Social Anxiety in the Netherlands, the United States of America and Indonesia

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Abstract

This study examined whether people in Western and individualistic oriented societies, such as the Netherlands and the United States of America, differ from those of collectivistic societies, such as Indonesia with regard to the emotional/cognitive and behavioral component of social anxiety. Social anxiety was compared between Dutch students (N=434), students in the U.S.A. (N=402) and those in Indonesia (N=140). Social anxiety was operationalized with the Inventory of Interpersonal Situations (IIS: Van Dam-Baggen & Kraaimaat, 1987, 1999, 2000), which measures two aspects of social anxiety, i.e. discomfort experienced in interpersonal situations and frequency of assertive social responses in those situations. In addition, the responses to the interpersonal situations are divided into five social skills, i.e. expressing opinion, giving criticism, giving compliments, initiating contact and positive self-evaluation.

American students experienced more discomfort in interpersonal situations than Dutch and Indonesian students, while the Indonesian students' discomfort surpassed that of Dutch subjects. The Dutch students also reported more social responses than the American and Indonesian students, while the latter groups did not differ in this respect. The results are somewhat more differentiated with respect to the five social skills, and they are discussed in terms of the cultural dimensions of power distance, individualism and masculinity of Hofstede (2001) and their implications for clinical practice.

Key words: ISS, social anxiety; Western and Indonesian societies, cross-cultural differences.

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Introduction

Social anxiety has been conceived of as a multiple determined, complex concept, containing physiological, cognitive and behavioral aspects (Beidel, Turner & Dancu, 1985; Van Dam-Baggen & Kraaimaat, 2000). It has been shown that these aspects are differentially influenced by environmental and individual variables (Van Dam-Baggen, Van Heck & Kraaimaat, 1992). In international studies on anxiety there is a widespread use of similar assessment instruments and treatment procedures. The question is whether this is justifiable, since studies on emotions have revealed that everyone is born with the same basic emotions, but that the development and expression of emotions differs across cultures (Mesquita & Frijda, 1992). Since social anxiety involves concern about social-evaluative threat, socialization patterns apparent in certain cultures are assumed to play a role in the development of people's social anxiety and the type of social responses they display. The main issue in cross-cultural research is the extent to which behavior is influenced by culture (Poortinga & Hofstede, 1989). The premise is that differences in emotions and social behavior between two populations can be attributed to ecological and sociocultural factors when the populations differ in terms of habitat, language, attitudes and customs. Sociocultural factors refer to values, attitudes, beliefs, educational styles, family structure, social structure - in short, the rules in relationships and communication. These rules are the basis of interactions and vary in different social situations and across cultures (Argyle & Henderson, 1985, Wilson & Gallois, 1993). Some rules are universally accepted, such as respect for privacy, while others depend more on the situation. Sociocultural factors are relevant to research on social anxiety across cultures. Western Judeo-Christian-oriented values such as autonomy and individualism partly deviate from those of non-Western societies, for example in Muslim-oriented cultures with their values of authoritarianism and collectivism (Mansour, Zernitsky-Shurka & Florian, 1987).

The problem in studies on the universality versus particularity of cross-cultural behavior is the lack of a standard for comparing the similarities and differences in emotions across cultures (Mesquita, Frijda & Scherer, 1997). The solution recommended for this problem is to divide the concept under study into several underlying components and separately investigate the generalizability of each (Mesquita et al., 1997; Pepitone & Triandis, 1987). It is assumed that each component will vary from culture to culture, which means that every component has to be examined separately.

Cross-cultural studies on social anxiety are fairly unexplored territory (Heinrichs et al., 2006). Two types of studies can be distinguished, i.e. studies in which similar samples from different countries are compared (cross-national or multinational studies, e.g. Carmona & Lorr, 1992; Kleinknecht, Dinnel, Kleinknecht, Hiruma & Harada, 1997, Van Dam-Baggen, Kraaimaat & Elal, 2003) and studies in which samples from different cultures in a single country are compared (e.g. Florian & Zernitsky-Shurka, 1987; Fukuyama & Greenfield, 1983; Mansour et al., 1987; Sue, Sue & Ino, 1990; Zane, Sue, Hu & Kwon, 1991). A relatively greater number of studies have been based on culturally different samples in one country. This is probably because samples in one country are more easily accessible than those in foreign countries. Another consideration in sample selection for cross-cultural studies is that subjects from different cultural groups have to be similar in terms of relevant background characteristics so that sample differences can be ruled out as alternative explanations for any cultural differences observed. For these reasons, university students are often used in cross-

cultural comparisons (see Leung & Van de Vijver, 2008). It should be noted that results obtained with students can not automatically be generalized to other samples from the same cultural group in or outside a country.

