

**Beyond Agreeableness: Social-Relational Personality Concepts from an Indigenous  
and Cross-Cultural Perspective**

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**Abstract**

The links of social-relational concepts (SRC) of personality identified in South Africa with the Five Factor Model (FFM), Interpersonal Relatedness (IR), social desirability, and prosocialness were examined. In Study 1 ( $N = 1,483$ ), the SRC defined two factors (positive and negative) distinct from the FFM, more strongly linked to relational than to tradition-focused IR aspects and to impression management than to deception. Links to tradition-focused concepts were stronger, and scores on positive SRC higher in Blacks than in Whites. In Study 2 ( $N = 325$ ), SRC explained substantial variance in prosocialness above the FFM. In Study 3 ( $N = 1,283$ ), the SRC were replicated in a Dutch multicultural sample. The findings suggest expanding the FFM with respect to social-relational functioning.

*Keywords:* Big Five, Agreeableness, Interpersonal Relatedness, social desirability, prosocialness, indigenous and cross-cultural research

## **Beyond Agreeableness: Social-Relational Personality Concepts from an Indigenous and Cross-Cultural Perspective**

### **1. Introduction**

The present study addresses the conceptualization of social-relational personality constructs identified in South Africa from an indigenous perspective. This study is part of a larger project aiming at the development of a comprehensive personality inventory for use in the 11 official languages of South Africa (the South African Personality Inventory, SAPI). Using free descriptions in a mixed-methods approach, our previous research has identified an implicit personality model shared across the major cultural-linguistic groups in South Africa (Nel et al., 2012; Valchev et al., 2011, 2013). One of the central features of this model is its strong emphasis on the social-relational characteristics of the individual, with a large number of descriptions about functioning in interpersonal relationships and in social context. The present study, building on this qualitative model but using quantitative measures, addresses the question, to what extent the social-relational personality concepts can be accommodated in existing universal personality models—notably as elements of Agreeableness—or represent as yet uncovered salient concepts calling for the expansion of such models.

#### **1.1. Personality Structure across Cultures**

There is general agreement that a set of five personality factors corresponding to the Big Five or Five-Factor Model (FFM) is cross-culturally replicable both when standardized questionnaires are used (e.g., McCrae & Allik, 2002) and when lexica are studied (e.g., Saucier & Goldberg, 2001; see De Raad et al., 2010, for a more conservative view on the replicability of factors in lexical studies). The question of whether more personality factors are needed beyond the Big Five for an exhaustive

representation of personality has received much research attention. We refer specifically to three lines of research in this quest.

First, researchers have examined the effects of wider variable selection in psycholexical studies including highly evaluative attributes, physical descriptions, and other characteristics considered “external” to the core of personality (Saucier, 2008, p. 30). Research in this line has suggested that the Big Five could be enriched with the addition of positive and negative valence (Benet-Martínez & Waller, 2002) and a number of other dimensions like religiousness, honesty, tradition, and humor (Paunonen & Jackson, 2000; Saucier & Goldberg, 1998; see also Saucier, 2009).

Second, Ashton, Lee, and colleagues (for a review, see Ashton & Lee, 2007) have reanalyzed psycholexical data that formed the basis for the establishment of the Big Five in a number of languages and suggested a new model, the HEXACO, which features a sixth factor, Honesty-Humility. This factor captured variance in the domain of interpersonal traits between the axes of the Big Five’s Agreeableness and Conscientiousness and had an incremental value in the prediction of related personality outcomes (Ashton & Lee, 2007; Saucier, 2008).

Third, the comprehensiveness of the Big Five model in non-Western cultural contexts has been critically examined from the perspective of indigenous personality studies (Church, 2008). Church and colleagues have examined models representing the implicit personality conceptions in Mexico (Ortiz et al., 2007) and the Philippines (Katigbak, Church, & Akamine, 1996; Katigbak, Church, Guanzon-Lapeña, Carlota, & Del Pilar, 2002). Comparing these models with established FFM measures, these researchers have found that most personality concepts in the two cultures could be subsumed within the FFM and suggested that culture-specific aspects could mostly be expected in the expression and salience of specific model components, like the

concepts of warmth and affection in Mexico. Another indigenous line of research, in China, identified a personality dimension beyond the Big Five: Interpersonal Relatedness, measured by the Cross-Cultural (Chinese) Personality Assessment Inventory (CPAI-2; F. M. Cheung et al., 2001, 2008; S. F. Cheung, Cheung, Howard, & Lim, 2006). Interpersonal Relatedness has a focus on relationships and social functioning in a normative context and is defined by concepts like harmony, discipline, relational orientation, social sensitivity, thrift, and tradition. This dimension has shown incremental value in behavior prediction (Zhang & Bond, 1998) and has been replicated in diverse non-Chinese groups, although it appeared to be less salient in European Americans (S. F. Cheung et al., 2006; Lin & Church, 2004).

What is common to these three distinct lines of research, and perhaps most obvious in indigenous personality research, is that the candidates for expanding the Big Five space most often involve concepts in the area of interpersonal functioning (Church, 2008). In the Big Five model, this area is primarily represented by Agreeableness. It has been frequently noted in the literature that Agreeableness seems to be at the same time the largest, the most evaluatively laden, and the least well understood personality dimension (Graziano & Tobin, 2002). Arguably these properties mean that Agreeableness is in need for further refinement and possible expansion. Cross-cultural studies including non-Western contexts in which interpersonal functioning is important can inform this debate on expansion.

## **1.2. Agreeableness and Social-Relational Functioning**

The core of Agreeableness refers to motivations, traits, and behaviors aimed at maintaining positive relations with others (Graziano & Eisenberg, 1997). An important component is the notion of effortful control, accounting for the suppression of self-interest and negative affect in interpersonal settings (Jensen-Campbell &

Graziano, 2001; Jensen-Campbell, Knack, Waldrip, & Campbell, 2007). It could be speculated that the elements of effortful control and self-restraint, shared with Conscientiousness, are represented also in the Honesty-Humility factor in the HEXACO model (Ashton & Lee, 2007).

Another important aspect of Agreeableness is its relation to social desirability (McCrae & Costa, 1983). Agreeableness has been found to be strongly associated with descriptions of the ought self (Hafidahl, Panter, Gramzow, Sedikides, & Insko, 2000) and moralistic (Paulhus & John, 1998) and communal (Paulhus & Trapnell, 2008) biases in self-perception and presentation. Graziano and Tobin (2002) distinguished between impression-management and self-deception aspects of socially desirable responding and found that Agreeableness was only related to impression management. They found that other personality dimensions were also related to social desirability (cf. Li & Bagger, 2006) and concluded that Agreeableness is not threatened by self-favoring biases. Recent research has suggested that persons from more collectivistic cultures score higher on impression management and lie scales, whereas persons from more individualistic cultures score higher on self-deception (Lalwani, Shavitt, & Johnson, 2006; Van Hemert, Van de Vijver, Poortinga, & Georgas, 2002). So, it is clear that social desirability plays a role in the expression of personality concepts in the interpersonal domain, and its role may differ across cultures.

The most pertinent question regarding Agreeableness from a cross-cultural perspective is to what extent this dimension sufficiently captures the main personality concepts in the area of social-relational functioning, notably in non-Western, collectivistic cultures. Attention to relations and to social context is supposed to be more prominent in collectivistic than in individualistic cultures (Triandis, 1995) and

this can be expected to result in higher salience or levels of Agreeableness. A major finding in the opposite direction is that of McCrae, Terracciano, and 79 Members of the Personality Profiles of Cultures Project (2005) who found a positive association between country-level Agreeableness and individualism. A possible interpretation is that there may be an Agreeableness core focusing on general prosocial orientation, which is more salient in an individualistic context, and further concepts of—presumably more norm-regulated—social-relational functioning, more prominent in a collectivistic context. The research by F. M. Cheung and colleagues (F. M. Cheung et al., 2001) has made the strongest case for expansion of the Big Five model with concepts of social-relational functioning (Church, 2008). Recently, we proposed an indigenous personality model for South Africa which also displays a strong emphasis on social-relational aspects of personality (Nel et al., 2012; Valchev et al., 2011). In the present study, we put this model, developed on the basis of qualitative data, to the test by examining its social-relational concepts using a quantitative approach in a framework defined by established measures of the Big Five model, Interpersonal Relatedness, social desirability, and prosocialness.

### **1.3. The South African Context and Social-Relational Concepts**

South Africa is a multicultural society comprising 11 official languages and four distinct ethnic groups: Blacks, Coloureds, Indians, and Whites. The dominant approach to personality study and assessment has been to use imported instruments measuring models developed in Western contexts, mostly the UK and the US. These instruments have often been found to have unsatisfactory psychometric properties in South Africa, especially in the Black group (Foxcroft, Paterson, Le Roux, & Herbst, 2004; Laher, 2008; Meiring, Van de Vijver, Rothmann, & Barrick, 2005). In contrast, Taylor and De Bruin (2005) developed their Basic Traits Inventory (BTI) to measure

the Big Five in a culture-informed manner. This instrument has been validated in the major ethnic and linguistic groups of South Africa (Ramsay, Taylor, De Bruin, & Meiring, 2008).

The SAPI project (F. M. Cheung, Van de Vijver, & Leong, 2011; Nel et al., 2012; Valchev et al., 2011) is the first to examine the implicit personality conceptions in South Africa's 11 languages from an indigenous perspective. The first stage of this mixed-methods project identified nine broad personality clusters based on shared content and co-occurrence patterns in free personality descriptions made in the 11 languages. The nine clusters were: Conscientiousness, Emotional Stability, Extraversion, Facilitating, Integrity, Intellect, Openness, Relationship Harmony, and Soft-Heartedness, further subdivided into 37 subclusters and 188 facets (Nel et al., 2012). The social-relational aspects were represented in four clusters: Facilitating (referring to the quality of being a good guide in life, with descriptions like "He gives good advice and builds people up"), Integrity (dealing with moral values and behaviors, e.g., "Fair, does not discriminate"), Relationship Harmony (dealing with the preservation of harmony in interpersonal relationships and the larger social context, e.g., "Peacemaker, always wants the family to be united"), and Soft-Heartedness (dealing with altruism and empathy, e.g., "Kind, caring, willing to help"). Based on the content of the semantic clusters (not yet validated by quantitative measures), Soft-Heartedness showed the strongest conceptual relation with the Agreeableness core. Relationship Harmony was similar to Interpersonal Relatedness (F. M. Cheung et al., 2001) but was narrower as it did not include the latter's tradition-focused elements. Integrity was similar to the HEXACO model's Honesty-Humility (Asthon & Lee, 2007) but included additional elements of equal treatment

and discrimination. Finally, Facilitating did not have a clear correspondence to an existing personality concept in other models and appeared relatively culture-specific.

In a subsequent study, also involving free personality descriptions in South Africa, we found that Facilitating, Relationship Harmony, and Soft-Heartedness were mentioned more frequently in the Black group than in the White group, with Indians in the middle (Valchev et al., 2013), underscoring the salience of these concepts in a collectivistic context. These findings fit in a global pattern of documented differences between Blacks and Whites, where Blacks are considered more collectivistic and Whites more individualistic (Allik & McCrae, 2004; Eaton & Louw, 2000; Laher, 2008). The present project, comprising three studies, aims to develop the nomological network of the social-relational concepts with quantitative data.

## **2. Study 1**

We address four questions in the first study. First, what is the relation of the SAPI social-relational concepts to the Big Five model? Our conceptual, qualitative analysis of the SAPI social-relational clusters has treated them as extensions of Agreeableness including relatively culture-specific elements (Nel et al., 2012). We hence formulate the following hypothesis:

Hypothesis 1: The social-relational scales are related to Agreeableness and constitute a coherent factor distinct from the Big Five.

Second, what is the relation of the SAPI social-relational concepts to Interpersonal Relatedness (F. M. Cheung et al., 2001; S. F. Cheung et al., 2006)? The two constructs share a focus on social-relational functioning, while Interpersonal Relatedness also focuses on tradition. We test the following hypothesis:

Hypothesis 2: There is a pattern of stronger associations of the SAPI social-relational scales with the relational components of Interpersonal Relatedness, and less strong associations with the tradition-focused components.

Third, how do the SAPI social-relational concepts relate to social desirability? Previous research has found links of Agreeableness and Conscientiousness to impression management (e.g., Graziano & Tobin, 2002). Impression management, in turn, is distinct from (albeit related to) deception as measured in lie scales (Paulhus, 1991) and has recently been proposed as an indicator of capacity for interpersonal adjustment in social context (Uziel, 2010). We hence formulate the following hypothesis:

Hypothesis 3: The links of the social-relational scales with social desirability are strong, similar to those for Agreeableness and Conscientiousness, and stronger for impression-management than for a lie scale measuring the tendency to deceive.

Finally, we are interested in cross-cultural differences in mean scores. Differences have been observed between more collectivistic and more individualistic groups with respect to the salience of social-relational personality concepts in free descriptions (Valchev et al., 2013), as well as in mean scores on Interpersonal Relatedness (Lin & Church, 2004) and social desirability scales (Lalwani et al., 2006). We thus test the following hypothesis:

Hypothesis 4: Blacks score higher than Whites on the positive (and lower than Whites on the negative) SAPI social-relational scales, CPAI-2 Interpersonal Relatedness, and social desirability.

## **2.1. Method**

### **2.1.1. Sample and Procedure**

Participants were students at the Police College in Pretoria ( $n = 678$ ), University of Johannesburg ( $n = 223$ ), University of the Witwatersrand ( $n = 372$ ), and North-West University ( $n = 210$ ). The sample included 1,043 Blacks (429 males;  $M_{age} = 24.33$  years,  $SD = 4.79$ ) and 440 Whites (126 males;  $M_{age} = 19.55$  years,  $SD = 2.23$ ). All had completed at least high-school level education. On a one-item, self-report English proficiency scale from 1 (*very poor*) to 4 (*very good*), Blacks had a mean score of 3.42 ( $SD = 0.52$ ) and Whites had a mean score of 3.51 ( $SD = 0.52$ );  $F(1, 1455) = 8.69$ ,  $p = .003$ ,  $\eta^2 = .01$ . All participants filled in the SAPI social-relational scales; in addition, 799 students (603 Blacks and 196 Whites) filled in the BTI and 768 students (523 Blacks and 245 Whites) filled in the CPAI-2 Interpersonal Relatedness (IR) scales. The package of scales was completed in a single session, with counterbalanced order, except for the students at the Police College, who had completed the BTI at an earlier session. All students received course credit for their participation, except for 120 students at the University of Johannesburg who were rewarded with the local equivalent of US\$ 2.50.

