Response styles in cross-national survey research: a 26-country study

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RESPONSE STYLES IN CROSS-NATIONAL SURVEY RESEARCH: A 26-COUNTRY STUDY

ABSTRACT

Studies of attitudes across countries generally rely on a comparison of aggregated mean scores to Likert-scale questions. This presupposes that when people complete a questionnaire, their answers are based on the substantive meaning of the items to which they respond. However, people's responses are also influenced by their response style. Hence, the studies we conduct might simply reflect differences in the way people respond to surveys, rather than picking up real differences in management phenomena across countries. Our 26-country study shows that there are major differences in response styles between countries that both confirm and extend earlier research. Country-level characteristics such as power distance, collectivism, uncertainty avoidance and extraversion all significantly influence response styles such as acquiescence and extreme response styles. Further, English-language questionnaires are shown to elicit a higher level of middle responses, while questionnaires in a respondent's native language result in more extreme response styles. Finally, English language competence is positively related to extreme response styles and negative related to middle response styles. We close by discussing implications for cross-national research.

INTRODUCTION

The globalization of the world economy and the increasing importance of multinational companies has made more and more researchers realise that theories and concepts developed in one part of the world (usually the USA) might not be applicable across borders. In order to find out which theories and concepts are universally valid and which have to be adapted, cross-national research is necessary and oftentimes this type of research is conducted using surveys. However,

cross-national research survey research is plagued by many problems (for an overview see for instance Singh, 1995; Usunier, 1998; Van de Vijver and Leung, 2000). This article focuses on one of these problems: differences in response styles.

Studies of attitudes across countries have generally relied on a comparison of aggregated mean scores to Likert-scale questions. This presupposes that when people complete a questionnaire, their answers are only based on the substantive meaning of the items to which they respond (Baumgartner and Steenkamp, 2001). However, people's responses are also influenced by their response style. Response styles refers to a respondent's tendency to systematically respond to questionnaire items regardless of item content (Baumgartner and Steenkamp, 2001). The most commonly cited examples of response styles are acquiescence (ARS) or dis-acquiescence (DRS), (i.e. the tendency to agree or disagree with an item regardless of the content), and extreme response styles (ERS) versus middle response styles (MRS, i.e. the tendency to use the extreme or middle response categories on ratings scales).[1]

Previous research, as will be reviewed in the next section, has shown that there might be systematic differences between countries with regard to response styles, which would make a comparison of mean scores across countries a hazardous affair. Conclusions drawn might simply reflect differences in the way people respond to surveys rather than picking up real differences in the management phenomena across countries. Unfortunately, earlier studies looking at response styles have focused on comparisons of a limited number of countries only, while the few available multi-country studies (Baumgartner and Steenkamp, 2001; Smith, 2004) did not systematically present country differences. In addition, none of the earlier work provided a clear theoretical rationale for country differences in response styles or investigated whether the language of the questionnaire might influence response styles.

This paper will offer a systematic comparison of the response styles identified above in 26 countries, covering nearly all major cultural clusters in the world: Northern Europe (Denmark, Finland, Sweden), Western Europe (Austria, Germany, the Netherlands, the UK), Southern

Europe (France, Greece, Portugal, Spain, Turkey), Eastern Europe (Bulgaria, Lithuania, Poland, Russia), Latin America (Brazil, Chile, Mexico), North America (USA) and Asia (China, Hong Kong, India, Japan, Malaysia, Taiwan). We will also propose and test several hypotheses with regard to country-level factors influencing response styles. Finally, in each country - except for the UK and the USA - two matched samples of respondents replied to a questionnaire in either their native language or English. We will therefore also be able to assess the impact of language on response styles. In addition, we'll explore the impact of English-language competence on response styles.

Literature Review and Hypotheses

Previous studies with regard to differences in response styles between countries have shown fairly consistent results. In the USA, both Hispanics (Clarke III, 2000; Marin, Gamba and Marin, 1992; Hui and Triandis, 1989; Johnson et al., 1997; Ross and Mirowsky, 1984) and African-Americans (Bachman and O'Malley, 1984; Clarke III, 2000; Johson et al., 1997) showed a larger preference for extreme responses than European Americans, particularly towards the positive end of the response scale and were also more prone to acquiescence. Comparisons between US/Canadian respondents and Japanese respondents showed that the former had higher ERS and the latter higher MRS (Chen, Lee and Stevenson, 1995; Ohara, Antonucci and Akiyama, 2002; Shiomi and Loo, 1999; Takahashi, Zax and Takahashi, 1967). The same pattern was found in comparisons between US and Korean respondents (Chun, Campbell and Yoo, 1974; Lee and Green, 1991).

Other countries are typically covered in only one or two studies. Bennett (1977) explained response differences for Chinese and Filipino respondents to different language questionnaires in terms of switching of reference groups (Europeans versus locals). However, an overall analysis of their results shows that Filipino respondents had a higher acquiescence bias and extreme response bias than Chinese respondents, who displayed a higher preference for the middle of the

scale.[2] Church (1987) also found Filipino respondents to have a strong acquiescence bias. Van Herk, Poortinga and Verhallen (2004) found the highest level of both acquiescence and extreme response styles for their Greek respondents, while Spanish and Italian respondents also had consistently higher scores than British, German and French respondents. Moreover, they were able to show that these differences were indeed caused by differences in response styles only, as there was no relationship between higher levels of endorsement on the questionnaire items and actual behavior. The high level of acquiescence for Greek respondents confirmed earlier results by Steenkamp and Baumgartner (1998) who found them to have higher mean scores than British and Belgian respondents. Finally, Brengelmann (1959) found that German respondents showed a higher level of acquiescence than British respondents, while Javeline (1999) found acquiescence bias to be stronger for Kazakhs than for Russians and Clarke III (2000) found higher levels of extreme response styles for French respondents than for Australians. Table 1 summarises the results of these studies.

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Table 1 about here

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Although previous studies have generally shown consistent results, only a few countries have been covered both within individual studies and across studies. With a limited number of exceptions, research has only focused on Hispanics/blacks in the USA or comparisons of East Asian respondents with US Americans. Two recent studies (Baumgartner and Steenkamp, 2001; Smith, 2004) dealing with response styles included a wider range of countries, but did not report on the actual differences in response styles between countries. The first contribution of this study will therefore be to provide descriptive results on response style patterns across a matched group of respondents in 26 countries and compare these with results from earlier studies.

However, more interesting than the descriptive results would be an exploration of *why* response styles differ between countries. Reasons for differences in response style can be disposi-

tional - i.e. related to individual characteristics such as age, gender or personality - or situational, i.e. related to situational characteristics such as the format of the response scale, the ambiguity of questions, time pressure (Baumgartner and Steenkamp, 2001). In the context of cross-country differences in response styles, cultural differences would be a likely dispositional explanation. Below, we will discuss the likely impact of three dimensions of cultural difference: power distance, collectivism and uncertainty avoidance.[3] The language of the questionnaire could be an important situational explanation, while language capability of the respondent in question would be dispositional.

