03	-.12	.21	-.11	-.16	-.04	-.29	.00	-.16
ǂgom!gâo!nâ: distrusting	-.01	.14	.07	.06	-.10	.17	.28	-.07	.28	-.17	.14
hara: open-hearted, extroverted, kind - from hara (being wide, roomy, spacious)	.06	-.07	.08	-.07	.16	-.2	-.26	.26	-.28	.19	-.21
ǂûna: greedy (for), be; crave, have craving for (e.g. food/women)	.10	.11	-.24	.10	.00	-.08	-.07	-.12	.28	-.02	.25
!ûisens: good behavior; habit/characteristic of taking care of o.s.	-.26	-.13	.17	-.01	.03	-.12	-.24	.15	-.28	.21	-.05
hî|huruxa: squander/etc., prone to	.20	.22	-.04	.26	-.07	-.01	-.01	-.18	.27	-.05	.09
ǂkhāxa: resistant, refusal to do, help, give, etc, stubborn, uncooperative	-.07	-.04	-.14	-.08	-.2	.07	.00	.15	-.26	-.04	.15
tauxa: jealous	.19	.01	-.11	.03	-.18	.04	.03	-.15	.24	-.13	.14
ǁaexa: composed, calm; having/w. ample time	-.08	-.24	.14	-.10	.17	-.05	-.20	.00	-.24	-.05	-.19
!hao|goraxa: segregative; separatist; wh. tends to divide/segregate people/etc.	-.04	.22	-.04	.05	.11	.13	.15	-.08	.24	-.02	-.11
dāsāxa: adulterous/etc., tendency/propensity to stumble	.15	.09	-.03	.10	.03	-.02	.03	-.21	.22	-.20	.04
10. Resilient vs. Agitated											
tani|namxa: tolerant/etc., given to being	-.12	-.27	.30	-.20	.18	-.06	-.11	.13	-.27	.36	-.07
mâxō|khā-aob/s: supporter; pers. who stands by one/sides w. one; assistant	-.12	-.17	.29	-.11	.06	-.19	-.11	.07	-.12	.36	-.08
!gâia‡gaoxa: of a happy disposition; tends to rejoice/etc.	-.05	-.21	.14	-.06	.16	-.16	-.15	.01	-.08	.36	.13
sâo!nâsib: restlessness; fidgetiness	.14	.12	.01	.12	-.05	.05	-.07	-.01	.02	**-.36**	.11
ǁgûsi|nammi: love, parental	-.13	-.05	.16	-.19	.02	-.15	-.25	.16	-.14	.35	.01
ǂâi‡hansen: anxious, be; worry	.05	-.05	.00	-.07	-.03	-.02	-.06	.14	-.02	**-.35**	-.02
ǁkhātama-īsib/s: incapacity, incompetence, inability	.08	.13	.15	-.04	-.05	.03	.08	.07	.09	**-.33**	.19
tsū: bad (in gen.) (1); 2 bad (of: name/reputation); evil (of: reputation); 3 wicked/evil/foul/mean/scurvy/malevolent/depraved/base (of: character); 4 vulgar/obscene/gross/low/improper/indecent/vile (of: behavior/porn)	.26	.14	-.05	.16	-.28	.07	.08	-.11	.13	-.29	.00
!ū(ke)-ai: lonely/desolate/lonesome, feel	.00	-.04	.12	.00	.01	-.15	-.05	.16	.04	-.28	.14
|ûbao!nâ: unforgiving, implacable	-.01	.00	-.09	.02	-.11	.23	.08	-.01	.19	-.28	.05
ǂhanu-aisib: justice; justness; righteousness; fairness, equity; integrity (quality of)	-.19	-.14	.25	-.23	.12	-.15	-.02	.23	-.21	.28	-.06
ǁgoasen(tsâ)xa: inclination to cringe (implore, entreat; supplicate)	.15	-.11	-.12	-.16	.19	-.05	-.09	.05	-.22	-.27	.04

tsū(si)b: badness; evil, baseness, wickedness, sinfulness; wrong; unwholesomeness; inferiority	.13	.24	-.16	.20	-.18	.15	.09	-.05	.14	-.27	-.07
îga(n)|gē(he)sa: doubtful, dubious, questionable; uncertain	-.11	.03	-.01	.18	-.04	.12	-.01	-.07	-.12	-.26	.04
|khomsenxa: self-pity	-.13	.02	-.10	-.09	.06	-.02	-.08	-.07	-.11	-.23	.04
|hapixa: guilty	.11	.02	-.06	.05	-.13	.10	.02	-.05	.02	-.22	.12
ǁama-aob/s: buyer, purchaser; shopper; customer; bidder (at auction)	-.20	-.14	-.02	-.20	-.10	-.07	.09	.20	-.12	.22	-.01
ǂkhabu(sa)sib: weakness; infirmity, frailness, decrepitude; dimness, faintness	-.01	.05	.20	.05	-.09	.19	.03	.10	.11	-.20	.19
!gom|gausa: 1 arduous, difficult to attain; 2 important, significant; precious	-.14	-.02	.04	.01	-.17	.08	-.03	-.15	-.07	-.19	-.01
ǂhansenxa: to be motivated and/or active, or go from place to place in a restless manner, typically in the context of seeking solutions to or aid for a current problem or dilemma	-.03	-.06	.11	-.09	.11	.00	-.07	.14	-.13	-.15	-.15
11. Fear vs. Courage											
|aexa: "fiery"; adept, skilled, exceptional, masterful, in relation to a domain of expertise	.08	.01	.14	-.06	-.01	.14	.09	.07	.07	-.12	**-.39**
!haokhoedīsenxa: stand-offish; acting like a stranger	-.07	.00	.03	-.04	.06	.04	.05	-.12	-.09	.01	**.36**
ǁkhoaǂgao(xa)sib: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness	-.15	-.13	.15	-.13	.04	-.09	-.08	.18	.11	.07	**-.35**
ǁgoaraxa: someone who wants to be begged by others, creates situations where others are in a position to beg, withholds in order to be begged	.07	.19	-.08	.14	-.20	.01	-.07	-.08	.11	-.06	.35
!hurixa: jumpy, jittery, easily frightened	.11	-.13	-.03	-.05	.04	-.05	-.06	-.04	.07	-.06	**.34**
ǂkhariǂgomxa: faithless; mistrustful; of little faith, lacking in faith	.12	.05	-.04	.09	-.11	.09	.02	-.02	.23	-.05	.34
!ao!nâ: timid, timorous; cowardly, faint-hearted	.07	.07	.03	-.23	.08	-.06	.05	.10	-.01	-.06	.32
îga(n)|gēxa: sceptical, given to doubt; inclined to hesitate, irresolute, vacillating	-.09	.10	.00	.05	-.10	.26	-.16	.00	-.06	-.05	.30
!ereamo!nâsib: irresponsibility	.10	.26	.05	.27	.02	.10	.10	.01	.07	-.20	.30
ǁom(tsâ)xa: fond of sleeping a great deal	.05	.03	.06	.05	.08	.08	-.07	-.08	-.11	-.12	**.30**
buruburuxa: astonishment, amazement, wonderment, awe; surprise	.05	-.04	.14	-.21	.09	-.02	-.03	.07	-.15	-.05	-.29
!oaxa: distressing; lamentable; tragic; ironic miraculous; marvellous, wonderful; incredible, amazing	-.02	-.10	.11	-.02	.03	-.05	.07	-.03	.05	.03	**.28**
|gaisa: strong, powerful, forceful, robust; mighty, potent; loud (of: sound); burly/sturdy (of: physique); vigorous	-.15	-.13	.20	-.11	.05	.02	-.01	-.16	-.15	.14	-.28