Another issue in cross-cultural research concerns the translation of the instruments used (see Geisinger, 1994). Translation of words describing an emotion may change their meaning (e.g. the Dutch word for distress to the American or Indonesian words for distress), but it is also possible that situations which function as relevant antecedents in one culture will not have the same function in another culture (e.g. the meaning of authority in Indonesia and in the Netherlands). To monitor translation errors, checking the equivalence of the original and the translated construct has been recommended (e.g. Poortinga, 1989; Leung & Van de Vijver, 2008). If the psychometric characteristics of a measure used between different cultural groups correspond, it could be inferred that the psychological constructs underlying the different versions of this measure are identical. This makes possible meaningful cross-cultural comparisons of levels of social anxiety in groups that are culturally different.

The question to be considered in the present study is whether student samples from Dutch, American, and Indonesian societies differ in the emotional/cognitive and the behavioral component of social anxiety. Differences between the societies are discussed with respect to the role of Hofstede's (2001; www.gertjanhofstede.com/about_culture.htm) cultural dimensions power distance, individualism and masculinity-femininity in the three societies.

Method

Instrument.

The emotional cognitive and behavioral component of social anxiety was measured with the Inventory of Interpersonal Situations (IIS: Van Dam-Baggen & Kraaimaat, 1987, 1999, 2000), which consists of two scales, i.e. Anxiety/Discomfort and Frequency of occurrence. These two scales consist of the same 35 items, which are assertive responses in interpersonal situations. The level of anxiety/discomfort and the frequency of performing the response are rated with separate 5-point Likert scales. Extensive studies on the psychometric properties of the IIS have demonstrated the adequate validity and reliability of both scales' total scores on all levels in clinical and non-clinical samples (for a review see Van Dam-Baggen & Kraaimaat, 1999, 2000). Five sub-scales were empirically derived, representing the following social skills: (a) Giving criticism, (b) Expressing opinions, (c) Giving compliments, (d) Initiating contacts and (e) Positive self-evaluation. All sub-scales showed sufficient internal consistency (Van Dam-Baggen & Kraaimaat, 1987; 1999, 2000). The 35 IIS items are provided in the appendix.

Experts on methodological issues in cross-cultural research such as Leung & Van de Vijver (2008) propose making use of the same instrument the default choice in cross-cultural research. They mention several advantages of this, i.e. the possibility of comparing results with other findings reported in the literature, the possibility of maintaining scale equivalence and the small expense and effort required an existing instrument in comparison to the cost of developing and establishing the psychometric properties of a new or adapted instrument. These advantages prompted us to use an existing instrument. This meant that the original Dutch IIS (Inventarisatielijst Omgaan met Anderen, IOA: Van Dam-Baggen & Kraaimaat, 1987, 1999) had to be translated into an U.S. English version and a Bahasa Indonesia version. Several procedures were used to check these translations, including translation into the target

language and translation back into the source language, which resulted in the Inventory of Interpersonal Situations (IIS) and the Survai Hubungan Antar Pribadi (SHAP).

Subjects.

The present study was performed among university students from three societies, the Netherlands, the U.S.A. and Indonesia. The age range of the students was set between 18 and 50 years and the samples were stratified with respect to gender (64 % female and 36 % male) and age. The relatively older students were attending postdoctoral training courses.

Data on the Dutch_students (N=434) were collected at several universities in the Netherlands, e.g. in Utrecht and Amsterdam. This sample consisted of 156 men and 278 women with a mean age of 22.9 yrs. (SD= 5.8). Data on the American_students (N=402) were collected at several universities in the U.S.A., e.g. the University of Hawaii at Manoa, the University of Washington in Seattle and the University of Central Florida in Orlando. This sample consisted of 143 men and 259 women with a mean age of 21.3 yrs. (SD= 5.2). Data on the Indonesian_students (N=140) were collected at two universities, respectively Jakarta and Bandung. This sample consisted of 50 men and 90 women with a mean age of 24.9 yrs. (SD= 8.0). The Dutch and American samples consisted of students who were with some exceptions of Caucasian ethnicity and the Indonesian students were predominantly of Javanese ethnicity. The language of the IIS version the subjects completed was the primary language for all of them.

