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The Cross-Cultural Generalizability of Personality Types: A Philippine Study

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Abstract

Research on personality types was extended to a non-Western culture, the Philippines. In two large samples of Filipino college students, cluster analyses of self-rated trait adjectives revealed interpretable three-cluster solutions (i.e. types) for each gender. The types differed on indigenous measures of ego resiliency and ego control and exhibited sensible configurations of Big Five traits, indigenous Filipino traits, and behavioural indicators. Most types were interpretable in terms of the concepts of ego resiliency and ego control of Block and Block (1980) and resembled types identified in other cultures. Two of three male and female types were fairly comparable and some types replicated across data sets. The results provided some support for the cross-cultural comparability of personality types and for typological research in general. Copyright © 2005 John Wiley & Sons, Ltd.

Key words: personality types; cross-cultural; five-factor model; Philippines

INTRODUCTION

Two general approaches have been used to conceptualize the structure of personality. The first, referred to as the trait, nomothetic, or variable-centred approach, aims at delineating quantitative or continuous dimensions that can be used to describe the personalities of all individuals. The second, the typological, idiographic, or person-centred approach, is concerned with identifying a set of discrete, qualitatively different types or configurations of personality.

Within the trait or variable-centred approach, the Big Five or Five Factor Model (FFM), with its five organizing dimensions of extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness, is currently the most influential and there is growing

evidence for the cross-cultural universality of these dimensions (McCrae & Allik, 2002). Studies of indigenous trait lexicons also provide support for Big-Five-like dimensions in a variety of languages and cultures (Saucier, Hampson, & Goldberg, 2000). For example, in the Philippines, the setting for the present study, there is support for the FFM or Big-Five-like dimensions in both lexical studies (Church, Katigbak, & Reyes, 1998) and in studies that have applied indigenous and imported inventories (Katigbak, Church, Guanzon-Lapeña, Carlota, & del Pilar, 2002).

Although the typological approach has received less attention than the trait approach, it experienced a revival during the last decade (Asendorpf, 2002). Much of this research has been influenced by Block's concepts of ego resiliency and ego control (Block, 1971; Block & Block, 1980), which are thought to regulate personality, and, in combination, to underlie distinct classes of men and women. Ego resiliency is a dimensional construct, defined at one end by resiliency—that is, resourceful adaptation, flexibility, and inventiveness—and at the other end by 'brittleness', that is, little adaptive flexibility and the inability to respond quickly to changing situational demands. The construct of ego control represents a continuum from overcontrol—characterized by restriction of affect, delay of gratification, and inhibition of action—to undercontrol, characterized by 'insufficient modulation of impulse, inability to delay gratification, immediate and direct expression of motivation and affects, and vulnerability to environmental distractors' (Block & Block, 1980, p. 43). Block and Block (1980) referred to four 'quadrants' of personality, representing combinations of these two dimensions: Brittle Undercontrollers, Brittle Overcontrollers, Resilient Undercontrollers, and Resilient Overcontrollers. According to Block and Block (1980), example characteristics associated with the four quadrants include the following: for Resilient Overcontrollers, compliant, calm, empathic; for Resilient Undercontrollers, active, curious, charismatic; for Brittle Overcontrollers, inhibited, anxious, rigid; and for Brittle Undercontrollers, restless, vulnerable, and manipulative.

Several researchers in the United States and in a few Western European countries have described their results in terms of Block's concepts. For example, in a sample of United States women, York and John (1992) derived four types and noted some similarities to Block's types, although the latter were not strictly replicated. Robins, John, Caspi, Moffitt, and Stouhamer-Lober (1996) identified three types of adolescent boy, which they labelled Resilients, Overcontrollers, and Undercontrollers, and demonstrated that both Caucasian and African American boys could be classified into these types. In a sample of New Zealand children, Caspi and Silva (1995) identified five replicable types, three of which they judged to be similar to Resilient, Overcontrolled, and Undercontrolled types. In Finnish men and women, Pulkkinen (1996) found types that were similar to Block's (1971) types, but also noted differences in the subtypes that comprised each type. Other researchers have identified Resilient, Undercontrolled, and Overcontrolled types based on the Big Five dimensions of personality (e.g. Asendorpf & van Aken,1999). Van Leeuwen, De Fruyt, and Mervielde (2004) provided a useful summary of the Big Five trait profiles associated with these types in most studies: (a) Resilients score above average on agreeableness, extraversion, conscientiousness, and openness to experience, and low on neuroticism; (b) Overcontrollers exhibit high neuroticism and low extraversion; and (c) Undercontrollers are low on agreeableness and conscientiousness and high on neuroticism. In summary, despite the variety of samples and statistical methods used by these researchers (e.g. cluster analysis, inverse factor analysis), most researchers have identified three or four general personality types, with Resilient, Overcontrolled, and Under-controlled types being most common.

In all of these studies, the researchers have inferred the presence of resiliency and control types from profiles of personality traits, but have not included direct measures of resiliency and control. Inclusion of such measures could strengthen conclusions about how derived types relate to these two dimensions. It is also noteworthy that none of the previous studies have been conducted in a nonwestern culture, reducing confidence in the cross-cultural generalizability of personality types. Finally, most studies have relied on Q-sort stimuli or imported inventories that were developed originally in the United States using the English language. Cross-cultural researchers refer to this as an imposed-etic approach, in which concepts or measures are applied or 'imposed' in new cultural contexts in which they may be less relevant or comprehensive (Berry, 1990; Church, 2001).

The (imposed) etic approach does have some advantages. The application of an existing theoretical framework can facilitate cross-cultural comparisons and interpretation of findings in terms of known and consistent constructs. However, imported instruments might skew results in the direction of the original culture, biasing conclusions of cross-cultural universality. For example, if there are any unique types or trait dimensions in particular cultures, imported instruments are probably less likely to reveal them. These considerations have prompted some psychologists to advocate the use of emic or culture-specific instruments in cross-cultural studies (e.g. Church, 2001; Kagitcibasi & Poortinga, 2000). Indeed, if support for one's theory is obtained with indigenous measures, then the case for universality is even more persuasive.

In the present study, we implemented a combined etic–emic approach, in hopes of benefiting from the advantages of both perspectives. Block's (1971; Block & Block, 1980) presumed etic concepts of ego resiliency and ego control provided the theoretical framework for the study. However, we operationalized these constructs using indigenous Filipino (Tagalog) trait adjectives judged by cultural informants to measure these constructs. The trait adjectives are from an Austronesian language, rather than the Indo-European languages used in most typological studies to date. In addition, trait configurations for each type were derived using both indigenous (emic) and imported (imposed-etic) measures.

A stronger case for cross-cultural universality can also be made when the cultures investigated are quite different. Although the Philippines has been subjected to Western influences as a former Spanish and American colony, it retains a number of features—for example, emphases on group identity, social acceptance, close and extended family ties, and deference to authority—that are more typical of collectivistic cultures than the more individualistic cultures studied thus far (Church, 1987). Hofstede (2001) located 50 cultures along five value-based dimensions, specifically (a) individualism–collectivism, (b) power distance, (c) uncertainty avoidance, (d) masculinity–femininity, and (e) long-term versus short-term orientation. The Philippines differed substantially along these dimensions from the United States, the culture in which the dimensions of Block and Block (1980) and the Five Factor Model originated. This was especially the case for the individualism–collectivism dimension—along which the United States ranked first and the Philippines thirty-first—and for the power distance dimension—along which the United States ranked thirty-eighth and the Philippines fourth.

Overview of the present study

There are alternative ways to define or derive types, a full discussion of which is beyond the scope of the present article (for reviews, see Block & Ozer, 1982; Gangestad & Snyder,

1985). As Block and Ozer (1982) point out, it is tenable to use alternative conceptualizations of type, but authors should be clear and consistent in the conception they adopt. In the present study, we defined type based on the definition of phenotypes by Gangestad and Snyder (1985). That is, types were viewed as constructs that feature specific trait configurations that allow the researcher to maximize within-group homogeneity and between-group heterogeneity, a conception that is consistent with the cluster-analytic methods we used.

Our overall goal was to test the cross-cultural and cross-gender replicability of types inspired by the four personality quadrants of Block and Block (1980) (i.e. resilient and brittle types of undercontroller and overcontroller). Although a few studies suggest that there may be differences in types or trait configurations between men and women, the number of relevant studies is not large (e.g. Block, 1971; Pulkkinen, 1996; Van Leeuwen et al., 2004). We predicted that generally comparable types would be found among men and women, but that these comparable types would differ to some extent in trait composition, because of psychosocial and physiological differences between men and women.

Specifically, the following hypotheses were formulated.

Hypothesis 1. Types interpretable in terms of the dimensions of ego resiliency and ego control of Block and Block (1980) will be found and replicated in Philippine samples using an indigenous trait adjective instrument.

Hypothesis 2. The identified types will differ from each other in their configurations of Big Five and indigenous traits and in selected behaviours and attitudes.

Hypothesis 3. Generally comparable types will be found in both male and female subsamples, but even for comparable types there will be some gender differences in the configurations of Big Five and indigenous traits.