tsausasib: tiredness, exhaustion, fatigue; wear (and tear); pulpiness, softness	-.01	.20	.06	-.04	-.11	.04	.09	.02	-.06	.04	.28
ǀgôadīǀgôasenxa : fond of childlike behavior	.07	.13	.00	-.08	.00	.21	-.01	.01	.15	.00	.27
ǂâio!nâ: thoughtless; unthinking; absent-minded, inattentive	.10	.16	-.02	.24	-.04	.16	.18	-.10	.21	-.22	.26
ǀkhomǀkhomsa: pitiable, piteous	.02	-.06	-.03	.01	.17	.01	.00	.05	.01	-.18	.26
āxa: over-sensitive, disposed to cry; complain (inclined to), grumble; crow, bellow, bleat, neigh, bray (inclined to)	.04	.01	.07	-.14	.12	.15	-.04	.15	.19	.14	.25
ǂanǂansa: well-known, famous, renowned; notorious	-.05	-.05	.07	-.02	.06	-.17	-.21	.09	-.13	.15	-.24
ǀgaio(!nâ): powerless, weak; insipid; without nutritional value; empty, lacking force/impact; impotent, effete; inefficatious (of: medicine)	-.05	.06	.02	-.16	.01	.00	.16	.10	.10	-.12	.24
!aoxa!nâsib: fear (inclined toward, tends to experience this temporary state)	-.05	.08	.10	-.12	.06	-.05	-.05	.11	-.19	-.10	.24
dīǁkhā: feasible, practical, able to do, competent	-.18	-.23	.15	.10	.10	-.03	-.24	.14	-.08	.17	-.24
dūrao!nâsib: dullness, listlessness, apathy; disinclination, lack of appetite	-.08	.04	-.08	-.01	-.15	.20	.08	-.02	-.01	-.09	.24
ǂansabeb/s: well-known person, public figure	.04	-.09	.13	-.01	.07	-.02	-.22	.11	-.06	.12	-.23
!noe(aǂgao)xa: hurry (in a); hasty	-.04	-.14	.05	-.06	-.07	-.01	-.13	.03	.07	-.19	-.23
ǀae-ams: vicious gossip OR difficult/troublesome person (depends on tone)	-.13	.03	-.01	-.12	-.07	-.06	.01	.01	-.04	-.09	-.23
ǂâisāxa: prone to think wrongly, misjudge	.04	.08	-.02	.02	-.12	.05	-.03	-.11	-.03	-.15	.23
!ûisentama-īsib: self-neglect, indifference concerning o.s.	.21	.14	-.09	.15	.10	-.05	.15	.04	.21	-.15	.22
!ereamxa: responsible	-.07	-.15	-.03	-.09	-.10	-.08	-.15	.09	-.01	.00	-.22
taoxa: shy, bashful; shamefaced; embarrassed, ashamed	-.06	.08	.21	-.12	.19	.12	-.05	.12	.00	-.14	.22
!ao-o!nâ: fearless, intrepid; dauntless	-.03	-.02	.05	-.01	.04	.13	.00	-.08	-.01	.06	-.20

Note. $N = 502$, 269 terms. Bold is used for univocal terms, those with a primary loading at least twice as large in magnitude as any cross loading. * Indicates factors where the name chosen indicates the opposite pole of the loadings of the terms, typically where the majority of terms load negatively on the factor, and thus the name was chosen to encompass the majority content/direction. For the tables in the paper, the factor loadings in Table 2, the correlations in Tables 3 and 4 and in Figure 2 are consistently "reflected" to match the name. This is not done here, and instead raw results are shown.

