Patterns of Shyness in East-Asian and European Heritage students

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Abstract

Reviews of the self-report literature suggest that shyness is more prevalent among East Asians than among those of European heritage (e.g., Zimbardo, 1977). We evaluated the generality of that claim in North American immigrants using four studies of students of Asian-heritage (AH) and European-heritage (EH). In Study 1, a large student sample ($N = 897$) revealed a substantially higher rate of self-reported shyness among AH students (68%) than among EH students (44%). In Study 2 ($N = 285$), the ethnic difference in self-reported shyness was substantially higher for classroom than for social situations. The most commonly-reported reason for classroom non-participation was “fear of being wrong” for AHs and “fear of being judged” for EHs. In Study 3 ($N = 188$), the ethnic difference was strong for cross-group socializing but nil for same-group socializing. In Study 4, a behavioral index -- classroom participation -- was recorded and coded. The observed ethnic difference in participation rate had a medium effect size and was comparable to that observed on the self-report differences in classroom shyness. There was no ethnic difference, however, in the mean complexity and challengingness of the classroom participations or in final course grades. We conclude that the ethnic difference is minimal for within-group socializing but maximal for classroom participation because the latter combines several key precipitating factors for Asian shyness.

In his early review of international shyness surveys, Zimbardo (1977) reported that the overall prevalence of self-reported shyness was higher in most Asian samples (roughly 60%) than in Western samples (roughly 40%). Similar ethnic differences have emerged in more recent reviews of shyness and related constructs such as social anxiety, introversion, communication anxiety and low-assertiveness¹ (e.g., Eysenck & Eysenck, 1982; Lee, McCauley, & Draguns, 1999; Zane, Sue, Hu, & Kwan, 1991) but not depression (Okazaki, 1997). Recent large-scale immigration to Australia and North America has not only raised the importance of this ethnic difference but also facilitated within-country comparisons of Asian-heritage (AH)² and European-heritage (EH) samples. The numbers at our own institution – roughly equal numbers of AH and EH students – place us in a good position to investigate in detail the size and specificity of the reported cultural difference.

Which mode of measurement? Establishment of a cultural difference in shyness is especially tricky because shyness is not always consistent across modes of measurement (e.g., Alden & Cappe, 1981; Cheek & Watson, 1989; Sue, Ino, & Sue, 1983). Judgments of informed observers (e.g., peer ratings) are often used as the ultimate criterion for confirming the reality of individual differences in personality (e.g., Costa & McCrae, 1989). In the comparison of ethnic groups, however, mean differences found on observer

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¹ The term shyness is often used interchangeably with these other constructs -- particularly within normal populations. Empirically, the standard measures of the constructs overlap to the degree that the constructs are virtually indistinguishable (Leary, 1991).

² For simplicity we will use the abbreviation AH to refer to East Asian heritage (i.e., Chinese, Japanese, Korean, Phillipino, etc.). Our samples were not large enough to study South Asians (i.e., Indian, Pakistani, etc.).

ratings might be explained away as ethnic stereotypes (Lee, McCauley, & Draguns, 1999). Even self-ratings are not invulnerable to ethnic stereotyping: They can distort memory of actual events and behaviors (Smith & Bond, 1999). Objective measures of behavior, although difficult to obtain, are typically considered the ideal mode of measurement for distinguishing accurate from inaccurate stereotypes (Funder, 1987; Lee et al., 1999). Unfortunately, the extant behavioral evidence for AH-EH differences in shyness is skimpy and unclear (see Zane et al., 1991). We hope to resolve that issue with a rigorous behavioral study.

Which situations? Elucidation of ethnic differences might be furthered by identifying context changes that magnify or reduce the differences. Some potential moderators have turned out to be unproductive. For example, AH-EH differences observed in interview situations are of the same magnitude as differences obtained with self-report questionnaires (Okazaki, 2000). Moreover, AH raters do not disagree with EH raters about the ethnic difference in shyness (Bond, 1986).

Nonetheless, there is evidence that the AH-EH shyness differential is influenced by context. Zane and his colleagues have contributed substantially to this literature (e.g., Zane et al., 1991). Their conclusion was that the shyness differential is maximized in interactions with strangers (including professors and service workers). We plan to pursue the differentiation of situations.