METHOD

Samples

Data set 1

Data set 1, obtained by Katigbak et al. (2002), was used previously to study indigenous Filipino trait structure, but was re-analysed here to derive Filipino personality types. The sample consisted of Filipino college students who filled in one or more of three instruments: *Panukat ng Pagkataong Pilipino* (PPP; $n = 387$); *Panukat ng Mga Katangian ng Personalidad* (PKP; $n = 413$); Filipino *NEO-PI-R* ($n = 398$), and *Panukat ng Ugali Pagkato* (PUP, $n = 404$). Participants were recruited at De La Salle University, a private university in Manila ($n = 237$); La Salle Lipa, a private university in Lipa City ($n = 135$); the University of the Philippines at Diliman ($n = 72$), a state university in the Greater Manila area; and St. Francis de Sales Major Seminary, a private seminary in Lipa City ($n = 67$). Demographic data were available for 413 participants who filled in the PKP. Of these, 271 participants were female (66%) and 142 were male (34%). Mean age was 18.91 (SD = 1.33). Regarding year in college, nine per cent were first year, 58% were second year, 21% were third year, 11% were fourth year, and seven per cent were fifth year students. Three participants, who stated that their ability to understand Tagalog was poor, were excluded from the analysis. Tagalog is a major Philippine dialect and the primary basis for the Filipino national language.

Data set 2
Data set 2 consisted of 310 female and 185 male Filipino college students, 145 from Batangas State University in Batangas City; 229 from the University of St. Thomas, a private university in Manila; and 122 from De La Salle University, a private University in Manila. Mean age was 18.0 years (SD = 1.36). Regarding year in college, 32% were first year, 30% were second year, 19% were third year, 19% were fourth year, and one person was a fifth year student. Two students, who indicated that their ability to understand Tagalog was poor, were excluded from the analysis.

Instruments

We used the *Panukat ng Mga Katangian ng Personalidad* (PKP; Katigbak et al., 2002), which was administered in both data sets, to derive and replicate personality types and to construct indigenous measures of ego resiliency and ego control. In data set 1, we used the Filipino NEO-PI-R (del Pilar, 1998; McCrae, Costa, del Pilar, Rolland, & Parker, 1998) and *Panukat ng Pagkataong Pilipino* (PPP; Carlota, 1985) to identify Big Five and indigenous trait profiles for each type. Nine items from the *Panukat ng Ugali at Pagkatao* (PUP; Guanzon-Lapeña, Church, Carlota, & Katigbak, 1998) were used to assess selected behaviours and attitudes.

Panukat ng Mga Katangian ng Personalidad (PKP; Katigbak et al., 2002).
The PKP measures indigenous Filipino personality dimensions that were identified using a comprehensive lexical or taxonomic approach (Church, Katigbak, & Reyes, 1996; Church et al., 1998). The trait adjectives in the instrument included 253 representative marker items from a comprehensive set of about 1200 Filipino trait adjectives. In the present study, these 253 adjectives were cluster analysed to derive Filipino personality types. The instrument was also scored for the following scales, which are based on factor analyses reported previously (Church et al., 1998; Katigbak et al., 2002): Concern for Others versus Egotism (41 items, $\alpha = 0.89$ in the present sample), Gregariousness (33 items, $\alpha = 0.90$), Intellect (13 items, $\alpha = 0.83$), Temperamentalness (23 items, $\alpha = 0.90$), Self-Assurance (39 items, $\alpha = 0.90$), Conscientiousness (39 items, $\alpha = 0.92$), and Religiosity (seven items, $\alpha = 0.91$). Participants rated the extent to which each trait adjective accurately described them using an eight-point bipolar scale (extremely inaccurate, quite inaccurate, somewhat inaccurate, a little inaccurate, a little accurate, somewhat accurate, quite accurate, extremely accurate). Katigbak et al. (2002) reported validity data for the scales.

Panukat ng Pagkataong Pilipino (PPP; Carlota, 1985)
The PPP is comprised of 210 items and 19 scales, which are based on a review of Filipino literature and descriptions of traits and behaviours given by Filipino respondents of various ages and occupational levels. The items were answered on a five-point scale (strongly agree, agree, cannot decide or nothing to say, disagree, strongly disagree). Carlota (1985) reported scale intercorrelations that ranged from −0.09 to 0.33, which indicates that the scales are relatively distinct. Katigbak et al. (2002) reported moderate alpha reliability coefficients: 0.52–0.85 ($M = 0.67$) for the Interpersonal scales (Thoughtfulness, Social Curiosity, Respectfulness, Sensitiveness, Obedience, Helpfulness, Capacity for Under-standing, Sociability); 0.69–0.74 ($M = 0.72$) for the Personal scales (Orderliness, Emotional Stability, Humility, Cheerfulness, Honesty, Patience, Responsibleness); and 0.45–0.79 ($M = 0.61$) for the Intelligence/Creativity scales (Creativity, Risk-Taking, Achievement Orientation, Intelligence). Guanzon-Lapeña et al. (1998) and Katigbak et al. (2002) reported validity data for the PPP scales.

Filipino Revised NEO Personality Inventory (NEO-PI-R; del Pilar, 1998)
The NEO-PI-R (Costa & McCrae, 1992) consists of 240 items and provides five domain scores, corresponding to the Big Five or FFM dimensions, plus six facet scale scores within each domain. The Filipino version was obtained using back-translation procedures (del Pilar, 1998; McCrae et al., 1998). The factor structure of the NEO-PI-R has replicated well in Philippine samples, particularly when Procrustes rotations have been applied (Katigbak et al., 2002; McCrae et al., 1998). Moderately high internal consistency reliabilities have been reported for the facet scales (median $\alpha = 0.61$; Katigbak et al., 2002) and for the domain scales (range of 0.78–0.90; Church & Katigbak, 2002).

Culture-relevant behavioural and attitudinal indicators
Also available in data set 1 were nine items from the indigenous *Panukat ng Ugali at Pagkatao* (PUP; Guanzon-Lapeña et al., 1998) that assess salient health, risk-related, and religious behaviours (i.e. smoking, drinking, gambling, accident proneness, and praying), attitudes toward certain behaviours that are counter to the religious and moral conservatism of the culture (i.e. homosexuality, premarital sex, and extramarital sex), and attitudes toward squatters.[1] Participants reported their behaviours and attitudes using a five-point scale (definitely no, no, nothing to say, true, definitely true). Katigbak et al. (2002) showed that these were effective criteria against which both imported and indigenous trait scales could be validated.

Resiliency and control scales
To relate Filipino personality types to Block's dimensions, we constructed bipolar Resiliency (versus Brittleness) and Control (Overcontrolled versus Undercontrolled) scales comprised of relevant trait adjectives from the PKP. We used the ratings from six Filipino judges, all bilingual university graduates, to select the relevant trait adjectives. The judges first studied definitions and lists of characteristics reflecting resiliency and brittleness, and overcontrol and undercontrol, drawn from the descriptions by Block and Block (1980) (definitions and list of characteristics are available from the authors). The judges then rated the extent to which each of the 253 PKP trait adjectives reflected the dimensions of Resiliency (versus Brittleness) and Control. Alpha measures of inter-rater reliability were 0.80 for the Resiliency dimension and 0.77 for the Control dimension. To create bipolar Resiliency and Control scales, we selected those traits that had mean ratings equal to or greater than 5.5 (i.e. high resiliency or overcontrol) and equal to or below 2.5 (i.e. brittleness or undercontrol) on the relevant dimension. We identified 44 pure resiliency items (e.g. *matibay* [strong], *may tapang* [brave], *maparaan* [resourceful], *may pakikisama* [gets along with others]), 18 pure brittleness items (e.g. *duwag* [cowardly], *iyakin* [cry-baby], *pikon* [peevish]), 47 pure undercontrol items (e.g. *magagalitin* [irritable], *malikot* [naughty], *agresibo* [aggressive]), and nine pure overcontrol items (e.g. *mapaghunos-dili* [restrained], *maayos* [orderly], *disiplinado* [disciplined]). In addition, 21 items were judged relevant to both resiliency and undercontrol

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[1]These nine items, in English translation, were as follows: (a) smoking behaviour, 'smoking has become my habit'; (b) gambling behaviour, 'I am prone to gambling'; (c) drinking behaviour, 'I am prone to drinking alcohol'; (d) praying behaviour, 'I do not forget to pray, even when I have no particular wish or problem'; (e) accident proneness, 'I don't know why, but I often get hurt or have accidents'; (f) attitude toward homosexuality, 'There is nothing wrong with a man enjoying sex with another man, or a woman with another woman'; (g) attitude toward extramarital sexual relations, 'If I cannot get physical satisfaction from my spouse or spouse-to-be, I am willing to accept or seek it from others'; (h) attitude toward premarital sexual relations, 'Even before marriage, I am willing to have sex with a person I love'; (i) attitude toward squatters, 'Squatters should not be habitually helped because they are violators of the law'.

(e.g. *mapagpatawa* [humorous, funny], *palausap* [talkative], *walang-atras* [doesn't back down]) and two items were judged relevant to both resiliency and overcontrol (i.e. *may sariling-desisyon* [makes own decisions], *organisado* [organized]).