Table S7

Most Robust Emic solution Using Raw Data, Varimax Rotation, Seven Factors

	Component						
	1	2	3	4	5	6	7
1. Good Character							
i170 tsâba‖hao(xa)sib: compassion, sympathy, pity	.60	-.14	-.08	.08	-.14	-.11	.02
i33 !gam!gamsenxa: humble; meek, docile, submissive; self-deprecating	.58	-.22	-.33	.06	-.05	.03	-.06
i163 ganganxasib: thankfulness, gratefulness, gratitude	.58	-.25	-.12	.08	.01	-.11	-.09
i158 ǂhau!nâ(xa)sib: honesty, uprightness; straightforwardness; integrity	.56	-.19	-.20	.03	-.05	-.16	.05
i135 !gari-ao : brave/courageous man/woman; hero	.56	-.08	-.06	-.05	-.03	-.16	.01
i55 ‖nâu|namxa: obedient; tractable, amenable	.56	-.25	-.26	.09	-.02	-.04	-.07
i89 aiǂhomisenxa : prepare (o.s.), (advance), inclined to	.56	-.15	-.10	.01	.04	.09	.12
i138 !ûi-aob/s : shepherd, herdsman; nurse; guard; watchman, security guard; scout (mil.); sentry; bodyguard	.55	-.07	-.03	.04	.01	-.19	-.02
i263 tani|namxa: tolerant/etc., given to being	.54	-.28	-.15	-.01	-.03	-.20	-.12
i232 !gâidīxa: charitable; inclined to…	.54	-.19	-.01	-.01	-.07	-.09	-.11
i197 !gâisîsen‖khāsib : effectiveness	.54	-.22	.06	-.09	.02	.03	-.10
i151 ǂgomsabeb/s: believer; follower	.54	-.23	-.14	.01	-.04	-.02	.09
i150 |apemā-aob/s: adviser, counselor, s.o. giving unsolicited advice	.54	-.10	.00	.04	-.05	-.18	.15
i88 ǂgomaiǂnûixa: rely on others, inclined to	.54	-.07	-.09	.04	-.06	.04	.04
i221 !amku: decent, respectable; proper, orderly; tidy, neat	.54	-.21	-.10	-.03	-.01	-.01	-.04
i202 ‖gûsi|nammi: love, parental	.54	-.22	-.05	.06	.09	-.09	-.1
i80 |ûba(ǂgao)xa: forgiving; (generally) willing to forgive/etc.	.53	-.08	-.31	.09	.00	-.06	-.13
i164 ôasasib: diligence, assiduousness industriousness, willingness	.53	-.17	-.10	-.10	-.06	.05	-.07
i287 koasa-anu: praise-worthy, commendable, laudable	.53	-.38	-.08	.00	.02	-.08	.00
i153 !anu(si)b: cleanness, cleanliness; pureness; holiness, sacredness, sanctity	.53	-.24	.04	-.13	-.01	-.14	.04
i176 tani|namxasib: willingness to tolerate/forbear, tolerance	.53	-.27	-.11	.13	-.13	-.04	.02

i167 ǂhanu-aisib: justice; justness; righteousness; fairness, equity; integrity (quality of)	.53	-.22	-.18	.00	-.06	-.15	.00
i119 ǂgaeǂgui-aob/s: leader; manager, director; person in charge	.52	-.18	.03	-.06	.13	-.12	.21
i85 danxa: inclined to be victorious, given to winning	.52	-.11	-.15	-.12	.13	.07	.00
i24 gāgāsi: spiritual	.51	-.18	-.20	-.01	-.02	-.04	.16
i50 ǀkhomxaǂgao: easily moved to pity, soft-hearted; merciful, sympathetic	.51	-.20	-.22	.02	-.05	.03	-.16
i239 sîsendūraxa: keen/eager to work;	.51	-.27	-.02	-.03	-.05	.02	.00
i94 kare(tsâ)xa: praise/etc., prone to	.51	.01	-.14	-.06	.00	-.11	-.00
i124 mâxōǀkhā-aob/s: supporter; pers. who stands by one/sides w. one; assistant	.51	-.21	-.08	-.07	.03	-.02	-.16
i29 khoe(xa)!nâ: being friendly, kind (-hearted), benevolent, humane; benignant (to inferiors)	.51	-.17	-.29	-.04	-.02	-.04	-.14
i66 kaikhoe!ao!gâxa: respect for/awe of elders/superiors; honour (accorded to elders/etc.)	.51	-.30	-.23	.13	-.08	-.13	-.03
i279 sîsenhuixa: helpful, ready to help	.51	-.15	-.02	-.06	-.10	-.01	-.13
i154 gā-aisib/s: cleverness, intelligence, wisdom; sagacity	.51	-.17	-.08	-.12	.02	.03	-.04
i157 tsauraǂgaosib: soft-heartedness	.51	-.17	-.26	.12	-.09	-.21	-.12
i273 ǀnamxa!nâ: loving, affectionate (w. element of compassion); tender	.50	-.31	-.16	.08	-.08	-.08	-.18
i166 !ûisens: good behavior; habit/characteristic of taking care of o.s.	.49	-.26	-.05	-.03	.02	.01	-.04
i259 !ûi!gâxa: attentive; mindful of (people/material things); painstaking, meticulous	.49	-.22	.01	-.04	-.01	-.08	.02
i21 māsenxa: available, willing, ready	.49	-.03	-.22	-.05	-.03	.12	-.17
i168 Elo!ao!gâb: religiousness, fear of God, devotion, piety	.49	-.15	-.21	.09	-.09	-.10	.06
i159 !gâi(si)b: goodness; (good) quality; good-naturedness; excellence	.49	-.19	-.13	-.07	-.03	-.08	-.16
i201 sîsendūraxasib: eagerness to work	.49	-.19	.07	.04	-.03	.04	-.00
i229 hara: open-hearted, extroverted, kind - from hara (being wide, roomy, spacious)	.48	-.14	-.08	-.11	-.10	-.04	-.20
i131 ǀkhae-aob/s: donor, person who makes a gift, giver; pers. who blesses	.48	-.07	-.12	.03	.02	-.09	.07
i82 ǂgom!gâsa: trustworthy, reliable	.48	-.28	-.21	-.10	-.02	-.05	.03
i1 huiǀnam(xa): helpful, eager/keen to help (always)	.48	-.21	-.22	-.11	.05	.22	-.20
i187 sîsen(tsâ)xasib: diligence, industriousness, keeness to work; activeness	.48	-.20	-.07	-.01	-.02	.09	-.09
i22 ǂgomǂgomsa: trustworthy, reliable, dependable; credible	.47	-.23	-.35	-.05	.12	.03	-.05
i174 ǁkhoaǂgao(xa)sib: bravery, courage, valour; boldness; dauntlessness; fearlessness, intrepidity; chivalrousness	.47	-.06	.07	-.11	-.04	-.03	.19