Early studies on differences in response styles between countries have typically offered post-hoc and limited rationales, such as the tendency to be modest for Asian respondents. Yates et al. (1997, p. 88) even claim that "*the origin of response styles themselves [….] remain[s] the mystery it has always been*". Javeline (1999) posited that an acquiescence bias might be due to deference or respect for the investigator and hence predicted and found Kazakhs scoring higher on this response style than Russians as their culture was seen as more deferential to superiors. She argued that cultures with the same characteristics, such as Central and East-Asian cultures would show a similar tendency. Given that our respondents are students, and the investigators are their lecturers, an acquiescence effect might be present in countries in which deference to people in positions of higher status is common. This would be likely to be the case in countries characterized by a high score on power distance as measured in for instance Hofstede's study and the Globe Leadership study (Hofstede, 1980/2001; House, Hanges, Javidan, Dorman and Gupta, 2004). Smith (2004) offered the same argument when explaining his exploratory results. On the other hand, in countries characterized by a low score on power distance, respondents would not be afraid to disagree with the investigator. Hence:

Hypothesis 1: The higher the level of a country's power distance, the higher its acquiescence bias.

Collectivist countries are characterized by harmony, avoidance of confrontations and more conformity behavior. Individual initiatives and opinions tend to be discouraged and opinions are

predetermined by the in-group (Hofstede, 2001). We expect that this would lead respondents from collectivist countries to give either middle or slightly positive responses (e.g. 3 or 4 on a 5-point scale) as these are most likely to avoid confrontation and preserve harmony. In explaining his exploratory results, Smith (2004) also claimed that in-group harmony in collectivist cultures might lead respondents to give acquiescent answers. In contrast, individualist countries are characterized by an acceptance of confrontations and lower emphasis on conformity and harmony. Individual initiative is expected and speaking one's mind is appreciated. In individualist countries, we would therefore expect a higher willingness to disagree. Hence:

Hypothesis 2: The higher the level of a country's collectivism, the higher its middle response and acquiescence bias.

In countries with a high level of uncertainty avoidance, people experience higher levels of stress and anxiety, and have a need for clarity and structure. Change and innovation are generally resisted and diversity less valued than in countries with a low level of uncertainty avoidance. Truth is seen as absolute and students prefer structured learning situations and seek the "right answers" (Hofstede, 2001). Tolerance for ambiguity is also negatively related to uncertainty avoidance (House et al., 2004). We expect that the lower tolerance for ambiguity and diversity of respondents in high uncertainty avoidance countries will lead to a preference for affirmative answers (acquiescence) over disagreement (disacquiescence). The preference for the absolute truth and the right answers would reinforce this tendency. Respondents are likely to agree with what they think the investigator sees as the "right answer", rather than questioning this by disagreeing. Hence:

Hypothesis 3: The higher the level of a country's uncertainty avoidance, the higher its acquiescence bias.

As Smith (2004) indicated response bias can not only be seen as the manifestation of nation-level intergroup relations (such as power distance, individualism/collectivism and uncertainty avoidance), but also as a nation-level reflection of individual communication styles. Communication styles might be a particularly useful explanatory factor of extreme versus middle response styles.

A similar argument was put forward by Bachman and O'Malley (1984) to explain the higher level of extreme responses by black Americans in comparison to white Americans. They argued these response styles might be related to differences in linguistics styles. Blacks might be more willing to express their opinions in unqualified terms, while whites show a greater caution or inhibition to do so. Hui and Triandis (1989) also seemed to refer to this distinction, when they claimed that in low-ERS countries individuals prefer to appear modest and non-judgmental. In high-ERS countries on the other hand extreme responses would be seen as a demonstration of sincerity, conviction and individual expressiveness.

In order to test this assumption, ideally we would need a measure of the level of restraint and modesty versus expressiveness and exaggeration in communication styles. Gudykunst et al.'s (1988) concept of succinct versus elaborate communication styles comes very close to this. However, no country scores are available for these communication style differences and the same examples (Middle Eastern cultures having an elaborate style and many Asian cultures having a succinct style) are repeated over and over again. Hall's (1976) distinction between direct and indirect (or low/high context) communication styles would seem to be related to this as well, but the parallel isn't complete. Although an indirect communication style is often related to understatement, succinctness and an extensive use of silence (e.g. as for Japan and many other Asian countries), Latin American and Mediterranean countries are generally characterized to have high context communication, but would seem to have a more expressive communication style than Asians. Furthermore, some low context countries have rather restraint communication styles as well (Scandinavian countries, Germanic countries). Finally, Trompenaars' (1997) distinction between affective and neutral cultures might be expected to show some relationship with communication styles. Unfortunately, published empirical data on this dimension are limited to the results of one question ("Would you show emotions openly if you felt upset at work"). In addition, Trompenaars' results seem counterintuitive for many countries, e.g. Danes, Fins and Germans are all classified on the affective side.

Recently, however, there has been an increasing interest in comparing the big-five personality characteristics (neuroticism, extraversion, openness, agreeableness and conscientiousness) across cultures. Hofstede and McCrae (2004) and Van Hemert et al. (2002) have shown that its factor structures are replicated not just at an individual level *within* countries, but also at a country level, and hence meaningful comparisons can be made *across* countries. One of the big-five personality characteristics, extraversion, would seem to bear a strong positive relationship to the level of expressiveness and exaggeration in communication styles. Hence:

Hypothesis 4: The higher the country-level extraversion, the higher the extreme response bias.

As indicated above the language of the questionnaire might be an important situational determinant of response styles. Unfortunately, there has been no previous research that has systematically investigated the impact of the language of the questionnaire on response styles. However, Church et al.'s study (1988) found that concepts are more refined in the mind of the respondent when responding in their native language. This might lead respondents to prefer more neutral answers when presented with a questionnaire in a non-native language. Gibbons et al. (1999) found that for one of the questionnaires they tested with a bilingual sample, items were found to be more meaningful and elicited more extreme responses when items were presented in the respondent's native language. Finally, McCrae (2002) found standard deviations for the NEO-PI-R to be higher in the Filipino subsamples when the questionnaire was administered in Filipino than when it was administered in English. This sparse evidence seems to indicate that respondents might be more likely to use the full range in their native language, while being more prone to neutral (middle) answers in a foreign language. Hence:

Hypothesis 5a: Respondents will be more likely to choose extreme responses when replying to a questionnaire in their native language than when replying to the same questionnaire in a non-native language.

And:

Hypothesis 5b: Respondents will be more likely to choose middle responses when replying to a questionnaire in a non-native language than when replying to the same questionnaire in their native language.