We conducted principal-axis factor analysis of these items, with oblique (oblimin) rotations, in both data set 1 and data set 2. In both data sets, the patterns of eigenvalues supported the dominance of two dimensions. In data set 1, the first eight eigenvalues were 26.32, 16.38, 5.97, 4.77, 3.49, 2.63, 2.47, and 2.30, and the first two factors accounted for 19 and 12% of the variance. In data set 2, the first eight eigenvalues were 22.66, 15.36, 5.05, 4.31, 3.33, 2.74, 2.38, and 2.16, and the first two factors accounted for 16 and 11% of the variance. In both data sets, the two factors were quite independent ($r = -0.12$ in data set 1; $r = -0.07$ in data set 2). In both data sets, virtually all of the resiliency terms loaded highly on the first factor (most loadings ranged from 0.45 to 0.65). All of the brittleness terms loaded negatively on the first factor, although the loadings were more modest in size (mostly in the -0.10 to -0.35 range). Thus, we labelled the first factor Resiliency–Brittleness. Also, in both data sets, most of the undercontrol items had high positive loadings on the second factor, and most of the overcontrol items had negative loadings (although more modest in size) on the second factor. We labelled the second factor Control. The items judged relevant to both the Resiliency and Control dimensions generally loaded better on the Resiliency dimension, although several had dual loadings consistent with their conceptual association with both dimensions as rated by our Filipino judges. Resiliency and Control scale scores were calculated for each person by averaging his or her scores across all items associated with these two dimensions by our judges, reverse-keying for the brittle and undercontrolled terms so that high scores reflected resilient and (over)controlled tendencies, respectively. Alpha reliabilities for the two scales were 0.96 and 0.92, respectively, in data set 1, and 0.95 and 0.90, respectively, in data set 2. The two scales correlated -0.04 ($p = 0.48$) in data set 1 and -0.18 ($p < 0.01$) in data set 2.[2]

To examine external validity, we correlated scores on the Resiliency and Control scales with PKP, PPP, and NEO-PI-R scale scores in data set 1. The Resiliency scale was most strongly related to scales measuring self-assurance, competence, intellect, and emotional stability versus neuroticism and vulnerability. For example, the highest positive correlations were with PKP Self-Assurance, $r = 0.71$; NEO-PI-R Competence, $r = 0.52$; PKP Intellect, $r = 0.50$; PKP Discipline, $r = 0.47$; PPP Intellect, $r = 0.42$; and PPP Emotional Stability, $r = 0.37$; the highest negative correlations were with PKP Temperamentalness, $r = -0.57$; NEO-PI-R Vulnerability, $r = -0.51$; NEO-PI-R Depression, $r = -0.36$; and PPP Sensitiveness, $r = -0.34$.[3] The Control scale was most strongly related to scales measuring impulse control, conformity, social restraint, and discipline. For example, the highest positive correlations were with PKP Discipline, $r = 0.62$;

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[2]As an alternative method of scoring the Resiliency and Control dimensions, we computed scores for a reduced list of items after eliminating terms that were allocated to both dimensions by our judges and some terms with loadings less than 0.30. However, these reduced scales correlated highly with the fuller scales based on our judges' ratings ($r = 0.97$ for Resiliency and $r = 0.91$ for Control in data set 1; $r = 0.96$ for Resiliency and $r = 0.89$ for Control in data set 2). Therefore, we retained and scored all of the items judged relevant to Resiliency and Control by our Filipino judges.
[3]Correlations with the PKP scales are somewhat inflated by a degree of item overlap between the PKP scales and the Resiliency and Control scales, which were also constructed using PKP items. Nonetheless, the PKP correlations provide information about which PKP constructs overlap with the Resiliency and Control scales and hence the psychological meaning of the latter scales. The correlations with the PPP and NEO-PI-R scales are not subject to this limitation.

NEO-PI-R Compliance, $r = 0.50$; PKP Concern for Others, $r = 0.50$; NEO-PI-R Deliberation, $r = 0.41$; and NEO-PI-R Straightforwardness, $r = 0.40$; the highest negative correlations were with PKP Gregariousness, a measure of impulse expression and playfulness, $r = -0.71$; NEO-PI-R Excitement-Seeking, $r = -0.47$; and NEO-PI-R Impulsiveness, $r = -0.41$. These correlations are consistent with the conception by Block and Block (1980) of resiliency and control and indicate that the procedures for constructing indigenous measures of Block's constructs were effective.

RESULTS

Derivation of personality types

To identify the types, we followed the procedures proposed by Asendorpf, Borkenau, Ostendorf, and van Aken (2001) and widely used in subsequent studies (e.g. Asendorpf, 2003; Barbaranelli, 2002; Boehm, Asendorpf, & Avia, 2002; De Fruyt, Mervielde, & Van Leeuwen, 2004; Schnabel, Asendorpf, & Ostendorf, 2002; Van Leeuwen et al., 2004). We first applied hierarchical cluster analysis (Ward's method based on Euclidean distances) to the 253 PKP items in data set 1 (i.e. all cluster analyses were conducted at the item level). Guided by theory and previous research, we examined three-, four-, and five-cluster solutions. As Barbaranelli (2002) explains, because clusters that are fused in one step remain together in all later steps, Ward's method, as well as other hierarchical methods, can result in less than optimal solutions. Therefore, we next input each solution obtained with Ward's procedure as the initial cluster centres for a nonhierarchical k-means cluster analysis. In this way, all participants were assigned to the clusters to which they were most similar on the basis of their Euclidian distances from the initial cluster centres. These procedures were applied to male and female participants separately.

To justify selection of a particular solution, Asendorpf et al. (2001) have suggested using Cohen's (1960) kappa coefficient. In this method, the sample is split into two halves and the two-step cluster analysis described above is performed with each half. Participants are then assigned to the best-fitting cluster of the other half according to their Euclidean distances from each cluster. Convergence between the first and second cluster assignments across all individuals is measured by Cohen's kappa. Asendorpf et al. (2001) explains that in order to increase agreement it is sometimes necessary to reorder clusters, which is appropriate because the order of clusters is irrelevant. In our analysis, we have reordered three-, four-, and five-cluster solutions and selected the highest resulting kappa value for each number of clusters.

Asendorpf et al. (2001) suggested that a kappa coefficient of 0.60 is sufficient for considering a solution appropriate (Asendorpf, 2003; De Fruyt et al., 2002). In data set 1, four- and five-cluster solutions yielded kappas substantially below 0.60 (maximum of 0.15 across gender), so these solutions were excluded from further investigation. Three-cluster solutions yielded kappas of 0.46 ($p < 0.001$) for men and 0.42 ($p < 0.001$) for women. Although these kappa coefficients were also below 0.60, three clusters were retained for both men and women because (a) in the total sample, the kappa for the three-cluster solution was 0.55 ($p < 0.001$), (b) three-cluster solutions had more acceptable kappa values in data set 2 (see below), and (c) three clusters were repeatedly identified in previous research and we wanted to see whether we could replicate these types. In addition, these type distinctions yielded meaningful trait configurations, as described

below. The number of women classified into the three female types was 102, 101, and 68. Given the total number of men in the sample, the number of men of each type was necessarily smaller (80, 46, and 16).

We followed the same procedures to derive the types in data set 2. Solutions of four and five clusters again resulted in very low kappa values (maximum $= 0.15$). Three-cluster solutions yielded kappa values of 0.77 ($p < 0.001$) for men, and 0.54 ($p < 0.001$) for women. Therefore, three-cluster solutions were again retained for further analysis. The number of men classified into the three male types was 78, 64, and 43. The number of women classified into the three female types was 128, 107, and 75.

Replication and initial interpretation of personality types

Male types

Resiliency, Control, and PKP mean profiles were available in both data sets, so they were used for initial interpretation of the types and to examine their replicability across data sets. Table 1 shows the Resiliency, Control, and PKP scale means for the male types derived in data set 1 (scores for all instruments were converted to *z*-scores in the total sample). A MANOVA with type membership as the independent variable and the Resiliency and Control scores as dependent variables yielded a significant type effect (Wilks's $\Lambda = 0.26$, $F[4, 278] = 65.21$, $p < 0.01$), as did a MANOVA with the seven PKP scales as dependent variables (Wilks's $\Lambda = 0.26$, $F[14, 266] = 18.26$, $p < 0.01$). The results of follow-up ANOVAs and post hoc Scheffé *t*-tests for each scale are summarized in Table 1. These results revealed significant differences between male types for both Resiliency and Control and for all of the PKP scales. Effect sizes (partial eta^2 values) were particularly large for the Resiliency, Control, Concern for Others, Discipline, and Temperamentalness scales.

We labelled the smallest of the male types Resilient and Overcontrolled ($n = 16$), because (a) individuals of this type averaged highest among the male types on the Resiliency and Control scales and (b) the PKP profiles suggested relatively high resiliency (i.e. Self-Assurance, Intellect), high control and socialization (i.e. Discipline, Concern for Others, Religiosity), and low impulsivity and temperamentalness (i.e. low Gregariousness, low Temperamentalness). These men were highly socialized, if not constricted, but also self-confident and emotionally stable. We labelled a second male type Brittle and Undercontrolled ($n = 46$), because this type averaged significantly lower than the other types on the Resiliency and Control scales and exhibited scores on the PKP scales that suggested (a) low ego-resiliency (low Self-Assurance and Intellect), (b) low ego control and low conventionality (low Discipline, low Religiosity), (c) relatively high attention-seeking, impulsivity, and emotional reactivity (high Gregariousness, high Temperamentalness), and (d) possible difficulties in interpersonal relationships (low Concern for Others). We labelled the remaining and most prevalent male type Adjusted and Moderate ($n = 80$), because the type was intermediate between the other two types on the Resiliency and Control scales, and exhibited qualities on the PKP scales indicative of their adjusted and moderate nature, including intermediate but above average scores for Concern for Others, Religiosity, Discipline, Intellect, and Self-Assurance, and intermediate but below average scores for Temperamentalness.