### **2.1.2. Instruments**

All questionnaires were administered in English and requested self-report. A 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) was used in all questionnaires.

#### **2.1.2.1. SAPI Social-Relational Scales**

Scales were developed from the content of the free descriptions obtained by Nel et al. (2012). All items were formulated in the first person singular, used simple language, and specified concrete behaviors expressed with an object whenever possible (using items similar to “I care for others” and “I help others cope with their

problems”). The scale development and properties are described in Hill et al. (2013, in press).

The following 10 SAPI social-relational scales were used (the instrument is copyright-protected, so the examples given are paraphrased): Facilitating (10 items, e.g., “I give guidance to people in their life decisions”); Integrity (11 items, e.g., “I acknowledge my mistakes”); Relationship Harmony (10 items, e.g., “I help people live in peace”); Active Support (13 items, e.g., “I support others when they need it”); Empathy (6 items, e.g., “I consider how others feel”); Unreliability (7 items, e.g., “I fail to meet others’ expectations”); Harmony Breach (8 items, e.g., “I cause fights”); Arrogance (6 items, e.g., “I show that I am better than others”); Hostility (10 items, e.g., “I make people feel vulnerable”); and Egoism (10 items, e.g., “I only think about my own interests”). All scales were unipolar; five of the scales were in the positive direction, and five were in the negative direction. The items were based on the input from the qualitative data, allowing optimal content representation. To avoid measurement problems common in cross-cultural research, no items with negations were used (cf. Hendriks, Hofstee, & De Raad, 1999). The items were presented in a random order.

The Cronbach’s alpha values for the SAPI social-relational scales ranged from .59 to .92 with an average of .81 for Blacks, and from .74 to .89 with an average of .81 for Whites. The Tucker’s phi indices of construct equivalence after target rotation of the individual scales (see Van de Vijver & Leung, 1997) were all above .97, with an average of .99.

#### **2.1.2.2. BTI**

The BTI, developed in South Africa (Taylor & De Bruin, 2005), measures the FFM and provides both factor and facet scores. Each factor subsumes 4 to 5 facets,

and each facet is measured by 6 to 10 items. All scales are unipolar; items are formulated in the positive direction, except for Neuroticism. Similarly to the SAPI items, most BTI items involve concrete behaviors (Taylor & De Bruin, 2005). The BTI items were developed using the International Personality Item Pool (IPIP) as a model and contained formulations similar to “I like being with others” and “I forgive easily.” Items are presented in blocks per factors and facets.

Cronbach’s alpha values for the factor scales ranged from .86 to .94 with an average of .89 for Blacks, and from .89 to .96 with an average of .92 for Whites. For the facet scales, alphas ranged between .39 and .83 with an average of .71 for Blacks, and between .57 and .91 with an average of .80 for Whites. There was only one scale with a very low alpha of .39 in Blacks: Openness to Values. There was no clear indication of single items causing the low value. Like all facet scales, this scale only contained a small number of items (six). Because we were interested in overall patterns rather than individual facet scales, and the reliability values for the factor scales were excellent, we retained this facet scale as is; caution would be warranted in the interpretation of results on this facet scale. The Tucker’s phi indices for the individual factor scales ranged from .97 to .98, with an average of .97, and for the facet scales from .90 to .99, with an average of .97.

### **2.1.2.3. CPAI-2 IR**

Preliminary analyses indicated a number of items negatively affecting the internal consistency (with several Cronbach’s alpha values of the magnitude of .40) and structural equivalence (with several Tucker’s phi indices far below .90) of the CPAI-2 IR scales. Most such items involved negations and difficult wording (e.g., unfamiliar words, such as *cohabitation*, and idiomatic expressions), and a few involved concepts that have different connotations in the two cultural groups (e.g.,

saving money by using public transport, which may be more salient in the less affluent Black group). After careful examination, a total of 17 items (two to five per scale, except the unaffected Social Sensitivity scale) were removed, which resulted in a marked improvement of the scales' properties. The removed items appeared to be poor indicators of the target constructs mostly because of their formulation and familiarity. The items did not refer to some common content and were spread across scales, so their removal did not threaten the overall content representation of the scales. The following six scales were used in the analyses: Traditionalism versus Modernity (10 items); Relational Orientation (8 items); Social Sensitivity (11 items); Discipline (9 items); Harmony (12 items); and Thrift versus Extravagance (7 items; see F. M. Cheung et al., 2001).

The Cronbach's alpha values ranged from .47 to .64 with an average of .58 for Blacks, and from .49 to .68 with an average of .59 for Whites. These values are low, yet comparable to those found in other non-Chinese samples (S. F. Cheung et al., 2006; Lin & Church, 2004). Tucker's phi for the individual scales ranged from .94 to .98, with an average of .97.

#### **2.1.2.4. Social Desirability**

Three scales were used: To accompany the SAPI social-relational scales, 18 items were adapted from the Marlowe-Crowne scale (Crowne & Marlowe, 1960) and the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991). Based on previous research (Meiring, 2011), two scales were formed: Positive Impression Management (IM-Positive; 8 items, e.g., "I continue with my work if I am motivated") and Negative Impression Management (IM-Negative; 10 items, e.g., "I have some bad habits"). In addition, the BTI Social Desirability (SD, or lie) scale was used in the part of the sample that completed the BTI. This scale contains 13 items

that employ extreme statements about positive or denial of negative behaviors (e.g., featuring the words *always*, *never*, *everything*, and *everyone*) and can thus be considered as a lie scale. Cronbach's alphas of the three scales ranged from .66 to .84 with an average of .74 for Blacks, and .51 to .70 with an average of .64 for Whites. Tucker's phi indices ranged from .94 to .99, with an average of .97. In summary, all scales had at least satisfactory and most had very good reliability values and structural equivalence indices between Blacks and Whites.

## **2.2. Results and Discussion**

### **2.2.1. Analysis Overview**

There are two main methods for assessing the distinctiveness of indigenous personality concepts from universal models (F. M. Cheung et al., 2001; Katigbak et al., 2002; Ortiz et al., 2007). The first method is to conduct a joint factor analysis of measures of the universal and the indigenous model and to assess to what extent the indigenous scales load on the factors defined by the universal model's scales or form separate factors. This method provides insight into the conceptual network of indigenous scales in the framework of universal models. The second method is to regress the indigenous measure on the combination of all factors of the universal model in multiple regression, and to assess to what extent the indigenous scales are predicted by the universal scales. This method provides a more unified insight into the degree of overlap between indigenous and universal concepts. Next to these two main methods, the correlation matrix of individual scales from the indigenous and universal models provides an overview of both conceptual networks and degree of overlap. We employed both main methods, combined with the overall correlation matrix. For the comparison with the Big Five, we factor-analyzed the SAPI social-relational scales jointly with the BTI scales, inspecting five-, six- and seven-factor solutions for the

interpretability of factors (cf. F. M. Cheung et al., 2001). For the comparison with the CPAI-2 IR, we inspected joint factor solutions with one, two, and three factors. In the multiple regression analysis, we inspected the multiple correlation coefficients ( $R$ ) of the SAPI scales with the combination of the BTI scales and the CPAI-2 IR scales as predictors, respectively. Multiple correlations of .40 or lower have been proposed as indicating relatively distinct indigenous measures (Katigbak et al., 2002; Ortiz et al., 2007).

For an overall inspection of the interrelations among the constructs in the present study, we correlated the BTI factor scales, CPAI-2 IR scales, and social desirability scales to the SAPI social-relational scales in both Blacks and Whites. The results are displayed in Table 1. The table also presents the  $R$  coefficients from the multiple regression analyses. Differences in correlations between the two groups were tested using Fisher's  $r$ - $z$  transformation (Cohen, Cohen, West, & Aiken, 2003).

### **2.2.2. SAPI and the Big Five**

As expected, the SAPI social-relational scales correlated with Agreeableness; however, they also correlated with Conscientiousness and Openness (see top panel of Table 1). The correlations were higher for the positive than the negative SAPI social-relational scales. The correlations were largely similar in both groups.

We conducted a joint factor analysis of the SAPI social-relational scales and the BTI facets using the maximum likelihood algorithm with Oblimin rotation. Because we expected at least one additional dimension beyond the Big Five, we examined seven-, six-, and five-factor solutions. The loadings for both groups of the seven- and six-factor solutions are presented in Tables 2 and 3, respectively. The first seven eigenvalues were 11.07, 3.95, 2.29, 1.77, 1.37, 1.26, and 1.02 in the Black group, and 8.79, 5.60, 3.22, 2.27, 1.53, 1.39, and 1.11 in the White group. The SAPI

social-relational scales clearly formed two factors beyond those defined by the BTI scales, a positive and a negative one. In the six-factor solution the BTI Agreeableness and Openness factors merged in Blacks, and the Extraversion facets spread across factors in Whites (see Table 3). In the five-factor solution (not presented here) Agreeableness and Openness merged in Whites, and the two merged with Conscientiousness in Blacks; the social-relational scales still defined two separate factors in both groups.

An alternative interpretation of the two additional factors beyond the Big Five is that they represent bloated specific factors obtained due to highly correlated scales of very specific personality aspects. The average intercorrelation (based on absolute values) of all SAPI scales was .52 in the White group and .53 in the Black group, which was comparable to the average intercorrelations of the BTI scales, .49 and .50 in the two groups, respectively. To directly assess the interpretation in terms of bloated specifics, we conducted a joint factor analysis of the BTI facet scales and two broad scales representing the positive and negative SAPI social-relational factors. If the latter factors were merely bloated specifics, they could be expected to display a stronger tendency to be subsumed under the Big Five when analyzed on this broad level. In a five-factor solution, Openness and Agreeableness tended to merge in both groups, but a single social-relational factor defined by the two broad, positive and negative scales remained distinguishable, although it attracted two Agreeableness scales in the White group. So, we found no evidence for the merging of the broad social-relational scales with Big Five scales when five factors were extracted, which would have supported the interpretation of the social-relational scales as bloated specifics. Rather, the analysis suggested six interpretable factors in both groups: the Big Five and a social-relational factor. The first six eigenvalues were 9.27, 2.39, 1.89,

1.26, 1.11, and 0.98 in the Black group, and 6.97, 3.96, 2.36, 1.73, 1.35, and 1.20 in the White group. In conclusion, the interpretation of the social-relational factors as bloated specifics was not supported.

It could also be argued that the two SAPI social-relational factors represent merely positive and negative valence. If that were the case, the removal of the negative scales would result in a structure where the positive valence would have less relative impact, and the positive scales would be attracted to the five BTI factors. However, after excluding the negative SAPI social-relational scales, the positive SAPI scales still formed a distinct separate factor in six- and five-factor solutions.<sup>1</sup>

We then conducted multiple regression analyses on the individual SAPI social-relational scales with the BTI scales as predictors. With tolerance values of .45 and higher, there was no evidence for collinearity among the predictors. The multiple correlations are displayed in the top panel of Table 1. Applying the criterion of  $R$  at or below .40, Empathy and most negative social-relational scales were relatively weakly predicted by the Big Five set, especially in the Black group. Finally, we conducted a multiple regression analysis on the overall positive and negative social-relational factors with the BTI scales as predictors. The values for the positive factor were  $R_{\text{Blacks}} = .52$ ,  $R_{\text{Whites}} = .56$ ; for the negative factor,  $R_{\text{Blacks}} = .41$ ,  $R_{\text{Whites}} = .49$ .

In summary, in partial confirmation of Hypothesis 1, the SAPI social-relational scales revealed a pattern of significant and meaningful relations to (the Big Five) Agreeableness, but also Conscientiousness and Openness, and defined two separate factors with a positive and negative component. The additional factors were

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<sup>1</sup> Alternatively, it could be argued that the positive SAPI scales are more skewed than the BTI scales (see Table 6), which could contribute to the positive scales still identifying a separate factor even without the negative scales in the analysis. However, the Conscientiousness scales appeared on average similarly skewed but had a stronger tendency than the SAPI social-relational scales to attract secondary loadings from other scales. So, while item popularity may have contributed to the emergence of a separate social-relational factor to an extent, it did not seem to account for it completely.

not reducible to positive and negative valence and were moderately predicted by the Big Five.

### **2.2.3. SAPI and Interpersonal Relatedness**

The pattern of correlations of the SAPI social-relational scales with the CPAI-2 IR scales suggested that the SAPI social-relational scales were more strongly associated with Relational Orientation, Social Sensitivity, and Harmony than with Traditionalism versus Modernity, Discipline, and Thrift versus Extravagance (see the middle panel of Table 1). However, the correlations with the latter three scales were higher in the Black sample than in the White sample.

We examined the relations of the SAPI social-relational scales to the CPAI-2 IR in a joint factor analysis. Because of the conceptual similarity and the overall high correlations, we expected a coherent factor with a possible second negative factor. We performed a maximum-likelihood factor analysis, extracting three, two, and one factors, with Oblimin rotation for the multiple-factor solutions. The first three eigenvalues were 7.43, 1.84, and 1.49 in the Black group, and 6.92, 2.12, and 1.45 in the White group. The third factor was only defined by two CPAI-2 IR scales: Traditionalism versus Modernity and Discipline; so, we focused on the single- and two-factor solutions. The pattern matrices for both groups can be found in Table 4. Both factor solutions suggested that the CPAI-2 IR scales and the SAPI scales jointly defined a factor of social-relational functioning, with a subdivision into positive and negative aspects. The SAPI scales with the most pronounced relationship components, such as Active Support, Relationship Harmony, and Facilitating, were the strongest markers. The CPAI-2 IR scales involving tradition and norms (Traditionalism vs. Modernity; Discipline, where several items deal with the beneficial aspects of following traditional conventions and regulations; and Thrift vs. Extravagance)

showed some of the lowest loadings on the joint factors. Group differences were also found: The tradition-focused concepts were more strongly linked to interpersonal concepts for Blacks than for Whites.