An important reason for the preference for neutral responses when replying to a questionnaire in a non-native language might be a lack of understanding of the language in question. We argue that when respondents feel they might not understand a question properly, they would be more likely to choose a safe (middle) response. If this were true, the level of competence in a foreign language would be related to differences in response style. Therefore:

> *Hypothesis 6: When responding to a questionnaire in a non-native language, respondents' level of non-native language competence will be positively related to extreme response styles and negatively related to middle response styles.*

METHODOLOGY

SAMPLE AND DATA COLLECTION PROCEDURES

The project coordinator recruited country collaborators through personal contacts and networking at professional conferences such as the Academy of Management. Once the project had started, several researchers contacted the project coordinator directly offering to collect data in their country. All country collaborators received a 15-page document containing very detailed instructions about the aim of the study; items and constructs; results of the pilot study; translation, data collection and data entry procedures; as well as agreements about co-authorship. All collaborators received access to the final data set. A document with personal introductions of all collaborators was prepared to promote group cohesion and facilitate networking among collaborators.

Respondents were final year university students following a course in Business Administration, Business and Management, Commerce or a similar subject. They were generally between 21 and 22 years old. The gender distribution varied from 27% female in India to 77% female in Hong Kong. International students were excluded from our sample, so that our comparisons only included students that could be assumed to be representative of the country they studied in. The resulting sample sizes ranged from 85 for Russia to 210 for the Netherlands, but for most

countries were around 100. Data were collected in-class between March 2001 and April 2003. Although data were collected on a voluntary basis response rates were high, generally between 80-100%. The use of a student sample poses limitations in terms of representativeness; especially in developing countries students might be different from the population as a whole and might be more Westernized than non-students. However, this does mean that any cross-country differences in response styles might be attenuated, so that in fact our study provides a more stringent test of these differences (Alik and McCrae, 2004).

The project was part of a large-scale study investigating the impact of the language of the questionnaire on students' responses. Yang and Bond (1980) suggest that when learning a second language, individuals might be subconsciously influenced by the culture of that language and acquire some of the cultural attitudes and values associated with that language, a process called cultural accommodation. In our study, responses were shown to be significantly different between the English-language questionnaire and the native-language questionnaire (see Harzing, Maznesvki et al. 2002; Harzing et al. 2005) showing a pattern of cultural accommodation. This means that responses in the native language are likely to be closer to the "true" responses and response styles than responses in English. Hence in the first part of this study, we only used the sample of students that responded to the questionnaire in their native language. In the second part of the study, which focused on the impact of language and English-language competence on response styles, we compared the two language versions and only used the sample of students that responded to the questionnaire in English.

The original questionnaire was designed in English. It was pilot tested in the UK in October 2000. The pilot study coincided with a discussion among the first eight country collaborators about translatability of items. Several items that proved to be difficult to translate were replaced. Subsequently, bilingual country collaborators were responsible for the translation of the original English questionnaire. Translations were conducted using translation-back-translation procedures. The translator and back-translator were separate individuals who did not enter into a

discussion until after they had finished their translations. Discussions between translator and back-translator usually resulted in the change of some of the translations. Where difficulties remained, a third bilingual person was consulted. The back-translated versions were verified by the project coordinator for consistency across languages, which usually resulted in further changes and discussions between translator and back-translator. For several of the European languages, the project coordinator provided independent verification of the translated versions.

Questionnaires were completed in either English or the native language of the country in question. Collaborators were instructed to make sure that the different language versions were randomly distributed. In most countries English and native language questionnaires were distributed in the same class. In the remaining countries, different classes of the same module or related module were used to separate English and native language questionnaires. Respondents were not allowed to choose which language version they completed. An equal number of English-language and native-language questionnaires were distributed.

To verify whether collaborators had succeeded in the randomization process, we tested whether the two language groups differed systematically on the question: "How typical do you consider your view to be of people who live in the country in which you were born?" *None* of the 25 country samples showed a significant difference between the language versions on the "typical view" question, which shows that there were no systematic differences between the two language samples. However, in some of the countries there was a difference in age and gender distribution between the different language versions. We therefore included age and gender as control variables in our statistical analysis.

MEASURES

Dependent variables

Measures of the various response styles were constructed using the responses to all attitudinal five point Likert-scale questions in the questionnaire. These questions dealt with 4 different topic

areas: cultural norms and values with regard to activity (e.g. "Sitting around without doing something is a waste of time"), cultural norms and values with regard to relationships (e.g. "Good team members subordinate their own interests to those of the team"), reasons for choosing electives (e.g. "Because I think I can get a high mark for it"), and characteristics of the ideal type of job after graduation (e.g. "Have an opportunity for high earnings"). The first three sets of questions had scale anchors running from "strongly disagree" to "strongly agree", while scale anchors for the last set of questions ran from "of very little or no importance" to "of utmost importance". The response format was identical for all questions, i.e. "strongly agree" and "of utmost importance" were always on the right. A total number of 69 questions were used to create the dependent variables.[4]

The level of acquiescence was calculated by dividing the number of questions that received a 4 or 5 (agree/strongly agree, very important/of utmost importance) response by the total number of questions for each respondent. The resulting score ranges from 0.00 to 1.00. Disacquiescence was calculated in a similar way, using the number of questions that received a 1 or 2 (strongly disagree/disagree, of very little importance, of little importance) response. We also calculated the acquiescence balance by subtracting disacquiescence from acquiescence, resulting in a score from –1.00 to 1.00. Following Van Herk et al. (2004), the acquiescence balance was used as the final measure of acquiescent response style as it measures the tendency to agree more than disagree. Middle response style was calculated as the proportion of questions that received a middle (3) response for each respondent. Extreme response style was divided into positive extreme response style (proportion of 5 responses) and negative extreme response style (proportion of 1 responses). For the analyses relating to language the two measures of ERS were combined.

As indicated above we used only the responses to the native-language questionnaire for our hypotheses relating to the impact of national cultural dimensions and the national level of extraversion on response styles. As this analysis is conducted at country level, individual response styles were aggregated to the country level. For the hypotheses relating to the impact of language

on response styles we used questionnaires in both languages (hypothesis 5) or English-language questionnaires only (hypothesis 6). Analyses were conducted at the individual level.

