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This research addressed two questions: (1) What are the potentially universal links between the dimensions of person perception and those of behavior intention, and (2) what dimensions of person perception are most salient in collectivist as opposed to individualistic cultures? Male subjects from Hong Kong and Australia read a description of a target person (TP) varying across the universal dimensions of extroversion, agreeableness, conscientiousness, and emotional stability. They then indicated their behavior intentions toward that TP. Across both cultures, TP conscientiousness was linked to intentions of trust and TP extroversion and agreeableness to intentions of association. As predicted from the dynamics of cultural collectivism, the Chinese were more responsive than the Australians to TP conscientiousness in forming trust intentions and to TP agreeableness in forming associative intentions.

LINKING PERSON PERCEPTION TO BEHAVIOR INTENTION ACROSS CULTURES
The Role of Cultural Collectivism

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How does culture influence the perception of peoples’ character and responses toward those persons arising from those perceptions? A survey of the empirical literature addressed to these issues yielded a disappointing cull, with the exception of Korten’s (1974) pioneering study. At the theoretical level, there is even less. The present study is an attempt to fill part of this vacuum.

Central to our thinking is the concept of the cultural agenda. This term refers to basic concerns that inform the daily life of a

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cultural unit. Historical, ecological, and philosophical factors combine to impart an especial significance to certain fundamental issues in particular cultures. The concern will then be manifested in a variety of social responses.

One such agenda involves the maintenance of group cohesiveness and integrity across time. In collectivist cultures (Hofstede, 1980; Triandis, in press), this concern is especially acute and is manifested in such diverse areas as the distribution of resources (Leung & Bond, in press), implicit personality theory (Yang & Bond, 1983) and the control of aggression (Bond & Wang, 1983). For members of these cultures, a person's conscientiousness and agreeableness should be relatively more salient, as these characteristics are critical in maintaining groups intact against the fragmenting influences of individual interests.

This approach to the role of culture in social perception is compatible with the recent elaboration of ecological theory by McArthur and Baron (1983). They argue, with Gibson (1979), that perception is adaptive in function and that perceptual socialization requires the "education of attention." This education will be directed toward sensitizing members of a given culture "to adaptively relevant information." As concluded by the authors, "What people in one culture need to perceive may be different from what those in another culture need to perceive" (p. 219).

One approach to exploring the question of perceptual salience is the link between dimensions of person perceptions and dimensions of behavior intention across cultures. Bond (1979) established that there were a minimum of four broad dimensions used across a variety of heterogeneous cultures in the perception of a TP's personality: extroversion, agreeableness, conscientiousness, and emotional stability. This conclusion resulted from extending Norman's (1963) materials and procedures to samples in the Philippines, Hong Kong, and Japan. Given this data base, these four dimensions are strong candidates as cross-cultural universals in person perception (Triandis, 1978).
At the other end of the linkage, Triandis (1964, 1972, 1978) has isolated four factors of behavior which he believes are found in all cultures. These universal dimensions are association, subordination, formality, and overtness. If “perception is for doing,” as Gibson (1979) maintains, then there should be identifiable relationships between the four dimensions in the perceptual realm and the four in the behavioral realm.

At a general level, how may cultural influences function to moderate these linkages between perception and behavior intention? The ecological approach of McArthur and Baron (1983) posits a heightened sensitivity to certain perceptual features of the environment (or affordances) in guiding adaptive behavior. For behaviors that are conceptually equivalent across cultures, then, perceptual accentuation (Postman, Bruner, & McGinnies, 1948) should tie certain dimensions of person perception to certain dimensions of behavior intention more strongly for some cultural groups than for others.

An initial study of this relationship established such links for Hong Kong Chinese (Bond, 1983). As predicted, the response dimension of association was most strongly associated with the perceptual dimension of agreeableness; that of subordination (or its equivalent in equal status relations, trust) with conscientiousness, and that of formality with emotional stability. The perceptual dimension of extroversion, however, showed fewer effects, particularly when compared to the powerful and pervasive influence of TP agreeableness.