Societies.

According to Hofstede (2001) societies and cultures may be differentiated by their ways of coping with inequality (power distance), the relationship with the individual with his or her primary group (Individualism) and the emotional implications of having been born as a boy or a girl (masculinity). Of special interest with respect to the influence of societal values and norms on social anxiety are power distance and individualism. Individualistic societies such as the Netherlands and the USA do score relatively low on the dimension of power distance and high on individualism while a reverse picture is found in the Indonesian scores on these dimensions (see Table 1). There is some evidence that people in collectivistic societies do score higher on social anxiety than those in individualistic societies (Heinrichs et al., 2006). Collectivistic societies are thought to socialize its members to be dependent, loyal and compliant while individualistic societies emphasize independence and autonomy. Masculinity is another dimension of interest with respect to cross-cultural differences in social anxiety that are reported in some studies between men and women. In the study of Hofstede (2001) relatively low scores of masculinity, indicative of a relatively low level of differentiation and discrimination between the gender were found in the Netherlands, while relatively high levels were found in the USA and Indonesia (see Table 1).

Table 1. Cultural dimensions: Hofstede, 2001

	The Netherlands	U.S.A.	Indonesia	
Power Distance	32	40	78	
Individualism	80	91	14	
Masculinity	14	62	50	
Wascumity	14	02	30	

Results

Conceptual structure of the ISS.

To assess the internal consistency of the Anxiety/Discomfort and Frequency scales of the ISS in the three samples Cronbach alpha coefficients were calculated. The following coefficients were obtained with respect to the Anxiety/Discomfort scale and the Frequency scale respectively: .92 and .89 in the Dutch sample, .92 and .90 in the American sample and .93 and .87 in the Indonesian sample. In cross-cultural research aimed at comparing samples, the constructs measured by the original and translated instruments have to be equivalent. Accordingly, it was determined whether the two aspects measured by the three language versions of the IIS meet this requirement across the Dutch, American, Dutch and Indonesian student samples. Item equivalence was assessed by examining how the samples match in their ranking of discomfort and frequency items. The correspondence of item ranking was investigated by computing Spearman rank order correlations between the group mean item ratings (N = 35). A significant between group association of ρ = .83 was revealed for the Discomfort Scale items for the Dutch and American samples, $\rho = .85$ for the Dutch and Indonesian samples and $\rho = .80$ for the American and Indonesian samples. Coefficients of $\rho =$.88 (Dutch-American), ρ = .79 (Dutch-Indonesian) and ρ = .80 (American-Indonesian) were found for the Frequency scale. This means that there was a high correspondence between the samples on responses in interpersonal situations that caused anxiety/discomfort and were performed more or less frequently.

In previous research, the conceptual structure of the ISS was investigated in different populations in the Netherlands, the USA and Turkey (e.g. Van Dam-Baggen, Kraaimaat & Elal, 2003). These studies revealed that the clustering in five social skills of the responses was rather invariant across populations and supported that the five sub-scales of the ISS represented coherent domains of social anxiety in the afore mentioned cultural samples. For the present study, it was investigated whether the established factorial structure with the five sub-scales could also be replicated in the Indonesian sample. The structural equivalence was investigated through confirmative comparison of the structure of the Indonesian sample to the original conceptual structure of the Dutch version of the ISS by means of Simultaneous Components Analysis (SCA; Kiers & Ten Berghe, 1989; Millsap & Meredith, 1988). To determine whether the components have almost the same loadings in the Dutch and the Indonesian samples, Tucker's phi coefficients were computed. For the discomfort as well as

frequency scales these coefficients appeared to be greater than .90, which is indicative that the Indonesian sample fits the structure with five sub-scales found in previous research.

Anxiety/Discomfort and Frequency of assertive responses.

Now that it is clear that the IIS measures similar emotional/cognitive and behavioral components of social anxiety in the three societies, the question arises of whether the level of these components differs in these societies. ANOVAs (p < .05) with the main factors of "group" and "gender" were performed to determine differences in levels of discomfort and frequency of occurrence of responses between the three samples. Differences between groups were examined with Scheffé tests (p < .01). In Table 2, the means of the IIS Anxiety/Discomfort and Frequency scales and the ANOVA F values are given.