Finally, we conducted a multiple regression analysis of each SAPI social-relational scale on the CPAI-2 IR scales. With tolerance values of .52 and higher, there was no evidence for collinearity among the predictors. The multiple correlation coefficients are displayed in the middle panel of Table 1. Applying the cut-off value of .40, all SAPI scales were predicted by the CPAI-2 IR scales. The overall positive and negative SAPI social-relational factors were also strongly predicted by the CPAI-2 IR: For the positive factor,  $R_{\text{Blacks}} = .75$ ,  $R_{\text{Whites}} = .79$ ; for the negative factor,  $R_{\text{Blacks}} = .60$ ,  $R_{\text{Whites}} = .61$ .

In summary, in support of Hypothesis 2, the SAPI social-relational scales demonstrated convergent validity by showing associations with the CPAI-2 IR scales involving interpersonal functioning, and discriminant validity by showing weaker associations with the tradition-focused CPAI-2 IR scales. The SAPI scales were much more strongly predicted by the CPAI-2 IR than by the Big Five.

#### **2.2.4. Personality and Social Desirability**

The correlation matrix of the SAPI social-relational scales contained, as expected, sizeable correlations with the IM-Positive and IM-Negative scales (see bottom panel of Table 1). The BTI SD (lie) scale, on the other hand, appeared less strongly related to the social-relational scales.

To assess these associations in the two groups, we performed separate multigroup path analyses per personality scale with AMOS (Arbuckle, 2009). Tolerance values were above .70, so there was no evidence for collinearity among the predictors. The results are displayed in Table 5. We defined saturated models with

covariance terms between all three pairs of social desirability scales and regression paths from the social desirability scales to each personality scale. Using the comparative fit index (CFI) and the Tucker-Lewis index (TLI), we assessed the change in fit from the unrestricted model to the regression-weights model imposing equal weights between groups. The CFI suggested that the regression-weights model had an adequate fit (above .95) for most scales, although the TLI identified a number of scales with differences in the regression weights between the two groups.

Three findings are worth mentioning. First, as expected, the SAPI social-relational scales were relatively strongly associated with social desirability overall. The mean  $R^2$  for the SAPI social-relational scales was .39 for Blacks and .36 for Whites, which in both groups was higher than the values for Agreeableness (.37 and .24, respectively) and lower than those for Conscientiousness (.46 and .42, respectively; Table 5). The CPAI-2 IR scales had weaker associations with social desirability, which may to an extent be attributable to the relatively low reliability of the CPAI-2 IR scales. Second, the standardized regression weights indicated that the SAPI social-relational scales were more strongly related to the IM scales than to the BTI SD (lie) scale (see Table 5). As could be expected, the positive and negative personality scales tended to be respectively related to positive and negative social-desirability scales. Third, a comparison between the individual correlations of the BTI SD (lie) scale with the SAPI social-relational scales (bottom row in Table 1) and the regression weights for the same variables (Table 5) revealed an interesting case of suppression, especially for the negative SAPI scales. While the BTI SD (lie) scale's correlations with the SAPI social-relational scales were low and/or in the same direction as IM-Positive, the corresponding regression weights were higher and/or in the same direction as IM-Negative. It appeared that the two IM scales had suppressed

the genuine social-desirability variance of the BTI SD (lie) scale and brought to the fore the underlying lie component. So, after taking into account common variance with impression management, higher scores on a scale measuring lying tended to co-occur with higher scores on measures of other negative interpersonal behaviors. It is worth noting that the suppression did not occur for the BTI scales; Agreeableness and Conscientiousness were highly positively associated both with the IM-Positive and the BTI SD (lie) scale. The link of the lie component to self-reported negative aspects of social-relational functioning, such as unreliability, arrogance, and egoism, adds to the content validity of the negative SAPI social-relational scales.

In summary, in support of Hypothesis 3, the SAPI social-relational scales had sizeable associations with social desirability, on average comparable to those of the BTI Agreeableness and Conscientiousness scales for both groups. The links were the strongest with the impression-management aspects of social desirability. The BTI SD (lie) scale's underlying lie component served as a criterion measure adding to the content validity of the social-relational scales.

### **2.2.5. Differences in Mean Scores**

We conducted multivariate analyses of covariance testing for the main effects and interaction of ethnic group and gender, with age as covariate, separately for the SAPI social-relational scales, the BTI, the CPAI-2 IR, and the three social desirability scales. The Wilks' Lambda multivariate tests for ethnic group were significant ( $p < .001$ ) for all analyses, with large effect sizes: partial  $\eta^2 = .18$  (SAPI),  $.32$  (BTI),  $.18$  (CPAI-2 IR), and  $.24$  (social desirability scales). The mean scores and univariate partial effect sizes for ethnic group are presented in Table 6. Blacks scored higher than Whites on the positive SAPI scales (except Empathy, *ns*), Conscientiousness, the CPAI-2 IR Traditionalism versus Modernity and Discipline, and the IM-Positive and

BTI SD (lie) scales; the pattern was reversed for the negative SAPI scales, Extraversion, Neuroticism, and the IM-Negative scale. Most univariate effect sizes were small, although a few were moderate or large. These findings supported Hypothesis 4.

### **3. Study 2**

In Study 1, we found that the SAPI social-relational personality concepts defined a positive and a negative factor distinct from the Big Five. For a first assessment of the incremental value of these factors, in Study 2 we turn to their association with a relevant criterion variable: prosocial behavior tendencies. Prosocialness, expressed in altruistic helping and empathy, has been found to be moderately to strongly associated with Agreeableness (Caprara, Alessandri, Di Giunta, Panerai, & Eisenberg, 2010). Given the focus of the SAPI scales on social-relational functioning, we expect them to add substantially to the explained variance in prosocialness above the Big Five. We test the following hypothesis:

Hypothesis 5: The SAPI social-relational scales explain variance in prosocialness above the Big Five.

In Study 1, we identified the social-relational factors both in Blacks and Whites in South Africa. In Study 2, we test their incremental predictive value only in Whites. Even though this does not provide a complete representation of the study population, the social-relational concepts appeared more salient in Blacks, so a test in the White group can be considered conservative.

#### **3.1. Method**

##### **3.1.1. Sample**

The sample, independent from the sample of Study 1, consisted of White students at North-West University ( $n = 299$ ) and the University of Johannesburg ( $n =$

26). There were 118 males, 3 missing data on gender;  $M_{age} = 21.05$  years,  $SD = 4.05$ .

All students participated for course credit.

### **3.1.2. Instruments**

#### **3.1.2.1. SAPI Social-Relational Scales**

The same SAPI social-relational scales as in Study 1 were used, except for the Facilitating, Integrity, and Unreliability scales which were left out for logistic reasons. Cronbach's alpha ranged from .78 to .89, with an average of .82. Because we were interested in the combined effect of the social-relational scales, and based on the finding of two factors in Study 1, we formed two broad social-relational scales: a positive (29 items; Cronbach's alpha = .91) and a negative one (34 items; Cronbach's alpha = .92).

#### **3.1.2.2. BTI**

We used a short version of the BTI (Taylor & De Bruin, 2005) which consists of 60 items and provides factor scores, but no facet scores. Cronbach's alpha ranged from .81 to .89, with an average of .85.

#### **3.1.2.3. Prosocialness**

We used a scale developed by Caprara, Steca, Zelli, and Capanna (2005). The scale is unifactorial and includes 16 items about helping behavior (e.g., "I am pleased to help my friends/colleagues in their activities") and empathy (e.g., "I intensely feel what others feel"). As with all other instruments, a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) was used. Cronbach's alpha was .90.

## **3.2. Results and Discussion**

We conducted hierarchical multiple regression with prosocialness as outcome variable and BTI and SAPI as predictors. With tolerance values of .46 and higher, there was no evidence for collinearity among the predictors. The BTI and SAPI scales

were entered in sequential blocks. With the inclusion of the SAPI scales, the adjusted  $R^2$  increased from .37 to .58. This change was significant,  $F(2, 317) = 79.39, p < .001$ . The standardized regression coefficients before and after the inclusion of the SAPI scales are presented in Table 7. As the table shows, the positive SAPI social-relational scale was the strongest predictor of prosocialness, and its inclusion dramatically diminished the independent contribution of Agreeableness, Openness, and Conscientiousness.

The counterintuitive positive association of prosocialness with Neuroticism appeared to be driven by the strong emotional component of some empathy items in the prosocialness scale (see example item in Section 3.1.2.3). To test this, we re-ran the regression analysis after removing four empathy-focused items (the reduced prosocialness scale of 12 items had a Cronbach's alpha of .87). This reduced scale was not related to Neuroticism:  $\beta = .05, ns$ . The remaining results were the same as for the complete prosocialness scale: The inclusion of the SAPI scales increased the adjusted  $R^2$  value from .38 to .55,  $F(2, 317) = 63.81, p < .001$ , and only Agreeableness ( $\beta = .18, p < .01$ ) and the positive SAPI social-relational scale ( $\beta = .52, p < .001$ ) were significant predictors, whereby the SAPI scale had a much stronger effect. This additional analysis suggests that the associations between the SAPI social-relational scales and prosocialness were not due to a shared emotionality component. In conclusion, in support of Hypothesis 5, the SAPI social-relational scales explained substantial variance in prosocialness above the variance accounted for by the Big Five.

#### **4. Study 3**

Previous studies have found that personality concepts which were initially thought of as indigenous could be replicated in cultures different from those where

they had first been identified (S. F. Cheung et al., 2006; Lin & Church, 2004). We were interested in establishing to what extent this also holds for the social-relational concepts identified in South Africa: Are they culturally unique or do they replicate in other cultures? To address this question, in Study 3 we investigate the social-relational concepts in a multicultural sample of mainstream Dutch and several immigrant groups in the Netherlands. This also gives us the opportunity to test the generalizability of the social-relational scales' conceptual network by examining their links with a different measure of the Big Five model. If the social-relational concepts displayed a similar set of associations in a different culture and when measured jointly with a different Big Five instrument, this would provide a strong indication that the conceptual network of the social-relational scales generalizes beyond South Africa and the particular samples and measures of Study 1.

#### **4.1. Method**

##### **4.1.1. Sample**

Participants were recruited via the Tilburg Immigrant Panel, which is composed of a representative sample of immigrants and mainstream group members who participate in monthly internet surveys in the Netherlands. The panel is based on a true probability sample of households drawn from the population register (Scherpenzeel & Das, 2010). The Immigrant Panel is an independent part of the LISS panel of the MESS project (Measurement and Experimentation in the Social Sciences; [www.lissdata.nl](http://www.lissdata.nl)). The sample for this study included 452 mainstream Dutch, 427 Western, 225 Antillean, Surinamese, and Indonesian, and 179 non-Western participants. Antillean and Surinamese immigrants come from former Dutch colonies, tend to speak the dominant language very well, and are well adjusted to the Dutch society. This is also the case for the Indonesian immigrants who arrived in the

Netherlands in the late 1940s and 1950s and were strongly focused on assimilating to the Dutch society. The measures were completed in two separate sessions online.

#### **4.1.2. Instruments**

##### **4.1.2.1. SAPI Social-Relational Scales**

To comply with the study panel's time restrictions, a shorter form of the SAPI social-relational scales was used. The six highest loading items per scale were selected, resulting in a total of 60 items. The items were translated into Dutch using a committee approach and were administered in Dutch to all participants. Cronbach's alpha ranged from .65 to .84, with an average of .76 (mainstream Dutch group), .65 to .83, with an average of .75 (Western immigrants), .68 to .86, with an average of .77 (Antillean, Surinamese, and Indonesian immigrants), and .79 to .89, with an average of .79 (non-Western immigrants). All scales' Tucker's phi coefficients after target rotation of individual groups toward the factor loadings from the common, pooled-within correlation matrix were at least .99.

##### **4.1.2.2. Big Five**

Goldberg's 50 marker items (Goldberg, 1992) from the IPIP were used to measure the Big Five. The items were translated into Dutch by professional translators, using the translation-back-translation method. Inconsistencies were discussed and resolved by two of the main investigators of the panel (also consulting the publicly available German translation.). Unlike the BTI, the IPIP scales are balanced, containing items both in the positive and the negative direction, and the items are presented in a random order. A 5-point Likert response scale from 1 (*very inaccurate*) to 5 (*very accurate*) was used. Cronbach's alpha ranged from .78 to .88, with an average of .83 (mainstream Dutch), .75 to .87, with an average of .81 (Western), .76 to .89, with an average of .80 (Antillean, Surinamese, and Indonesian),

and .71 to .81, with an average of .75 (non-Western immigrants). All scales' Tucker's phi coefficients after target rotation of individual groups toward the pooled-within factor loadings were .95 or higher.

#### **4.2. Results and Discussion**

We conducted a joint factor analysis of the SAPI and IPIP items. Because the 50 IPIP items do not provide facet scores, we conducted this analysis on item level. For a balanced representation of the sample subgroups by their size, we conducted the analysis on the pooled-within correlation matrix. We inspected solutions with seven, six, and five factors. The first seven eigenvalues were 16.99, 8.28, 5.78, 3.74, 3.38, 2.81, and 2.76. The seven-factor solution is presented in Table 8. The social-relational scales identified two separate factors, a positive and a negative one. Interestingly, there was a pattern of secondary negative loadings of several Facilitating items on the Agreeableness factor. These items deal with guiding and giving advice, which can be perceived as undesired interference in an individualistic context such as the Netherlands (Chentsova-Dutton & Vaughn, 2012). In the six- and five-factor solutions, the two separate social-relational factors were still clearly distinguishable, while first Conscientiousness and Intellect, and subsequently Agreeableness and Extraversion tended to merge. These findings point at the replicability of the social-relational factors in a different cultural context.