Methodological Control. Many cross-cultural studies suffer from a variety of confounds that accompany the variable of interest, that is, the cultural heritage of the respondents (Matsumoto, 1995; Smith & Bond, 1999). For example, a comparison of students from, say, Mississippi State University and the University of Hong Kong may

inadvertently introduce differences in (a) the selectivity of the students, (b) the political orientation of the students, (c) the cultural background of the test administrators and (d) the language of questionnaire administration. With few exceptions (e.g., Church & Katigbak, 1989; McCrae, Yik, Trapnell, Bond, & Paulhus, 1998), researchers have not gone to the trouble of unraveling such confounds.

The current student body at the University of British Columbia represents an ideal population for such research given that: (a) the two ethnic groups are represented in large numbers in the university, (b) both groups speak English at university-level proficiency and receive comparable grades. Thus students of varying heritage can be tested under comparable conditions. Moreover, the AH group includes students with varying levels of acculturation. Thus acculturation effects on shyness can be examined.

Present studies. We conducted four studies to investigate the prevalence and situational specificity of shyness among undergraduate students of Asian-heritage (AH) and European-heritage (EH). Study 1 was a comparison of rates of self-reported shyness across differing levels of acculturation. Study 2 compared shyness rates in social and classroom situations. Study 3 evaluated effects of same-heritage and cross-heritage audiences. Study 4 measured actual behavior in classroom situations.

STUDY 1

Study 1 was designed to compare the overall prevalence of self-reported shyness in European heritage (EH) and Asian heritage (AH) students. Based on the above literature review, we predicted a higher rate of shyness in AH students than in EH students. The impact of acculturation was also assessed by comparing three groups who varied in

degree of contact with Western countries. We predicted that shyness rates would decrease with acculturation for both AH and EH students.

Method. Ten classroom samples in lower-level psychology courses totaled 897 students (376 East Asian, 401 European, and 120 other). They were asked to categorize themselves as either “shy” or “nonshy”. They were also asked: “If you are shy, does it cause you serious problems in everyday life?” Finally, they were asked to describe their ethnic background and indicate how many generations their family had been in North America.

The free descriptions of ethnic background were coded as follows: European heritage (45 percent) included only Europe proper and Turkey. East-Asian heritage (42 percent) included students from Hong Kong (33 percent), Japan (3), Taiwan (2), mainland China (1), Viet Nam (1) and miscellaneous East Asian (2). The Other category (14 percent) included South Asian heritage (10 percent), Middle Eastern (3), and Latin American (1), and African (1). Because they are our primary concern here, we will use the category AH to refer only to East Asian heritage. (Technically, of course, the term “Asian” also applies to South Asia and the Middle East as well as the former Soviet Republics and Siberia.) Respondents who said ‘Canadian’, ‘American’, or ‘Australian’ were categorized by the apparent ethnicity of their last name. The reliability of this coding system was evaluated by having a second rater code the ethnicity of a subsample of 50 students. The agreement was 100 percent.

Results and Discussion. Note from Table 1 that approximately 68% of the Asian-heritage students (70% of males; 67% of females) reported being shy, compared with only 44% of European heritage students (45% of males; 43% of females). Supporting

our first hypothesis, this ethnic difference was significant, $\chi^2 = 27.5$, $p < .01$.

Following Rosenthal and Rosnow (1991), the effect size (Cohen's $h = .49$) is considered 'medium' (p.44).

Among those who reported being shy, the rate claiming that it was a serious problem (46 percent) did not differ between ethnic groups: The rate was 47 percent and 45 percent, respectively, for EH and AH students (χ^2 n.s.). This comparability argues against the possibility that AH heritage students simply have a more liberal criterion for defining people as shy.

Shyness rates by acculturation level are reported in Table 1. High acculturation students were defined as those born and raised in a Western country. Moderate acculturation students were born elsewhere but spent at least ten years in a Western country. Low acculturation students have been in the West less than ten years.

Our prediction regarding the effects of acculturation was only partly supported. The rate of AH shyness declined with acculturation ($\chi^2 = 16.0$, $p < .01$) whereas the rate of EH shyness did not change significantly ($\chi^2 = \text{n.s.}$). Finally, the shyness rate among AHs remained higher than that among EHs even among those born and raised in North America ($\chi^2 = 7.65$, $p < .05$).