Chinese cultures are highly collectivistic (Hofstede, 1980), so the above findings could well reflect the operation of cultural agendas occurring within some universal patterns of linkage. Specifically, we believe that a person’s conscientiousness is an indicator of probable care in protecting the interest of others. Thus, a TP’s conscientiousness should universally guide behavioral intentions that place one’s outcomes under the TP’s stewardship (trust). This relationship should be stronger in a collectivist culture, however, where such interpersonal interdependencies are more binding and less changeable across the life span. Similarly, a person’s agreeableness is an indicator
of the ease with which one can interact, and should therefore control intentions to associate with others regardless of culture. This relationship should be stronger in a collectivist society, however, in which associations persist for longer time periods and, hence, depend more strongly for their viability on harmony among the participants.

Extroversion involves both a person's interest in socializing and overtness in displaying internal states. Given such a TP's probable responsiveness, extroversion should influence behavioral intentions to associate with the TP. It should also influence one's overtness toward the TP through the norm of reciprocity. We are, however, uncertain if the influence of extroversion should be different in collectivist as opposed to individualist cultures, and look at the present study as exploratory in this regard.

By replicating the Hong Kong study in an individualistic culture and then combining the two cultural samples, one can address the above hypotheses. Other results may also emerge. Taken together, the findings will constitute a useful starting point in answering the following questions in the study of culture and person perception:

(1) Which perception-intention linkages are robust across cultures and, hence, qualify for consideration as possible universals?
(2) How does culture influence the relative weighting of these four dimensions of personality perception in guiding behavior?

**METHOD**

**SUBJECTS**

In order to test the earlier questions about culture and the perceptual dimensions of extroversion, conscientiousness, and
agreeableness, it was necessary to select a cultural group that differed from the Hong Kong Chinese along the dimension of individualism versus collectivism. Australia is one such culture (Hofstede, 1980).

Consequently, 128 male undergraduates from the University of New South Wales took part in the experiment in addition to 128 male undergraduates from the Chinese University of Hong Kong. The Chinese sample was recruited from the subject pool for Introductory Psychology; the Australian sample was recruited by obtaining volunteers from first- and second-year psychology classes.

THE STIMULUS MATERIALS

Norman's (1963) dimensions of person perception were obtained by providing raters with 20 bipolar descriptions of the TP from Cattell's (1947) reduced personality sphere. These 20 descriptions were found to discretely load onto one of five factors constituting the American dimensions of personality perception.

This study was replicated in Hong Kong (Bond, 1979). The two bipolar descriptions with the highest loadings on each of the extroversion, agreeableness, conscientiousness, and emotional stability factors for male subjects were selected as stimulus materials for the present experiment.

So, in manipulating the extroversion dimension, the two selected descriptions for the introverted end of the dimension were combined as were those for the extroverted end of the dimension. Subjects reading about an introverted TP would read the first combined description; those reading about an extroverted TP, the second. The remaining three factors were manipulated in a similar way. When these four factors were combined, the result was one of \(2 \times 2 \times 2 \times 2\) or 16 possible personality descriptions of the TP. See Bond (1983) for an example of one such description.
ORDER OF INFORMATION ABOUT THE TP

With these four factors of personality, there are 24 possible orders in which they could have been presented to the subjects. The experimental design would have become impossibly cumbersome had the experiment assessed the impact of all 24 orders on the subject’s behavioral intentions toward the TP. Consequently, four of these orders were selected for use in presenting the stimulus information. In these four orders, a different factor appeared in each of the four positions. If the effects of the personality information were found to be independent of these four orders of presentation, then one could be reasonably confident that the obtained effects were independent of any other variations in order.

OVERVIEW OF THE DESIGN

The experiment was thus a $2 \times 2 \times 2 \times 2 \times 4 \times 2$ factorial, with two levels of extroversion, agreeableness, conscientiousness, and emotional stability manipulated in the TP descriptions. This information was presented in one of four possible orders to male subjects from Hong Kong or Australia. There were eight subjects in each cell, two subjects receiving one of the four orders in which TP information was presented.

THE DEPENDENT VARIABLES

A statement of behavioral intention simply indicates whether a person would or would not engage in a certain behavior with the TP (Triandis, 1964). Subjects indicate the strength of this likelihood by varying the position of their response on a 9-point scale (with 1 representing “would not” and 9 representing “would”).