Finally, we conducted multiple regression analyses with the social-relational scales as dependent variables and the combination of IPIP scales as predictors. With tolerance values of .59 and higher, there was no evidence for collinearity among the predictors. The multiple correlation coefficients per group are presented in Table 9. Different social-relational scales were related to the Big Five measures to a different extent in the different groups; 13 coefficients (33%) were below .40, suggesting

relatively weak predictability of several individual scales in individual groups by the Big Five. Across the board, predictability by the Big Five was the lowest in the non-Western group and for the Facilitating scale. The predictability of the overall positive and negative factors, however, was higher, with  $R$ s ranging from .38 for the positive factor in the non-Western group to .59 for the positive factor in the three other groups; the mean values across groups were  $R_{\text{Positive}} = .54$  and  $R_{\text{Negative}} = .48$ . The indices were similar to those in Study 1 and point to a moderate predictability of the overall social-relational factors from the Big Five, but to relative distinctiveness from the Big Five of several individual social-relational scales, especially in the non-Western group.

In summary, the findings indicated that the social-relational concepts were replicated in a Western context. These results are remarkable considering the cultural differences between South Africa and the Netherlands and the fact that this study, in contrast to Study 1, utilized shorter measures of the social-relational concepts, a different Big Five instrument, and item-level rather than scale-level analysis. The results provide a first indication for the broader external validity of the social-relational concepts: Although first identified in a non-Western context, these concepts appear to be replicable in a multicultural Western context. It is worth noting that both in Study 1 and in Study 3, the social-relational concepts were better predicted by the Big Five in the Western groups than in the non-Western groups.

## **5. General Discussion**

The present study aimed to advance the development of the nomological network of a set of social-relational personality concepts identified from an indigenous perspective in South Africa (Nel et al., 2012). In a cross-cultural context, we examined the position of the SAPI social-relational concepts in the framework of the FFM or Big Five model (McCrae & Allik, 2002), their relation to Interpersonal

Relatedness (F. M. Cheung et al., 2001), social desirability (Graziano & Tobin, 2002), and prosocialness (Caprara et al., 2010). We found that the social-relational concepts had a pattern of significant correlations not only with Agreeableness, but also with Conscientiousness and Openness, and defined two separate factors, a positive and a negative one (Hypothesis 1). The SAPI social-relational scales displayed high correlations with the relational aspects of Interpersonal Relatedness (Hypothesis 2) and the impression-management aspects of social desirability (Hypothesis 3), and lower correlations with the tradition-focused aspects of Interpersonal Relatedness and the lie component of social desirability, providing evidence for convergent and discriminant validity, respectively. The scale structures and their patterns of associations were similar for Blacks and Whites in South Africa. The main cultural differences referred to the stronger links between relational and tradition-focused concepts in Blacks as compared to Whites. Blacks also scored higher than Whites on the positive social-relational scales, two Interpersonal Relatedness scales, and positive impression management, whereas Whites scored higher on the negative social-relational scales and negative impression management (Hypothesis 4). Furthermore, as first piece of evidence for incremental criterion validity, the SAPI scales explained substantial additional variance in prosocialness above the Big Five (Hypothesis 5). Finally, the social-relational concepts were replicated in a Western context, the Netherlands, with a similar overall pattern of associations with the Big Five as in South Africa, suggesting that these concepts are not unique to South Africa.

### **5.1. Beyond Agreeableness**

How do the SAPI social-relational concepts fit in the framework defined by the Big Five model? An interesting finding is that the social-relational scales were related not only to Agreeableness, but also to Conscientiousness and Openness (Table

1). The link to Conscientiousness is reminiscent of the position of the Honesty-Humility factor in the HEXACO model (Ashton & Lee, 2007; Saucier, 2008). Some of the elements of the SAPI social-relational concepts, like Integrity and Egoism, can be found in Honesty-Humility. Others, like Empathy and Active Support, correspond to aspects of Agreeableness and Emotionality, rather than Honesty-Humility, in the HEXACO model. Finally, concepts like Facilitating and Relationship Harmony are not well represented in most currently influential models in personality.

Facilitating was found to be one of the strongest markers of the SAPI social-relational concepts in South Africa both in the framework of the Big Five (Tables 2 and 3) and of Interpersonal Relatedness (Table 4). Facilitating is defined by items about conveying knowledge, giving guidance, and empowering others. These characteristics correspond directly to one of the major adaptive problems pertinent to the evolutionary differentiation of personality traits proposed by Buss (1991, p. 472): “Who can I go to for advice?” In the Big Five framework, the answer to this question refers primarily to Openness, which taps the cognitive capacity to give advice (Buss, 1997). Facilitating, on the other hand, refers to the actual realization of this capacity in an interpersonal context. In line with this interpretation, Facilitating had the highest correlation to Openness (Table 1). The perceived importance of guidance and knowledge sharing in the South African context has been emphasized in previous research on implicit personality conceptions (Valchev et al., 2011) and employee perceptions in organizational settings (April & Peters, 2011). The aspect of transmitting wisdom assumes special importance in more traditional groups, such as the Black group in South Africa in our study (Hammond-Tooke, 1974; Schwartz, 2006).

It is interesting to discuss some methodological aspects of the distinctiveness of personality factors. Firstly, although conclusions regarding the distinctiveness of the social-relational concepts from the Big Five were supported both in factor and regression analyses, the outcomes of the joint factor analysis (with distinct factors above the Big Five emerging consistently across measures and samples: Tables 2, 3, and 8) suggested more distinctiveness than the outcomes of the multiple regression analysis (with several *Rs* of social-relational scales with the Big Five above .40: Tables 1 and 9). Secondly, in the multiple regression analysis, the distinctiveness of indigenous scales appeared greater when analyzing individual, low-level scales than when analyzing broader indigenous factors. Most evidence in the literature for the emergence of the CPAI-2 IR as distinct from the Big Five has also come from joint factor analysis and from multiple regression analysis on the level of individual scales (F. M. Cheung et al., 2001, 2008). Despite the incomplete convergence of factor- and multiple regression analyses, the present study offers three main types of support for the substantive value of the indigenous social-relational concepts. First, there were consistent indications that these concepts were less well covered by the Big Five model in non-Western than in Western groups. Second, the social-relational concepts in South Africa were much more strongly linked to Interpersonal Relatedness than to the Big Five. Finally, these concepts made a substantial contribution above the Big Five in the predictability of relevant outcomes.

## **5.2. Social-Relational Personality Concepts, Self-Regulation, Norms, and Tradition**

The associations of the SAPI social-relational scales with Agreeableness, Conscientiousness, and prosocial behaviors suggest a common element of effortful control (Graziano & Eisenberg, 1997; Hogan & Ones, 1997). The social-relational

concepts under investigation involve effortful control, allowing individual differences in the proclivity to “do the right thing” in interpersonal situations. This interpretation agrees with the observed correlations with the three different social desirability aspects (Table 5). The positive associations with the IM scales are in line with recent propositions that impression management should be reconceptualized as a measure of interpersonally oriented self-regulation (Lalwani et al., 2006; Uziel, 2010). In turn, the present research suggests that the impact of deceptive strategies on self-report personality measures may only be fully revealed when the common variance of lie scales with IM scales is suppressed.

The aspects of norm-congruent self-regulation in social context can be expected to emerge as especially salient in more collectivistic (Triandis, 1995) or tight (Gelfand et al., 2011) cultures, where norms and traditions play a more important role in behavior regulation. The research that led to the identification of the Interpersonal Relatedness concept in China started with a specific interest in the influence of Chinese norms and traditions on implicit personality concepts (F. M. Cheung et al., 1996). “Traditional” is also one of the candidates for expansion of the Big Five in lexical studies (Paunonen & Jackson, 2000). In the SAPI social-relational scales, unlike the CPAI-2 IR (F. M. Cheung et al., 2001), there are no items directly referring to the adherence to norms, regulations, and traditions. Nonetheless, the pattern of associations with CPAI-2 IR and the two IM scales suggests that perceived normative regulations play an important role in the constitution of the social-relational concepts in South Africa. The social-relational concepts extend personality in the direction of norms and values, usually studied independently of personality (Saucier, 2008). One of the consequences is the observed overall strong association with social desirability.

It is important to note that this association points to norm-congruent self-regulation more than to faking good.

### **5.3. Alternative Interpretations and Limitations**

Some alternative interpretations of our findings need to be addressed. One alternative interpretation refers to the social-relational concepts as “bloated specifics” (Cattell, 1973). If enough highly correlated measures of a very specific facet are included in a factor analysis, the facet may show up as a separate factor, irrespective of this facet’s substantive overlap or distinction from the other components of the factor structure. It could be argued that this may have been the case with our measures of the social-relational concepts, and that their emergence as distinct from the Big Five is an artifact of bloated specifics. Three kinds of evidence argue against this interpretation. Firstly, the evidence for the distinctiveness of the social-relational concepts in factor and regression analysis was obtained across three studies that employed different and increasingly restricted measures of these concepts. In addition, the average correlations of the scales of the SAPI and BTI were comparable in size, which does not suggest the presence of highly specific factors in the SAPI. Secondly, in a direct test of the bloated-specifics interpretation, we found that the social-relational concepts defined a separate factor even when they were measured with two broad scales, positive and negative (Section 2.2.2). The third point is that the social-relational scales differ in substance from the Big Five scales and include content which is not well represented in the Big Five. This includes concepts such as guidance, maintenance of harmonious relationships, and manifestations of integrity, but also behaviors disruptive of interpersonal relationships and social harmony. It is especially noteworthy that we found less empirical overlap where the conceptual overlap is weaker (social-relational concepts and the Big Five: Sections 2.2.2 and 4.2)

and much greater empirical overlap where the conceptual overlap is stronger (social-relational concepts and Interpersonal Relatedness: Section 2.2.3). The balance of the evidence is against the interpretation of the social-relational concepts as bloated specifics.

Another alternative interpretation refers to the two social-relational factors as valence factors, similar to those known from previous research (e.g., Saucier & Goldberg, 2001). We argue that our social-relational factors are different from the valence factors reported before. Firstly, the two factors in the present study involve only social-relational aspects, in contrast to the classic positive and negative valence factors, which feature substantively fuzzier content with more pronounced evaluative loading, such as *excellent*, *special*, *awful*, and *wicked* (Benet-Martínez & Waller, 2002). Secondly, the fact that the positive social-relational scales still defined a separate additional factor after the exclusion of the negative scales suggests that these scales are empirically distinguished from the Big Five factors by their content rather than valence.

What could be seen as a limitation of the SAPI involves the absence of negatively keyed items in the social-relational scales. Arguably, this absence may have weakened the correlations between the positive and negative social-relational scales, contributing to the separation of the two factors. Our reason for developing separate, unipolar scales was that this provided an exhaustive representation of the content of the implicit personality model in South Africa (Nel et al., 2012; Valchev et al., 2011). In this model, many descriptions of diverse positive and negative social-relational concepts were present, although they were often not mirror images (for example, the opposite of active support would be the lack of active support, whereas we found hostility as closest to the opposite). Furthermore, negatively keyed items

could also lead to the separation of a negative factor, which would have to be accounted for as a method factor or in a bi-factor model. Negatively keyed items may be especially problematic in cross-cultural comparisons as evidenced, for example, in the case of the CPAI-2 IR in the present study, where items with negations affected reliability and construct equivalence (Section 2.1.2.3). Finally, it should be noted that the positive and negative social-relational concepts constituted a single, bipolar factor when analyzed with broad scales (Section 2.2.2) and in the joint factor analysis with the CPAI-2 IR scales (Table 4). Nonetheless, the future development of the SAPI social-relational scales could include the development of negatively keyed items, which would allow for questions such as acquiescence bias to be addressed.

#### **5.4. Prospects**

Indigenous research on personality usually starts with identifying a set of constructs relevant to *one* particular cultural group and may subsequently seek replication of these constructs in different cultural groups (e.g., S. F. Cheung et al., 2006; Katigbak et al., 1996; Lin & Church, 2004). In contrast, the present research employed constructs that have been identified as common to *two* cultural groups as distinct as South African Blacks and Whites. The finding of differences in mean levels on these constructs is well in line with our previous findings of their differing salience (Valchev et al., 2013) and with findings of cultural differences along the individualism–collectivism dimension in mean levels of personality characteristics (e.g., Allik & McCrae, 2004; S. F. Cheung et al., 2006; Lin & Church, 2004). In view of the oft-perceived tensions between emic and etic approaches to personality (Van de Vijver & Leung, 2001), our finding of structural equivalence of the indigenously derived SAPI social-relational constructs in South Africa and their replication in a

Western context is reassuring for the prospects of developing an integrated, emic-etic approach (F. M. Cheung et al., 2011).

### **5.5. Conclusion**

Claims for the expansion of the Big Five space most often involve concepts of relational functioning, especially in cross-cultural research (Church, 2008). The present study adds to this body of research by identifying a coherent set of positive and negative social-relational concepts salient in South Africa and replicable in a Western context. This set is distinguishable from the Big Five model and relates in a systematic manner to the relational and tradition-focused components of Interpersonal Relatedness (F. M. Cheung et al., 2001), to the impression-management and lie aspects of social desirability, and to prosocialness (Caprara et al., 2010). The SAPI social-relational personality concepts, observed in two fairly culturally distant groups such as Blacks and Whites in South Africa and replicated in the very different cultural context of the Netherlands, are associated with interpersonally oriented self-regulation in social context (Uziel, 2010). We hope that this study stimulates further cross-cultural research in this border area between the domains of personality, norms, and tradition.