i286 dī‖khā: feasible, practical, able to do, competent	.46	-.15	.02	-.11	-.02	-.03	.01
i19 ‖khā‖khāsen(ǂgao)xa: studious; eager to learn, desirous of learning	.46	-.13	-.25	-.10	.16	.01	.08
i165 ‖nâu!āxasib: intelligence; prudence; sagacity	.46	-.17	-.21	-.01	-.08	-.06	-.20
i227 |gôadīxa: fond of caring for/of handling (children)	.46	-.10	-.02	.06	-.17	-.12	-.03
i195 !gâi!ō(si)b: luck, luckiness, good fortune; bliss, blessedness, joy	.45	.01	-.11	.02	.03	.01	.10
i247 |gôa|nam: fond of children	.45	-.24	-.07	-.03	-.09	-.11	-.19
i57 ǂhanu: straight; correct, proper; right	.45	-.16	-.32	-.06	.04	-.05	.05
i45 !norasa: free; independent; unimpeded, unrestricted; safe; secure	.44	-.25	-.19	-.06	.01	.01	.04
i65 |gore(tsâ)xa: prayerful, inclined to prayer	.44	-.21	-.23	.04	.00	-.09	.22
i266 sâsa: calm/restful/relaxed/tranquil (of: mind), placid; calming	.44	-.19	-.24	.09	.02	-.32	.06
i107 ǂgomxa: gullible, credulous, over-trusting	.43	-.11	-.11	-.01	-.01	-.12	.11
i104 buruburuxa: astonishment, amazement, wonderment, awe; surprise	.43	.08	.10	.02	-.03	-.04	.08
i244 |ō-aisa: special; unique; distinctive; exceptional	.43	-.25	-.05	.03	-.04	-.08	-.07
i71 Elo!ao!gâxa: god-fearingness, piety, piousness	.43	-.13	-.18	.09	-.07	-.07	.10
i112 ǂâi!gâxa: 1) someone who reflects, reconsiders before acting, 2) someone who reflects after a decision or interaction with regret or remorse, or has second-thoughts, and corrects or apologizes."	.42	-.11	-.05	.02	.17	-.02	.08
i196 !ao!gâxasib: respectfulness, inclination to revere/etc.	.42	-.16	-.17	.20	-.14	-.03	.14
i175 dūraxasib: desire, motivation, ambition, or eagerness to achieve, or obtain goals	.41	-.12	.07	.00	.00	.04	.04
i292 !gâiaǂgaoxa: of a happy disposition; tends to rejoice/etc.	.41	-.18	-.15	.05	.13	-.08	-.23
i37 ǂkhaisa: awake, vigilant	.41	-.04	-.06	-.08	.23	.09	.03
i8 |opesa: lazy, slothful, indolent	-.41	.34	.12	.24	.16	-.14	.02
i84 ǂkhî : satisfied, contented; content, willing to accept circumstances, happy; peaceful; tranquil (of: mind)	.41	-.27	-.22	.05	.16	-.02	-.22
i161 anusib: dignity, suitability, appropriateness, seemliness	.41	-.26	.00	.00	.08	-.03	-.01
i4 !gâi: good, excellent; good-natured (of: pers.)	.41	-.26	-.26	-.11	.14	.09	-.20
i267 !gapa|îhesa: appealing/pleasing (to look at); attractive	.40	-.30	-.10	.10	-.10	-.20	.15
i233 dī(tsâ)xa: industrious, active	.40	-.18	.06	-.02	.12	-.03	-.04
i15 ǂoaǂamsa: exceptional, particular, outstanding, distinctive; special	.40	-.06	-.21	-.11	.08	.06	.02

i262 anusa: worthy	.39	-.25	-.04	-.07	.04	-.03	-.07
i86 sîsen|opesa: work-shy, shirking work; aversion to work	-.39	.35	.09	.20	.15	-.06	.05
i122 ao‖nā-aob/s: preacher	.39	.15	-.18	.04	.07	-.14	.32
i141 ǂansabeb/s: well-known person, public figure	.38	-.07	.08	-.09	.02	-.03	-.05
i269 ‖aexa: composed, calm; having/w. ample time	.38	-.14	.00	.01	.08	.00	.04
i243 gāxa: wily, foxy, tricky	-.37	.35	.16	.17	.17	.23	-.15
i7 |nam|namsa: loveable, likeable, ami(c)able; respected, cherished	.37	-.20	-.28	-.05	.05	.08	-.29
i207 ǂanbasen: careful/cautious, be	.37	-.17	-.05	-.07	.13	-.01	.06
i41 ûitsama, ~tsaba: living, animate; lively, vivacious, full of life	.36	-.09	-.07	-.14	.04	.10	-.10
i93 !onkhaoxa: late, unpunctual, tardy, prone to be	-.35	.21	.10	.22	.08	-.02	-.02
i183 amabesib: authenticity, genuineness; sincerity, honesty; truthfulness	.35	-.10	-.06	.03	.35	-.10	.07
i81 ǂanǂansa: well-known, famous, renowned; a certain (of: s.o. w. undivulged identity, whose identity is known (of: esp. criminal); notorious	.34	-.16	-.04	-.20	.09	.02	.01
i70 ǂhansenxa: to be motivated and/or active, or go from place to place in a restless manner, typically in the context of seeking solutions to or aid for a current problem or dilemma	.34	.05	.05	.12	-.05	.04	.12
i60 |khara|kharasa: changed, altered, converted, improved	.34	.01	-.05	-.03	-.03	-.06	.11
i214 ǂō(!om): thrifty, parsimonious, frugal; narrow; tight/constricting (of: clothes); confined (of: house);	-.34	.30	.11	.26	.23	.05	.15
i48 |gaisa: strong, powerful, forceful, robust; mighty, potent; loud (of: sound); burly/sturdy (of: physique); vigorous	.33	-.07	.02	-.17	.15	-.02	.15
i144 ǂamkhoeb/s: a person of special status, high position, class, authority, or seniority who is accorded respect, 2) a person who is snobbish, acts as if they are of high position without merit or acts better than others, 3) a person who is the best, at the	.32	.05	-.05	.00	.16	-.11	.15
i132 ‖ama-aob/s: buyer, purchaser; shopper; customer; bidder (at auction)	.31	-.03	.06	.02	-.04	-.16	.04
i98 !ereamxa: responsible	.30	-.04	.19	-.07	.00	-.02	.05
i248 ‖goaraxa: someone who wants to be begged by others, creates situations where others are in a position to beg, withholds in order to be begged	-.28	.21	.17	.24	.16	.20	-.10
i145 |ae-ams: vicious gossip OR difficult/troublesome person (depedning on tone)	.21	.08	.10	-.01	.06	.05	.16
i68 ǂhâ!khoexa: quick to look to others for help	.21	.15	.07	.13	.10	.02	.06
i206 au: 1) bitter, acidic, negative, resentful, stingy, antisocial, 2) tough, austere, hardy	.20	-.03	-.07	.06	.05	-.02	-.16
i258 sâubasenxa: miserly;inclined to hoard/to save up for o.s.	.18	-.10	.12	.18	.01	-.18	.14