Table 2 shows the Resiliency, Control, and PKP scale mean profiles for the three male types identified in data set 2. As in data set 1, the MANOVAs relating type membership to Resiliency and Control scores (Wilks's $\Lambda = 0.21$, $F[4, 362] = 106.43$, $p < 0.01$) and to

Table 1.   Means, standard errors, and ANOVA results for male types in data set 1

Scale	Male types						ANOVA results	
	Resilient and overcontrolled		Brittle and undercontrolled		Adjusted and moderate			
	M	SE	M	SE	M	SE	F	Partial eta^2
Resiliency–Control								
Resilience	1.30_a	0.20	-0.65_b	0.12	0.11_c	0.09	35.38**	0.34
Control	1.22_a	0.18	-0.88_b	0.11	0.26_c	0.08	60.29**	0.46
PKP								
Concern for Others	0.73_a	0.20	-1.33_b	0.12	0.16_c	0.09	65.02**	0.48
Religiosity	0.87_a	0.26	-0.52_b	0.16	0.22_a	0.12	12.68**	0.15
Discipline	1.22_a	0.17	-0.96_b	0.10	0.42_c	0.08	83.67**	0.55
Gregariousness	-0.52_a	0.22	0.29_b	0.13	$-0.15_{a,b}$	0.10	6.25**	0.08
Intellect	0.59_a	0.22	-0.34_b	0.13	0.33_a	0.10	10.67**	0.13
Temperamentalness	-1.27_a	0.17	0.42_b	0.10	-0.46_c	0.07	46.67**	0.40
Self-Assurance	0.88_a	0.19	-0.15_b	0.11	0.55_a	0.09	16.62**	0.19
NEO-PI-R								
Neuroticism	-1.20_a	0.22	0.44_b	0.14	-0.30_c	0.10	16.45**	0.26
Extraversion	0.22_a	0.22	-0.22_a	0.14	0.01_a	0.11	0.70	0.01
Openness to experience	0.36_a	0.25	0.11_a	0.16	-0.06_a	0.12	1.29	0.02
Agreeableness	1.07_a	0.21	-0.62_b	0.13	0.26_c	0.10	26.15**	0.30
Conscientiousness	0.90_a	0.21	-0.63_b	0.13	0.22_c	0.10	22.30**	0.27
PPP								
Thoughtfulness	0.44_a	0.25	-0.56_b	0.16	$-0.19_{a,b}$	0.12	5.82**	0.09
Social Curiosity	-0.75_a	0.25	0.09_b	0.16	$-0.36_{a,b}$	0.12	4.88**	0.07
Respectfulness	0.72_a	0.24	-0.49_b	0.15	0.17_a	0.11	10.65**	0.15
Sensitiveness	-0.81_a	0.22	-0.11_b	0.14	$-0.45_{a,b}$	0.10	4.00*	0.06
Obedience	0.47_a	0.23	-0.37_b	0.14	0.41_a	0.11	10.50**	0.15
Helpfulness	0.88_a	0.24	-0.27_b	0.15	$0.33_{a,b}$	0.11	9.88**	0.14
Capacity for Understanding	0.70_a	0.22	-0.13_b	0.14	0.03_b	0.10	5.47**	0.09
Sociability	0.59_a	0.23	-0.07_b	0.14	$0.17_{a,b}$	0.11	3.05*	0.05
Orderliness	0.69_a	0.24	-0.39_b	0.15	$0.13_{a,b}$	0.11	8.18**	0.12
Emotional Stability	1.25_a	0.21	-0.35_b	0.13	0.37_c	0.10	22.7**	0.28
Humility	0.89_a	0.24	-0.64_b	0.15	0.12_c	0.11	16.44**	0.22
Cheerfulness	0.41_a	0.23	0.05_a	0.14	0.11_a	0.11	0.90	0.01
Honesty	0.71_a	0.26	-0.59_b	0.16	-0.07_b	0.12	9.64**	0.14
Patience	1.01_a	0.23	-0.33_b	0.14	0.27_c	0.11	13.70**	0.19
Responsibleness	0.86_a	0.24	-0.59_b	0.15	0.20_c	0.11	15.89**	0.21
Creativity	0.58_a	0.24	-0.27_b	0.15	$0.12_{a,b}$	0.11	4.82**	0.08
Risk-Taking	0.42_a	0.24	-0.02_a	0.15	0.33_a	0.11	2.13	0.03
Orientation to Achievement	0.51_a	0.24	-0.26_b	0.15	$0.22_{a,b}$	0.12	4.62**	0.07
Intelligence	0.54_a	0.25	-0.13_b	0.16	$0.10_{a,b}$	0.12	2.64	0.04
Behaviours and attitudes								
Proneness to accidents	-0.23_a	0.22	0.08_a	0.14	-0.13_a	0.10	1.04	0.02
Drinking alcohol	-0.17_a	0.25	0.46_b	0.16	$0.21_{a,b}$	0.11	2.47	0.04
Extramarital affairs	-0.65_a	0.26	0.58_b	0.16	0.33_b	0.12	7.95**	0.11
Gambling	-0.33_a	0.29	0.56_b	0.18	$0.23_{a,b}$	0.13	3.46*	0.05
Acceptance of homosexuality	-0.60_a	0.23	0.13_b	0.14	$-0.24_{a,b}$	0.10	4.17*	0.06
Praying	0.64_a	0.25	-0.17_b	0.16	$0.07_{a,b}$	0.12	3.72*	0.05
Premarital sex	-0.47_a	0.25	0.56_b	0.16	0.30_b	0.12	5.92**	0.08
Smoking	-0.36_a	0.28	0.46_b	0.17	$0.26_{a,b}$	0.13	3.28*	0.05
Squatting	0.52_a	0.24	-0.11_b	0.15	$0.16_{a,b}$	0.11	2.60	0.04

Degrees of freedom for the ANOVA F-statistics were as follows: for the Resiliency and Control scales, $F(2, 139)$; for the PKP, $F(2, 139)$; for the NEO-PI-R, $F(2, 123)$; for the PPP, $F(2, 117)$; and for behaviours and attitudes, $F(2, 130)$. Means that do not share the same subscript were significantly different from each other in Scheffé t-tests. **$p < 0.01$; *$p < 0.05$.

Table 2.   Means, standard errors, and ANOVA results for male types in data set 2

Scale	Male types							
	Resilient and controlled		Brittle and undercontrolled		Brittle and overcontrolled		ANOVA results	
	M	SE	M	SE	M	SE	F (2, 182)	Partial eta^2
Resiliency–Control								
Resilience	0.87_a	0.07	-0.39_b	0.10	-0.80_c	0.08	123.05**	0.57
Control	0.20_a	0.08	-1.19_b	0.11	0.56_c	0.09	75.34**	0.45
PKP								
Concern for Others	0.92_a	0.07	-1.12_b	0.10	-0.51_c	0.08	160.84**	0.63
Religiosity	0.23_a	0.11	-0.66_b	0.15	-0.64_b	0.13	17.02**	0.15
Discipline	1.00_a	0.08	-1.11_b	0.11	-0.09_c	0.09	117.05**	0.56
Gregariousness	-0.28_a	0.11	0.38_b	0.15	-0.84_c	0.13	22.53**	0.20
Intellect	-0.45_a	0.10	0.13_a	0.13	-0.95_b	0.11	44.05**	0.32
Temperamentalness	-1.04_a	0.07	0.57_b	0.10	-0.34_c	0.08	84.84**	0.48
Self-Assurance	0.99_a	0.08	-0.26_b	0.11	-0.39_b	0.09	73.16**	0.44

Means that do not share the same subscript were significantly different from each other in Scheffé *t*-tests.
**$p < 0.01$; *$p < 0.05$.

PKP scores (Wilks's $\Lambda = 0.17$, $F[14, 352] = 28.11$, $p < 0.01$) were statistically significant. Follow-up ANOVAs and Scheffé *t*-tests revealed significant differences among the male types for all scales (see Table 2). As in data set 1, effect sizes were largest for the Resiliency, Control, Concern for Others, Discipline, and Temperamentalness scales, and, in data set 2, the Self-Assurance scale.

We cannot expect the *z*-scores for comparable types to be precisely comparable across data sets, because the scores were standardized in different samples. However, comparisons of the relative means in Tables 1 and 2 suggest that the type we labelled Resilient and Controlled in data set 2 ($n = 78$) was quite similar to the Resilient and Overcontrolled type in data set 1, albeit somewhat less controlled. The correlation between the two PKP profiles was 0.87, $p < 0.01$.[4] Similarly, the type we labelled Brittle and Undercontrolled in data set 2 ($n = 43$) exhibited a very comparable pattern of relative means to the Brittle and Undercontrolled type in data set 1 (PKP profile $r = 0.93$, $p < 0.01$). In contrast, the two remaining types, the Adjusted and Moderate men in data set 1 and the type we labelled Brittle and Overcontrolled in data Set 2 ($n = 64$), did not show a close resemblance (PKP profile $r = 0.19$, $p = 0.62$). Although the profiles of both types were intermediate to the other male types in their respective samples, the Brittle and Overcontrolled men in data set 2 were less resilient (lower Resiliency, Intellect, and Self-Assurance) and more controlled (e.g. higher Control, lower Gregariousness) than the Adjusted and Moderate men in data set 1, at least relative to other men and women in their respective data sets. In summary, two of the three male types replicated well across samples.

Female types
Table 3 shows Resiliency, Control, and PKP means for the female types derived in data set 1. A MANOVA with the Resiliency and Control scores as dependent variables

[4]The PKP profile correlations referred to here and elsewhere in the text were computed across the Resiliency and Control scales, and the seven PKP scale scores.