### References

- Allik, J., & McCrae, R. R. (2004). Toward a geography of personality traits: Patterns of profiles across 36 cultures. *Journal of Cross-Cultural Psychology, 35*, 13-28. doi:10.1177/0022022103260382
- April, K., & Peters, K. (2011). Communal versus individual modalities of work: A South African investigation. *Asia Pacific Journal of Business and Management, 2*, 5-36.
- Arbuckle, J. (2009). *Amos 19*. Crawfordville, FL: AMOS Development Corporation.
- Ashton, M. C., & Lee, K. (2001). A theoretical basis for the major dimensions of personality. *European Journal of Personality, 15*, 327-353.  
[doi:10.1002/per.417](https://doi.org/10.1002/per.417)
- Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review, 11*, 150-166. doi:10.1177/1088868306294907
- Benet-Martínez, V., & Waller, N. G. (2002). From *adorable* to *worthless*: Implicit and self-report structure of highly evaluative personality descriptors. *European Journal of Personality, 16*, 1-41. doi:10.1002/per.431
- Buss, D. M. (1991). Evolutionary personality psychology. *Annual Review of Psychology, 42*, 459-491. doi:10.1146/annurev.ps.42.020191.002331
- Buss, D. M. (1997). Evolutionary foundations of personality. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 317-344). San Diego, CA: Academic Press.
- Caprara, G. V., Alessandri, G., Di Giunta, L., Panerai, L., & Eisenberg, N. (2010). The contribution of Agreeableness and self-efficacy beliefs to prosociality. *European Journal of Personality, 24*, 36-55. doi:10.1002/per.739

- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. *European Journal of Psychological Assessment, 21*, 77-89. doi:10.1027/1015-5759.21.2.77
- Cattell, R. B. (1973). *Personality and mood by questionnaire*. San Francisco, CA: Jossey-Bass.
- Chentsova-Dutton, Y. E., & Vaughn, A. (2012). Let me tell you what to do: Cultural differences in advice-giving. *Journal of Cross-Cultural Psychology, 43*, 687-703. doi:10.1177/002202211140234
- Cheung, F. M., Cheung, S. F., Zhang, J., Leung, K., Leong, F., & Yeh, K.-H. (2008). Relevance of Openness as a personality dimension in Chinese culture: Aspects of its cultural relevance. *Journal of Cross-Cultural Psychology, 39*, 81-108. doi:10.1177/0022022107311968
- Cheung, F. M., Leung, K., Fan, R. M., Song, W. Z., Zhang, J. X., & Zhang, J. P. (1996). Development of the Chinese Personality Assessment Inventory. *Journal of Cross-Cultural Psychology, 27*, 181-199. doi:10.1177/0022022196272003
- Cheung, F. M., Leung, K., Zhang, J. X., Sun, H. F., Gan, Y. G., Song, W. Z., & Xie, D. (2001). Indigenous Chinese personality constructs: Is the Five-Factor Model complete? *Journal of Cross-Cultural Psychology, 32*, 407-433. doi:10.1177/0022022101032004003
- Cheung, F. M., Van de Vijver, F. J. R., & Leong, F. T. L. (2011). Toward a new approach to the assessment of personality in culture. *American Psychologist, 66*, 593-603. doi:10.1037/a0022389
- Cheung, S. F., Cheung, F. M., Howard, R., & Lim, Y.-H. (2006). Personality across the ethnic divide in Singapore: Are "Chinese traits" uniquely Chinese?

*Personality and Individual Differences*, 41, 467-477.

doi:10.1016/j.paid.2005.12.023

Church, A. T. (2008). Current controversies in the study of personality across cultures. *Social and Personality Psychology Compass*, 2, 1930-1951.

[doi:10.1111/j.1751-9004.2008.00132.x](https://doi.org/10.1111/j.1751-9004.2008.00132.x)

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.

doi:10.1037/h0047358

De Raad, B., Barelds, D. P. H., Levert, E., Ostendorf, F., Mlačić, B., Di Blas, L., ...

Katigbak, M. S. (2010). Only three factors of personality description are fully replicable across languages: A comparison of 14 trait taxonomies. *Journal of Personality and Social Psychology*, 98, 160-173. 10.1037/a0017184

Eaton, L., & Louw, J. (2000). Culture and self in South Africa: Individualism–collectivism predictions. *The Journal of Social Psychology*, 140, 210-217.

doi:10.1080/00224540009600461

Foxcroft, C. D., Paterson, H. Le Roux, N., & Herbst, D. (2004). *Psychological assessment in South Africa: A needs analysis*. Pretoria, South Africa: Human Sciences Research Council.

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., ...

Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, 332, 1100-1104. doi:10.1126/science.1197754

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure.

*Psychological Assessment*, 4, 26-42. doi:10.1037/1040-3590.4.1.26

Graziano, W. G., & Eisenberg, N. (1997). Agreeableness: A dimension of personality.

In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 795-824). San Diego, CA: Academic Press.

Graziano, W. G., & Tobin, R. M. (2002). Agreeableness: Dimension of personality or social desirability artifact? *Journal of Personality*, 70, 695-728.

doi:10.1111/1467-6494.05021

Hafdahl, A. R., Panter, A. T., Gramzow, R. H., Sedikides, C., & Insko, C. A. (2000).

Free-response self-discrepancies across, among, and within FFM personality dimensions. *Journal of Personality*, 68, 111-151. doi:10.1111/1467-

6494.00093

Hammond-Tooke, W. D. (Ed.). (1974). *The Bantu-speaking peoples of Southern*

*Africa*. London, United Kingdom: Routledge & Kegan Paul.

Hendriks, A. A. J., Hofstee, W. K. B., & De Raad, B. (1999). The Five-Factor

Personality Inventory (FFPI). *Personality and Individual Differences*, 27, 307-325. doi:10.1016/S0191-8869(98)00245-1

Hill, C., French, L., Morton, N., Van de Vijver, F. J. R., Valchev, V. H., Adams, B.

G., & De Bruin, G. P. (2013). The construct validation of the Relationship Harmony and Soft-Heartedness scales of the South African Personality

Inventory. *South African Journal of Psychology*, 43, 167-181.

doi:10.1177/0081246313482628

Hill, C., Nel, J. A., Van de Vijver, F. J. R., Meiring, D., Valchev, V. H., Adams, B.

G., & De Bruin, G. P. (in press). Developing and testing items for the South African Personality Inventory (SAPI). *SA Journal of Industrial Psychology*.

- Hogan, J., & Ones, D. S. (1997). Conscientiousness and integrity at work. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 849-870). San Diego, CA: Academic Press.
- Jensen-Campbell, L. A., & Graziano, W. G. (2001). Agreeableness as a moderator of interpersonal conflict. *Journal of Personality, 69*, 323-362. doi:10.1111/1467-6494.00148
- Jensen-Campbell, L. A., Knack, J. M., Waldrip, A. M., & Campbell, S. D. (2007). Do Big Five personality traits associated with self-control influence the regulation of anger and aggression? *Journal of Research in Personality, 41*, 403-424. doi:10.1016/j.jrp.2006.05.001
- Katigbak, M. S., Church, A. T., & Akamine, T. X. (1996). Cross-cultural generalizability of personality dimensions: Relating indigenous and imported dimensions in two cultures. *Journal of Personality and Social Psychology, 70*, 99-114. doi:10.1037/0022-3514.70.1.99
- Katigbak, M. S., Church, A. T., Guanzon-Lapeña, M. A., Carlota, A. J., & Del Pilar, G. H. (2002). Are indigenous dimensions culture-specific? Philippine inventories and the five-factor model. *Journal of Personality and Social Psychology, 82*, 89-101. doi:10.1037/0022-3514.82.1.89
- Laher, S. (2008). Structural equivalence and the NEO-PI-R: Implications for the applicability of the Five-Factor Model of Personality in an African context. *SA Journal of Industrial Psychology, 34*, 76-80.
- Lalwani, A. K., Shavitt, S., & Johnson, T. (2006). What is the relation between cultural orientation and socially desirable responding? *Journal of Personality and Social Psychology, 90*, 165-178. doi:10.1037/0022-3514.90.1.165

- Lee, K., & Ashton, M. C. (2008). The HEXACO personality factors in the indigenous personality lexicons of English and 11 other languages. *Journal of Personality*, 76, 1001-1053. [doi:10.1111/j.1467-6494.2008.00512.x](https://doi.org/10.1111/j.1467-6494.2008.00512.x)
- Li, A., & Bagger, J. (2006). Using the BIDR to distinguish the effects of impression management and self-deception on the criterion validity of personality measures: A meta-analysis. *International Journal of Selection and Assessment*, 14, 131-141. [doi:10.1111/j.1468-2389.2006.00339.x](https://doi.org/10.1111/j.1468-2389.2006.00339.x)
- Lin, E. J.-L., & Church, A. T. (2004). Are indigenous Chinese personality dimensions culture-specific? An investigation of the Chinese Personality Assessment Inventory in Chinese American and European American samples. *Journal of Cross-Cultural Psychology*, 35, 586-605. [doi:10.1177/0022022104268390](https://doi.org/10.1177/0022022104268390)
- McCrae, R. R., & Allik, J. (Eds.). (2002). *The five-factor model of personality across cultures*. New York, NY: Kluwer Academic/Plenum.
- McCrae, R. R., & Costa, P. T., Jr. (1983). Social desirability scales: More substance than style. *Journal of Consulting and Clinical Psychology*, 51, 882-888. [doi:10.1037/0022-006X.51.6.882](https://doi.org/10.1037/0022-006X.51.6.882)
- McCrae, R. R., Terracciano, A., & 79 Members of the Personality Profiles of Cultures Project. (2005). Personality profiles of cultures: Aggregate personality traits. *Journal of Personality and Social Psychology*, 89, 407-425. [doi:10.1037/0022-3514.89.3.407](https://doi.org/10.1037/0022-3514.89.3.407)
- Meiring, D. (2011, June). Exploring the cross-cultural application of social desirability within the SAPI project. In F. J. R. van de Vijver (Chair), *Personality theory and assessment: Recent advances*. Symposium at the regional conference of the International Association for Cross-Cultural Psychology, Istanbul, Turkey.

- Meiring, D., Van de Vijver, A. J. R., Rothmann, S., & Barrick, M. R. (2005). Construct, item, and method bias of cognitive and personality measures in South Africa. *SA Journal of Industrial Psychology, 31*, 1-8.
- Nel, J. A., Valchev, V. H., Rothmann, S., Van de Vijver, F. J. R., Meiring, D., & De Bruin, G. P. (2012). Exploring the personality structure in the 11 languages of South Africa. *Journal of Personality, 80*, 915-948. doi:10.1111/j.1467-6494.2011.00751.x
- Ortiz, F. A., Church, A. T., Vargas-Flores, J. J., Ibáñez-Reyes, J., Flores-Galaz, M., Iuit-Briceño, J. I., & Escamilla, J. M. (2007). Are indigenous personality dimensions culture-specific? Mexican inventories and the Five-Factor Model. *Journal of Research in Personality, 41*, 618-649. doi:10.1016/j.jrp.2006.07.002
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychology attitudes* (pp. 17-59). New York, NY: Academic Press.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-deceptive styles with basic traits and motives. *Journal of Personality, 66*, 1025-1060. doi:10.1111/1467-6494.00041
- Paulhus, D. L., & Trapnell, P. D. (2008). Self-presentation of personality: An agency–communion framework. In O. P. John, R. W. Robins, L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 492-517). New York, NY: The Guilford Press.
- Paunonen, S. V., & Jackson, D. N. (2000). What is beyond the Big Five? Plenty! *Journal of Personality, 68*, 821-835. doi:10.1111/1467-6494.00117

- Ramsay, L. J., Taylor, N., De Bruin, G. P., & Meiring, D. (2008). The Big Five personality factors at work: A South African validation study. In J. Deller (Ed.), *Research contributions to personality at work* (pp. 99-114). Munich, Germany: Rainer Hampp Verlag.
- Saucier, G. (2008). Measures of the personality factors found recurrently in human lexicons. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment* (Vol. 2, pp. 29-54). Los Angeles, CA: SAGE.
- Saucier, G. (2009). Recurrent personality dimensions in inclusive lexical studies: Indications for a Big Six structure. *Journal of Personality, 77*, 1577-1614. doi:10.1111/j.1467-6494.2009.00593.x
- Saucier, G., & Goldberg, L. R. (1998). What is beyond the Big Five? *Journal of Personality, 66*, 495-524. doi:10.1111/1467-6494.00022
- Saucier, G., & Goldberg, L. R. (2001). Lexical studies of indigenous personality factors: Premises, products, and prospects. *Journal of Personality, 69*, 847-879. doi:10.1111/1467-6494.696167
- Scherpenzeel, A. C., & Das, M. (2010). "True" longitudinal and probability-based internet panels: Evidence from the Netherlands. In M. Das, P. Ester, & L. Kaczmirek (Eds.), *Social and behavioral research and the internet: Advances in applied methods and research strategies* (pp. 77-104). Boca Raton, FL: Taylor & Francis.
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology, 136*-182. doi:10.1163/156913306778667357

- Taylor, N., & De Bruin, G. (2005). *Basic Traits Inventory: Technical manual*.  
Johannesburg, South Africa: Jopie van Rooyen & Partners SA.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.
- Uziel, L. (2010). Rethinking social desirability scales: From impression management to interpersonally oriented self-control. *Perspectives on Psychological Science*, 5, 243-262. doi:10.1177/1745691610369465
- Valchev, V. H., Van de Vijver, F. J. R., Nel, J. A., Rothmann, S., Meiring, D., & De Bruin, G. P. (2011). Implicit personality conceptions of the Nguni cultural-linguistic groups of South Africa. *Cross-Cultural Research*, 45, 235-266. doi:10.1177/1069397111402462
- Valchev, V. H., Nel, J. A., Van de Vijver, F. J. R., Meiring, D., De Bruin, G. P., & Rothmann, S. (2013). Similarities and differences in implicit personality concepts across ethno-cultural groups in South Africa. *Journal of Cross-Cultural Psychology*, 44, 365-388. doi:10.1177/0022022112443856
- Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: SAGE.
- Van de Vijver, F. J. R., & Leung, K. (2001). Personality in cultural context: Methodological issues. *Journal of Personality*, 69, 1007-1031. doi:10.1111/1467-6494.696173
- Van Hemert, D. A., Van de Vijver, F. J. R., Poortinga, Y. H., & Georgas, J. (2002). Structural and functional equivalence of the Eysenck Personality Questionnaire within and between countries. *Personality and Individual Differences*, 33, 1229-1249. doi:10.1016/S0191-8869(02)00007-7

Zhang, J., & Bond, M. H. (1998). Personality and filial piety among college students in two Chinese societies: The added value of indigenous constructs. *Journal of Cross-Cultural Psychology, 29*, 402-417. doi:10.1177/0022022198293002

Table 1

*Correlations of the BTI Factor Scales, CPAI-2 IR, and Social Desirability Scales with the SAPI Social-Relational Scales in Blacks (B) and Whites (W)*