STUDY 2

To examine contextual factors, we began with possible differences between scholastic and social situations. Previous surveys have suggested that classroom participation may create a special problem for Asian students (e.g., Liberman, 1994). In contrast, interactions with friends appear to raise fewer assertiveness issues for Asian

students (Zane et al., 1991). Accordingly, in Study 2, we asked students about their shyness in classroom situations and in social situations. If they did report shyness, they were also asked to explain what made them shy.

Method. Participants were asked to indicate whether or not they were shy “in social situations” and “in classroom situations”, and then to provide the most important reason for reporting shyness in either situation. They were advised that they could use the same reason for both situations if that was appropriate. Determination of ethnic heritage was necessarily indirect because we had not asked students directly. Out of a total of 309 participants from an undergraduate psychology class, 151 had unambiguous European names, and 134 had unambiguous Asian names (see Dion & Yee, 1987).

Frequencies of shyness in both social and classroom situations were calculated separately for Asian and European heritage groups. Reasons given for shyness were then coded and compiled into ad hoc categories.

Results. Overall, 91% of the Asian heritage students reported being shy in classroom situations compared with only 51% of European heritage students, chi-square (1) = 54.0, significant at $p < .01$. For social situations, this difference (43% vs. 47%) was not significant, chi-square (1) = 0.40. In short, the ethnic differential appeared only in classroom situations.

To pinpoint reasons for the shyness differential in classroom situations, we counted the reasons separately for the two groups. Table 2 reports the top reasons broken down by seven categories. In general, the reasons showed similar rates across ethnicity. The largest difference occurred for the category *fear of being wrong* (30 vs. 5 percent), chi-square (1) = 5.09, $p < .05$.

STUDY 3: AUDIENCE EFFECTS IN SOCIAL SHYNESS

One surprising finding from Study 2 was that there was no ethnic differential self-report shyness in social situations. This non-effect seems to fly in the face of the many demonstrations of an AH-EH shyness differential in self-reports (e.g., Dion & Yee, 1987; Eysenck, & Eysenck, 1980; Furnham & Cheng, 1999; Fukuyama & Greenfield, 1983; Iwawaki, Johnson & Marsella, 1978; Loo & Shiomi, 1982; Lynn & Thompson, 1975; Magnusson et al., 1983; McCrae et al., 1998; Sofue, 1979; Stevens, Kwan, & Graybill, 1993; Thompson, Ishii, & Klopf, 1990; Thompson, Klopf, & Ishii, 1991; Windle et al., 1987; Zhang et al., 1999). Surely, the questions posed in those studies were not all interpreted as referring to classroom shyness.

We considered two possible explanations for our finding. First, it is likely that both groups were thinking of own-ethnicity socializing when they answered the question about social situations³. AH students may not perceive themselves as especially shy in interacting with other AH individuals. Without a salient anchor, the notion of ethnicity differences in shyness may lose its meaning in within-ethnicity contexts. People tend to affiliate with those who make them feel comfortable: Hence, the construct of shyness is difficult to evaluate by asking people about their behavior with close friends (e.g., Zimbardo, 1977). Accordingly, in Study 3, we asked students about their shyness in both within-ethnicity and between-ethnicity contexts.

A second potential explanation follows from the finding that Asians suffer more from low assertiveness when interacting with strangers than with intimates (Zane et al.,

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³ In answering the classroom question in the Vancouver area, they would be unlikely to think of an own-ethnicity scenario.

1991). The AH students in that study may have been thinking of Westerners when asked about strangers and other Asians when asked about intimates.

The third potential explanation for the relatively low Asian shyness rate in social situations is a contrast effect: Because almost every AH student claimed shyness on the classroom question, they felt comparatively less shy on the adjacent question about social situations. By restricting our questions to social shyness in Study 3, we ruled out that possible contrast effect.

Method. A total of 188 students (90 EH and 98 AH) were asked two questions about their shyness in social situations. They were asked to rate on 6-point scales how shy they were when socializing with (a) Asian-heritage students and (b) European-heritage students. Both scales were anchored by not at all (1) and very much (6).

Results. The mean shyness self-ratings were significantly higher in AH students ($M = 4.06$) than in EH students ($M = 3.42$), $t(186) = 11.45$, $p < .01$. In addition, the shyness self-ratings were significantly higher in the cross ethnicity situation ($M = 3.95$) than in the same-ethnicity situation ($M = 3.53$), $t(186) = 4.46$, $p < .01$. The substantial correlation between shyness in the two situations ($r = .46$, $p < .01$) indicates some degree of cross-situational consistency in shyness.