Table 2. Means (standard deviations between parentheses) of the IIS Anxiety/Discomfort and Frequency scales for women and men of each sample, as well as F values of the ANOVAs.

	Women		Men						
	Dutch	Am.	Indon.	Dutch	Am.	Indon			
	M	M	M	M	M	M	Fgrou	ıp Fsex	F _{sex.group}
Anx./Disc.	70.3	87.9	85.3	72.1	87.4	75.7	16.6*	0.93	5.0**
	(16.1)	(19.1)	(18.5)	(15.3)	(19.7)	(19.7)			
Frequency	111.9	105.0	108.9	108.8	100.4	102.1	30.6*	22.3*	0.9
	(13.3)	(15.9)	(11.7)	(13.0)	(15.6)	(16.2)			
* p <.05 ††† \underline{F} sex.group		.01 [†] Fgr	oup (2, 1881)	†1	F _{sexe} ((1,1834))		

For the Anxiety/Discomfort scale, a significant main effect was shown for groups (F(2, 1881) = 16.6; p<.05; see also Table 2). Scheffé tests (p < .01) revealed that the American students reported significantly more discomfort than the Dutch and Indonesian students, while the Indonesian students' discomfort surpassed that of the Dutch students. No significant main effect was found based on gender. Finally, there was a significant interaction effect found for groups when comparing the gender factor. Post hoc tests revealed only a significant difference between male and female students in the Indonesian sample (t=2.85; p < .01).

For the Frequency scale, a significant main effect was evident for groups (F (2, 1881) = 30.6). The Dutch students reported a higher frequency than the American and Indonesian students, while the latter groups did not differ in this respect. A significant main effect was found based on gender. Male students reported a higher frequency than female students. Finally, there was no significant interaction effect established for groups when comparing the

gender factor.

the difference (< or >)

Previous research demonstrated a moderate to high negative correlation between the level of Discomfort and the Frequency of responses on the ISS in various Dutch samples (Van Dam-Baggen & Kraaimaat, 1999). Similar results were obtained in Dutch and American samples (r = -.45 and r = -.55, respectively; p < .01), but a relatively low correlation was found between both aspects in the Indonesian sample (r = -.26; p < .01).

Social response classes.

With respect to five social response classes or skills reflected by the sub-scales of the IIS, differences between groups were explored by one-way analyses of variance followed by Scheffé tests (p <. 01). The results of the one-way analyses of variance and the Scheffé tests are given in Table 3.

The scores of all Anxiety/Discomfort sub-scales showed a significant main effect for groups. Scheffé tests revealed that the Dutch students showed relatively lower social anxiety than the American students on all sub-scales. On Criticism and Positive Self-evaluation, the Dutch students did not differ from the Indonesian students. While the Dutch students showed lower social anxiety than the Indonesian students on Opinion, Compliments and Initiating Contacts. Furthermore, the American students showed relatively higher social anxiety than the Indonesian students on Criticism and Positive Self-evaluation (see Figure 1 for a profile of the three groups in the 5 domains of social anxiety)

All scores on the Frequency sub-scales showed a significant main effect for groups (see Table 3). Scheffé tests revealed that the Dutch students showed relatively higher response frequency than the American students on the sub-scales of Criticism, Opinion, Compliments and Initiating Contacts. The Dutch students showed relatively higher response frequency than the Indonesian students on Opinion and Compliments and lower frequency on Positive Selfevaluation. On Criticism, Initiating Contacts and Positive Self-evaluation, the Indonesian students surpassed the American students (see Figure 2 for a profile of the three groups in the 5 domains of response frequency).

Table 3. F values of the one-way analyses for the sub-scales of Discomfort and Frequency, as well as the differences identified by Scheffé (p< .01) between the groups, including the direction of

the difference (< of >)				
	F(2, 970)	D-A [†]	D-I [†]	A-I [†]
Anxiety/Discomfort				
Criticism	43.5**	<	ns	>
Opinion	63.7**	<	<	ns
Compliments	37.9**	<	<	ns
Initiating contact	35.2**	<	<	ns
Pos. self-evaluations	62.4**	<	ns	>

Continuation of Table 3.