	Facilitating		Integrity		Rel. Harmony		Active Support		Empathy		Unreliability		Harmony Breach		Arrogance		Hostility		Egoism	
	B	W	B	W	B	W	B	W	B	W	B	W	B	W	B	W	B	W	B	W
BTI																				
Extraversion	<b>.31</b>	<b>.31</b>	.29	.25	.28	.24	<b>.30</b>	<b>.31</b>	.14	.16	-.12	.08	-.12	.06	.02	.13	-.06	.08	-.06	.10
Neuroticism	-.22	-.15	-.25	-.19	-.25	-.13	-.24	-.07	-.11	.07	.26	<b>.37</b>	.28	<b>.41</b>	.17	.11	.23	.28	.26	<b>.31</b>
Conscientiousness	<b>.47</b>	<b>.44</b>	<b>.51</b>	<b>.47</b>	<b>.46</b>	<b>.38</b>	<b>.46</b>	<b>.40</b>	.23	<b>.31</b>	<b>-.33</b>	-.23	<b>-.36</b>	-.26	-.10	-.11	<b>-.32</b>	-.17	-.19	-.10
Openness	<b>.39</b>	.28	<b>.32</b>	.19	<b>.35</b>	.22	<b>.35</b>	.25	.24	.20	<u>-.16</u>	<u>.14</u>	-.15	.11	.00	.17	-.14	.11	<u>-.07</u>	<u>.28</u>
Agreeableness	<b>.39</b>	<b>.38</b>	<b>.41</b>	<b>.33</b>	<b>.39</b>	<b>.45</b>	<b>.39</b>	<b>.42</b>	.22	<b>.40</b>	-.28	-.08	-.29	-.07	-.11	-.13	-.25	-.10	-.20	-.09
R	<b>.49</b>	<b>.51</b>	<b>.52</b>	<b>.52</b>	<b>.49</b>	<b>.51</b>	<b>.49</b>	<b>.50</b>	.27	<b>.43</b>	.39	<b>.49</b>	<b>.42</b>	<b>.51</b>	.23	.38	.38	<b>.40</b>	.32	<b>.51</b>
CPAI-2 IR																				
Traditionalism vs. Modernity	<b>.31</b>	<u>.03</u>	<b>.33</b>	<u>-.07</u>	<b>.33</b>	<u>.01</u>	<u>.28</u>	<u>.03</u>	-.08	-.08	<u>-.29</u>	<u>.06</u>	<u>-.25</u>	<u>.06</u>	.06	.12	<u>-.22</u>	<u>.06</u>	-.12	.12
Relational Orientation	<b>.40</b>	<b>.33</b>	<b>.46</b>	<b>.38</b>	<b>.48</b>	<b>.40</b>	<b>.45</b>	<b>.44</b>	.22	<b>.44</b>	<b>-.39</b>	-.26	<b>-.35</b>	-.17	-.24	<b>-.32</b>	<b>-.38</b>	-.26	<b>-.35</b>	-.21
Social Sensitivity	<b>.59</b>	<b>.62</b>	<b>.59</b>	<b>.55</b>	<b>.60</b>	<b>.68</b>	<b>.64</b>	<b>.73</b>	<b>.39</b>	<b>.67</b>	<b>-.44</b>	<b>-.37</b>	<b>-.36</b>	<b>-.34</b>	-.23	<b>-.39</b>	<b>-.38</b>	<b>-.40</b>	<b>-.37</b>	<b>-.39</b>
Discipline	<u>.46</u>	<u>.18</u>	<u>.46</u>	<u>.19</u>	<u>.42</u>	<u>.12</u>	<u>.38</u>	<u>.14</u>	.02	.05	<u>-.32</u>	<u>-.02</u>	<u>-.30</u>	<u>-.01</u>	.00	-.01	-.25	-.09	-.10	.14
Harmony	<b>.53</b>	<b>.48</b>	<b>.55</b>	<b>.54</b>	<b>.57</b>	<b>.64</b>	<b>.59</b>	<b>.59</b>	<b>.34</b>	<b>.53</b>	<b>-.49</b>	<b>-.50</b>	<b>-.44</b>	<b>-.50</b>	<b>-.36</b>	<b>-.45</b>	<b>-.51</b>	<b>-.51</b>	<b>-.46</b>	<b>-.49</b>
Thrift vs. Extravagance	<u>.34</u>	<u>.09</u>	<b>.41</b>	.21	<b>.35</b>	.14	<b>.40</b>	<u>.12</u>	.22	.23	<b>-.34</b>	-.16	-.28	-.08	-.25	-.26	<b>-.34</b>	-.17	-.28	-.17
R	<b>.67</b>	<b>.64</b>	<b>.69</b>	<b>.64</b>	<b>.69</b>	<b>.74</b>	<b>.71</b>	<b>.76</b>	<b>.49</b>	<b>.71</b>	<b>.56</b>	<b>.52</b>	<b>.49</b>	<b>.50</b>	<b>.45</b>	<b>.54</b>	<b>.55</b>	<b>.54</b>	<b>.52</b>	<b>.56</b>
Social Desirability																				
IM-Positive	<b>.66</b>	<b>.38</b>	<b>.74</b>	<b>.59</b>	<b>.70</b>	<b>.43</b>	<b>.68</b>	<b>.41</b>	.25	<b>.33</b>	<b>-.52</b>	<b>-.28</b>	<b>-.48</b>	<b>-.30</b>	-.22	-.12	<b>-.49</b>	<b>-.26</b>	<b>-.32</b>	<b>-.10</b>
IM-Negative	<b>-.44</b>	<b>-.17</b>	<b>-.53</b>	<b>-.25</b>	<b>-.46</b>	<b>-.18</b>	<b>-.41</b>	<b>-.12</b>	<u>.17</u>	<u>-.03</u>	<b>.69</b>	<b>.55</b>	<b>.66</b>	<b>.57</b>	.24	.28	<b>.56</b>	<b>.41</b>	<b>.53</b>	<b>.46</b>
BTI SD (Lie)	.28	.14	<b>.33</b>	<u>.06</u>	.27	.02	.25	.04	-.03	.02	<u>-.25</u>	<u>.12</u>	<u>-.26</u>	<u>.10</u>	.03	.23	<u>-.22</u>	<u>.19</u>	-.09	.16

Note. BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); BTI SD (Lie) = social desirability (lie) scale of the BTI; CPAI-2 IR =

Interpersonal Relatedness scales of the Cross-Cultural Personality Assessment Inventory (S. M. Cheung et al., 2006); IM = impression

management; SAPI = South African Personality Inventory, in development (Nel et al., 2012). For correlations with the BTI,  $N = 799$  (603 Blacks, 196 Whites); for the CPAI-2 IR,  $N = 768$  (523 Blacks, 245 Whites); for IM-Positive and IM-Negative,  $N = 1,483$  (1,043 Blacks, 440 Whites). Correlations of .30 and higher (absolute values) and multiple correlations of .40 and higher are in boldface. Pairs of correlations that differ at  $p < .001$  between the two groups are underlined.

Table 2

*Loadings of the BTI Facet Scales and the SAPI Social-Relational Scales on the Joint**Seven-Factor Solution for Blacks and Whites*

Scale	Blacks							Whites						
	1 <sup>a</sup>	2	3	4	5	6	7	1	2	3	4	5	6	7
<b>BTI</b>														
E: Ascendance	.09	-.03	-.07	.25	-.07	<b>.58</b>	.19	.15	.16	.11	.20	.25	<b>-.49</b>	-.18
E: Liveliness	-.06	-.01	.01	.22	.03	<b>.66</b>	-.04	-.05	-.04	-.15	.28	-.04	<b>-.84</b>	-.04
E: Positive Affectivity	-.02	-.02	-.09	.23	.21	<b>.34</b>	-.24	.10	-.07	.21	.07	.04	<b>-.43</b>	.29
E: Gregariousness	.02	-.03	-.10	.10	.11	<b>.67</b>	-.07	.25	.05	.13	-.16	.01	<b>-.47</b>	.11
E: Excitement-Seeking	.04	.03	.08	-.13	.00	<b>.61</b>	.00	-.11	.08	.04	<b>-.35</b>	.27	<b>-.37</b>	.12
N: Affective Instability	.03	.09	<b>.69</b>	-.01	-.07	.09	.02	-.13	.09	<b>-.88</b>	.04	-.10	-.21	-.11
N: Depression	-.02	.03	<b>.73</b>	-.10	.09	.06	.02	.06	.07	<b>-.84</b>	-.07	.09	.04	.09
N: Self-Consciousness	.00	-.05	<b>.73</b>	.07	.04	-.09	-.04	.09	.09	<b>-.72</b>	-.04	.06	.13	.12
N: Anxiety	-.04	-.04	<b>.82</b>	.02	-.01	.05	.02	.01	.00	<b>-.83</b>	.03	.08	.03	.02
C: Effort	.06	-.01	-.02	<b>.66</b>	.04	.07	.06	-.01	-.12	.11	<b>.61</b>	.11	-.11	.09
C: Order	.02	-.01	.00	<b>.90</b>	-.08	.01	-.09	.12	.07	-.01	<b>.73</b>	.02	-.07	.02
C: Dutifulness	.06	-.02	-.03	<b>.80</b>	.05	.01	.01	.13	-.09	.11	<b>.59</b>	.20	-.07	.08
C: Prudence	.10	.01	-.05	<b>.62</b>	.13	.03	.06	.01	-.04	-.20	<b>.84</b>	.05	.01	-.03
C: Self-discipline	-.02	-.02	-.09	<b>.60</b>	.20	.01	-.04	-.01	.02	.21	<b>.72</b>	-.02	-.05	.23
O: Aesthetics	.04	.02	-.04	.01	<b>.41</b>	.23	.07	-.01	.01	-.03	.09	<b>.65</b>	.03	.02
O: Ideas	.06	.06	-.18	.07	<b>.46</b>	.22	.02	.09	.20	.09	.14	<b>.64</b>	-.04	-.05
O: Actions	.05	.05	-.10	.09	<b>.46</b>	.23	.05	-.04	.00	.00	-.02	<b>.72</b>	.04	.08
O: Values	.09	.12	.07	.02	<b>.47</b>	-.02	.01	.06	.05	-.06	-.04	<b>.34</b>	-.13	.05
O: Imagination	.12	.00	-.08	.25	<b>.36</b>	.12	.02	.03	-.07	-.07	.00	<b>.70</b>	.01	.01
A: Straightforwardness	.00	-.18	-.09	.25	<b>.48</b>	-.08	.16	.18	-.05	.07	.21	-.02	-.11	<b>.44</b>
A: Compliance	-.04	-.13	-.04	-.05	<b>.63</b>	.12	-.05	.02	-.11	-.02	-.07	<b>.34</b>	.01	<b>.55</b>
A: Prosocial Tendencies	.09	.03	-.14	.12	<b>.54</b>	.05	.09	.15	.16	.05	.16	.09	-.07	<b>.48</b>
A: Modesty	-.01	-.04	.07	.05	<b>.50</b>	-.13	-.08	-.10	.03	-.15	.06	.03	.03	<b>.68</b>
A: Tendermindedness	.03	-.08	.00	.23	<b>.58</b>	.00	-.19	.22	-.22	-.20	.07	<b>.31</b>	-.19	<b>.31</b>
<b>SAPI</b>														
Facilitating	<b>.92</b>	-.01	-.02	.00	.03	.03	.02	<b>.83</b>	.14	.10	.09	.02	.01	-.02
Integrity	<b>.72</b>	-.25	.01	.12	-.01	.00	.03	<b>.60</b>	-.29	.03	.14	.08	-.06	-.09
Relationship Harmony	<b>.88</b>	-.09	-.04	.00	.02	-.02	.02	<b>.67</b>	-.23	.03	.01	.04	.01	.11
Active Support	<b>.91</b>	-.03	-.03	.02	-.02	.02	-.14	<b>.96</b>	-.06	-.06	-.03	-.01	-.05	-.03
Empathy	<b>.33</b>	.00	-.01	.04	.06	.00	<b>-.44</b>	<b>.62</b>	-.23	-.19	.01	.03	.01	.06
Unreliability	-.19	<b>.77</b>	.01	.00	-.04	-.02	-.17	-.08	<b>.83</b>	-.13	-.07	.01	-.01	.07
Harmony Breach	-.12	<b>.75</b>	.02	-.10	.00	.01	-.11	.05	<b>.83</b>	-.19	-.14	-.10	-.02	.12
Arrogance	.07	<b>.58</b>	.05	.03	.03	-.01	<b>.35</b>	-.07	<b>.84</b>	.12	.05	.08	-.01	-.09
Hostility	-.12	<b>.83</b>	-.05	-.08	-.01	.04	-.15	-.15	<b>.85</b>	-.05	.03	-.07	-.04	.09
Egoism	-.05	<b>.65</b>	.10	.08	-.01	-.03	.22	-.09	<b>.75</b>	-.09	.06	.29	.05	-.17

*Note.* BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); SAPI = South African

Personality Inventory, in development (Nel et al., 2012); the following abbreviations

refer to BTI facet scales: E = Extraversion; N = Neuroticism; C = Conscientiousness;

O = Openness; A = Agreeableness. Factors were extracted using maximum likelihood

with Oblimin rotation. Loadings with absolute value of .30 or higher are in boldface.

<sup>a</sup>Tucker's phi indices for the seven factors were: .93, .95, .93, .94, .92, .92, .41, respectively.