2. Predatory Aggression							
i146 !gamaob/s/i: killer; murderer, assassin, homicide	-.08	.64	-.08	.11	-.06	-.02	.09
i155 gāxa!nâxasib: fraudulence, wiliness, deceitfulness	-.29	.63	.07	.05	.04	.09	.04
i288 ǀapexūxa: inclined to betray	-.23	.63	-.01	.15	.18	.08	.03
i121 ǂgaeǂhapu-aob/s: seducer; deceiver; s.o. leading astray	-.26	.61	.13	.06	.10	.01	.00
i148 tsūdī-aob/s: wrongdoer, evildoer, malefactor; culprit, offender; criminal	-.29	.60	.20	.05	.02	.12	.01
i177 ǀhôakao(xa)sib/s: roguishness, crookedness; dishonesty, treachery; corruptness, fraudulence	-.34	.59	.14	.00	.08	.04	-.08
i130 !khompōb/s: a stupid person, a person of low intelligence, ignorant, idiot	-.16	.58	-.04	.19	.05	-.04	.03
i136 !hāsara-aob/s: denouncer; s.o. prone to insult	-.22	.58	.20	.00	.16	.18	.07
i143 ǂhumi-aob/s: liar, (habitual/inveterate)	-.13	.58	.10	.02	-.10	.01	-.08
i250 ǂūo: without manners; characterless, without personality; base	-.21	.57	.16	-.02	.17	.18	-.02
i125 !nari-aob/s: thief; kidnapper	-.15	.57	-.05	.03	-.14	.03	.03
i169 gāxa!nâsib: cunning, slyness, craftiness, wiliness; trick(ery), deceit	-.29	.57	.15	.04	.09	.07	.08
i139 tsûtsû-aob/s: tormentor; torturer	-.25	.56	.25	.08	.02	.21	-.02
i199 ǁgaisib: badness; rottenness; evil; shoddiness; wickedness, vileness, ill-naturedness, maliciousness; malice	-.29	.55	.16	.06	.09	.13	.13
i102 ǂhôaxa: gossipy, tattling; full of news, bursting w. news	-.29	.55	.21	.06	.19	-.09	-.03
i142 ǂkhabadī-aob/s: wrong-doer, evil-doer	-.27	.54	.37	-.06	.03	.18	-.09
i224 ǂhomi!nâ: double-tongued; inclined to half-truths, not quite honest; laced w. half-truths (of: account)	-.30	.53	.20	.22	.09	.03	-.08
i127 ǁore-aob/s: sinner; offender, miscreant; transgressor; wastrel; good-for-nothing	-.31	.52	.28	-.05	-.01	.21	-.08
i123 ǂhôatani-aob/s: scandalmonger; messenger	-.16	.52	.10	-.02	.17	-.11	.09
i32 ui-uisa, ui-uixa: disgusting/revolting/abhorrent/horrible/sickening	-.25	.52	.10	.20	.05	-.16	.10
i147 !ao!ao-aob/s: intimidator; s.o. who frightens/etc.	-.12	.52	.23	.07	.07	.09	.03
i134 ǀhorosemâb/s : drunkard	-.08	.51	.23	.17	-.03	.07	-.37
i100 ǀāxare(he)sa: cursed	-.19	.51	.16	.14	.04	-.02	-.01
i31 ǂkhôaxa: harmful; likely to damage/etc., damaging	-.29	.51	.24	.13	.10	-.11	-.04
i14 ǂhomixa: mendacious, deceitful, inclined to lie	-.36	.50	.23	.10	.11	-.15	-.04

i120 ǀhoe-aob/s: scandalmonger, gossiper	-.31	.50	.13	.05	.18	-.01	.05
i256 !gaixa: who is (habitually) in possession of black medicine	.00	.49	-.01	.15	-.12	-.19	.13
i106 mîǁnâxa: likes talking people down, defame	-.33	.49	.31	.06	.22	-.03	.01
i270 ǁnâuǀnamo!nâ: disobedient, disrespectful, stubborn	-.31	.49	.19	.08	.05	.20	.04
i96 omkhôaxa: burgler, inclined to burgle	-.17	.49	.11	.17	.05	-.10	-.03
i186 !gôao(!nâ)sib: disrespectfulness; irreverence	-.26	.49	.25	.13	.09	.25	.03
i99 !gôaǀnāxa: disdain, scorn, have a low opinion of others	-.30	.48	.29	.07	.16	.04	.12
i190 tsū(si)b: badness; evil, baseness, wickedness, sinfulness; wrong; unwholesomeness; inferiority	-.21	.48	.35	.15	.07	.18	.09
i54 ǁgai : bad; rotten; evil; of poor quality, shoddy; wicked/vile/ill-natured/malicious (of: character)	-.24	.48	.24	.12	.09	.00	.12
i129 !gammekhôa-aos: adulteress	-.03	.48	.00	.08	.10	.01	-.08
i126 !khamaob/s: fighter; soldier	-.15	.48	.23	.02	.01	.21	-.09
i30 ǀhomaxa: untidy, messy, slovenly; hap-hazard/slipshod (of: work)	-.10	.47	.33	.12	.06	-.08	-.10
i72 ǀgoexa: disposed to using obscene language; insult	-.24	.47	.41	.07	.08	.04	-.26
i240 tsū(ke)!gâxa: difficult, dangerous (of: e.g. foe/road), hazardous; accident-prone (of: pers.), w. high risk of accident	-.25	.46	.14	.10	.04	.19	.08
i284 !hōxa: derisive, quick to deride/etc.	-.24	.46	.15	.01	.26	.28	-.07
i35 tsūdīxa: wrong/harm, prone to do, harm, inclined to (cause), w. criminal tendency	-.27	.46	.38	.09	.05	.14	.02
i43 !khamxa: pugnacious, belligerent; bent on fighting; aggressive; quick/disposed to fight	-.22	.46	.40	.06	.05	.11	-.12
i230 gangano!nâ: unthankful, ungrateful, thankless	-.31	.45	.09	.23	.12	.08	.16
i252 !haoǀgoraxa: segregative; separatist; wh. tends to divide/segregate people/etc.	-.19	.44	.07	.07	.19	.00	.13
i200 gangano!nâsib: unthankfulness, ingratitude, thanklessness	-.31	.44	.12	.15	.02	.11	.16
i189 !khaera(si)b/s: untidiness, slovenliness; slipshod(di)ness	-.37	.44	.04	.22	.14	.06	-.06
i194 !ûisentama-īsib: self-neglect, indifference concerning o.s.	-.25	.44	.04	.27	.04	.14	-.09
i87 tsū!ō: ill-fated, unlucky, unsuccessful (in an endeavour)	-.26	.43	.18	.22	.10	-.06	.10
i231 ǂâio!nâ: thoughtless; unthinking; absent-minded, inattentive	-.34	.43	.11	.29	.08	.16	.05
i220 tsū: bad (in gen.) (1); 2 bad (of: name/reputation); evil (of: reputation); 3 wicked/evil/foul/mean/scurvy/malevolent/depraved/base (of: character); 4 poor (of:	-.19	.43	.38	.16	.04	.26	-.04