For ease of presentation and comparison with Studies 1-2, the 6-point responses were dichotomized: Ratings of 1-3 were coded as ‘nonshy’ and ratings of 4-6 were categorized as ‘shy’.

Note from Table 3 that the reported shyness rates among EHs and AHs were similar when socializing within-ethnicity. Moreover, these values are comparable to the values obtained in Studies 1 and 2. The only cell that stands out is the high rate of reported

shyness by AH students when socializing with EH students (78 percent). Thus the ethnic differential is minimal when socializing with AH students, $\chi^2 = 0.67$, n.s., but large when socializing with EH students, $\chi^2 = 27.7$, $p < .01$. A more powerful test of this interaction was performed by conducting a mixed 2×2 ANOVA with ethnicity (EH, AH) as the between-subjects factor and audience-match (same ethnicity, different ethnicity) as the within-subjects factor. Shyness self-ratings were used as the dependent variable. As expected, effects were significant for ethnicity, $F(1, 186) = 11.48$, $p < .001$, audience match, $F(1, 186) = 14.01$, $p < .01$, and their interaction, $F(1, 186) = 12.51$, $p < .01$.

These results clarify the phenomenon of Asian shyness in social situations by distinguishing between same- and mixed ethnicity interactions. Although same-ethnicity situations showed no difference, mixed ethnicity situations revealed substantially higher shyness ratings in AH than EH students. The observed pattern supports our speculation that the relatively low rates of AH social shyness reported in Study 2 resulted from their interpreting the question as referring to own-ethnicity socializing.

STUDY 4

Needless to say, self-reports are not always substantiated by alternative modes of measurement. Unfortunately, virtually all AH-EH comparison studies are based solely on self-reports. Confidence in those studies is bolstered by research showing that cultural differences in self-report shyness tend to be corroborated by interview data (Morishima, 1981; Okazaki, 2000), by occupational choice (Harrison, Harrison, & Park, 1999) and by epidemiological measures (Lynn & Hampson, 1975). Direct measurement of relevant

behaviors, however, is rare. Interestingly, the only two known studies – both by Sue and colleagues -- found no behavioral differences in laboratory simulations of shyness situations (Sue, Ino, & Sue, 1983; Sue, Sue, & Ino, 1990). It has been noted, however, that those simulation studies may not represent real-world behavior where authoritative instructions are seldom available (Zane et al., 1991).

On the other hand, some commentators have argued that shyness could be conceived as an inherently phenomenological variable, that is, a subjective experience best measured by self-report (e.g., Cheek & Watson, 1989). But in a comparison across cultures, how can we substantiate such a difference? To rule out the effects of irrelevant ethnic differences in questionnaire translation, including scalar, and structural differences, a complex series of studies is required (McCrae et al., 1998). Moreover, there is some evidence for differences in questionnaire response styles between Asian and European-heritage respondents (Chen, Lee, & Stevenson, 1995; Iwawaki et al., 1969; but see Grimm & Church, 1999). Such method artifacts can be ruled out by collecting cross-method convergent evidence, particularly with concrete measures of behavior.

For all these reasons, we saw a stark need for an ethnic comparison that involved direct assessment of behavior. At the same time, we wanted to avoid the ambiguity of previous simulation studies. Based on the literature reviewed above, including Studies 1-3, we concluded that the ideal context for demonstrating a behavioral difference was in the classroom. To this end, we collected a large sample of unobtrusive data on ethnic differences in classroom participation. We operationalized participation by the number of comments and/or questions that students posed during classroom lectures. Finally, we collected class grades to determine whether participation rates affected grades.

Method

A total of 13 undergraduate students (6 European-heritage; 7 Asian-heritage) participated as observer-reporters for course credit. To minimize the influence of ethnic stereotypes, the reporters were told that they were participating in a study of gender differences in classroom behavior. Their task was to write down all student participations (i.e., public questions, answers, and opinions) as well as gender and ethnicity of the student.

Nine of the reporters were assigned to report on four of their courses for 3 lectures each. Thus each of these nine reporters recorded verbatim every word of class participation in 12 lectures (about 50 min each) for a total coverage of 36 different courses.

Each of the four other reporters covered 10 lectures in a single course. They were paired up so that each pair covered the same lectures. Altogether, these four judges added information on only two courses, but the pairing of reporters permitted the calculation of inter-rater reliabilities for several key variables (see below).