Independent variables

Power distance, collectivism/individualism and uncertainty avoidance were measured using Hofstede's[5] (1980, 2001) and Globe's (House et al., 2004) country level scores for these dimensions. As Hofstede did not include country scores for Lithuania these were taken from a Lithuanian study (Mockaitis, 2002). Data for Lithuania, Bulgaria and Chile were missing in the Globe study. The personality characteristic of extraversion is part of two well-established personality measurement instruments: the Eysenck Personality Questionnaire (EPQ) and the revised NEO Personality Inventory (NEO-PI-R). We decided to use the scale from the EPQ since – tapping into aspects such as expressiveness and liveliness – this would seem to capture much of what was defined above as an expressive/elaborate communication style. In contrast, the extraversion scale of the NEO-PR taps not only into friendliness, gregariousness and cheerfulness, but also into assertiveness, activity, excitement seeking, which would not seem to be related as directly to an expressive communication style. Moreover Hofstede and McCrae (2004) show that the extraversion scale of the NEO-PR showed very strong (0.57-0.64) correlations with the two culture variables included in our study (individualism and power distance), making it less useful as a distinct predictor of response styles. The EPQ was not significantly related to any of Hofstede's culture dimensions (correlations varied from 0.07 to 0.11) nor to most of the eight Globe culture dimensions (correlations varied from 0.00 to 0.32, only the correlation with in-group collectivism was significant, 0.50, $p = 0.018$), making it more useful as a distinct explanatory factor.

Country mean scores for extraversion were taken from Van Hemert, Van de Vijver, Poortinga and Georgas (2002) who summarised the results of a range of country studies that included extraversion as one of their concepts. However, if a particular country was not reported in Van Hemert et al., while it was included in Lynn and Martin (1995) – who provided a similar overview – we used the latter data. In three other cases (Japan, the Netherlands and France) we

also used the Lynn and Martin data, because for these countries the studies that were reported by Van Hemert et al. included data for fewer respondents. For Denmark, Austria, Turkey, Malaysia and Taiwan no extraversion scores were available. For the first four countries we used the score of their closest cultural equivalent in our sample (based on Hofstede's dimensions) that also shared historical, geographical or linguistic links: Sweden, Germany, Greece and India, respectively. Taiwan didn't have close cultural equivalents and its closest equivalent (Brazil) did not share any historical, geographical or linguistic links. Hence we excluded Taiwan from our analysis.

For our analysis of the impact of the language of the questionnaire on response styles, we compared response styles between the native-language questionnaires and the English-language questionnaires. In order to measure the impact of English-language competency on response styles, we asked students to assess their capability to understand written English on an eight-point scale (very weak to fully bilingual). As for the latter question some of the categories had very few observations, we collapsed the eight categories into three (very weak-average, good/very good, excellent/bilingual).

Control variables

There are several demographic variables that have been shown to influence response styles in earlier studies. ERS has been shown to increase with age (Greenleaf, 1992; Ross and Mirowsky, 1984) and males have been shown to have a higher level of acquiescence than females (Johnson et al. 1997; Ross and Mirowsky, 1984). Both variables will therefore be included as control variables in the individual-level analysis. Level of education (Greenleaf, 1992; Johnson et al., 1997; Landsberger and Saavedra, 1967; Marin, Gamba and Marin, 1992) and socio-economic status (Ross and Mirowsky, 1984) have also been shown to impact on response styles but as our respondents are reasonably well-matched on this characteristic, it is not included as a control variable.

RESULTS

DESCRIPTIVE RESULTS

Table 2 provides the descriptive results for the various response styles in the 26 countries included in our survey. Our results conform very closely to previous cross-country studies, many of which were conducted several decades ago. Students from Spanish-speaking countries show higher ERS and high acquiescence, while East Asian (Japanese & Chinese) respondents show a relatively high level of MRS. German respondents showed higher acquiescence than British respondents did and within Europe the Greeks stand out as having the highest level of acquiescence and ERS.[6]

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Table 2 about here

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Table 2 also show that while some regions – e.g. Northern and Western Europe – show fairly similar response patterns, other regions are much less homogeneous. Within Eastern Europe two clear patterns are visible with Russia and Poland showing high disacquiescence, low MRS and low positive ERS, while Bulgaria and Lithuania show the reverse pattern. In Southern Europe, Greece and Turkey and Spain and Portugal form rather similar pairs, while some aspects of the French response style are more similar to Northern/Western Europe, confirming its geographical and cultural position as a bridgehead between Northern/Western Europe and Southern/Latin Europe. Within Latin America, Mexico and Chile are rather similar, showing the typical Hispanic response style. Brazil, however, show a mix of Hispanic and Northern/Western European response styles. Brazil has been identified a country with a particularly strong evidence of distinct subcultures (Lenartowicz and Roth, 2001) which might make our results difficult to generalise.

The largest differences, however, are found in the Asian cluster that shows three very different patterns. Respondents in China and Hong Kong show medium acquiescence, low disacquiescence, low positive and negative ERS and high MRS, while Malaysia and India show the reverse pattern on nearly all of these indicators. Taiwan takes up a middle position between these extremes. A third and very distinct pattern is shown by Japan, which has the lowest acquiescence, the highest disacquiescence and the highest MRS of all 26 countries. The results for Malaysia show that ethnic background also influences response styles: Malaysian-born Chinese respondents had response styles that differed significantly from Malay respondents and were generally situated between Malay and Chinese (mainland China & Hong Kong) response styles.[7] Malay respondents had a significantly higher ARS ($t=2.727$, $p=0.008$) and positive ERS ($t=2.209$, $p=0.031$) than Malayisan-born Chinese respondents.

THE IMPACT OF CULTURAL DIMENSIONS AND EXTRAVERSION ON RESPONSE STYLES

Table 3 summarises the intercorrelations of all variables used in our study. As would be expected, the different types of response styles show strong intercorrelations. However, as we will see below, they do differ in terms of the factors that influence them. When we compare the correlation pattern for acquiescence in our study with that reported for six different studies by Smith (2004), we find nearly identical patterns. All cultural dimensions that show a significant correlation with acquiescence in our study also did so in Smith's study, often for all 5 or 6 studies that Smith analysed. In most cases even the magnitude and level of significance of the correlations is very similar. This further strengthens Smith's argument that bias will be consistently predicted by the same value profile. It also reinforces our earlier argument of consistency of response styles over time, as our data were collected after the studies that were reported in Smith (2004). Finally, it shows that even though we used a student sample, our results are very similar to those of studies that used managerial samples.

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Table 3 about here

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Table 4 shows the regression results for each set of culture dimensions (Hofstede, Globe practices, Globe values) and extraversion. It is apparent that whereas acquiescence and a positive extreme response style are well explained by the variables included in our study, this is less so for a negative extreme response and middle response style. We will see below that language is a better predictor for ERS and MRS. Hypothesis 1 predicted a positive relationship between power distance and acquiescence. Table 4 shows partial support for this hypothesis as Hofstede's power distance dimension shows a positive correlation with acquiescence. However, neither of the Globe measures of power distance show the same relationship. Hofstede's power distance measure also showed a significant negative correlation with middle response styles, while Globe power distance practices (values) are weakly positively (negatively) related to negative ERS. Hypothesis 2 predicted a positive relationship between collectivism and acquiescence and middle response style. Again there is partial support for this hypothesis. Hofstede's individualism measure (the opposite of collectivism) shows a significant negative relationship with both an acquiescent and a middle response style. Globe's in-group collectivism practices also show the predicted positive relationship with acquiescence, but are not related to middle response style. They do have a significant positive (negative) relationship with positive (negative) ERS. Institutional collectivism practices on the other hand are significantly negatively related with acquiescence, though again no relationship is found with middle response style. Hypothesis 3 predicted a positive relationship between uncertainty avoidance and acquiescence. Again partial support for this hypothesis is found in that both Globe uncertainty avoidance practices and values show the expected relationships, while uncertainty avoidance values also has a strong positive relationship to ERS. The results for Hofstede's uncertainty avoidance dimension are not significant, although there is a weakly significant negative relationship with middle response styles.