Table 3.   Means, standard errors, and ANOVA results for female types in data set 1

Scale	Female types						ANOVA results	
	Resilient and overcontrolled		Brittle and undercontrolled		Adjusted and outgoing			
	M	SE	M	SE	M	SE	F	Partial eta^2
Resiliency–Control								
Resilience	0.70_a	0.09	-1.00_b	0.07	0.22_c	0.07	125.87**	0.48
Control	0.92_a	0.10	-0.24_b	0.08	-0.36_b	0.08	56.81**	0.30
PKP								
Concern for Others	0.74_a	0.09	-0.56_b	0.07	0.42_c	0.07	76.00**	0.36
Religiosity	0.43_a	0.10	-0.39_b	0.08	0.03_a	0.08	18.70**	0.12
Discipline	1.04_a	0.09	-0.61_b	0.07	-0.18_c	0.07	103.89**	0.44
Gregariousness	-0.57_a	0.12	-0.06_b	0.09	0.51_c	0.09	102.36**	0.17
Intellect	0.44_a	0.11	-0.63_b	0.09	0.15_a	0.09	32.15**	0.19
Temperamentalness	-0.75_a	0.09	0.98_b	0.08	-0.12_c	0.08	111.49**	0.45
Self-Assurance	0.39_a	0.10	-0.87_b	0.09	0.11_a	0.09	52.80**	0.28
NEO-PI-R								
Neuroticism	-0.33_a	0.11	0.79_b	0.09	-0.28_a	0.09	32.82**	0.27
Extraversion	-0.35_a	0.12	-0.23_b	0.11	0.37_b	0.10	12.17**	0.09
Openness to Experience	-0.22_a	0.12	-0.09_a	0.11	0.30_b	0.10	6.22*	0.05
Agreeableness	0.36_a	0.12	-0.45_b	0.11	0.09_a	0.10	14.05**	0.11
Conscientiousness	0.58_a	0.11	-0.63_b	0.10	0.12_c	0.09	28.74**	0.23
PPP								
Thoughtfulness	0.44_a	0.12	-0.20_b	0.11	0.41_a	0.11	10.25**	0.10
Social Curiosity	-0.40_a	0.12	0.18_b	0.11	0.09_b	0.11	7.06**	0.07
Respectfulness	0.47_a	0.12	-0.51_b	0.11	0.28_a	0.11	20.78**	0.18
Sensitiveness	-0.25_a	0.12	0.62_b	0.11	-0.00_a	0.11	15.16**	0.14
Obedience	0.19_a	0.13	-0.21_a	0.12	-0.11_a	0.12	2.74	0.03
Helpfulness	0.19_a	0.13	-0.33_b	0.12	0.14_a	0.12	5.67**	0.06
Capacity for Understanding	0.22_a	0.13	-0.37_b	0.12	0.18_a	0.11	7.82**	0.08
Sociability	-0.15_a	0.13	-0.36_a	0.12	0.32_b	0.11	9.07**	0.09
Orderliness	0.35_a	0.13	-0.20_b	0.12	$0.16_{a,b}$	0.11	5.50**	0.06
Emotional Stability	0.30_a	0.12	-0.76_b	0.11	0.19_a	0.11	25.44**	0.22
Humility	0.40_a	0.11	-0.26_b	0.11	0.27_a	0.10	10.56**	0.10
Cheerfulness	-0.42_a	0.12	-0.31_a	0.12	0.45_b	0.11	16.85**	0.15
Honesty	0.63_a	0.12	-0.27_b	0.11	0.30_a	0.10	16.72**	0.15
Patience	0.26_a	0.13	-0.46_b	0.12	0.18_a	0.12	10.17**	0.10
Responsibleness	0.57_a	0.12	-0.36_b	0.11	0.21_a	0.11	17.23**	0.16
Creativity	$0.17_{a,b}$	0.13	-0.25_a	0.12	0.28_b	0.12	5.47**	0.06
Risk-Taking	0.18_a	0.13	-0.46_b	0.12	0.00_a	0.11	7.73**	0.08
Orientation to Achievement	0.43_a	0.12	-0.44_b	0.11	0.17_a	0.11	15.91**	0.15
Intelligence	0.03_a	0.12	-0.38_b	0.11	0.26_a	0.11	8.18**	0.08
Behaviours and attitudes								
Proneness to accidents	-0.12_a	0.14	0.26_a	0.11	-0.13_a	0.11	3.75*	0.03
Drinking alcohol	-0.48_a	0.13	-0.07_b	0.11	-0.03_b	0.10	3.98*	0.03
Extramarital affairs	-0.19_a	0.12	-0.03_a	0.10	-0.26_a	0.10	1.44	0.01
Gambling	-0.33_a	0.11	-0.05_a	0.10	-0.14_a	0.10	1.88	0.02

Continues

Table 3. Continued

Scale	Female types							
	Resilient and overcontrolled		Brittle and undercontrolled		Adjusted and outgoing		ANOVA results	
	M	SE	M	SE	M	SE	F	Partial eta^2
Acceptance of homosexuality	0.17$_a$	0.14	0.04$_a$	0.11	0.06$_a$	0.11	0.28	0.00
Praying	0.30$_a$	0.13	−0.30$_b$	0.11	0.05$_{a,b}$	0.10	6.67**	0.06
Premarital sex	−0.41$_a$	0.11	−0.11$_a$	0.09	−0.25$_a$	0.09	2.15	0.02
Smoking	−0.32$_a$	0.11	−0.15$_a$	0.09	−0.12$_a$	0.09	1.09	0.01
Squatting	−0.02$_a$	0.14	−0.11$_a$	0.11	−0.01$_a$	0.11	0.23	0.00

Degrees of freedom for the ANOVA F-statistics were as follows: for the Resiliency and Control scales, $F(2, 268)$; for the PKP, $F(2, 268)$; for the NEO-PI-R, $F(2, 238)$; for the PPP, $F(2, 185)$; and for behaviours and attitudes, $F(2, 218)$. Means that do not share the same subscript were significantly different from each other in Scheffé t-tests.
**$p < 0.01$; *$p < 0.05$.

revealed a significant type effect (Wilks's $\Lambda = 0.26$, $F[4, 276] = 65.22$, $p < 0.01$), as did a MANOVA with the PKP scale scores as dependent variables (Wilks's $\Lambda = 0.25$, $F[14, 5248] = 37.81$, $p < 0.01$). Follow-up ANOVAs and Scheffé t-tests revealed that there were significant type differences for both Resiliency and Control, and for all of the PKP scales. As in the male samples, effect sizes were largest for the Resiliency, Control, Concern for Others, Discipline, Temperamentalness, and Self-Assurance scales.

We labelled the smallest of the female types in data set 1 Resilient and Overcontrolled ($n = 68$), because it was the highest among the female types on both the Resiliency and Control scales. The PKP scales also suggested relatively high resiliency (i.e. Self-Assurance, Intellect), high control and socialization (i.e. Discipline, Concern for Others, and Religiosity), and low impulsivity or temperamentalness (i.e. low Gregariousness, low Temperamentalness). We labelled a second type Brittle and Undercontrolled ($n = 102$), because this type was lowest on the Resiliency scale, below average on the Control scale, and exhibited PKP scores suggesting low resiliency (low Self-Assurance, low Intellect), low discipline and conventionality (low Discipline, Concern for Others, and Religiosity), and very high emotional reactivity (Temperamentalness). We labelled the third female type Adjusted and Outgoing ($n = 101$). These women were generally intermediate or moderate in their scores compared with the other female types. They were slightly above average in resiliency and slightly below average in control, and were generally above average in their concern for others and tendency to be outgoing (high Concern for Others and Gregariousness).

Table 4 shows the Resiliency, Control, and PKP profiles for the three female types identified in data set 2. The MANOVAs relating type membership to Resiliency and Control scores (Wilks's $\Lambda = 0.23$, $F[4, 614] = 166.87$, $p < 0.01$) and to PKP scores (Wilks's $\Lambda = 0.19$, $F[14, 604] = 55.41$, $p < 0.01$) were statistically significant. Follow-up ANOVAs and Scheffé t-tests revealed significant differences among the female types for all scales. As in data set 1, effect sizes were largest for the Resiliency, Control, Concern for Others, Discipline, Temperamentalness, and Self-Assurance scales.

Comparisons of the relative means in Tables 3 and 4 suggest that the type we labelled Resilient and Controlled in data set 2 ($n = 75$) was quite similar to the Resilient and

Table 4.   Means, standard errors, and ANOVA results for female types in data set 2

Scale	Female types						ANOVA results	
	Resilient and controlled		Brittle and overcontrolled		Adjusted and undercontrolled			
	M	SE	*M*	SE	*M*	SE	$F(2, 308)$	Partial eta^2
Resiliency–Control								
Resilience	0.98$_a$	0.08	−0.81$_b$	0.07	0.10$_c$	0.06	131.10**	0.46
Control	0.51$_a$	0.08	0.72$_a$	0.06	−0.90$_b$	0.06	203.09**	0.60
PKP								
Concern for Others	1.08$_a$	0.08	−0.20$_b$	0.07	−0.39$_b$	0.06	101.09**	0.40
Religiosity	0.39$_a$	0.10	−0.08$_b$	0.08	0.24$_a$	0.08	7.19**	0.04
Discipline	0.90$_a$	0.08	−0.15$_b$	0.07	−0.59$_c$	0.06	105.53**	0.41
Gregariousness	0.24$_a$	0.08	−0.64$_b$	0.07	0.87$_c$	0.06	23.50**	0.23
Intellect	0.54$_a$	0.09	−0.63$_b$	0.08	0.36$_a$	0.07	61.31**	0.28
Temperamentalness	−0.82$_a$	0.09	0.38$_b$	0.07	0.77$_c$	0.07	110.59**	0.42
Self-Assurance	0.73$_a$	0.09	−0.80$_b$	0.08	−0.08$_c$	0.07	81.63**	0.35

Means that do not share the same subscript were significantly different from each other in Scheffé *t*-tests.
**$p < 0.01$; *$p < 0.05$.