Twenty behavioral intentions were elicited from Chinese University students in a procedure described in detail by Bond (1983). As these items were generated by Hong Kong Chinese, one may question their suitability for use by Australian
students. None of the responses, however, involves idiosyncratic cultural practices; all are easily understood and common to the response repertoires of university students around the world. They were, in fact, initially selected by the first author for their cross-cultural applicability, and their suitability to an Australian student culture was confirmed by informal questioning of subjects in the Australian sample (Bond, 1983).

ASSESSING THE DIFFICULTY OF THE EXPERIMENTAL TASK

Cultural effects could be artifactually produced if members of one culture were to find aspects of the experimental task more difficult. Such a reaction may result in variable or midpoint responding unrelated to the content of the stimulus materials.

To assess this possibility, two questions were asked: How easy/difficult did you find it to form a clear impression of the described person, and how easy/difficult was it to answer questions about this person. Nine-point scales were again used to maintain similarity of format.

PROCEDURE

Subjects were run in noninteracting groups of two to ten persons by Cantonese or Australian research assistants. The TP information and dependent variables were contained in a booklet that introduced the task as follows:

Many students have taken the personality tests given by the Dean of Students’ Office. The results of these tests are usually presented to the students in the form of personality descriptions. Some of the students in Introductory Psychology have taken these tests and agreed to let us use their personality descriptions in this experiment.

On the next page you will find a personality description of one of these students. This student is the same sex as yourself. Your job in this experiment is to read the description of this student and to form as clear a picture of this person as possible. Later,
we will ask you to indicate your ideas and feelings about this person by responding to some questions. Before you turn the page, read these instructions again. If you have any questions, raise your hand and the experimenter will come and speak to you.

The various conditions of TP information and order were randomized beforehand and given to the subjects in their order of appearance. All materials were presented in English. This, of course, is the mother tongue of most Australians, but the second language of Chinese students in Hong Kong. However, fully 70% of the Chinese students received their high school instruction in English and have passed a university entrance examination in English. Clear and basic syntax was used to ensure that no students had any difficulty decoding the experimental procedures. Subjects typically took about 30 minutes to complete the experiment. None reported any difficulties to the research assistants.

RESULTS

SIGNIFICANCE LEVEL

With multiple analyses of variance, the possibility of capitalizing on a Type I error is a serious danger. In order to control this possibility, a conservative Bonferroni family-wise error rate was used here, setting the probability level at < .05 (Bird, 1975; Harris, 1975). Only those F values are reported here that remained significant in terms of this more exacting criterion, although in reporting these values we continue to use the more conventional univariate significance levels.

ORDER EFFECTS

Order effects are only of interest if their presence qualifies any significant effect involving the dimensions of personality
variation used as independent variables. When such an outcome was found, the otherwise significant general effect is not reported. Thus, any result reported is robust across the orders in which personality information about the TP was presented.

CULTURAL EQUIVALENCE OF THE EXPERIMENTAL TASK

There was no difference between the two cultural groups either in the difficulty of forming a clear impression about the TP or in answering questions about the TP. Both cultural samples gave an average score near the midpoint of the scales. Cultural influences noted below are thus unlikely to represent artifacts of the experimental task itself.

ESTABLISHING CULTURAL EQUIVALENCE

Before one can compare dependent variables across cultures, there must be some evidence for their comparability. The demonstration of metric equivalence is one approach to satisfying this requirement (Berry, 1979). To this end, the factor analyses of the behavioral intentions of the Chinese and the Australians were compared (Buss & Royce, 1975).

The analyses for each culture revealed a large first factor and six smaller factors with eigenvalues \( \geq 1.0 \). Inspection of items loadings indicated that only the first two factors in each culture showed appreciable overlap and were defined by more than two items. Consequently, the data from each culture were factor analyzed again, this time rotating only the first two factors extracted. Coefficients of congruence were then calculated to measure the degree of factor similarity in these two-factor solutions (Harman, 1960, pp. 256-260). For factor 1, the figure was .90; for factor 2, .96.