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Table 4 about here

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As predicted in Hypothesis 4 extraversion has a significant positive relationship with extreme response styles. This result is consistent, regardless of which other variables are included in the analysis. However, this result is limited to positive extreme response styles, i.e. the tendency to strongly agree. This is not unexpected as, similar other studies, the major differences between countries were found in positive ERS and hence results for ERS and acquiescence are related. Country-level extraversion was also found to be a significant positive determinant of an acquiescent response style.

Overall, respondents in countries with high power distance values seem to prefer positive extreme response styles over middle response styles and negative extreme response styles. collectivism appears to lead to a preference for acquiescence and middle response styles. Uncertainty avoidance is associated with a higher level of acquiescence and a preference for increased uncertainty avoidance is very strongly associated with extreme positive answers. Extraversion shows its strongest impact on positive ERS ($p < 0.001$), but also portrays secondary explanatory power for acquiescence (positive, $p < 0.01$). Overall, in-group collectivism practices and extraversion seem to be the characteristics that most consistently influence response styles, while uncertainty avoidance values and Hofstede's power distance and individualism measures are quite influential too. However, we should note that these four cultural dimensions show very strong intercorrelations, typically around .60-.80.

THE IMPACT OF LANGUAGE ON RESPONSE STYLES

Hypotheses 4 and 5 referred to the impact of language of the questionnaire and English-language competency on response styles. To test the relative impact of language versus country, SPSS's General Linear Model Factorial procedure was used. The GLM procedure is a technique that

provides regression analysis for one dependent variable by one or more factors and/or variables. In contrast to linear regression analysis, this technique allows a combination of categorical and continuous independent variables, without the necessity to recode categorical data into individual dummy variables. Because the sample sizes for English and native language questionnaires varied slightly in the different countries, we included the interaction effect between language of the questionnaire and country into the first model. Further, since the 26 countries in our survey might differ in their average English language competence, the interaction effect between country and English language competence was included in the second model. In addition, our literature survey indicated that demographic variables such as age and gender might be related to response styles and hence they were included as control variables. As Table 5 shows, even when controlling for country, demographic variables and the interaction between country and language, language remains a very important determinant of response styles. In fact, in 5 of the 6 analyses it is the most important determinant. Confirming our analyses above, the respondent's country also has an important impact on response styles. Age does not appear to have a systematic or consistent impact, which is not surprising given the restricted age range in our student sample. Gender does appear to have some impact, with male students generally showing higher ERS and female students showing higher MRS, which confirms earlier studies (Johnson et al. 1997; Ross and Mirowsky, 1984).[8]

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Table 5 about here

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In terms of our specific hypotheses, Table 6a shows strong confirmation of both hypothesis 5a and 5b. Extreme responses are more likely when a respondent is responding in his/her native language, while middle responses are more likely when English language questionnaires are used. As a result the standard deviation is significantly higher for native-language questionnaires than for English-language questionnaires. As Table 6b shows higher English-language competence is

significantly positively related to extreme response and significantly negatively related to middle response styles, thus confirming hypotheses 6. Standard deviation differs accordingly: the higher the English-language competence, the higher the standard deviation.

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Table 6a & b about here

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DISCUSSION AND CONCLUSION

Our study has shown that there are substantial differences in response styles across countries that without exception confirmed patterns found in earlier studies. These strongly consistent results point to response style differences between countries that are very stable across time. One of the earliest studies on response style differences (Zax and Takahashi, 1967) linked the high MRS and low positive ERS in Japan to child-rearing practices promote restraint and suppress impulsive displays. The authors suggested that these results might change since their respondents were born just after WWII and the response styles of their children might "draw closer to the western groups they are striving to emulate" (Zax and Takahashi, 1967). Our study shows that respondents that were born some 40 years later still display very similar patterns.

Given that no less than 26 countries were included in our study, we now know much more about response styles for a wide range of countries. Our results for Malaysia also showed that ethnic background could have a persistent effect on response styles, with Malay respondents showing response styles different from those of Chinese respondents. Over 35 years ago, Mitchell (1968) already observed a similar difference between Chinese and Indian respondents in Malaysia. Hence our results are relevant not only for cross-national surveys, but also for cross-cultural surveys within nations. A second contribution of our study was to test the impact of various cultural dimensions and one personality characteristic on a variety of response styles. The results generally confirmed Smith's (2004) exploratory results, but extended them to a wider

range of response styles, including extreme response style and middle response style. We also showed that extraversion was one of the most important and consistent determinants of response styles. Future researchers might want to focus on other determinants more directly related to communication style rather than cultural dimensions in explaining differences in response styles. A third contribution of our study was to show that the language of the questionnaire and the English language competency of the respondents influence extreme and middle response styles as well as standard deviation. Responses in the native language showed higher ERS and SD and lower MRS, while the level of English language competency was related to higher ERS and SD and lower MRS in responding to English-language questionnaires.

An important explanation for response style differences across languages might be differential interpretation of equivalent scale anchors in different languages. Even though scale anchors might translate into appropriate local equivalents, the intensity associated with these equivalents might be different from the original language. Voss, Stem, Johnson and Arce (1996) show that while the magnitude estimates for good and very good were 74 and 87 in English, they were 91 and 101 in the equivalent Japanese translation. As far as we are aware no equivalent research has been done for disagree-agree scales or unimportant-important scales, but if results would be similar, this could explain the very low acquiescence of our Japanese respondents.

Our analysis of response style differences focused on aggregate response styles for the questionnaire as a whole, as we reasoned that response styles would occur irrespective of the type of question concerned. However, we might ask ourselves whether differences in response styles are more likely for questions relating to cultural dimensions than for more neutral questions such as elective choice and to a lesser extent ideal job characteristics. We therefore reran all of the analyses using response styles for each group of questions (culture activity dimension, culture relationship dimension, elective choice and ideal job characteristics) as a dependent variable. While F-values differed slightly, overall differences in response styles between countries turned out to be highly significant (all $p < 0.000$) regardless of the type of questions. There was no distinguish-

able pattern that could indicate that response style differences were more important for some questions than for others.