Overcontrolled type in data set 1, albeit a little less controlled (PKP profile $r = 0.83$, $p < 0.01$). The type that we labelled Brittle and Overcontrolled in data set 2 ($n = 107$) shared a number of low resiliency traits with the Brittle and Undercontrolled type in data set 1 (e.g. low Resiliency, Intellect, and Self-Assurance) (PKP profile $r = 0.62$, $p = 0.07$). However, the two types differed substantially in their level of control (e.g. see Control, Discipline, Gregariousness, and Temperamentalness). The remaining female type in data set 2, which we labelled Adjusted and Undercontrolled ($n = 129$), only partially resembled the remaining type from data set 1, Adjusted and Outgoing (PKP profile $r = 0.49$, $p = 0.18$). Although both types were slightly above average in Resiliency in their total samples, the data set 2 type was substantially lower in Control and related PKP scales (Discipline, Temperamentalness).

In summary, two of three male types and one of three female types were well replicated across the two samples. One male type in each sample did not replicate well and two female types in each sample exhibited only partial resemblance across samples. These results provide only partial support for Hypothesis 1. We turn now to the question of whether the male and female types in data set 1 exhibited sensible configurations of Big Five and indigenous Filipino traits.

Big Five and indigenous profiles of Filipino personality types

Male types

Table 1 also shows the mean scale scores (*z*-scored in the total sample) for the Big Five (NEO-PI-R) and indigenous PPP traits for each male type in data set 1. Because not everyone filled in all of the instruments, the number of men of each type available for the NEO-PI-R and PPP analyses, respectively, was as follows: Adjusted and Moderate type, $n = 70$, $n = 67$; Brittle and Undercontrolled type, $n = 40$, $n = 38$; and Resilient and Overcontrolled type, $n = 16$, $n = 15$. The MANOVA for the NEO-PI-R domain scores

revealed a significant type effect (Wilks's $\Lambda = 0.55$, $F[10, 238] = 8.35$, $p < 0.01$), as did the MANOVA for the PPP scales (Wilks's $\Lambda = 0.49$, $F[38, 198] = 2.2$, $p < 01$). In the follow-up ANOVAs, the male types exhibited significant differences in Big Five Neuroticism, Agreeableness, and Conscientiousness (but not Extraversion or Openness to Experience), and in 16 of 19 PPP scales (all but Cheerfulness, Risk-Taking, and Intelligence). Effect sizes for both instruments were generally medium in size, and tended to be highest for scales that measure emotional stability (NEO-PI-R Neuroticism, PPP Emotional Stability), interpersonal agreeableness and modesty (NEO-PI-R Agreeableness, PPP Humility), and conscientiousness (e.g., NEO-PI-R Conscientiousness, PPP Responsibleness). We postpone further interpretation of the male types, incorporating these trait profiles, until we compare the male and female types.

Female types

Table 3 shows the mean profiles for the Big Five (NEO-PI-R) and indigenous PPP traits for each female type in data set 1. The number of women of each type available for the NEO-PI-R and PPP analyses, respectively, was as follows: Adjusted and Outgoing type, $n = 90$, $n = 69$; Brittle and Undercontrolled type, $n = 85$, $n = 64$; and Resilient and Overcontrolled type, $n = 66$, $n = 55$. The MANOVA for the NEO-PI-R domain scores revealed a significant type effect (Wilks's $\Lambda = 0.56$, $F[10, 468] = 15.47$, $p < 0.01$), as did the MANOVA for the 19 PPP dimensions (Wilks's $\Lambda = 0.50$, $F[38, 334] = 3.62$, $p < 0.01$). In follow-up ANOVAs, we found significant differences between the female types on all of the five dimensions and for 18 of the 19 PPP scales (all but the Obedience scale). As in the male sample, there was some tendency for effect sizes to be larger for scales measuring emotional stability (NEO-PI-R Neuroticism, PPP Emotional Stability) and conscientiousness (NEO-PI-R Conscientiousness), but scales measuring interpersonal agreeableness and modesty (i.e. NEO-PI-R Agreeableness, PPP Humility) did not differentiate the female types as well as the male types. We conclude that Hypothesis 2, which predicted significant differences between the Big Five and indigenous trait profiles of the types, was supported in both the male and female samples.

Comparability of male and female types

We used data set 1 to compare male and female types because profiles for all instruments were available in that data set. In Hypothesis 3 we predicted that generally comparable male and female types would emerge, but that some gender differences in trait emphasis would also be found.

Comparison of the type means in Tables 1 and 3 suggested that the male and female types we labelled Resilient and Overcontrolled were fairly comparable (recall that the *z*-scores for each scale were computed in the total combined-gender sample). The profile correlations were 0.95 ($p < 0.01$) for the PKP scales, 0.74 ($p = 0.16$) for the NEO-PI-R domain scales, and 0.66 ($p < 0.01$) for the PPP scales. Both the male and female types were high in Resiliency and Control, as well as other scales reflecting good emotional adjustment (e.g. PKP Self-Assurance, PPP Emotional Stability), interpersonal adjustment (e.g. PKP Concern for Others, NEO-PI-R Agreeableness), and impulse control (e.g. PKP Discipline, NEO-PI-R Conscientiousness, and PPP Responsibility, Orderliness, and Achievement). However, there were also some gender differences. For example, men, as compared to women, of this type tended to describe themselves as (a) more emotionally stable and self-assured (see Resiliency, PKP Self-Assurance and Temperamentalness, NEO-PI-R Neuroticism, and PPP Emotional Stability, Cheerfulness, Patience, and

Sensitiveness); (b) more outgoing and agreeable (NEO-PI-R Extraversion and Agreeableness, PPP Helpfulness); and (c) more open to experience (NEO-PI-R Openness to Experience, PPP Creativity, Risk-Taking, and Intellect).

The male and female types we labelled Brittle and Undercontrolled exhibited some comparability, but also some clear differences. The profile correlations were 0.62 ($p = 0.14$) for the PKP scales, 0.83 ($p = 0.08$) for the NEO-PI-R domain scales, and 0.26 ($p = 0.29$) for the PPP scales. Both types exhibited low Resiliency and below average Control. Both were the most emotionally unstable and insecure of the types (i.e. see PKP Temperamentalness and Self-Assurance, NEO-PI-R Neuroticism, and PPP Emotional Stability). In addition, they both exhibited low Discipline, Responsibility, and Concern for Others. However, the men of this type, as compared to the women, were (a) less brittle, insecure, and emotionally unstable (see Resiliency, PKP Temperamentalness and Self-Assurance, NEO-PI-R Neuroticism, and PPP Sensitiveness, Emotional Stability, and Cheerfulness); (b) less controlled or disciplined (Control, PKP Discipline and Gregariousness, and PPP Responsibleness, Honesty, Thoughtfulness, and Risk-Taking); and (c) more outgoing, but less concerned for others or humble (PKP Gregariousness and Concerned for Others, PPP Sociability and Humility).

The remaining male type, labelled Adjusted and Moderate, and the remaining female type, labelled Adjusted and Outgoing, exhibited less comparability. The profile correlations between these two types were low: -0.10 ($p = 0.82$) for the PKP scales, 0.46 ($p = 0.44$) for the NEO-PI-R domain scales, and -0.10 ($p = 0.67$) for the PPP scales. Both types tended to be well adjusted, as reflected in their average or above average means on indicators of both emotional adjustment (e.g. Resiliency, PKP Self-Assurance, PPP Emotional Stability and Cheerfulness) and interpersonal adjustment (e.g. PKP Concern for Others, NEO-PI-R Agreeableness and Conscientiousness). However, the Adjusted and Outgoing females were below average in ego control (e.g. Control, PKP Discipline), whereas Adjusted and Moderate males were somewhat above average. Both types averaged comparably low in Neuroticism (NEO-PI-R), but the women averaged higher than the men on temperamentalness (PKP) and sensitiveness (PPP) and lower on emotional stability (PPP). As in the comparison of the other male and female types, the Adjusted and Moderate men appeared to be more self-assured (PKP) and risk taking (PPP), whereas the Adjusted and Outgoing women averaged higher on a number of outgoing and pro-social traits, including gregariousness (PKP), extraversion (NEO-PI-R), concern for others (PKP), thoughtfulness, capacity for understanding, humility, and honesty (PPP). In summary, two of the three types in each gender were fairly comparable, providing partial support for Hypothesis 3. In addition, even the comparable types exhibited some gender differences in trait levels and composition.

Behaviour and attitude differences between the types

In their discussion of types versus traits, Costa, Herbst, McCrae, Samuels, and Ozer (2002) emphasized the need for type researchers to provide evidence of the external validity of types. Therefore, we compared the types on nine behavioural and attitudinal indicators (*z*-scored in the total sample). The number of men of each type available for this analyses was as follows: Resilient and Overcontrolled type, $n = 16$; Brittle and Undercontrolled type, $n = 41$; Adjusted and Moderate type, $n = 76$. The number of women of each type available for this analysis was Resilient and Overcontrolled type, $n = 55$; Brittle and Undercontrolled type, $n = 82$; and Adjusted and Outgoing type, $n = 84$.

For men (see Table 1), a MANOVA yielded a significant type effect for the behavioural and attitudinal indicators: Wilk's $\Lambda = 0.75$, $F[18, 244] = 2.06$, $p < 0.01$. Table 1 shows the results of the follow-up ANOVAs and Scheffé *t*-tests. There were significant differences between male types in self-reported proneness to drinking, gambling, praying, and smoking, and in attitudes toward homosexuality and extramarital and premarital sex. Effect sizes were generally modest, however. With the exception of praying behaviour, Brittle and Undercontrolled men endorsed all of these behaviours more than Resilient and Overcontrolled men. The Adjusted and Moderate type reported intermediate levels of each behaviour and attitude and generally did not differ significantly from the other two types.