Table 3

*Loadings of the BTI Facet Scales and the SAPI Social-Relational Scales on the Joint**Six-Factor Solution for Blacks and Whites*

Scale	Blacks						Whites					
	1 <sup>a</sup>	2	3	4	5	6	1	2	3	4	5	6
<b>BTI</b>												
E: Ascendance	.07	-.03	-.07	.28	-.18	<b>.61</b>	.24	.30	.21	.26	.26	.02
E: Liveliness	-.05	-.01	-.02	.14	.05	<b>.68</b>	.13	.20	.05	<b>.36</b>	.05	.26
E: Positive Affectivity	.02	-.04	-.13	.11	<b>.31</b>	<b>.34</b>	.16	.01	.27	.14	.07	<b>.46</b>
E: Gregariousness	.02	-.03	-.12	.03	.11	<b>.69</b>	<b>.33</b>	.16	.20	-.09	.02	<b>.33</b>
E: Excitement-Seeking	.03	.03	.08	-.17	-.03	<b>.63</b>	-.04	.16	.12	<b>-.31</b>	<b>.32</b>	.26
N: Affective Instability	.03	.10	<b>.69</b>	-.03	-.05	.07	-.06	.21	<b>-.79</b>	.05	-.07	-.01
N: Depression	-.03	.03	<b>.73</b>	-.09	.09	.06	.07	.08	<b>-.86</b>	-.07	.09	.07
N: Self-Consciousness	.01	-.05	<b>.71</b>	.05	.09	-.10	.08	.06	<b>-.77</b>	-.05	.05	.06
N: Anxiety	-.04	-.03	<b>.81</b>	.00	.01	.03	.03	.02	<b>-.85</b>	.02	.08	.00
C: Effort	.07	-.02	-.05	<b>.65</b>	.04	.08	-.01	-.10	.12	<b>.65</b>	.10	.10
C: Order	.07	-.04	-.07	<b>.74</b>	.07	-.01	.10	.08	-.01	<b>.76</b>	.02	-.01
C: Dutifulness	.09	-.03	-.08	<b>.75</b>	.09	.02	.12	-.09	.11	<b>.62</b>	.18	.08
C: Prudence	.12	.00	-.08	<b>.63</b>	.11	.05	-.01	-.02	-.21	<b>.87</b>	.01	-.07
C: Self-discipline	.01	-.04	-.13	<b>.57</b>	.23	.02	-.04	-.01	.18	<b>.74</b>	-.02	.18
O: Aesthetics	.04	.02	-.02	.10	.29	.29	-.02	-.01	-.05	.09	<b>.67</b>	-.03
O: Ideas	.07	.06	-.17	.15	<b>.36</b>	.28	.08	.18	.08	.15	<b>.67</b>	-.09
O: Actions	.05	.05	-.09	.18	<b>.34</b>	.30	-.06	-.03	-.02	-.02	<b>.73</b>	.05
O: Values	.10	.13	.08	.09	<b>.39</b>	.04	.09	.08	-.04	-.03	<b>.35</b>	.09
O: Imagination	.13	.00	-.08	.30	.29	.17	.04	-.08	-.08	.00	<b>.71</b>	-.01
A: Straightforwardness	.00	-.17	-.07	<b>.38</b>	<b>.33</b>	.00	.16	-.08	.03	.25	-.02	<b>.46</b>
A: Compliance	-.03	-.14	-.03	.02	<b>.55</b>	.19	.00	-.18	-.09	-.04	<b>.36</b>	<b>.51</b>
A: Prosocial Tendencies	.09	.03	-.12	.25	<b>.40</b>	.13	.11	.11	-.01	.19	.11	<b>.45</b>
A: Modesty	.01	-.05	.07	.09	<b>.49</b>	-.09	-.14	-.05	-.23	.08	.07	<b>.59</b>
A: Tendermindedness	.07	-.10	-.03	.22	<b>.62</b>	.03	.26	-.20	-.19	.11	<b>.33</b>	<b>.37</b>
<b>SAPI</b>												
Facilitating	<b>.93</b>	.00	.01	.05	-.07	.05	<b>.80</b>	.09	.05	.09	.03	-.07
Integrity	<b>.72</b>	-.25	.03	.16	-.09	.01	<b>.63</b>	-.29	.04	.16	.07	-.07
Relationship Harmony	<b>.90</b>	-.08	-.01	.06	-.07	.00	<b>.66</b>	-.27	.00	.02	.03	.10
Active Support	<b>.92</b>	-.03	-.03	.00	-.02	.02	<b>.98</b>	-.08	-.09	-.02	-.01	-.03
Empathy	<b>.38</b>	-.02	-.06	-.13	.26	-.05	<b>.63</b>	-.25	-.21	.02	.03	.03
Unreliability	-.16	<b>.77</b>	-.03	-.12	.11	-.06	-.13	<b>.80</b>	-.19	-.08	.01	.05
Harmony Breach	-.08	<b>.77</b>	-.01	-.17	.08	-.02	.00	<b>.80</b>	-.26	-.14	-.10	.11
Arrogance	.03	<b>.58</b>	.07	.16	-.13	.04	-.12	<b>.82</b>	.08	.04	.09	-.13
Hostility	-.08	<b>.85</b>	-.09	-.17	.11	.00	-.20	<b>.83</b>	-.10	.02	-.06	.08
Egoism	-.07	<b>.66</b>	.11	.14	-.08	-.01	-.14	<b>.74</b>	-.13	.04	.28	-.22

*Note.* BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); SAPI = South African

Personality Inventory, in development (Nel et al., 2012); the following abbreviations

refer to BTI facet scales: E = Extraversion; N = Neuroticism; C = Conscientiousness;

O = Openness; A = Agreeableness. Factors were extracted using maximum likelihood

with Oblimin rotation. Loadings with absolute value of .30 or higher are in boldface.

<sup>a</sup>Tucker's phi indices for the six factors were: .91, .93, .89, .94, .83, .52, respectively.

Table 4

*Loadings of the CPAI-2 IR and SAPI Social-Relational Scales on the Joint Two- and Single-Factor Solutions*

Scale	Blacks			Whites		
	Two Factors <sup>a</sup>		Single Factor	Two Factors		Single Factor
	1	2		1	2	
<b>CPAI-2 IR</b>						
Traditionalism vs. Modernity	.30	-.10	<b>.38</b>	.06	.13	-.03
Relational Orientation	<b>.41</b>	-.20	<b>.57</b>	<b>.46</b>	-.08	<b>.50</b>
Social Sensitivity	<b>.66</b>	-.06	<b>.70</b>	<b>.75</b>	-.12	<b>.80</b>
Discipline	<b>.45</b>	-.05	<b>.49</b>	.20	.08	.14
Harmony	<b>.50</b>	-.26	<b>.69</b>	<b>.53</b>	<b>-.37</b>	<b>.73</b>
Thrift vs. Extravagance	<b>.33</b>	-.18	<b>.47</b>	.12	-.14	.21
<b>SAPI</b>						
Facilitating	<b>.90</b>	.05	<b>.83</b>	<b>.80</b>	.06	<b>.72</b>
Integrity	<b>.65</b>	-.26	<b>.84</b>	<b>.63</b>	-.24	<b>.75</b>
Relationship Harmony	<b>.87</b>	-.06	<b>.88</b>	<b>.82</b>	-.11	<b>.85</b>
Active Support	<b>.96</b>	.05	<b>.88</b>	<b>.93</b>	-.02	<b>.88</b>
Empathy	<b>.56</b>	.17	<b>.42</b>	<b>.79</b>	-.10	<b>.81</b>
Unreliability	-.08	<b>.83</b>	<b>-.69</b>	-.10	<b>.81</b>	<b>-.56</b>
Harmony Breach	.04	<b>.87</b>	<b>-.60</b>	-.08	<b>.81</b>	<b>-.53</b>
Arrogance	-.02	<b>.53</b>	<b>-.41</b>	-.18	<b>.66</b>	<b>-.55</b>
Hostility	-.08	<b>.83</b>	<b>-.68</b>	-.15	<b>.79</b>	<b>-.59</b>
Egoism	-.05	<b>.70</b>	<b>-.57</b>	-.17	<b>.69</b>	<b>-.56</b>

*Note.* CPAI-2 IR = Interpersonal Relatedness scales of the Cross-Cultural Personality

Assessment Inventory (S. M. Cheung et al., 2006); SAPI = South African Personality

Inventory, in development (Nel et al., 2012). Factors were extracted using maximum

likelihood with Oblimin rotation for the two-factor solutions. Loadings with absolute

value of .30 or higher are in boldface.

<sup>a</sup>Tucker's phi indices for the two and single factors were: .97, .97, and .96,

respectively.

Table 5

*Standardized Regression Weights and R<sup>2</sup> Values for Blacks (B) and Whites (W) and Comparative Fit Indices for the Structural-Weights Multigroup Path Analysis Models of Personality and Social Desirability Scales*

Personality Scale	Standardized Weights						R <sup>2</sup>		Comparative Fit Indices	
	IM-Positive		IM-Negative		BTI SD (Lie)		B	W	CFI	TLI
	B	W	B	W	B	W				
<b>SAPI</b>										
Facilitating	.64***	.53***	-.14***	-.05	.03	-.01	.52***	.29***	1.00	.99
Integrity	.68***	.67***	-.21***	-.16**	.03	-.14**	.64***	.48***	1.00	.98
Relationship Harmony	.66***	.50***	-.14***	-.13*	.01	-.14*	.54***	.27***	.99	.98
Active Support	.67***	.60***	-.12***	-.06	.00	-.14*	.53***	.35***	.99	.97
Empathy	.43***	.47***	.23***	-.04	-.05	-.11	.16***	.21***	.98	.92
Unreliability	-.32***	-.27***	.50***	.60***	.07*	.28***	.45***	.48***	.96	.85
Harmony Breach	-.28***	-.28***	.50***	.64***	.05	.28***	.41***	.54***	.96	.84
Arrogance	-.15***	-.21**	.24***	.38***	.19***	.35***	.09***	.25***	.97	.87
Hostility	-.34***	-.28***	.45***	.48***	.09*	.34***	.40***	.37***	.96	.85
Egoism	-.14***	-.12*	.43***	.53***	.14***	.27***	.20***	.32***	.99	.94
<b>BTI</b>										
Extraversion	.20***	.19**	.13**	.12	.35***	.31***	.16***	.16***	1.00	1.03
Neuroticism	-.13**	.02	.19***	.57***	-.08	-.05	.10***	.33***	.88	.54
Conscientiousness	.36***	.53***	.08*	-.13*	.52***	.19***	.46***	.42***	.97	.87
Openness	.29***	.24***	.20***	.19**	.34***	.12	.19***	.10***	1.00	.98
Agreeableness	.28***	.32***	.10**	.07	.52***	.30***	.37***	.24***	.99	.98
<b>CPAI-2 IR</b>										
Traditionalism vs. Modernity	.21***	.04	-.29***	-.05			.16***	.00	.92	.77
Relational Orientation	.36***	.21***	-.11*	.05			.17***	.04**	.96	.89
Social Sensitivity	.43***	.24***	-.10*	-.13*			.22***	.08***	.98	.95
Discipline	.37***	.38***	-.24***	.02			.25***	.14***	.97	.90
Harmony	.40***	.28***	-.19***	-.25***			.24***	.16***	.99	.98
Thrift vs. Extravagance	.30***	.18**	-.09*	.04			.12***	.03*	.97	.92

*Note.* BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); BTI SD (Lie) = social desirability (lie) scale of the BTI; CPAI-2 IR = Interpersonal Relatedness scales of the Cross-Cultural Personality Assessment Inventory (S. M. Cheung et al., 2006); IM = impression management; SAPI = South African Personality Inventory, in development (Nel et al., 2012); CFI = comparative fit index; TLI = Tucker-Lewis index. For the analyses of the SAPI and BTI scales,  $N = 799$  (603 Blacks, 196 Whites); for the analyses of the CPAI-2 IR,  $N = 768$  (523 Blacks, 245 Whites). The BTI SD (lie) scale was not used in the analyses involving CPAI-2 IR because only 84 participants filled in both questionnaires.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 6

*Means (M) and Standard Deviations (SD) of Scale Scores of Blacks and Whites on Personality and Social Desirability Scales*

	Blacks		Whites		$\eta_p^{2a}$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>SAPI</b>					
Facilitating	4.10	0.55	3.63	0.53	.05***
Integrity	4.18	0.50	4.00	0.47	.01**
Relationship Harmony	4.18	0.50	3.85	0.48	.03***
Active Support	4.11	0.49	3.91	0.47	.01***
Empathy	3.87	0.56	4.05	0.53	.00
Unreliability	1.89	0.64	2.49	0.63	.09***
Harmony Breach	1.89	0.67	2.52	0.66	.09***
Arrogance	2.05	0.66	2.25	0.73	.01***
Hostility	1.67	0.59	2.10	0.72	.06***
Egoism	2.30	0.58	2.70	0.58	.04***
<b>BTI</b>					
Extraversion	3.43	0.50	3.56	0.47	.02***
Neuroticism	1.92	0.41	2.93	0.75	.24***
Conscientiousness	4.17	0.48	3.70	0.54	.08***
Openness	3.75	0.46	3.70	0.49	.00
Agreeableness	3.72	0.47	3.62	0.43	.00
<b>CPAI-2 IR</b>					
Traditionalism vs. Modernity	3.22	0.56	2.55	0.48	.16***
Relational Orientation	3.88	0.50	3.79	0.46	.01
Social Sensitivity	3.73	0.44	3.68	0.41	.00
Discipline	3.41	0.55	3.16	0.47	.02***
Harmony	3.77	0.42	3.63	0.42	.00
Thrift vs. Extravagance	3.47	0.57	3.45	0.52	.00
<b>Social Desirability</b>					
IM-Positive	4.14	0.46	3.72	0.46	.08***
IM-Negative	2.23	0.60	3.31	0.56	.24***
BTI SD (Lie)	3.31	0.59	2.77	0.50	.05***

*Note.* BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); BTI SD (Lie) = social desirability (lie) scale of the BTI; CPAI-2 IR = Interpersonal Relatedness scales of the Cross-Cultural Personality Assessment Inventory (S. M. Cheung et al., 2006); IM = impression management; SAPI = South African Personality Inventory, in development (Nel et al., 2012). For the BTI,  $N = 799$  (603 Blacks, 196 Whites); for the CPAI-2 IR,  $N = 768$  (523 Blacks, 245 Whites); for IM-Positive and IM-Negative,  $N = 1,483$  (1,043 Blacks, 440 Whites).