In sum, our 13 reporters provided class participation data on a total of 38 distinct college courses including 128 distinct lectures. The 38 courses covered a wide range of departments and topics: Psychology (5), English (4), Foreign Languages (4), Math (3), History (3), Philosophy (3), Business (3), Physical Education (2), Geography (2), Engineering (2), Anthropology (2), Chemistry (1), Fine Arts (1), and Nursing (1). In short, we had wide representation of university classrooms. The total number of students registered in these courses was 1619, that is, 1471 EH and AH students plus 148 others.

Analyses and Results

The total number of recorded participations was 444 (394 unique) in 128 lectures. To simplify the calculations and presentation, the primary analyses below included only three lectures per course.⁴ This simplification reduced the total number of participations to 250 across 114 lectures. With attendance rate taken into consideration (see below), these values translate into a mean of 2.19 participations per lecture and 0.10 per lecture for every student.

Analyses by gender. We found no consistent or sizable main effects or interactions for student-gender or reporter-gender. Nor were there any significant interactions between gender and ethnicity. Therefore, we combined all results across gender.

Estimates of attendance and ethnicity ratio. The proportions of AH and EH students in each class were evaluated in two ways. First, the proportions were estimated by the names on the 38 class lists. Second, one of the authors (J.H.D) evaluated the ethnicity proportions in all 38 courses by actual counts made as the students exited the classroom. Every attending student was counted as AH, EH, or other. Unlike the list method, the exit poll method avoids a potential ethnic bias in actual class attendance.

The two estimates of the AH-EH ratios correlated .95 across classes suggesting that either method yielded an accurate estimate of the ratio. The convergence with registration data supports the validity of the exit poll counts. These counts also provided our estimate of typical class attendance rates – roughly 82 percent of initially registered students.

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⁴ To match the other 9 reporters, we used only 3 lectures reported by each of the two reporter-pairs who had reported on 10 lectures from one class. Thus we removed a total of 14 lectures. However, all 20 were retained for calculating the reliabilities.

Rates of class participation by ethnicity. In the total of 114 lectures, the number of recorded participations was 76 by AHs and 161 by EHs⁵. Based on our attendance estimates, there were 367 AHs and 391 EHs in those classes. Thus the overall rate of participation was .21 and .41 for AHs and EHs, respectively. This difference translates into a moderate effect size: Cohen's $h = .44$ (Rosenthal & Rosnow, 1991, p.444).

Analyses by Reporter. To evaluate reporter reliabilities, we reviewed the transcripts submitted by the two pairs of overlapping reporters. The overlapping and non-overlapping participations in each pair of transcripts were compared. Overall, the agreement that a participation actually occurred was 88 percent (34 of 39 participations) in one pair of reporters and 95 percent (14 of 15 participations) in the other.

The estimate of AH-participation rate by AH reporters was .32 whereas the same estimate by EH reporters was .28. This difference was not significant. Therefore, there was no evidence of bias ensuing from ethnicity of reporter. Among the overlapping participations, the agreement on judged ethnicity of the participator was 91 percent for one pair of reporters and 100 percent for the other pair.

Analyses by class. We correlated the proportion of AHs in each of the 38 classes with the percent of participations made by AHs. Our failure to find a significant correlation ($r(37) = .13$, n.s.) suggests that the relative presence of other AH students did not influence the rate of AH participation.

We suspected that the ethnic differential might be higher in classes where language is emphasized, that is, arts and education than in non-language courses (engineering, science, commerce). The rate of AH participation in the language-oriented courses (.06)

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⁵ Another 29 participations came from 72 students of other ethnicities.

was lower than their participation in other majors (.08), but not significantly so. In short, we found no evidence of a greater ethnic differential in courses where language is emphasized.

Comment quality. We also coded each participation for two qualities on 5-point scales ranging from (1) “not at all” to (5) “very much”. The first quality was the complexity of the participation. The theoretical framework followed that of Suedfeld and Tetlock (1988). An example of a low complexity participation was “Can you explain that?” and a high-complexity participation was “Couldn’t that contradiction be resolved by considering the person’s intention rather than their actual behavior”. A sample of 30 protocols were rated by a second judge. The correlation between judges ($r = .79, p < .01$) suggested an acceptable correspondence.