A second question in this respect would be whether Hofstede's/Globe's cultural dimensions and extraversion would have a more significant explanatory power for some sets of questions than for others. Given that some of our questions dealt with cultural dimensions (albeit slightly or even considerably different from the Hofstede/Globe dimensions that were included as explanatory variables), some of our results might be due to "true" content-related correlation between the independent and dependent variables rather than correlation between the Hofstede/Globe cultural dimensions and response styles. In particular our culture relationship dimension could be expected to have a content-oriented link with the individualism/collectivism-/power distance dimensions. However, our split-group analysis showed that relationships between the independent variables and response styles were generally upheld for each group of questions, hence lending strength to the idea that the underlying reason for the relationship is indeed differences in response styles. What did become apparent though is that the relationship between extraversion and response styles was strongest for the ideal job characteristics. The ideal job questions were measured on a different scale (from "of very little or no importance" to "of utmost importance") than the three other sets of questions that used a strongly disagree to strongly agree format. This might indicate that scale anchors referring to the level of importance might even be more susceptible to an acquiescent response bias than scale anchors referring to the level of agreement.

A third main topic in our paper was the impact of the language of the questionnaire on response styles. Differentiating our analysis by group of questions did not show any major differences between the groups in this respect. In all four groups both language and country, as well as the interaction between the two, were highly significant determinants of ERS, MRS and Standard Deviation. As reflected in the overall analysis reported above, the language of the questionnaire was generally (in 9 of the 12 comparisons) a more important determinant of ERS, MRS and

Standard Deviation than the country in which the data were collected. With regard to English language competence, our detailed results are slightly different. Even though in the overall analysis English language competence was a significant factor influencing response styles, in some of the individual analyses this was not the case. It is clear from both the overall analysis and the detailed analysis that the language of the questionnaire is a more significant factor influencing response styles than English language competence as such. Finally, a detailed comparison of ERS, MRS and Standard Deviation for each of the four groups of questions generally confirmed the overall analysis, with ERS and SD being higher and MRS being lower in the native language. Differences were highly significant ($p = 0.000$) for each of the four groups of questions, except for ERS Electives ($p = 0.003$) and SD Electives ($p = 0.037$). English language competence had the same impact for each of the four groups of questions with higher level competence resulting in higher ERS and SD and lower MRS. Except for MRS Culture Activity ($p=0.16$) and MRS Culture Relationship ($p=0.011$), results were significant at $p = 0.000$. Overall, our detailed analyses showed that results were very similar across all four groups of questions. This reinforces our argument that differences in response styles are a major factor to take into account in any international comparisons.

An important question that we have not answered yet is how to eliminate or attenuate the impact of response styles? An established procedure for removing bias associated with scale response is standardization (Leung and Bond, 1989). This procedure has become increasingly popular in cross-cultural studies (Fischer, 2004). However, standardization might also remove some of the true differences in responses. It remains difficult to assess what part of for instance a high mean score is caused by an acquiescence bias and what part truly reflects a strong opinion about the subject in question. In addition, for questionnaires that cover different topical areas, standardization over the questionnaire as a whole might cause a strong response bias for one part of the questionnaire to unduly impact on the scores of another part of the questionnaire. This would

reduce the validity of cross-country comparisons at the level of different aspects of the questionnaire (Maznevski et al., 2002). Fischer (2004) reviews different methods of standardization and provides an excellent overview of the problems and limitations associated with them.

Rather than trying to eliminate response bias retrospectively through standardization, researchers could attempt to avoid it by a careful questionnaire design. Several options are available. First, Smith (2003) suggests that the use of both positive and negative statements will mitigate both acquiescence and disacquiescence, because it might lead respondents to consider the exact meaning of the question more closely and as a result give more meaningful responses. But even if this effect does not materialise, at least responses will cancel each other out, so that the average for the respondent in question represents a middle position, which would be a better reflection of his/her true opinion than one extreme or the other (Smith, 2003). The problem, however, is that questionnaire items containing negations are difficult to translate into some languages.

A solution to mediate the impact of extreme response styles is to use Likert scales with a larger number of categories, which allows respondents with a relatively strong opinion to voice a more nuanced position, rather than being forced to choose the most extreme answer. Hui and Triandis (1989) found that ERS for Hispanics disappeared when 10-point Likert scales were used.

Most studies that show response bias used Likert scales with ordered scale anchors, e.g. "strongly disagree" to "strongly agree" or "of little or no importance" to "extremely important". These anchors might be vulnerable to acquiescence bias as respondents are keen to agree, whether this is caused by high levels of power distance, collectivism, uncertainty avoidance or extraversion. Our detailed analysis showed that scale anchors referring to the level of importance are even more problematic in this respect than scale anchors referring to the level of agreement. A related problem in this respect – discussed above with special reference to Japan – is that scale anchors are often difficult to translate and that translations might not result in metric equivalence. An alternative would be to use scale anchors as part of the question and let them reflect oppo-

sites rather than level of agreement. This would make the "right answer" less obvious and would also force respondents to carefully consider each question as most scale anchors would be different. Of course this technique would increase the level of cognitive involvement required and might lead to lower response rates. In addition, careful translation and pilot testing would become even more crucial as a respondent's interpretation of the questions would be framed by single words, whereby words that are seen as opposites in some countries might not be opposites in other countries. However, if translation problems can be solved, responses might be more meaningful. The Globe study (House et al., 2004) used many items that were constructed in this way, e.g. "In this society, people are generally: tough/tender" or "In this society, people place more emphasis on: solving current problems/planning for the future". It is probably not coincidental that response bias was found to be modest in this study.

A final remedy might be to ask respondent to rank statements rather than using Likert scales. Of course, this is only possible if the subject area is such that a hierarchical ordering of statements can be expected. The characteristics of ideal type of jobs as discussed above would be one subject area in which this would have been possible. On the other hand, asking respondents to rank more than a handful of statements puts a very high demand on their cognitive abilities and might lead them to discard the questionnaire altogether. In addition, statistical analyses that can be performed with rank-ordered scores are more limited than those that can be used for interval or quasi-interval scales (Alwin and Krosnick, 2001). An interesting alternative to ranking is suggested by Lenartowicz and Roth (2001) in their study of cultural values. They first asked respondents to indicate the most and least important value and rate its importance using a 10-point scale. Then respondents were asked to rate the next most and least important values within the range of the previously rated values and so on. For the analysis of final ratings all subject scores were then transformed to bring all the respondents' ratings to the same range of values, hence eliminating response styles. This solution preserves the hierarchical measurement, but also in-

cludes individual ratings. Again though, it puts heavy demands on the respondent's time and cognitive capabilities.

Regardless of what remedy is used to eliminate or alleviate response bias, the first step towards finding a solution is acknowledging that response bias can be a serious threat to valid comparisons across countries. We hope that this article has provided a step in that direction and that in future response bias will receive the attention it deserves from researchers in the area of international and cross-cultural management.

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Table 1: Results of earlier studies on differences in response styles between countries.