For women (see Table 3), the MANOVA also yielded a significant type effect: Wilks's $\Lambda = 0.86$, $F[18, 420] = 1.85$, $p < 0.05$. Table 3 shows the results of follow-up ANOVAs and Scheffé *t*-tests. The female types differed from each other only in accident-proneness, praying, and drinking behaviour. The Resilient and Overcontrolled females reported less drinking than the other two types and more praying behaviour than the Brittle and Undercontrolled type (the Scheffé *t*-tests revealed no type differences for accident-proneness). Effect sizes were small, however.

Examination of the male and female means in Tables 1 and 3, as well as the effect sizes, indicates that the female types differed less from each other on these behaviours and attitudes than did the male types. This might be explained by the more traditional role of females in Philippine society and their low overall involvement in such activities as gambling and substance use. Indeed, a MANOVA with the nine behavioural and attitudinal indicators as dependent variables and gender as the independent variable revealed significant gender differences: Wilk's $\Lambda = 0.80$, $F[9, 344] = 9.40$, $p < 0.01$. In follow-up ANOVAs, there were significant differences between men and women in proneness to drinking, extramarital and premarital sex, gambling, smoking, and attitudes toward homosexuality ($F[2, 130]$ statistics ranged from 5.30 to 26.19). In each case, men reported more of the problem behaviours (drinking, gambling, and smoking) and more liberal attitudes toward extramarital and premarital sex, but women reported greater acceptance of homosexuality.

DISCUSSION

Our goal was to investigate the cross-cultural generalizability of personality types. In particular, we hypothesized that types interpretable in terms of the dimensions of ego resiliency and ego control of Block and Block (1980) would be found and replicated in Philippine samples. Some limitations of the study should be noted. First, we analysed self-report data. Additional measures, such as peer or teacher ratings, or school performance indicators, would supplement interpretation of the types and provide additional validity evidence. Second, we investigated college students, who were presumably functioning reasonably well. The types might be somewhat different had a population more diverse in age and adjustment been studied. Strengths of the study included partial replication of types across two data sets, inclusion of culture-relevant measures of ego resiliency and ego control, inspection of trait profiles using both indigenous and imported measures, and the inclusion of behavioural and attitudinal indicators.

Relating Filipino types to Block's dimensions and to types in other cultures

To facilitate our discussion, in Table 5 we have organized the male and female types identified in data sets 1 and 2 into four groups, based on their resemblance to the four

Table 5.   Review of comparable types found in present study

Group A (Resilient and Overcontrolled)		
Females	Data set 1	Resilient and Overcontrolled (0.25)
	Data set 2	Resilient and Controlled (0.24)
Males	Data set 1	Resilient and Overcontrolled (0.11)
	Data set 2	Resilient and Controlled (0.42)
Group B (Brittle and Undercontrolled)		
Females	Data set 1	Brittle and Undercontrolled (0.38)
Males	Data set 1	Brittle and Undercontrolled (0.32)
	Data set 2	Brittle and Undercontrolled (0.23)
Group C (Adjusted and Undercontrolled)		
Females	Data set 1	Adjusted and Outgoing (0.37)
	Data set 2	Adjusted and Undercontrolled (0.42)
Group D (Brittle and Overcontrolled)		
Females	Data set 2	Brittle and Overcontrolled (0.34)
Males	Data set 2	Brittle and Overcontrolled (0.35)
Unique type		
Males	Data set 1	Adjusted and Moderate (0.56)

The proportion of each type in a given data set and gender is given in parentheses after each type label.

quadrants described by Block and Block (1980), plus one type that was more difficult to classify. This grouping of types was based on the analyses of comparable types presented earlier and the level of resiliency and control exhibited by each type. Implied by this grouping of types is the following conclusion. Although we identified only three types in each data set, in combination the types comprise four groups that resemble the four quadrants of Block and Block (1980). Because some gender differences emerged, we discuss the types separately for men and women.

Male types

The male types we labelled Resilient and Overcontrolled in data set 1 and Resilient and Controlled in data set 2 were quite similar and are classified in group A (Resilient and Overcontrolled) in Table 5. Male types classified into group A reported high resiliency and control. Their inventory profiles revealed that they were self-assured and emotionally stable, and highly disciplined, achievement oriented, and religious. They revealed a pro-social orientation, characterized by concern for others and conscientiousness, but not extraversion. They exhibited conventionality and restraint, in that more than the other male types, they disapproved of homosexuality and extramarital or premarital sex and reported less smoking, drinking, and gambling. The male types in group A thus appear to be quite similar to the Resilient Overcontrollers described by Block and Block (1980). Based on their Big Five profiles, they also resemble the Resilient types identified in recent studies by Barbaranelli (2002), Boehm et al. (2002), Rammstedt, Reimann, Angleitner, and Borkenau (2004), and Schnabel et al. (2002). The Resilient types in these previous studies, as in the present study, were all characterized by low neuroticism and above average agreeableness and conscientiousness. Finally, the male types in group A may be somewhat similar to Pulkkinen's (1996) Introverts, who were described as somewhat controlled (e.g. introverted and conscientious), but also as socially integrated.

The male types in group B (Brittle and Undercontrolled) were characterized by low resiliency and low control. Accordingly, they reported low self-assurance and emotional

stability, and in both data sets they were the least disciplined of the male types. Reflecting likely social maladjustment, they exhibited such qualities as low concern for others, high temperamentalness, and 'acting-out behaviours' such as substance use and gambling. This type was also open-minded and unconventional, in that they exhibited the most liberal attitudes toward homosexuality and extramarital and premarital sex. Overall, these types resemble the Brittle Undercontrollers of Block and Block (1980). They also appear to resemble Pulkkinen's (1996) Neurotics, who were described as disagreeable, neurotic, and socially disintegrated, and the Brittle Undercontrollers identified by Robins et al. (1996), who were described as undercontrolled, impulsive, restless, disagreeable, and lacking in discipline and conscientiousness. Finally, the Big Five trait configuration of this type was comparable to that of the Undercontrolled types identified by Boehm et al. (2002) and Rammstedt et al. (2004), who also exhibited a combination of high neuroticism and low agreeableness and conscientiousness.

The male type in group D (Brittle and Overcontrolled) was identified only in data set 2. This type exhibited low resiliency and high control. Males of this type were brittle, insecure, and introverted, but high in impulse control. Their introversion, social anxiety, and low concern for others suggest social maladjustment. These characteristics are reminiscent of the Brittle Overcontrollers of Block and Block (1980). This type also shows some resemblance to the Overcontrollers described by Boehm et al. (2002) and Robins et al. (1996), and the Restricted type identified by Schnabel et al. (2002), all of whom exhibited low emotional stability and below average extraversion. However, these other types appear to have been more agreeable than the type found in the present study. Their moderate to elevated agreeableness scores contrast with the below average concern for others of this type in the present study.

Finally, one male type, which emerged only in data set 1, did not fit as clearly into one of the quadrants of Block and Block (1980). These Adjusted and Moderate men were somewhat above average in both resiliency and control. The shape of their PPP trait profile was similar to that of the Resilient and Controlled men in data set 2, but their profile was less elevated on most scales. For example, their scores on scales related to affective well-being (e.g. emotional stability, cheerfulness, neuroticism), self-assurance, and conventionality (e.g. openness to experience, religiosity) were more moderate or intermediate. Their behaviours and attitudes were within the average range on the nine behavioural and attitudinal items. Thus, it is possible that the Adjusted and Moderate men are a more moderate version of the Resilient Overcontrollers in group A. They showed a similar pattern of scores as the Resilient Overcontrollers, albeit with a more intermediate level of scores. Indeed, the Big Five trait configuration of this type—below average neuroticism and above average agreeableness and conscientiousness—resembles the pattern exhibited by the Resilient types described by other authors (Van Leeuwen et al., 2004). Our Adjusted and Moderate type also shows some resemblance to the Average type identified by Rammstedt et al. (2004), which also exhibited moderate scores on most scales. One modest difference, however, was that the Average type of Rammstedt et al. (2004) displayed slightly elevated Neuroticism.

Female types

In Table 5, the female types organized in group A (Resilient and Overcontrolled) were highly resilient, controlled, disciplined, and conscientious, as well as self-assured and intelligent. They scored highest among the female types on praying behaviour and

reported the lowest tendency toward negative behaviours such as substance use. Overall, Group A females seem to correspond to the Resilient Overcontrollers of Block and Block (1980). They also resemble Pulkinnen's (1996) Individuated women, who were described as well adjusted, high in intellect, and low in neuroticism. Their Big Five profile was similar to the Big Five profiles of the Traditional female types of York and John (1992)— who exhibited traditional sex-typed behaviour and high agreeableness, conscientiousness, and control—as well as the Resilient types identified by Boehm et al. (2002) and Schnabel et al. (2002), who were described as high in conscientiousness and low in neuroticism.

For females, the Brittle and Undercontrolled type represented by group B emerged only in data set 1. Women of this type were insecure, emotionally unstable, and sensitive. They were undercontrolled and scored low on discipline and organization. They were disagreeable and egotistical (very low scores on Concern for Others) and reported greater proneness to drinking and accidents. These characteristics indicate a resemblance to the Brittle Undercontrollers of Block and Block (1980). These types also resemble Pulkkinen's (1996) female Undercontrollers, who were described as neurotic, negative, pessimistic, and depressed, and as having trouble in their careers. York and John (1992) identified a similar type, which they labelled Conflicted. Individuals of this type were anxious, socially avoidant, brittle, and prone to intrapersonal and interpersonal conflict. The group B female type also resembles Barbaranelli's (2002) Non-Desirables, who exhibited the same Big Five pattern of high neuroticism, combined with low extraversion, openness to experience, agreeableness, and conscientiousness. Rammstedt et al. (2004) also reported a similar combination of Big Five scores for their Non-Desirable type.