<sup>a</sup>Partial  $\eta^2$  effect sizes of ethnic group.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 7

*Standardized Regression Weights and Explained Variance in Hierarchical Multiple**Regression of Prosocialness on the BTI and SAPI Scales*

	Beta Weights	
	Model 1	Model 2
BTI Extraversion	.05	.02
BTI Neuroticism	.12*	.09*
BTI Conscientiousness	.11*	.07
BTI Openness	.20***	.09
BTI Agreeableness	.43***	.13*
SAPI SOCREL-Positive		.56***
SAPI SOCREL-Negative		-.08
Adjusted $R^2$	.37	.58

*Note.* BTI = Basic Traits Inventory (Taylor & De Bruin, 2005); SAPI SOCREL =

social-relational scales of the South African Personality Inventory, in development

(Nel et al., 2012).  $N = 325$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 8

*Loadings of the IPIP and the SAPI Social-Relational Items on the Joint Seven-Factor**Solution in the Pooled-Within Matrix*

	1 <sup>a</sup>	2	3	4	5	6	7
<b>IPIP</b>							
Extraversion Item 1	.08	<b>.50</b>	-.02	.09	.01	.03	-.02
Extraversion Item 2	.02	<b>-.63</b>	-.04	.02	.04	-.08	.02
Extraversion Item 3	.02	<b>.58</b>	-.10	.09	.09	.11	-.01
Extraversion Item 4	-.01	<b>-.64</b>	.08	.09	.12	.02	.04
Extraversion Item 5	-.05	<b>.71</b>	-.01	.03	.07	.08	-.02
Extraversion Item 6	.07	<b>-.48</b>	.12	.01	-.02	-.11	.19
Extraversion Item 7	-.05	<b>.71</b>	-.02	.02	.07	.07	.09
Extraversion Item 8	.02	<b>-.49</b>	-.01	.11	.13	.26	.03
Extraversion Item 9	.02	<b>.50</b>	-.02	.01	-.03	-.18	-.13
Extraversion Item 10	.07	<b>-.69</b>	.10	.08	.07	.03	-.01
Emotional Stability Item 1	-.06	-.01	<b>.68</b>	-.05	.03	.01	.01
Emotional Stability Item 2	.09	.11	<b>-.55</b>	.06	.04	.05	-.03
Emotional Stability Item 3	-.03	.02	<b>.58</b>	.08	.20	.15	-.08
Emotional Stability Item 4	.05	.07	<b>-.42</b>	.07	.02	.02	-.01
Emotional Stability Item 5	-.02	-.05	<b>.66</b>	.08	.10	.02	.13
Emotional Stability Item 6	-.02	-.03	<b>.69</b>	.03	-.01	.05	.11
Emotional Stability Item 7	-.02	-.02	<b>.67</b>	-.04	-.12	-.04	-.01
Emotional Stability Item 8	.03	-.02	<b>.72</b>	-.03	-.09	-.03	-.01
Emotional Stability Item 9	.05	-.04	<b>.59</b>	-.10	-.02	-.06	-.10
Emotional Stability Item 10	.05	-.12	<b>.69</b>	.07	-.11	-.07	.01
Conscientiousness Item 1	-.02	.03	.05	-.02	<b>.45</b>	-.11	-.12
Conscientiousness Item 2	.04	.06	.09	.10	<b>-.49</b>	-.02	-.12
Conscientiousness Item 3	-.01	.00	.12	.05	<b>.42</b>	.07	-.29
Conscientiousness Item 4	.15	.00	<b>.36</b>	.06	<b>-.40</b>	.01	.03
Conscientiousness Item 5	-.04	.08	.03	-.01	<b>.52</b>	.02	.12
Conscientiousness Item 6	.00	.06	.14	.09	<b>-.51</b>	-.04	.00
Conscientiousness Item 7	.01	-.02	.08	-.01	<b>.65</b>	-.02	.00
Conscientiousness Item 8	.07	-.04	.19	-.02	-.26	-.21	.10
Conscientiousness Item 9	.03	-.02	.03	.05	<b>.53</b>	-.04	-.13
Conscientiousness Item 10	.00	.05	.03	-.01	<b>.30</b>	.01	<b>-.34</b>
Intellect Item 1	.00	.10	-.03	.06	.04	.05	<b>-.46</b>
Intellect Item 2	.08	.02	.19	.06	.03	.01	<b>.54</b>
Intellect Item 3	.02	.12	.15	.05	-.01	.06	<b>-.43</b>
Intellect Item 4	.07	-.02	.06	-.01	.07	-.02	<b>.48</b>
Intellect Item 5	-.01	.13	.02	.09	.19	-.09	<b>-.45</b>
Intellect Item 6	.02	-.06	.14	-.04	-.05	-.12	.28
Intellect Item 7	.00	.00	-.14	.10	.23	.03	<b>-.40</b>
Intellect Item 8	.06	.11	.09	-.09	-.04	-.08	<b>-.48</b>
Intellect Item 9	.01	-.07	.01	.15	<b>.31</b>	.05	<b>-.30</b>
Intellect Item 10	-.02	.19	-.02	.07	.13	-.04	<b>-.51</b>
Agreeableness Item 1	.05	-.23	.05	-.08	-.04	<b>-.32</b>	.05
Agreeableness Item 2	.02	.28	.03	.26	.13	<b>.38</b>	-.10
Agreeableness Item 3	.30	.10	.17	-.11	-.13	-.12	-.02
Agreeableness Item 4	-.08	.14	.18	<b>.31</b>	.20	<b>.37</b>	-.03
Agreeableness Item 5	.06	-.11	.02	-.19	.02	<b>-.34</b>	.16
Agreeableness Item 6	.00	.09	<b>.40</b>	.14	.07	.18	.02

Agreeableness Item 7	.06	<b>-.30</b>	.04	-.17	-.08	<b>-.38</b>	.06
Agreeableness Item 8	-.04	.15	.00	.26	.29	<b>.37</b>	.04
Agreeableness Item 9	.00	.15	.17	<b>.33</b>	.21	<b>.33</b>	-.10
Agreeableness Item 10	-.04	.28	-.02	.25	.21	.24	-.03
SAPI							
Facilitating Item 1	.11	.14	-.07	<b>.42</b>	.04	<b>-.40</b>	-.06
Facilitating Item 2	.19	.15	-.07	<b>.45</b>	.03	<b>-.37</b>	-.04
Facilitating Item 3	.11	.09	-.05	<b>.55</b>	.07	<b>-.41</b>	.05
Facilitating Item 4	.09	.05	-.05	<b>.54</b>	.06	<b>-.39</b>	.02
Facilitating Item 5	-.03	.03	-.09	<b>.45</b>	-.02	-.10	-.17
Facilitating Item 6	.21	.11	-.03	<b>.48</b>	-.02	-.28	-.12
Integrity Item 1	-.26	-.04	-.02	<b>.30</b>	.12	-.08	-.05
Integrity Item 2	-.23	-.05	-.05	.25	.14	-.04	-.08
Integrity Item 3	-.18	-.06	-.11	<b>.43</b>	-.08	.06	-.05
Integrity Item 4	-.17	-.07	.01	.28	.15	-.26	-.10
Integrity Item 5	<b>-.30</b>	-.03	-.01	<b>.34</b>	.10	-.07	-.06
Integrity Item 6	-.18	-.02	-.03	<b>.40</b>	.06	-.01	-.05
Relationship Harmony Item 1	-.03	-.11	-.05	<b>.36</b>	-.08	-.03	-.19
Relationship Harmony Item 2	-.11	-.11	-.10	<b>.46</b>	-.07	.07	-.08
Relationship Harmony Item 3	-.14	.08	-.13	<b>.42</b>	-.05	-.05	.02
Relationship Harmony Item 4	.09	.10	-.02	<b>.51</b>	-.03	-.02	-.11
Relationship Harmony Item 5	-.10	.07	.02	<b>.54</b>	-.02	.06	.07
Relationship Harmony Item 6	-.02	.06	.03	<b>.64</b>	.03	-.08	.06
Active Support Item 1	.06	.03	.00	<b>.58</b>	.07	.05	.00
Active Support Item 2	-.07	.07	.01	<b>.45</b>	-.06	.13	.07
Active Support Item 3	-.03	.00	.05	<b>.66</b>	-.01	.11	.01
Active Support Item 4	-.03	.02	.04	<b>.66</b>	.04	.15	.10
Active Support Item 5	.00	.02	.03	<b>.71</b>	-.03	.01	.15
Active Support Item 6	.01	.03	-.03	<b>.58</b>	.05	.13	.02
Empathy Item 1	-.24	-.13	.01	<b>.49</b>	-.01	.09	-.04
Empathy Item 2	-.27	-.03	-.08	<b>.41</b>	-.03	.10	-.01
Empathy Item 3	.00	.08	.07	<b>.49</b>	-.01	.05	-.12
Empathy Item 4	-.12	-.01	.20	<b>.38</b>	.04	.13	-.03
Empathy Item 5	-.04	.04	.12	<b>.52</b>	.07	.11	-.02
Empathy Item 6	-.04	.06	.03	<b>.45</b>	.00	.11	-.04
Unreliability Item 1	<b>.68</b>	-.03	-.02	.02	.07	.07	.09
Unreliability Item 2	<b>.49</b>	-.11	.06	-.02	-.23	<b>.30</b>	-.20
Unreliability Item 3	<b>.67</b>	-.02	-.06	.01	-.13	.05	-.07
Unreliability Item 4	<b>.60</b>	-.04	-.01	-.05	-.17	.07	.00
Unreliability Item 5	<b>.69</b>	.00	-.04	-.07	.09	.01	.20
Unreliability Item 6	<b>.45</b>	-.16	.07	-.09	-.15	.14	-.23
Harmony Breach Item 1	<b>.55</b>	.02	.09	.01	-.01	-.02	.05
Harmony Breach Item 2	<b>.50</b>	.02	-.02	.05	-.14	.02	-.14
Harmony Breach Item 3	<b>.76</b>	-.01	-.03	.00	-.04	.09	.00
Harmony Breach Item 4	<b>.53</b>	-.06	.07	-.04	-.16	.26	-.18
Harmony Breach Item 5	<b>.41</b>	.06	.00	.08	-.07	-.06	.03
Harmony Breach Item 6	<b>.47</b>	-.05	.02	-.07	-.12	.11	-.20
Arrogance Item 1	<b>.33</b>	.12	.01	-.06	.06	<b>-.36</b>	-.08
Arrogance Item 2	<b>.45</b>	.00	.03	-.03	.10	-.17	.02
Arrogance Item 3	<b>.48</b>	.01	.11	-.07	.08	-.20	.08
Arrogance Item 4	<b>.62</b>	-.01	-.01	-.05	-.06	-.05	-.09
Arrogance Item 5	<b>.53</b>	-.02	-.02	-.07	.05	-.22	-.13
Arrogance Item 6	<b>.56</b>	.06	-.01	-.04	-.01	-.15	-.12
Hostility Item 1	<b>.64</b>	-.01	.04	.04	.08	.02	.18
Hostility Item 2	<b>.70</b>	.01	-.01	-.02	.03	-.04	.10

Hostility Item 3	<b>.73</b>	.00	.01	.02	-.04	.11	.02
Hostility Item 4	<b>.73</b>	-.02	-.04	-.03	.04	.06	.14
Hostility Item 5	<b>.66</b>	-.02	.00	-.01	-.02	-.12	-.06
Hostility Item 6	<b>.64</b>	-.02	-.04	.02	.07	.04	.25
Egoism Item 1	.28	.09	.12	.03	-.03	-.18	-.15
Egoism Item 2	.24	.03	.14	-.07	.06	-.14	-.16
Egoism Item 3	.24	-.05	.23	-.06	.10	-.13	.01
Egoism Item 4	<b>.45</b>	-.07	.02	-.21	.07	-.17	-.01
Egoism Item 5	<b>.57</b>	.05	.01	-.07	-.01	-.12	-.15
Egoism Item 6	<b>.56</b>	-.06	-.04	-.17	.02	-.11	-.03

*Note.* IPIP = 50 Big Five marker items (Goldberg, 1992); SAPI = South African

Personality Inventory, in development (Nel et al., 2012). Factors were extracted using maximum likelihood with Oblimin rotation. Loadings with absolute value of .30 or higher are in boldface.

<sup>a</sup>Mean Tucker's phi indices for the seven factors after target rotation of each group toward the pooled-within matrix were: .98, .95, .96, .96, .91, .89, .80, respectively.

Table 9

*Multiple Correlation Coefficients (R) between Individual SAPI Social-Relational Scales (as the Dependent Variables) and the Combination of IPIP Scales (as the Independent Variables) in Four Groups in the Netherlands*

	Mainstream Dutch	Western Immigrant	Antillean, Surinamese, and Indonesian Immigrant	Non- Western Immigrant	<i>M</i>
Facilitating	.35	<b>.42</b>	<b>.40</b>	.26	.36
Integrity	<b>.50</b>	.39	<b>.53</b>	.26	<b>.42</b>
Relationship Harmony	<b>.55</b>	<b>.49</b>	<b>.52</b>	.33	<b>.48</b>
Active Support	<b>.52</b>	<b>.54</b>	<b>.55</b>	<b>.42</b>	<b>.51</b>
Empathy	<b>.56</b>	<b>.57</b>	<b>.62</b>	.38	<b>.53</b>
Unreliability	<b>.49</b>	.39	.35	.38	<b>.40</b>
Harmony Breach	<b>.45</b>	.37	<b>.41</b>	.31	.39
Arrogance	<b>.49</b>	<b>.42</b>	<b>.41</b>	<b>.48</b>	<b>.45</b>
Hostility	<b>.48</b>	.36	.39	<b>.47</b>	<b>.42</b>
Egoism	<b>.47</b>	<b>.43</b>	<b>.40</b>	<b>.41</b>	<b>.43</b>
<i>M</i>	<b>.49</b>	<b>.44</b>	<b>.46</b>	.37	<b>.44</b>

*Note.* IPIP = 50 Big Five marker items (Goldberg, 1992); SAPI = South African

Personality Inventory, in development (Nel et al., 2012). *ns* = 452 (mainstream

Dutch), 427 (Western immigrant), 225 (Antillean, Surinamese, and Indonesian

immigrant), and 179 (non-Western immigrant). Multiple correlations of .40 or higher

appear in boldface.