prospects/outlook); 5 vulgar/obscene/gross/low/improper/indecent/vile (of: behavior/pornogra							
i265 ǁore(tsâ)xa: naughty/wicked (of: child); refractory; sinful; inclined to transgressing/etc.	-.28	.42	.24	.04	.05	.40	-.08
i17 surixa: envious, inclined to envy/begrudge	-.31	.42	.29	.14	.15	-.20	.08
i133 xorexab/s: tease/-joker, a	-.15	.42	.05	-.01	.05	.11	-.04
i249 xore(tsâ)xa: joking/etc., fond of	-.14	.41	.07	.05	.10	.29	-.06
i128 ǂgae-aob/s: smoker (1); ro(o)ker (< Afr.), i.e. dagga smoker; hence: freak, eccentric (2)	-.07	.41	.13	.16	-.09	.19	-.23
i18 xū!gunuxa: greedy, rapacious, avaricious, covetous	-.33	.40	.21	.21	.19	-.15	.03
i56 ǁnâuo!nâ: disobedient (out of neglect, as e.g.child)	-.28	.40	.27	.13	.08	-.10	.02
i272 hî|huruxa: squander/etc., prone to	-.26	.40	.19	.15	.19	.24	-.09
i44 !khom!nâxa: tend to jeorpadise, destroy	-.17	.39	.25	.16	.16	.16	-.01
i182 !ereamo!nâsib: irresponsibility	-.28	.39	.04	.34	.02	.16	-.01
i95 ǂgom!gâo!nâ: distrusting	-.29	.38	.14	.24	.03	.07	.16
i111 mari!gunu(xa): greed for/love of money, avarice	-.35	.38	.20	.18	.24	-.05	.08
i162 |namo(!nâ)sib: lovelessness, unlovingness, coldness	-.29	.37	.10	.20	.02	.17	.07
i271 gonxa: restless, fidgety, mischievous; lively	-.20	.36	.29	.01	.23	.27	-.12
i58 ǂhôaǂûna: nos(e)y, inquisitive	-.22	.36	.32	.03	.24	-.20	-.06
i237 |hū|hūsa: distressing; annoying	-.24	.36	.28	.19	.15	.28	-.01
i51 |khopexa: inclined to begging, (wh. is) in habit of begging; mendicant	-.20	.36	.09	.27	.16	-.16	-.11
i251 dāsāxa: adulterous/etc., tendency/propensity to stumble	-.14	.35	.14	.23	.21	.22	-.04
i105 sorasa 2: contempt, disdain; low esteem; underestimation; being underrated	-.23	.35	.31	.24	.10	-.03	-.01
i26 |khomo!nâ: ruthless, pitiless; merciless	-.31	.34	.34	.12	.11	.04	.13
i140 !âitsâ-aob/s: examiner; tempter, temptress	-.13	.33	.07	.17	.24	.25	.07
i216 dīxūxa: active, busy, industrious; engaged/involved	-.11	.32	.11	.02	.32	.10	.04
i219 tauxa: jealous	-.13	.32	.30	.21	.21	.14	-.08
i205 kairakhoedīsen: elderly, pretend to be, elderly pers., behave like an	-.01	.32	.18	.20	.04	-.14	.15
i264 ǁnâu|loa: disobedient; stubborn	-.18	.31	.14	.21	.06	.31	-.00
i78 |hapixa: hurried/rapid manner	-.17	.30	.25	.24	.07	.11	.04

i212 ǂûna: greedy (for), be; crave, have craving for (e.g. food/women)	-.21	.30	.12	.24	.28	.07	-.09
i222 ǁae tama: careless, indifferent, nonchalant; inconsiderate	-.23	.29	.16	.12	.03	.07	.09
i52 ǀûbao!nâ: unforgiving, implacable	-.24	.29	.27	.19	.06	.01	.20
i137 !gai(dī)-aob/s : shaman, medicine-man, sorcerer; herbalist (w. mainly sinister intentions)	.03	.29	.01	.08	-.20	-.10	.03
i285 ôa!nâxa: investigate (inclined to), probe; examine; evaluate, assess; research, (inclined to)	.01	.29	.16	.05	.18	.21	.02
i74 ǀkhomaxa : inclined to implore/etc.	.02	.28	.22	.12	-.04	.00	-.06
i115 ǂhanuo!nâ: unjust, wrongful; illegal; unfair	-.19	.27	.14	.15	.14	.16	.09
i223 ǂgomheǁoasa: untrustworthy, unbelievable, incredible;	-.07	.27	.13	.12	.06	.03	.16
i75 ǁomo!nâ: sleepless (of: pers.), unable to sleep	-.07	.26	.22	.20	-.02	-.01	.24
i46 ǀaexa: "fiery"; adept, skilled, exceptional, masterful, in relation to a domain of expertise	.18	.23	.22	-.08	-.07	-.01	.185
i218 tao-o!nâ: shameless, unashamed; not embarrassed; impudent, indecent	-.05	.18	.14	.03	.17	.05	-.01
i42 !ao-o!nâ: fearless, intrepid; dauntless	.09	.13	.11	-.12	.10	-.08	.11
3. Bad Temper							
i27 ǂkhabaxa: aggressive, antagonistic; liable to antagonise, likes to pick fights; militant; antagonistic; liable to antagonise	-.24	.36	.61	.05	.04	.01	-.06
i34 !gari-am!nâ: talks with a high volume, with a loud voice or speech	-.14	.15	.57	-.08	.18	-.10	-.15
i16 kai-am!nâ: someone who is overly talkative, indiscriminate with information shared or who they share it with, or a know-it-all	-.17	.26	.57	-.06	.17	-.06	-.05
i97 !haeǁaixa: hot-tempered, irascible; choleric	-.15	.12	.57	.04	.08	.16	-.02
i53 ǁē: audacious; insolent, impudent, impertinent; bold, dauntless, reckless	-.17	.22	.56	.07	.06	.20	.07
i63 ǁaixasa: rage, fury, anger; (poet.) wrath; (poet.)	-.19	.19	.53	.16	.11	.20	.04
i40 mîxa: sardonic, tending to run down/ridicule people (esp. of adults w. regard to children)	-.13	.28	.51	.08	.23	.02	-.02
i156 !haeǁaixa(si)b: hot-temperedness, irascibility; choleric temperament	-.15	.11	.51	.06	.13	.27	-.03
i225 ǂkhupixa: noisy, loud; inclined to be noisy/loud (of: pers.)	-.15	.31	.47	.16	.17	.15	-.18
i61 sorasa 1: disdain, disregard; undervaluation, underestimation	-.24	.42	.44	.12	.11	-.01	.04
i28 !khausa: wild; intractable, refractory; vivacious, excessively active, hyperactive	-.16	.37	.43	.18	-.01	-.12	.03
i274 ǀaraxa: quick to show annoyance/etc.; short-tempered	-.10	.23	.43	.19	.03	.40	.09
i10 koasenxa : fond of praising self	-.09	.26	.42	.03	.31	-.07	-.00