Study	Year	Countries/groups included	Result
Ross & Mirowsky Hui & Triandis Marin, Gamba & Marin Johnson et al. Clarke III	1984 1989 1992 1997 2000	USA: Hispanics versus European-Americans	ARS & ERS higher for Hispanics
Bachman & O'Malley Jonhson et al. Clarke III	1984 1997 2000	USA: African-Americans versus European-Americans	ARS & ERS higher for African-Americans
Zax & Takahashi Chen, Lee & Stevenson Shiomi & Loo Takahashi et al.	1967 1995 1999 2002	USA/Canada & Japan	ERS higher for USA/Canada MRS higher for Japan
Chun, Campell & Yoo Lee & Green	1974 1991	USA & Korea	ERS higher for USA MRS higher for Korea
Bennett Church	1977 1987	China & Philippines	ARS & ERS higher for Philippines MRS higher for China
Steenkamp & Baumgartner Van Herk, Poortinga & Verhallen	1998 2004	Greece, UK, Belgium Greece, Spain, Italy, UK, Germany, France	ARS highest for Greece ARS & ERS highest for Greece ARS &ERS lowest for UK, Germany, France
Brengelmann	1959	Germany & UK	ARS higher for Germany
Javeline	1999	Kazakhstan & Russia	ARS higher for Kazakhstan
Clarke III	2000	France & Australia	ERS higher for France

ARS = Acquiescent Response Style, ERS = Extreme Response Style, MRS = Middle Response Style

Table 2: Overview of response style differences across 26 countries, % of answers in particular categories, native language questionnaires only.

Country	1. Acquiescence % of 4/5 answers	2. Disacquiescence % of 1/2 answers	3. Acquiescence Balance (1-2)	ERS Positive % of 5 answers	ERS Negative % of 1 answers	Middle Response % of 3 answers
USA (n = 61)	.54	.24	.30	.17	.03	.22
Northern Europe						
Denmark (n = 44)	.44	.27	.17	.10	.05	.28
Finland (n = 87)	.48	.32	.15	.13	.09	.20
Sweden (n = 62)	.45	.31	.13	.14	.10	.24
Western Europe						
Austria (n = 53)	.48	.26	.21	.15	.07	.26
Germany (n = 50)	.52	.21	.31	.15	.05	.26
Netherlands (n = 109)	.48	.31	.17	.08	.05	.21
UK (n = 46)	.48	.27	.21	.11	.04	.24
Eastern Europe						
Bulgaria (n = 78)	.54	.20	.34	.18	.04	.26
Lithuania (n = 57)	.53	.20	.32	.16	.04	.26
Poland (n = 54)	.56	.27	.29	.12	.03	.16
Russia (n = 44)	.54	.29	.25	.14	.04	.16
Southern/Latin Europe						
France (n = 42)	.54	.31	.23	.17	.07	.14
Portugal (n = 76)	.53	.26	.28	.17	.06	.21
Spain (n = 83)	.54	.22	.32	.12	.04	.22
Greece (n = 58)	.58	.20	.38	.22	.05	.13
Turkey (n = 78)	.57	.21	.36	.22	.05	.21
Latin America						
Brazil (n = 72)	.51	.30	.22	.20	.09	.19
Chile (n = 53)	.58	.19	.39	.19	.04	.23
Mexico (n = 50)	.60	.21	.39	.28	.06	.19
Asia						
China (n = 50)	.51	.19	.33	.12	.02	.26
Hong Kong (n = 54)	.54	.18	.36	.12	.03	.26
India (n = 50)	.60	.17	.44	.28	.05	.16
Japan (n = 45)	.39	.32	.07	.10	.08	.28
Malaysia (n = 65)	.61	.17	.44	.19	.03	.21
• Malay (n=38)	.63	.15	.48	.22	.02	.21
• Chinese (n=27)	.58	.20	.38	.13	.03	.22
Taiwan (n = 60)	.61	.18	.43	.17	.03	.19
Overall average (n=1581)	.52	.25	.27	.15	.05	.22

ERS = Extreme Response Style

Table 3: Correlation Matrix (n = 1581)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Acquiescence balance	1	-.30	-.61***	.66***	.72***	.14	-.44*	.54**	-.60***	.48*	.25	.58**	-.27*	.63***	.11	.36
2. Middle Response Style		1	-.11	-.51**	-.40	-.25	.44*	-.34	.10	-.47*	.20	-.46*	.62**	-.45*	-.47*	-.15
3. Extreme Response Style Negative			1	.11	-.40	.000	.14	-.05	.26	-.04	-.54**	-.37	.20	-.36	.11	.05
4. Extreme Response Style Positive				1	.56**	.24	-.44*	.55**	-.46*	.55**	-.12	.46*	-.32	.49*	.30	.53**
5. in-group collectivism Practices					1	.14	-.26	.47*	-.82***	.70***	.17	.77***	-.61**	.86***	.39	-.10
6. in-group collectivism Values						1	.05	-.06	.05	.24	-.06	.19	-.23	.15	.19	.50*
7. Institutional collectivism Practices							1	-.72**	.09	-.45*	.40	-.13	.41	-.19	-.46*	-.32
8. Institutional collectivism Values								1	-.46*	.46*	-.37	.26	-.28	.40	.43*	.28
9. Individualism (Hofstede)									1	-.47*	-.23	-.66***	.35	-.79***	-.32	.08
10. Power Distance Practices										1	-.16	.57**	-.60**	-.58**	.56**	.05
11. Power Distance Values											1	.31	.10	.31	-.39	-.21
12. Power Distance (Hofstede)												1	-.58**	.80***	.26	-.11
13. Uncertainty Avoidance Practices													1	-.62***	-.68***	.00
14. Uncertainty Avoidance Values														1	.32	-.15
15. Uncertainty Avoidance (Hofstede)															1	.07
16. Extraversion																1

*** p <0.001, ** p < 0.01, * p < 0.05, † p <0.1, all two-tailed

Table 4: Regression analysis of the impact (standardized beta coefficients) of power distance, individualism/-collectivism, uncertainty avoidance and extraversion on response styles.

Response style	Acquiescence % of 4/5 answers - % of 1/2 answers	Negative ERS % of 1 answers	Positive ERS % of 5 answers	MRS % of 3 answers
Hofstede values (n=25)				
Power distance	.372*	-.363	.342	-.800**
Individualism	-.445*	.095	-.265	-.567**
Uncertainty avoidance	-.166	.231	.089	-.338†
Extraversion	.446**	-.016	.579***	-.101
Adjusted R-square	.550	.018	.498	.399
Globe practices (n=23)				
Power distance	-.165	.585†	.176	-.151
In-group collectivism	1.029***	-.762*	.564*	-.008
Institutional collectivism	-.289*	.221	-.111	.064
Uncertainty avoidance	.381*	-.014	.177	.456
Extraversion	.371**	.015	.541***	-.093
Adjusted R-square	.761	.096	.593	.138
Globe values (n=23)				
Power distance	.150	-.581*	-.210	.306
in-group collectivism	-.161	-.015	-.240	-.150
Institutional collectivism	.272	-.202	-.022	.038
Uncertainty avoidance	.533*	-.105	.712**	-.515
Extraversion	.501*	-.027	.722***	-.066
Adjusted R-square	.615	.159	.596	.042

*** p <0.001, ** p < 0.01, * p < 0.05, † p < 0.1, all two-tailed

ERS = Extreme Response Style, MRS = Middle Response Style

Table 5: Impact of language versus country and control variables on response styles, F-values and 2-tailed significance levels in GLM analysis.