†	F(2, 970)	D-A [†]	D-I [†]	A-I
Frequency				
Criticism	20.2**	>	ns	<
Opinion	25.1**	>	>	ns
Compliments	27.1**	>	>	ns
Initiating contact	18.9**	>	ns	<
Pos. self-evaluations	13.1**	ns	<	<

^{**}p<.01 † D-A: Dutch-American; D-I: Dutch-Indonesian; A-I: American-Indonesian;

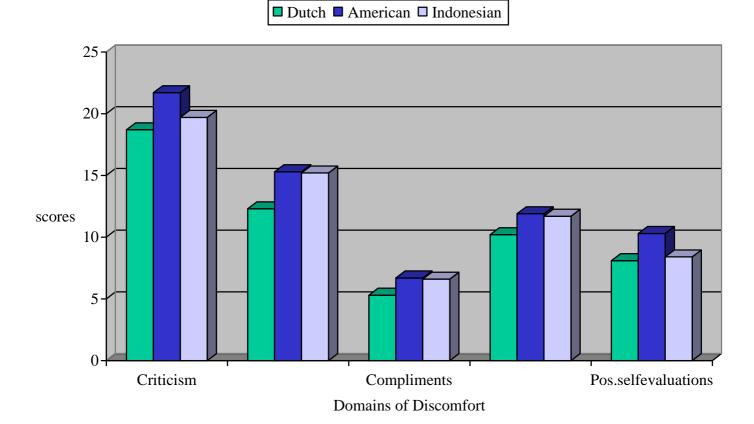


Figure 1. The scores of the 5 sub-scales of Anxiety/Discomfort for the Dutch, American and Indonesian students.

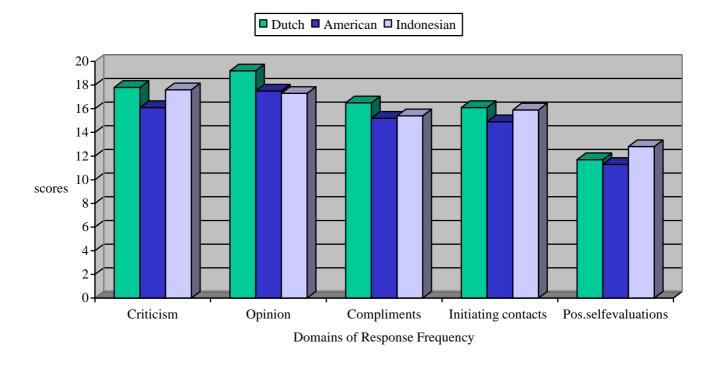


Figure 2. The scores of the 5 sub-scales of Frequency for the Dutch, American and Indonesian students.

Discussion and Conclusions

The present study examined cross-cultural differences in social anxiety between student samples from two Western societies (the Netherlands and the U.S.A.) and Indonesia. The Inventory of Interpersonal Situations (IIS) was used to measure two components of social anxiety, i.e. the emotional/cognitive component with the Anxiety/Discomfort scale (level of anxiety/discomfort in social situations) and the behavioral component with the Frequency scale (frequency of occurrence of social responses). Using the method of translation / back translation, the original Dutch inventory (Inventarisatielijst Omgaan met Anderen: IOA) was translated into U.S. English (Inventory of Interpersonal Situations: ISS) and Bahasa Indonesia (Survai Hubungan Antar Pribadi: SHAP).

To control for the equivalence of the original Dutch and the American and Indonesian versions of the IIS, psychometric characteristics of the Anxiety/Discomfort and Frequency scales were compared. The internal consistency of the Anxiety/Discomfort and Frequency scales was found to be high in all three samples. In addition, both the emotional/cognitive and the behavioral frequency components of social anxiety appeared to be equivalent. In addition, the 5 empirically derived subscales of the original ISS seemed to be coherent domains of social anxiety in the three samples. It could be concluded that the same constructs are measured by the Dutch, American, and Indonesian versions of the IIS.

Comparison of the emotional/cognitive component of social anxiety in the three samples revealed that Dutch students reported a lower level of anxiety/discomfort than American and Indonesian students. In addition, American students reported in social situations a higher level of anxiety/discomfort than Indonesian students. Our findings with respect to the emotional/cognitive component that American students report more social anxiety than their counterparts in other societies are in line with literature (Carmona & Lorr, 1992; Kleinknecht et al., 1997; Thompson & Klopf, 1995; Van Dam-Baggen et al., 2003). However, these findings contradict the general assumption and findings of the Heinrich et al. study (2006) that relatively low levels of social anxiety are to be expected in individualistic societies that emphasize independency and autonomy in comparison to collectivistic societies that socializes its members to be dependent, loyal and compliant. A possible explanation for these divergent results might be differences between the collectivistic societies in our study and those of Heinrichs et al. (2006), namely Indonesia and societies of Japan, Korea and Spain. Next to similar scores on the individualism-collectivism dimension, the extent to which a collectivistic society has explicit norms and sanctions for violating them might also at stake (see also Triandis, 2004).