i275 ǂnoaguxa: quarrelsome, argumentative	-.26	.27	.41	.04	.15	.35	.02
i23 ǂkhîo!nâ: dissatisfied, discontented, disgruntled; unhappy; upset	-.16	.17	.41	.26	-.01	.00	.17
i185 !garidanasib: obstinacy, stubbornness, mulishness; dullness, dim-wittedness; determination, headstrongness; resolution, resoluteness	-.22	.18	.41	.16	.13	.29	.06
i13 ǂanapega : willful; stubborn; perverse; intentional, deliberate	-.24	.33	.40	.19	-.02	-.03	-.11
i276 am!nâxa: prone to tell lies	-.15	.24	.39	-.04	.25	.07	-.04
i36 !ao(he)sa: feared, dreaded; frightening, frightful; fearsome; (wh. is) constantly feared	-.03	.29	.32	.06	.04	.11	.08
i211 dî!nâxa: someone who is inquisitive, who asks lots of questions in a persistent manner (curious[+] ; nosy, prying[-])	.11	.15	.25	.05	.22	-.01	.03
i67 !noe(aǂgao)xa: hurry (in a); hasty	.21	.01	.24	.01	.05	.09	.15
i91 ǂkhāxa: resistant, refusal to do, help, give, etc, stubborn, uncooperative	-.01	.03	.22	.19	-.07	-.03	.07
i198 !gariǂgao(xa)sib: stoicism, toughness	.07	.09	.21	-.04	.05	.09	.08
4. Fear and Timidity							
i228 !ao!nâ: timid, timorous; cowardly, faint-hearted	.03	.13	-.01	.49	.07	-.01	-.12
i11 taoxa: shy, bashful; shamefaced; embarrassed, ashamed	-.02	.01	-.03	.47	-.04	-.01	-.01
i77 !hurisa: frightened, alarmed	.00	.10	.12	.46	.15	-.05	.05
i257 !hurixa: jumpy, jittery, easily frightened; skittish/balky (of: horse)	-.05	.13	.13	.42	.13	.05	-.19
i184 !aoxa!nâsib: fear (inclined toward, tends to experience this temporary state)	.14	.02	-.05	.40	.00	.07	-.01
i180 ǁkhātama-īsib/s: incapacity, incompetence, inability	-.07	.26	.15	.40	-.05	.16	.08
i5 āxa: over-sensitive, disposed to cry; complain (inclined to), grumble; crow, bellow, bleat, neigh, bray (inclined to)	-.01	.10	.08	.39	.12	-.19	-.09
i242 ǀkhomǀkhomsa: pitiable, piteous	.04	.15	-.01	.39	.07	.01	-.06
i47 ǀgaio(!nâ): powerless, weak; insipid; without nutritional value; empty, lacking force/impact; impotent, effete; inefficatious (of: medicine)	-.05	.18	.00	.37	-.01	-.04	.05
i160 ǂkhabu(sa)sib: weakness; infirmity, frailness, decrepitude; dimness, faintness	-.12	.16	.21	.37	-.10	.08	.10
i20 îga(n)ǀgēxa: sceptical, given to doubt; inclined to hesitate, irresolute, vacillating	-.22	.04	.21	.37	.10	.02	.03
i204 !ū(ke)-ai: lonely/desolate/lonesome, feel	.07	.09	.09	.37	-.07	.25	.03
i108 ǁom(tsâ)xa: fond of sleeping a great deal	-.11	.11	.03	.36	.13	.08	-.07
i260 ǂau: tame; docile, tractable; slow; slow (and soft), suave (of: speech); gentle	.12	-.06	-.29	.34	-.16	-.20	.07
i261 !haokhoedīsenxa: stand-offish; acting like a stranger	-.04	.08	-.03	.34	.22	.00	-.07