The second quality rated was the challengingness of the participations. A higher rating was assigned to the extent that the participation directly disagreed with the instructor’s conclusion. An example of a challenging participation was “It seems like you’re making a biased statement”. A sample of 30 protocols were rated by a second judge. The correlation between judges ($r = .77, p < .01$) suggested a reasonable correspondence. A detailed rating form is available from the authors.

When we analyzed the participation quality by ethnicity, we found no significant difference for either complexity or challengingness. In short, when they do participation, AH and EH students show the same level of quality.

Course Grades. Grades were available only for the individuals in the five psychology courses. On this sample of 537 students, the mean grades for AH students

(70.1) and EH students (70.7) were not significantly different, $t < 1.6$, n.s., two-tailed test.

GENERAL DISCUSSION

In four studies, the differential rate of shyness previously documented in East Asian samples relative to European samples was replicated within classes in a large Pacific Rim university. The variety of controls built into this research design make it preferable to designs entailing the comparison of samples of convenience in two different countries. The singular disadvantage of this design – that our East Asian group combines varying levels of acculturation – is trumped by the opportunity to evaluate change across generations of immigrants. Thus we were able to track the personality shift as this ethnic group assimilated to a Western culture.

Our methodology of same-classroom comparisons includes a variety of controls not incorporated into most previous comparisons of those with Asian-heritage and European-heritage. That is, our students of different heritage had comparable education, similar majors, and similar grade point averages. Both had university-level language skills, and were tested under the same circumstances with the same instruments in the same language. Nonetheless the ethnic groups showed substantial shyness differences in self-reports and actual behavior.

Confirming these base-rate differences was just the starting point for elucidating them. The rationale behind our choice of studies was that determining the contextual features that reduce or magnify it furthers an understanding of shyness in general. In Study 2, the ethnic differential in self reported shyness was much higher in classroom situations than in social situations. The fact that the classroom situation maximized the

self-report difference between Asian-heritage and Euro-heritage students motivated Studies 3 and 4. Before elaborating on this issue, we will lay out the other findings.

Origins of the Main Effect?

Why are Asian-heritage students so shy in classroom situations? Although there is some evidence for Asian-Caucasian differences⁶ in temperament (e.g., Freedman & Freedman, 1969; Kagan, 1994; Triandis, 1997), available data and current methods are not up to the task of estimating the genetic contribution.

On the other hand, acculturation data provide clear evidence for environmental influences⁷. In our own data, rates of Asian shyness declined over generations of acculturation. This pattern is consistent with the finding that both components of shyness -- introversion and neuroticism -- show a decline with generations (e.g., McCrae et al., 1998; in press). The fact that a residual difference remains after several generations in the West might still be attributable to residual cultural influences (Lieberman, 1994; Zane et al., 1991). Among these potential cultural handicaps are language deficits.

The language issue. The notion of foreign language anxiety is an established phenomenon, not unlike math anxiety (Aida, 1994; Horwitz et al, 1986). Language deficits can lead to loss of confidence and consequent social inhibition (Sparks & Ganschow, 1991). Thus language deficits in some of our Asian students may be

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⁶ Certainly, there is strong evidence for genetic differences in shyness within ethnic groups. Shyness can be conceived as a combination of low-extraversion and high-neuroticism (Paulhus & Trapnell, 1998), both of which have high heritabilities (McCrae et al., in press).

⁷ Note that Europeans are not without variation. Students from Finland, for example, report more shyness than other Europeans (Thompson & Klopf, 1991; 1995).

responsible for their observed behavioral inhibition.⁸ The relative lack of shyness in immigrants from Europe might be attributed to the closer linguistic links between most European languages and English. Hence, European immigrants could become fluent more quickly than East Asian immigrants

Inconsistent with that line of reasoning is our finding that, of the possible reasons for classroom shyness, lack of confidence in English was seldom cited by AH students. Comparable AH-EH grades on exams is also hard to reconcile with language deficits. The lack of carryover of language confidence to exam performance is consistent with previous demonstrations that test anxiety is unrelated to foreign language anxiety (Horwitz et al., 1986).