Exploration of a statistically significant gender by group interaction revealed relatively higher anxiety/discomfort scores in the Indonesian sample of female students than in those of the male students. Cross-cultural studies do point to the role of gender in cultural differences (e.g. Florian & Zernitsky-Shurka, 1987; Mansour et al., 1987). Closer inspection of their and our findings reveals that the contribution of gender might be attributable to the different values and orientations of men and women in collectivistic versus individualistic societies. Specifically, the relatively high scores of the Indonesian culture on Power Distance and Masculinity may have contributed to the higher levels of social anxiety in the Indonesian female students.

With respect to the behavioral component of social anxiety, the Dutch students reported a higher level of response frequency than American and Indonesian students, while American and Indonesian students did not differ in this regard. In addition, across all groups of students female students reported somewhat higher response frequencies than the male students. In Western societies high levels of Anxiety/Discomfort are within subjects generally highly associated with low levels of Frequency of social responses (e.g. Van Dam-Baggen & Kraaimaat, 1999). This was also the case within the present Dutch and American samples, while this relationship was rather low to moderate within the Indonesian subjects. This rather low association of discomfort and social responses is in contrast with theoretical models of social anxiety and warrants further research in the Indonesian population.

Societal differences were revealed with respect to the 5 domains of social anxiety. Main effects were found for all sub-scales of Discomfort as well as sub-scales of Frequency of occurrence. For the emotional/cognitive component of social anxiety, it was revealed that the Dutch students have relatively lower level of anxiety/discomfort when expressing opinions (e.g. 'Expressing an opinion that differs from that of the person with whom you are talking'), giving compliments (e.g. 'Complimenting someone for a job well done') and initiating contacts (e.g. 'Initiating a conversation with an attractive male or female') than both other groups. Next, Dutch and Indonesian students did not show differences in expressing criticism (e.g. 'Telling a friend that he/she is doing something that bothers you') and positive self-

evaluations (e.g. 'Telling someone that you are pleased with something you did'). American students reported higher levels of social anxiety/discomfort when expressing criticism and positive self-evaluations than the Indonesian students.

With respect to the 5 domains of the behavioral component of social anxiety, it emerged that the Dutch students show a relatively higher response frequency in giving opinion and compliments than both other groups. While they showed no differences in response frequency on positive self-evaluations with the American students also no differences were revealed in frequency with respect to expressing criticism and initiating contacts with the Indonesian students. The Indonesian students demonstrated a relatively higher frequency in expressing criticism, initiating contacts and positive self-evaluation than the American students. Generally speaking with respect to the subscales the differences between Dutch students and American students were more pronounced than those between American and Indonesian students. It might be hypothesized that the above differences in domains of social anxiety between the societies reflect the different cultural and religious orientations of the three samples, i.e. a more conservative Judeo-Christian orientation for the American, a more moderate Judeo-Christean and secular orientation for the Dutch versus a predominantly Muslim orientation for the Indonesian students. In addition, differences between these societies as reflected by the cultural dimensions of Power Distance, Individualism and Masculinity may have contributed to these findings. For instance, the relatively low scores on Power Distance and high scores on Individualism of the Dutch society may have contributed to the relatively low Anxiety/Discomfort and high Frequency scores of the Dutch students. Similarly, differences in Anxiety/Discomfort between male and female Indonesian students might be explained by the relatively high scores of the Indonesian society on Power Distance and Masculinity.

What do the results of this study mean for cross-cultural research and clinical practice? First of all, the generalizability of the construct of social anxiety across Western and Indonesian societies was established, i.e. social anxiety means much the same thing in these societies in terms of the scales used to measure it here. This finding supports the use of similar assessment instruments. On the other hand, the fact that the level of both components of social anxiety differs in these societies demonstrates that it is necessary to develop separate standards for measures of social anxiety for different cultural societies. In addition, the relatively high association of Discomfort and Frequency of social responses may be characteristic for Western and Individualistic societies. Since discomfort and social responses (i.e. social skills) are integral parts of cognitive behavioral treatments, the question arises of the applicability of these treatments in non-Western and Collectivistic societies.