Having established metric equivalence across cultures, it was now possible to pool the data. First, however, the mean scores for each behavioral intention had to be equated for the two cultures. This statistical correction ensured that the factor analysis of the pooled data was unaffected by simple differences between the two cultural groups in their endorsement of the
variables. A factor analysis of the combined data was then run, with only the first two factors rotated to orthogonal structure. The first factor accounted for 24.1% of the matrix variance; the second, 8.0%. Using a loading criterion of $> .40$, and putting items into the factor on which they loaded more strongly, the first factor was composed of the following six items:

1. vote for TP in student union election
2. work together with TP in class project
3. rely upon TP in an emergency
4. respect TP
5. give TP a loan of $10
6. discuss with TP problems I am having with my girlfriend

This factor was labeled trust, as all the overt items involved the common theme of placing the TP in a position of critical importance for one’s own outcomes.

The second factor was composed of the following four items:

1. not dislike TP
2. not feel uneasy and unnatural around TP
3. not be afraid of TP
4. have fun with TP in my leisure time

These items, three covert and one overt, clearly involve attraction to, and desire to associate with, the TP. The factor is hence named association.

ANALYSES OF VARIANCE

Trust. There were three main effects. Extroverted TP’s received more trust than introverted TP’s, $F(1, 128)^2 = 32.9$, $p < .0001$; agreeable TP’s received more trust than ill-tempered TP’s, $F = 75.7$, $p < .0001$; and conscientious TP’s received more trust than undependable TP’s, $F = 113.4$, $p < .0001$. 
There was also an interaction between TP agreeableness and conscientiousness, $F = 17.7$, $p < .0001$. Examination of this interaction showed that the impact of TP agreeableness was stronger when the TP was unreliable, $F = 84.1$, $p < .0001$, than when the TP was conscientious, $F = 9.65$, $p < .01$.

The culture-perception issue is addressed by examining the interactions between culture and the dimensions of TP personality. Three two-way interactions were found. The first was between culture and extroversion, $F = 12.1$, $p < .001$. This interaction was analyzed for simple main effects to determine whether variations in extroversion have similar impact on trust judgments in each culture. For Australians, TP extroversion was significant, $F = 44.3$, $p < .0001$; for Hong Kong Chinese, it was not, $F = 2.60$, ns. The second was between culture and emotional stability, $F = 7.53$, $p < .01$. As with extroversion, it was the Australians who responded to variations in TP stability, $F = 10.3$, $p < .005$, not the Hong Kong Chinese, $F < 1$. The last such interaction involved culture with conscientiousness, $F = 11.7$, $p < .001$. Given the size of the overall main effect for conscientiousness, it is not surprising that both Chinese ($F = 98.8$) and Australian ($F = 27.6$) groups respond to variations in TP conscientiousness (both $p$'s $< .0001$). The size of the effect, however, was about twice as large for the Chinese sample.

**Association.** There were two main effects for this composite. Subjects expressed greater associative intentions toward an extroverted TP than toward an introverted TP, $F = 27.4$, $p < .0001$. Second, an agreeable TP elicited more association than did one who was described as ill-tempered, $F = 39.8$, $p < .0001$.

This last finding, however, was qualified by a culture $\times$ agreeableness interaction, $F = 6.92$, $p < .01$. Analysis for simple main effects within each culture revealed that the agreeableness variable had a larger impact on the Chinese sample, $F = 39.9$, $p < .0001$, than on the Australian, $F = 6.77$, $p < .025$. The size of the Chinese effect was more than twice that of the Australian.
DISCUSSION

THE LINKS BETWEEN PERCEPTION AND INTENTION

Only two cultures have been sampled, so one must be cautious in drawing conclusions about possible universals. However, these two cultures are very different, indeed, and can therefore provide a preliminary basis for tentative generalizations.

The first point to emerge is that all four dimensions of personality perception manipulated here influenced responses toward a TP in one or the other culture. Emotional stability appeared less important relative to the others, but only, we expect, because it was manipulated with weaker descriptions.

A second conclusion is that dimensions of personality perception were typically not associated with dimensions of behavioral intention in a discrete, one-to-one fashion. A given perceptual dimension may influence a variety of intention factors, and both intention factors were influenced by a number of perceptual dimensions.

Finally, although the factor linkages were frequently extensive, they were rarely complex. Most influences were main effects. Any interactions were second-level only, and never involved reversals of effect.