i235 !oaxa: distressing; lamentable; tragic; ironic miraculous; marvellous, wonderful; incredible, amazing	.08	.09	.03	.33	.16	.02	-.10
i9 ǀuruxa: forgetful, tending to forget; amnesic	-.20	.13	.07	.33	-.04	-.11	.075
i172 !aob: fear, dread, fright; anxiety; terror; alarm; disquietude, apprehension	.11	-.01	-.05	.33	-.02	.17	-.00
i62 !hausenxa: remorseful; compunctious; inclined to be regretful/ to regret/etc.	.17	.04	-.01	.32	-.11	-.02	.10
i6 !nōsa: silent, being; quiet	.17	-.06	-.17	.32	-.10	-.08	.17
i59 ǂkhariǂgomxa: faithless; mistrustful; of little faith, lacking in faith	-.30	.23	.23	.31	.09	.07	-.1
i181 sâo!nâsib: restlessness; fidgetiness	-.13	.28	.19	.30	.05	.23	.04
i25 ǀgôadīǀgôasenxa : fond of childlike behavior	-.28	.16	.13	.30	.13	-.13	-.03
i192 tsausasib: tiredness, exhaustion, fatigue; wear (and tear); pulpiness, softness	-.10	.18	.03	.28	.09	.08	-.06
i92 ǂâisāxa: prone to think wrongly, misjudge	-.18	.16	.15	.27	.13	.14	-.06
i101 ǁgoasen(tsâ)xa: inclination to cringe (implore, entreat; supplicate)	.15	.15	.10	.27	.02	.01	-.02
i179 dūrao!nâsib: dullness, listlessness, apathy; disinclination, lack of appetite	-.22	.18	.20	.27	.09	-.04	.10
i234 !gabu: insipid/lifeless/full (of: pers.), fig.	-.22	.21	.04	.25	.11	.17	.23
i203 ǂâiǂhansen: anxious, be; worry	.11	.11	.22	.25	-.09	.10	.12
i113 ǀkhomsenxa: self-pity	.04	.09	.06	.25	.16	.01	.14
i254 ǂâiǂâisenxa: pensive	.13	-.05	.06	.24	.19	-.04	.07
i109 ǂgan!gâsa: 1) someone who is secretive (or has a hidden agenda) with regard to personal history, attributes, intentions, or information that they have. 2) someone who is reserved, shy, or private	.02	.05	.02	.23	.15	-.07	.15
i280 supuǂgao(xa): soft, inclined to weep (esp. of: man)	.21	-.12	-.08	.21	-.01	-.13	-.12
i268 îga(n)ǀgē(he)sa: doubtful, dubious, questionable; uncertain	-.13	.19	.14	.20	.03	.20	.14
5. Haughty Self Respect							
i281 ǂnīǂnīsenxa: proud, haughty, inclined to act …	-.12	.21	.13	.09	.56	.11	-.00
i209 (ǁî)!gôasen: self-respect (having)	-.15	.23	.18	.13	.54	.18	-.08
i173 ǁî!gôasenni: haughtiness, arrogance	-.19	.21	.22	.10	.51	.18	-.06
i49 ǀgapiǂâixa: proud, haughty, arrogant; snobbish	-.19	.25	.29	.06	.45	.08	.02
i193 ǂkhaiǂkhaisens: 1) show-off, pretentions, ostentatious, pompous, grandiose, 2) self-respecting, prideful.	-.04	.18	.19	.08	.41	.02	-.08

i226 ǂamaxa: boastful, vaunting; bombastic, pompous; prone to show off/etc.	-.17	.35	.25	.11	.38	.05	.01
i171 hō!âsens: self-pride/ -respect	.04	.07	.10	.02	.38	.11	.03
i110 ǂgaobasenxa: covetous [someone who wants everything for themselves, selfish, covetous]	.18	.03	-.03	.08	.33	.01	-.05
i178 !gâitsâsens: well-being (feeling of)	.20	.07	-.01	-.04	.32	-.09	-.03
i117 ǀkhāǁhûixa: biased, partisan, partial (inclined to choose sides)	-.25	.20	.29	.18	.31	-.02	.10
i2 ǂnīsa: to be proud or to display self-respect and pride in relation to an achievement, or in relation to group belonging	.24	-.06	.06	-.09	.30	.18	-.01
i238 ǂhau!nâdīsenxa: feign honesty/etc., prone to	.09	.03	-.04	.08	.27	.09	-.01
i39 ama-ai: reliable, worthy, commendable, valuable	.24	-.03	-.06	.00	.27	-.03	.06
i208 oaxaedīsen: to dress up, make oneself beautiful or look good in order to stand out or attract the attention of others – especially with regard to the opposite sex	.04	.00	.13	.12	.24	-.04	.01
i76 ǁhapoxa: 1:“a person with goals, ambitions, wishes, or desires for the future and is motivated toward fulfilling them”, 2: “someone who is a visionary”, 3: “someone who dreams at night while sleeping”	.19	.06	-.02	.01	.23	-.07	.18
i149 ǁgaeǁgae-aob/s: imitator, mimic; impersonator	.01	.17	.10	.07	.23	-.01	.11
i277 dūraxa: eager; covetous; lustful; desirous	.14	-.04	.01	.02	.19	-.03	.13
i12 ǀkhonxa: funny, hilarious, laughter-provoking, humorous	.12	.04	.06	.07	.14	.13	-.14
6. Tough- vs. Tender-Minded							
i236 !nâudanaxa: obstinate, stubborn, pig-headed; obdurate; mulish, determined, resolute	-.15	.26	.32	.06	.12	.39	.02
i217 supudana: 1) gullible, easily manipulated, too easily convinced, persuaded, or influenced (naïve), 2) intelligent, quick to grasp, learns and understands easily.	.11	.10	-.10	.14	-.05	-.35	.02
i255 karosa: strict, stern, harsh	-.12	.17	.10	.18	.18	.33	.05
i278 karosaǂgao: hard-hearted, relentless; cruel	-.18	.24	.12	.12	.21	.33	.13
7. Drinker							
i38 āǂûna: greedy for drink	-.09	.37	.31	.24	.01	-.11	-.50
i73 ǀhoroxa: tend to be (always) drunk	-.11	.46	.30	.21	.00	.01	-.49
i283 !gomǀgausa: 1 arduous, difficult to attain; important, significant; precious	-.01	.04	.20	.13	.12	.16	.26
i3 !gom!gâxa: complicated, not clear-cut (of: e.g. legal case), or understand (:of person/issue)	-.11	.16	.18	.14	-.01	.14	.20

Note. N = 502, 269 terms.

Table S8

Congruence Coefficients for Marker Scales after Target Rotation

Model							Average
Big Two	.97	.95					.96
Pan-Cultural Three	.91	.84	.80				.85
Pan-African Three	.89	.60	.88				.79
Big Five	.67	.69	.72	.86	.67		.72
Big Six	.86	.68	.72	.93	.58	.51	.71
South African Personality Inventory	.70	.65	.83	.60	.51	.83	.69

Note. $N = 502$

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