The strengths of the present study are the homogeneity of the samples due to the use of students, and the fact that each sample consists of a broad range of students from throughout the countries. The use of student samples, however, poses some limitations for the generalization of the results because these cannot simply be generalized to other samples in the same country, such as the general population or socially anxious patients. Another limitation is that compared to the large Dutch and American samples the Indonesian sample was relatively small.

The role of other factors such as religion and race is often not clear in explaining cultural differences. We suggest taking these factors into account as much as possible in further cross-cultural research.

One of the strengths of the present study was also that the IIS was translated into the

primary language of the participants. The contribution of language to cross-cultural differences in emotions is undeniably revealed. This means that recommendations for the adequate use of translated measures are not only relevant to cross-cultural research, but also to clinical practice: translated measures should only be used in clinical assessment when validity, reliability and norms have been established for a specific sample in a specific country.

Finally, because of the explorative character of this study, a priori predictions could not be made about cultural differences.

Acknowledgments

We are grateful to Ton de Bruin, Jim Caulfield, Carmen Leung, Martine Vanryckeghem, Brenda Townes, Indry Wardhani and Andrew Williams for help in collecting data.

References

Argyle, M., & Henderson, M. (1985). *The anatomy of relationships and the rules and skills to manage them successfully.* Harmondsworth, England: Penguin Books..

Beidel, D.C., Turner, S.M. & Dancu, C.V. (1985). Physiological, cognitive and behavioral aspects of social anxiety. *Behaviour Research and Therapy*, 23, 109-117.

Carmona, A.E. & Lorr, M. (1992). Dimensions of assertiveness: a cross-cultural comparison of Chilean and U.S. subjects. *Personality and Individual Differences*, 13, 45-48.

Florian, V., & Zernitsky-Shurka, E. (1987). The effect of culture and gender on self-reported assertive behavior. *International Journal of Psychology*, 22, 83-95.

Fukuyama, M.A., & Greenfield, T.K. (1983). Dimensions of assertiveness in an Asian-American student population. *Journal of Counseling Psychology*, 30, 429-432.

Geisinger, K.F. (1994). Cross-cultural normative assessment: translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment*, 6, 304-312.

Heinrichs, N., Rapee, R.M., Alden, L.A., Bögels, S., Hofman, S.G., Oh, K.J. & Sakano, Y (2006). Cultural differences in perceived social norms and social anxiety. *Behaviour Research and Therapy*, 44, 1187-1197.

Hofstede, G. (2001). *Culture's Consequences: Comparing values, behaviors, institutions and organizations across nations*. Beverly Hills, C.A.: Sage Publications.

Kiers, H.A.L. & Ten Berge, J.M.F. (1989). Alternating least squares algorithms for simultaneous components analysis with equal component weight matrices in two or more populations. *Psychometrika*, 54, 467-473.

Kleinknecht, R.A., Dinnel, D.L., Kleinknecht, E.E., Hiruma, N., & Harada, N. (1997). Cultural factors in social anxiety: A comparison of social phobia symptoms and taijin kyofusho. *Journal of Anxiety Disorders*, 11, 157-177.

Leung, K & Van de Vijver, F. (2008). Strategies for strengthening causal inferences in cross-cultural research: the consilience approach. *International Journal of Cross Cultural Management*, 8, 2, 145-169.

Mansour, G., Zernitsky-Shurka, E., & Florian, V. (1987). Self-reported assertion of males with and without a physical disability: a cross-cultural study. *International Journal of Rehabilitation Research*, 10, 167-174.

Mesquita, B., & Frijda, N.H. (1992). Cultural variations in emotions: a review. Psychological Bulletin, 112, 179-204.

Mesquita, B., Frijda, N.H., & Scherer, K.P. (1997). Culture and emotion. In: J.W. Berry, P.R. Dasen & T.S. Saraswathi, *Handbook of Cross-cultural Psychology, volume 2. Basic processes and human development.* Boston: Allyn & Bacon.

Millsap, R.E. & Meredith, W. (1988). Components analysis in cross-sectional and longitudinal data. *Psychometrika*, 53, 123-134.