We grouped two female types in group C (Adjusted and Undercontrolled), although, as noted earlier, the Adjusted and Outgoing type from data set 1 and the Adjusted and Undercontrolled type from data set 2 were only moderately similar. Both types exhibited average or slightly above average ego resiliency and self-assurance, and below average ego control. For the Adjusted and Outgoing type in data set 1, impulse expression was apparently channelled into outgoing and affiliative behaviour (i.e. extraversion, gregariousness, sociability, and concern for others). The Adjusted and Undercontrolled type in data set 2 was gregarious, but also temperamental, undisciplined, and somewhat below average in concern for others. The two types may thus be variants of Block's Resilient Undercontrollers. The Adjusted and Outgoing type appears to better resemble female types identified in previous studies, including the following: (a) Pulkinnen's (1996) Feminines, especially the Social Feminines, who were described as well adjusted, integrated into society, outgoing, secure, and successful; (b) the Assured females of York and John (1992), who showed a lack of inner conflict, elevated ego resiliency, emotional stability, and focus on concrete aspects of life; and (c) the Resilients of Rammstedt et al. (2004), who displayed a similar combination of Big Five scores (i.e. low neuroticism with above average extraversion, openness to experience, agreeableness, and conscientiousness).

Finally, the Brittle and Overcontrolled female type in group D emerged only in data set 2. These women tended to be sensitive to criticism, vulnerable, and insecure. Their social interactions were marked by selfishness and introversion—a combination that is likely to be associated with social isolation. These qualities correspond with characteristics of the Brittle Overcontrollers of Block and Block (1980). This female type also seems similar to Pulkinnen's (1996) Anxious females, who were described as insecure, socially reserved, and anxious. Although no Big Five domain scores were available in data set 2, the PKP profile for this type suggested low extraversion and high neuroticism, making this type

similar to the Overcontrolled type frequently found in recent studies (e.g. Rammstedt et al., 2004; Van Leeuwen et al., 2004).

Gender comparisons

Our findings supported the existence of some comparable male and female types, as well as gender differences in these comparable types. The present study thus supplements others that have reported gender differences in types (e.g. Pulkinnen, 1996). This implies that researchers should probably continue to derive types separately for men and women.

At least some of the gender differences found in the present study between comparable male and female types were consistent with personality differences found between men and women in general. For example, Feingold (1994) conducted a comprehensive meta-analysis and reported that men tended to be higher in such agentic characteristics as self-confidence, assertiveness, and security, whereas women tended to be higher in anxiety and communal traits such as nurturance. Indeed, in our examination of 'matching' male and female types, we found that men tended to exhibit more self-confidence and security, whereas women tended to report greater emotional instability, insecurity, and anxiety. In addition, women of a given type tended to exhibit pro-social or communal traits such as concern for others somewhat more consistently than men, although there were exceptions to this trend. In considering such gender differences, however, it is important to keep in mind *between*-type differences. For example, Resilient and Overcontrolled women exhibited significantly less anxiety or neuroticism than did Brittle and Undercontrolled men.

Some unresolved issues

One unresolved question that has emerged in type studies is whether resiliency and control are actually orthogonal dimensions, resulting in four 'quadrants' or types of personality, as implied by Block and Block (1980). For example, Asendorpf et al. (2001) have argued that the relationship between resiliency and control is quadratic; that is, overly elevated and overly low ego control are both associated with brittleness, whereas optimal resiliency is associated with an average level of control. Studies that have identified distinct Resilient, Overcontroller, and Undercontroller types—rather than both Resilient Over- and Undercontrollers—are consistent with this quadratic conception (e.g. Asendorpf & van Aken, 1999; Boehm et al., 2002; Caspi & Silva, 1995; Robins et al., 1996; Schnabel et al., 2002).

In the present study, the near-zero correlations between the Resiliency and Control dimensions suggested that the two dimensions are reasonably orthogonal. In addition, high Resiliency scores did accompany above average control scores (e.g. in the group A types). When the Control scale scores approached $z = 1$ or higher, we used the label Overcontrolled. When the Control scores were more moderate we generally used the Controlled label. Nonetheless, it probably cannot be determined from these data alone whether these types were actually 'over'-controlled (e.g. constricted), or whether they would be better characterized as having a healthy degree of impulse control, socialization, and conscientiousness. In addition, none of the types were definitively characterized by the combination of high resiliency and low control. The Adjusted and Undercontrolled women classified into group C were the closest approximation to such a combination. Thus, it may be that undercontrol was not really compatible with high resiliency in our samples. Finally, relatively low Resiliency did combine in the types with both high and low control (i.e.

types in Groups B and D). However, without external judgments or data we cannot be certain whether these Brittle types, on average, had unhealthy degrees of overcontrol or undercontrol.

It is possible that the co-existence in particular types of high resiliency and (over)control—and to a lesser extent resiliency (or adjustment) and undercontrol—was possible because the control scores of these college students were not extreme in either the high or low direction. Had more extreme control scores been exhibited, they might not have appeared in combination with moderate or high resiliency scores. In short, we suspect that the present data alone cannot definitively resolve the question of whether ego resiliency and ego control are orthogonal dimensions, defining four quadrants or types, or related in a more quadratic manner, with high resiliency being associated only with more moderate levels of over- and undercontrol. We would probably need additional external criteria beyond the inventories administered to determine this with confidence.

Another unresolved question is why some types were not closely replicated across the two data sets. The prevalence of each type does not explain this phenomenon, because the types that did not replicate as well were actually among the most frequent types. In Table 5, we show the proportion of each type in a given data set and gender in parentheses after each type label. Note that the proportion of group B, C, and D types, and group A types for females only, tended to be fairly similar across data sets. In contrast, the proportion of group A male types differed considerably across data sets, and the large proportion of Adjusted and Moderate men in data set 1 did not correspond directly to a male type in data set 2. On the one hand, the small proportion of Resilient and Overcontrolled men in data set 1 was of less concern overall (i.e. it was not considered a chance type) because that type was replicated fairly well with a prevalent type, the Resilient and Controlled men, in data set 2. On the other hand, the proportion of men and women of a given type across data sets would seem to be a reasonable criterion for evaluating the replicability of types, assuming that the data sets are all comparably representative of their larger populations.

Thus, one possibility is that sample differences contributed to the emergence of type differences across data sets. For example, the students in data set 1 included a larger proportion of students from more elite universities, and a significant minority of men in data set 1 (45%), but not in data set 2, were enrolled in a seminary. However, in some follow-up analyses we did not find any clear tendency for the different types to be associated with age differences, major field of study, or university attended. Another possibility, one alluded to earlier, is that some proportion of the Adjusted and Moderate men in data set 1 were actually moderate versions of the Resilient and Overcontrolled men in data set 1. If so, the reassignment of some men in the Adjusted and Moderate cluster to the Resilient and Overcontrolled cluster would have reduced the substantial difference in prevalence of the latter type relative to the Resilient and Controlled male type in data set 2.

Indeed, cluster analysis requires the presence of a 'critical mass' of individuals with similar profiles to coalesce a type. That is, just as different variable sets (e.g. inventories) can lead to dimensions that carve up the personality domain somewhat differently in the trait approach, different 'person sets' or samples might lead to clusters that carve up the domain somewhat differently in the type approach. These findings are significant for typological research because they highlight the need to replicate in new samples the types identified in such studies. Of course, it also implies that the representativeness and overall size of one's samples may be an important factor. We would expect the replication of types to improve as samples increase in size and representativeness, so that all common types in the population are amply represented in the sample.

A few other researchers have addressed the replicability of types. For example, De Fruyt et al. (2002) compared types across samples, time, and five-factor measures. In most of their comparisons, kappa coefficients were below 0.60, even when subjective inspection suggested that clusters were consistent and replicable. This led the authors to question the adequacy of kappa in evaluating cluster consistency. Similarly, Rammstedt et al. (2004) pointed out that the kappa coefficient tends to be inflated by sample size and sample homogeneity. Finally, Asendorpf (2003) noted that out of 21 cross-study coefficients contained in a special issue edited by Asendorpf, Caspi, and Hofstee (2002) only six exceeded 0.60. De Fruyt et al. (2002) concluded that one cannot assume that types are universal and will emerge in all samples. Rather, it is more reasonable to view types as characteristic of a significant proportion of individuals in a given sample. Given these findings and conclusions, it is perhaps encouraging that some of the types in the present study were replicated reasonably well across data sets and gender.

A final comment on traits versus types

Typological and trait approaches have often been viewed as being in opposition to each other, with the two approaches focusing differentially on the intraindividual versus interindividual organization of personality, respectively. However, as Hofstee (2002) has noted, the focus on persons (types) and variables (traits) can be viewed as sides of the *same* coin. De Fruyt et al. (2002) also argued that person-centred and variable-centred approaches are complementary. Given the predominant focus on traits in the personality literature, a relevant question for research is whether the typological approach can add anything of significance to the description and understanding of personality or to the prediction of behaviour and adjustment (Costa et al., 2002). For example, Asendorpf (2003) recently found that traits were more useful than types in predicting behaviour. Nonetheless, whereas traits provide good descriptions of phenotypic or observable characteristics, one hope is that types may provide clues to the latent and complex mechanisms underlying personality functioning (i.e. genotypic characteristics). We have shown that the indigenous Filipino types reflect sensible configurations of traits and behaviours, and that at least some of the types can be replicated across data sets and gender. In addition, the interpretability of these types in terms of Block's concepts of ego resiliency and ego control, and their apparent similarity to types identified in other cultures, provides some evidence for their meaningfulness and a degree of cross-cultural comparability.

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