Response style	Language questionnaire n=2940	English competence n=1402	Country	Country * Language	Age	Gender	Adjusted R-Square
ERS	34.952***	-	15.520***	2.078**	2.226	9.151**	.128
MRS	43.993***	-	11.897***	4.042***	8.294**	0.984	.114
SD	48.483***	-	12.615***	2.172***	.888	3.514†	.114
ERS	-	6.226***	5.220***	1.458*	.160	.282	.137
MRS	-	2.667†	3.661***	1.003	1.654	4.511*	.092
SD	-	8.178***	3.245***	1.336†	.870	.313	.113

*** p <0.001, ** p < 0.01, * p < 0.05, † p <0.1, all two-tailed

ERS = Extreme Response Style, MRS = Middle Response Style, SD = Standard Deviation

Table 6a: Impact of language of the questionnaire on response styles

Response style	Language of the questionnaire		t-value	Significance 2-tailed	Significant differences, p < 0.05
	1. English language n= 1443	2. Native language n=1529			
ERS	.1817	.2111	5.826	.000	2 > 1
MRS	.2399	.2177	6.152	.000	1 > 2
SD	1.0296	1.0770	6.695	.000	2 > 1

ERS = Extreme Response Style, MRS = Middle Response Style, SD = Standard Deviation

Table 6b: Impact of English language competence on response styles, English-language questionnaires only

Response style	Ability to understand written English			F-value	Significance 2-tailed	Significant differences, p < 0.05
	1. Very weak – Average, n=315	2. Good/Very Good, n= 696	3. Excellent/-Bilingual, n=417			
ERS	.1529	.1742	.2176	25.782	.000	3 > 2 > 1
MRS	.2648	.2356	.2277	13.826	.000	1 > 2&3
SD	.9602	1.0238	1.0942	51.335	.000	3 > 2 > 1

ERS = Extreme Response Style, MRS = Middle Response Style, SD = Standard Deviation

[1] In this article we only deal with response styles that are independent of item content. Socially desirable response styles that vary with item content are not discussed.

[2] Culpepper, Zhao and Lowery (2002) propose an interesting distinction in response styles for Chinese respondents. They review two different streams of literature: one claiming that Chinese respondents have a higher tendency for extreme response styles and one maintaining that Chinese respondents have a mid-point response bias. Both are supported by empirical studies. They resolve this apparent contradiction by looking at the type of questions concerned. For simple questions related to knowledge that is "time-tested and widely accepted" Confucian influence leads Chinese respondents to see debate between opposing viewpoints as undesirable. They are less likely to weigh up pros and cons and instead have a tendency to prefer extreme responses that reflect the time-tested and widely accepted wisdom. However, for items requiring "ideographic characterizations" that involve judgements that are more complex and analytical, more modest responses are likely, based on the Confucian philosophy that does not value assertiveness and the display of strong independent opinions. Their empirical study that included both types of questions fully supported this distinction. As our study includes questions of the latter type (ideographic characterization), we would expect Chinese respondents to be displaying a rather modest response style.

[3] Smith (2004) found some of the other Globe dimensions to be linked to acquiescence as well. However, a theoretical rationale for these links was not obvious and in most cases these dimensions only predicted acquiescence for one of studies included in his review, while the predictors that we *did* include in our study showed a consistent effect across all seven studies covered by Smith.

[4] As we are interested response style patterns, not in the scoring on individual questions or constructs, we did not construct scales. Response styles were calculated using all 69 questions, so that each item had an equal contribution to the composite response style variables.

[5] Although Hofstede's work has elicited some criticism, it is largely accepted as a helpful, though crude way to quantify cultural differences (see Harzing and Hofstede (1996) for a discussion of the various critiques and the extensive use of Hofstede's dimensions in other studies; see Søndergaard (1994) for a summary of reviews, replications and citations).

6 We conducted formal statistical tests for all countries that were included in both previous studies and our study. Confirming studies by Ross and Mirowsky (1984), Hui and Triandis (1989), Marin, Gamba and Marin (1992), Johnson et al. (1997) and Clarke III (2000), Mexico - the most likely home country of the Hispanics in these studies - and the USA show very significant differences in both ARS ($t=2.944$, $p=0.004$) and ERS ($t=5.866$, $p=0.000$). Confirming Zax and Takahashi (1967), Chen et al. (1995), Shiomi and Loo (1999) and Takahashi et al. (2002), Japanese respondents showed significantly ($t=2.726$, $p=0.008$) higher levels of MRS than US respondents. They also showed significantly ($t=3.636$, $p=0.000$) lower levels of positive ERS, but higher levels of negative ERS ($t=3.806$, $p=0.000$). Differences in ARS between German and British respondents were significant ($t=3.765$, $p=0.000$) and parallel those found in Brengelmann (1959). In conformance with Steenkamp and Baumgartner (1998) and Van Herk et al. (2004) Greek respondents showed significantly higher levels of ARS and positive ERS than British ($t=6.128/6.216$, $p=0.000/0.000$), German ($t=2.491/2.705$, $p=0.014/0.008$), French ($t=4.565/1.380$, $p=0.000/0.194$) and Spanish ($t=2.558/5.343$, $p=0.012/0.000$) respondents. These consistent results for Greece are difficult to reconcile with the Globe Leadership project that found Greece to have one of the lowest levels of acquiescence. Mean scores for Greece fall in the lowest bands for most of the Globe culture dimensions for practices and/or values. The only exception is Gender Egalitarianism where Greece falls in the highest band for both practices and values. A noticeable feature of the Globe questionnaire is that many items were reverse-scored. Judging from the sample items listed in House et al. (2004) Gender Egalitarianism was the only dimension where items were not reverse-scored. It is possible that reverse scoring has influenced the typical Greek acquiescent response pattern.

[7] It is possible that the language of the questionnaire (Malay) resulted in Chinese response styles that were more similar to Malay respondents than they would have been if the questionnaire had been in Chinese. This, however, only reinforces the ethnic background argument.

[8] These studies looked at acquiescence rather than ERS and MRS, but the three response styles are obviously interrelated. A GLM analysis with acquiescence as a dependent variable confirmed the significant impact of gender.