Pepitone, A., & Triandis, H.C. (1987). On the universality of social psychological theories. *Journal of Cross-cultural Psychology*, 18, 471-498.

Poortinga, Y.H. (1989). Equivalence of cross-cultural data: an overview of basic issues. *International Journal of Psychology*, 24, 737-756.

Sue, D., Sue, D.M., & Ino, S. (1990). Assertiveness and social anxiety in Chinese-American women. *Journal of Psychology*, 124, 155-163.

Thompson, C.A., & Klopf, D.W. (1995). Social style among North American, Finnish, Japanese and Korean university students. *Psychological Reports*, 77, 60-62.

Triandis, H.C. (2004). Culture and social behavior. Boston: McGraw-Hill.

Van Dam-Baggen, C.M.J., & Kraaimaat, F.W. (1987). *Handleiding bij de Inventarisatielijst Omgaan met Anderen, de IOA [Manual of the Inventory of Interpersonal Situations: IIS]*. Lisse: Swets & Zeitlinger (present Pearson).

Van Dam-Baggen, R., & Kraaimaat, F. (1999). Assessing social anxiety: The Inventory of Interpersonal Situations (IIS). *European Journal of Psychological Assessment*, 15, 25-38.

Van Dam-Baggen, C.M.J., & Kraaimaat, F.W. (2000). *Inventarisatielijst Omgaan met Anderen (IOA). Handleiding (2e geheel herziene druk) [Inventory of Interpersonal Situations (IIS) Manual* (completely revised 2nd edition)]. Lisse: Swets & Zeitlinger (present Pearson).

Van Dam-Baggen, R., Kraaimaat, F. & Elal, G. (2003). Social anxiety in three Western societies. *Journal of Clinical Psychology*, 59, 673-686.

Van Dam-Baggen, R., Van Heck, G.L., & Kraaimaat, F. (1992). Consistency of social anxiety in psychiatric patients: properties of persons, situations, response classes, and types of data. *Anxiety, Stress and Coping*, 5, 285-300.

Wilson, K., & Gallois, C. (1993). Assertion & its social context. Oxford, England: Pergamon Press.

Zane, N.W.S., Sue, S., Li-tze Hu, S.S., & Kwon, J.H. (1991). Asian-American assertion: A social learning analysis of cultural differences. *Journal of Counseling Psychology*, 38, 63-70.

Appendix

Items in the Inventory of Interpersonal Situations

- 1. Joining a conversation in a small group of people.
- 2. Telling a friend that he/she is doing something that bothers you.
- 3. Resisting pressure to accept an offer (e.g. at door, in the street).
- 4. Accepting a compliment for something you did.
- 5. Asking a friend to help you with something.
- 6. Requesting the return of something you have lent to someone.
- 7. Turning down a request to lend someone money.
- 8. Refusing a request from an authority figure (e.g. employer, superior, teacher).
- 9. Telling someone that you are pleased with what he/she did for you.
- 10. Asking someone to stop bothering you in a public place (theatre, subway).
- 11. Keeping eye contact during a conversation.
- 12. Asking for information (at a window or booth).
- 13. Initiating a conversation with an attractive male or female.

- 14. Expressing an opinion that differs from that of the person with whom you are talking.
- 15. Initiating a conversation with a stranger.
- 16. Expressing an opinion that differs from that of those around you.
- 17. Complimenting someone for a job well done.
- 18. Returning a defective item (e.g. in a store or restaurant).
- 19. Asking for a further explanation of something you did not understand.
- 20. Expressing your opinion in a conversation with a group of unfamiliar people.
- 21. Telling someone that he/she has offended you.
- 22. Refusing a request from a person you like.
- 23. Expressing your appreciation for a present.
- 24. Telling someone that he/she is good looking.
- 25. Discussing why someone seems to avoid you.
- 26. Telling someone that you like it that he or she appreciates you.
- 27. Agreeing with a compliment about your looks.
- 28. Telling someone that you are pleased with something you did.
- 29. Introducing yourself to someone.
- 30. Expressing your opinion of life.
- 31. Telling someone you no longer want to see him/her.
- 32. Insisting that someone contributes his/her share.
- 33. Telling someone that the way he/she is talking disturbs you.
- 34. Expressing your opinion to an authority figure (e.g. employer, superior, teacher).
- 35. Asking a friend to go out with you.