Specific Connections. Across cultures, trusting intentions were most strongly associated with TP conscientiousness. A conscientious TP is one who has responsibly exercised guardianship over others’ resources in the past. Such a person has avoided the temptation of abusing others’ dependence, so that one is willing to trust them with future undertakings in which one could again be at risk. The acts of trust may differ from culture to culture; the need for the guarantee of trustworthiness will be invariant.

Also as predicted, agreeableness emerged as the most powerful determinant of associative intentions across cultures.
An easygoing and cooperative person creates fewer interpersonal problems, thereby reducing the anticipated costs of interaction. TP extroversion, however, was almost as strong a determinant of associative intentions across cultures. Extroverted persons are less difficult to interest in interpersonal activities because of their sociability and may be easier to interact with because they more readily externalize their inner states, thereby facilitating an "unequivocal behavior orientation" (Jones & Gerand, 1967).

These TP characteristics may also influence other types of association sought with the TP. Intimate behaviors, for example, are orthogonal to associative behaviors in the Triandis (1978) scheme. One can thus associate with another at either a superficial or a personal level. The decision to move toward greater intimacy where one is more vulnerable will probably be controlled by how accepting and uncritical the TP is believed to be (i.e., TP agreeableness). Unfortunately, the behavioral dimension of intimacy did not emerge from the combined sample, so the hypothesized effect can not yet be generalized across cultures. Further work is needed to identify cross-cultural indicators of intimacy among same-sex peers, so that its possible universal link with agreeableness can be established or rejected.

Similar exploration must also be undertaken to unearth intentions related to the overt-covert dimension of behavior. This factor emerged from the earlier study (Bond, 1983), but was not found in the Australian sample. Bond (1979) originally hypothesized that overtness would be most strongly linked with TP extroversion. An extroverted TP is one who externalizes inner feelings. Such public revelations encourage similar overtness through the norm of reciprocity; indeed, extroverted persons frequently demand such a give-and-take. As argued by Bond (1983), situational norms and interpersonal history also influence this translation of covert reaction into overt response, and adequate cross-cultural comparison may well show that TP extroversion is an additional factor of importance in making public what is private.
CULTURE'S IMPACT ON PERCEPTION

Using the notion of cultural agenda, it was predicted and found that judges from a collectivist culture would place relatively greater emphasis on TP conscientiousness in forming their trust intentions. Culture thus operates to moderate a relationship that exists across cultures, clearly demonstrating the importance of the culture variable. In this case, TP conscientiousness is of greater salience to the collectivist Chinese because moral interdependencies are more significant in societies where there is less intergroup mobility.

Perhaps less importance should be attached to the other interactions between culture and TP personality dimensions for trust, however. The results showed the Australians linking TP extroversion and emotional stability to trust intentions, but not the Chinese. Thus, there was no relationship across both cultures that the culture variable could moderate. One suspects, then, that the emphasis of the Australians on emotional stability and extroversion for this type of intention represents culturally unique processes. These relationships are of interest in their own right, but do not serve as cultural inputs into a universal theory of social behavior.

Culture also modified the size of the relationship between TP agreeableness and associative intentions. People have much less privacy in collectivist societies, and their obligations to the groups they join are more constraining. The consequences of associating with ill-tempered, disagreeable persons are therefore greater than they would be in more individualistic cultures. For these reasons, we believe that TP agreeableness was more salient in guiding associative intentions for the Hong Kong Chinese than for the Australians (also see Triandis's [1983] discussion of the Hispanic simpatia script).

Replications of this study would be particularly useful in checking the validity of our reasoning about the effects of cultural collectivism. Even across Hofstede's (1980) four dimensions, Hong Kong and Australia also differ on power distance and uncertainty avoidance. It is, of course, possible—
although unlikely—that these differences, rather than those along the collectivism dimension, are carrying the cultural effects. Alternatively, the possible unique cultural processes unearthed here may reflect the operation of these other dimensions. For example, does the Australian emphasis on emotional stability for trust intentions reflect the concern for personal predictability—a probable agenda for societies high in uncertainty avoidance? The sampling of additional cultural units with different positions on these dimensions would help illuminate such alternatives.

NOTES

1. We appreciate the helpfulness of Simon Yip and Lily Trimboli in collecting the data.
2. As these degrees of freedom are common to all the analyses within this section, their notation will henceforth be dropped.

REFERENCES


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