Reward vs. punishment orientation. When Asian-heritage students were asked why they did not participate in classroom situations, the most frequent explanation was *fear of being wrong*. Interestingly, European heritage students seldom gave this reason. The Asians' choice of explanations is consistent with recent research by Kitayama and his colleagues (1997): They concluded that failures pose a higher threat to self-esteem for Asians than for North Americans. Thus the high level of classroom shyness reported by our Asian heritage students could simply be a manifestation of their failure avoidance: The less one participates, the fewer public mistakes one makes. Citing a traditional Chinese proverb, Feather (1995) notes that "tall poppies risk getting cut down". In classroom situations, failure is clearly defined, thus making the instructor especially threatening.

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⁸ Although all sampled students met the university's language entrance requirements, the Asian students have a much higher rate of English as second language.

For those of European heritage, it is easy to postulate that classroom participation provides the opportunity for potential rewards. For them, the risk of being wrong is well worth the recognition and admiration of being recognized publicly as a “tall poppy”.

Values. A number of commentators point to value differences as being critical in the induction of Asian-Euro behavioral differences (Chen et al., 1992; Fukuyama & Greenfield, 1983; Johnson & Marsella, 1978). The extensive research by Chen and colleagues indicates that shyness and obedience are highly valued in Chinese children.

Such differences eventuate in adult norms and values that emphasize obedience and humility (Smith & Bond, 1999). Also important to the classroom context is the fact that East-Asian countries emphasize power-distance more than Western countries do (Hofstede, 1980). The deep inculcation of this value would be difficult to overcome even later in life as an immigrant to North America (Sue, 1997).

Not surprisingly, then, recent research shows that AHs in North America still prefer that class participation be cautious and restrained (Johnson & Marella, 1978). Indeed, the greatest complaint by AHs about the North American system is the perception that valuable class time is wasted by excessive classroom participation (Lieberman, 1994; Tweed & Lehman, in press).

A reconciliation. Together with previous work, our findings suggest the utility of a distinction between assertive participation and narcissistic participation in the classroom. Typical students, AH or EH, consider the participation of some of their classmates to be motivated by egotistic attention-seeking rather than genuine curiosity. In contrast, the assertive student, who participates when an important point needs clarification, is not resented (see Sue et al., 1983; 1990).

Evidence is available that AH students score lower than EH students on measures of narcissism (Hendin Shaver, & Paulhus, 2000). Note that modesty, not shyness, represents the opposite pole of narcissism. So our low rates of AH classroom participation (Study 4) may result from modest self-presentation as well as shyness. Using the assertive-narcissistic participation distinction, we may also reconcile the apparent contradiction of no AH-EH difference in behavioral assertiveness (Sue et al., 1983; Sue et al., 1990) with our findings of large AH-EH differences in classroom participation. That is, students of Asian heritage are assertive but not narcissistic. This conjecture is also consistent with the facet results from McCrae et al. (1998). They found that, compared to EHs, AHs were lower on the Assertiveness facet but higher on the Modesty facet.

Contextual Moderators.

Contextual moderators are premised on the assumption of person-situation interactions. One version is that only a small subset of situations permit full expression of a specific trait (see Funder, 1991). Other situations may create floor or ceiling effects that mask any differences. Still other situations may simply be irrelevant to the expression of a trait. Previous literature supports the importance of such moderators as the nature of audience, the public vs. private nature of the situation. For bilingual individuals, the language of testing may be considered a contextual moderator (McCrae et al., 1998).

Our data on social vs. classroom situations were dramatic. Study 2 showed a huge differential in classroom shyness but none in social situations. Study 3 uncovered a further complexity by showing that the appearance of social shyness does appear in

Asians when they interact with individuals of European-heritage; No shyness is evident when Asians interact with other Asians. This result suggests that Asian shyness is only a meaningful phenomenon in the mixed-ethnicity context.⁹

This finding raises the possibility that the critical determinant in classrooms may be the ethnicity of the instructor. Not only are instructors authority figures – a powerful inhibitor for AH students -- but they are typically of the very ethnicity (European) that triggers Asian shyness. Indeed, every instructor in the 38 courses we evaluated was of European heritage. Research involving the crossing of student ethnicity with instructor ethnicity is not yet available.

In sum, the act of classroom participation is inhibited by a confluence of factors that happen to work against Asian-heritage students.

Is there a problem?

ADD STUFF ABOUT DISCRETION HERE.

Evaluations of shyness issues typically raise conflicting opinions over whether or not it is maladaptive: To some shy individuals, it is, at worst, a nuisance. Our sample was similar to previous research in that roughly half of the shy individuals in both ethnic groups described it as a problem. But the high base-rate of shyness within Asians leads to the result that 35 percent of Asian-heritage students (compared to 20 percent of EH students) report that shyness is a problem in their lives. These results are consistent with counselor reports that many Asian students would like to become more assertive (Sue, 1977).

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⁹ Although research is minimal, the speculation that EHs might experience a sense of shyness in Asian contexts has not been supported (???).

Studies of shyness within Western samples have documented long term consequences such as lowered probability of marriage and finding one's final occupation (Caspi, Elder, & Bem, 1988; Cheek & Melchior, 1990). Moreover, shy individuals are perceived as less intelligent than nonshy individuals despite comparable abilities (Paulhus & Morgan, 1997). Disadvantages in the classroom include less attention from teachers and less practice in self-expression (Friedman, 1980). Given the shyness differential confirmed by our data, Asian immigrants, on average, should incur these difficulties more often than European-heritage immigrants. And the advancement of Asians in Western society should be severely handicapped.

Curiously, these dire predictions are not borne out by hard data. Asian immigrants succeed in educational settings at higher rates than the national average in both Canada and the United States (Fejgin, 1995; Hsia & Peng, 1998). They also have higher average incomes than European-heritage individuals. Perhaps other stereotypical Asian qualities such as discipline (Chinese Culture Connection, 1987; Triandis, 1997) and preference for education in science and business over the (less profitable) arts and social science specialties (Park & Harrison, 1995) may compensate for disadvantages incurred by trait shyness.

One might even argue that a high rate of classroom participation is maladaptive in undergraduate classes (Tweed & Lehman, in press). Though often encouraged, it is seldom rewarded in a concrete fashion. Certainly a focus on participation, particularly on challenges to the instructor's presentation, may detract from taking notes and learning the material in a fashion that eventuates in high exam scores. Indeed, avoidance of class

participation may actually be an adaptive strategy for success as an undergraduate student.

Handicap or not, the shyness differential diminished with acculturation in our data. This result is consistent with previous research showing similar declines in shyness across generations (McCrae et al., 1998; Ryder, Alden, & Paulhus, 2000)¹⁰. To speed up the process, recent Asian immigrants have been advised to take training sessions to reduce inhibition in job interviews (Fukuyama & Coleman, 1992; Morishima, 1981; Sue & Wing, 1999) and classroom situations (Lieberman, 1994). Simply being warned of Western tendencies to act aggressively and self-enhance (e.g., Heine et al., 2000; Yik et al., 1997) might diminish the inhibition that Asians experience in confronting such odd Western behavior.

CONCLUSION

The Euro-Asian differential in shyness is not an absolute phenomenon. It varies in a coherent fashion across situations. Its nature is clarified by examining the situations where it appears and disappears: Class participation appears to be a maximal situation whereas socializing within ethnic-group is a minimal situation.

No negative consequences are apparent from the ethnic differential in classroom participation. Modest participation appears not to handicap and may actually enhance Asian academic achievement. Future research should investigate the distinction between narcissistic and assertive classroom behavior.

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¹⁰ Our finding that a difference was still detectable after several generations is consistent with previous research (Johnson & Marsella, 1978; McCrae et al., 1998).

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Table 1**Ethnic Differences in Rates of Self-Reported Shyness by Generational Status**

	European Heritage		East Asian Heritage	
	n	Shyness rate	n	Shyness rate
Low acculturation	63	.40	139	.81
Moderate acculturation	79	.44	130	.71
High acculturation	259	.42	107	.58
Overall	401	.44	376	.68

Note. N = 777

Table 2**Reported Reasons for Classroom Shyness by Ethnic Group**

	European-heritage	Asian-heritage
N	151	134
difficulty expressing oneself	08	11
not appropriate to participate	02	13
fear of being wrong	05	30
don't belong to class in-group	06	06
unwanted attention/judgment	28	29
miscellaneous	02	02
Overall shyness rate	51	91

Note. N = 285

The cell entries are frequency of reasons per 100 students of each ethnic group.

Table 3

**Proportions of Self-Reported Shyness in Socializing with
European-Heritage and Asian-Heritage Students**

Reports by:	N	Socializing With	Socializing With
		Asian-heritage students	European-heritage students
Asian-heritage students	98	.49	.78
European-heritage students	90	.49	.47

Note. N = 188