

**GOOD CITIZENS IN A GLOBAL ECONOMY:
INDIVIDUALISM-COLLECTIVISM
AND POWER DISTANCE
AS PREDICTORS OF
ORGANIZATIONAL CITIZENSHIP BEHAVIOR**

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INTRODUCTION

Outline of the Study

This study examines Organizational Citizenship Behavior (Organ, 1988) in a cross-cultural setting. The purpose of the study is to establish a link between Organizational Citizenship Behavior (OCB) and two cultural dimensions, Individualism-Collectivism (IC) and Power Distance (PD) (Hofstede, 1980).

Previous work on OCB was mostly done within one, usually Western culture, and little is known about its evaluation or performance by people from varied cultural backgrounds (for a review, refer to Organ & Paine, 1999). Numerous studies (for example, Hofstede, 1980) have shown, though, that one's cultural background affects one's values, attitudes, and behavior in the workplace. An account of these studies will be given below. This study attempts to show that Individualism-Collectivism and Power Distance are significantly related to the evaluation and performance of OCB.

Organizational Citizenship Behavior : Construct Definition

According to Organ (1988) "Organizational Citizenship Behavior represents individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p.4). Organ postulates a five-dimensional model of Organizational Citizenship Behavior that comprises the following dimensions:

- Altruism: Behaviors that support a specific other person with an organizationally relevant task, for example helping out a colleague who has been out for a few days.
- Conscientiousness: Employees displaying conscientious work behaviors are performing "150%" in their job, for example, they are always on time, leave their workplace tidy, don't make personal calls while at work, and so forth.
- Sportsmanship: These are mainly behaviors that a "good citizen" refrains from, for example complaining about petty grievances.
- Courtesy: Similar to altruism, these are supportive behaviors, but in contrary to altruism, courtesy behaviors are not aimed at any specific person. Instead, they are

more general in nature, aimed at preventing potential problems from happening. An example would be an employee coming across a piece of information that might not bear much relevance to him / her, but could be important for a colleague, and thus passing the information on to this colleague.

- Civic Virtue: These are behaviors that express the interest of the employee in the organization, his / her involvement and participation in organizational matters. An example would be an employee who always reads the company newsletter, or contributes to it.

Other researchers have postulated different models of OCB, for example Graham (1989, 1991, as cited in Van Dyne, Graham, & Dienesch, 1994). Her definition of OCB is derived from political philosophy and has a broader scope than Organ's definition: OCB is thus conceptualized as "a global concept that includes all positive organizationally relevant behaviors of individual organization members." (1994, p.766). She proposes a three-dimensional model of OCB:

- Organizational Obedience: Refers to employees' acceptance of the structures and rules that govern the organization, and their compliance with these rules. This dimension bears resemblance to Organ's conscientiousness dimension.
- Organizational Loyalty: Behaviors that mark employees' identification with the company. The goals of the company take precedence over personal goals in the workplace. There is some overlap with Organ's sportsmanship and courtesy dimensions in that loyal employees, according to Graham (1991, as cited in Van Dyne et al., 1994), defend the organization when it is criticized, and cooperate in order to reach the company's goals.
- Organizational Participation: Practically identical to Organ's Civic Virtue dimension, participation encompasses behaviors that express employees' interest and involvement in the company.

Moorman and Blakely (1992) introduced and operationalized a model of OCB which integrates Organ's (1988) and Graham's (1991) models. Moorman and Blakeley's conceptualization of OCB has the following four dimensions:

- Interpersonal Helping: Combines Organ's altruism dimension, aspects of Organ's courtesy dimension and aspects of Graham's participation dimension.

- Individual Initiative: Combines Organ's civic virtue dimension and Graham's participation dimension.
- Personal Industry: Combines Organ's conscientiousness dimension with Graham's obedience dimension.
- Loyal Boosterism: Combines aspects of Organ's sportsmanship dimension with Graham's loyalty dimension.

This study refers to Moorman and Blakeley's dimensions of OCB (1992). Their dimensions of OCB, which present a synthesis of Graham's (1991) and Organ's (1988) conceptualizations, seem to define OCB best for this study, because their OCB scale does not have any negatively worded items and also fewer culture specific colloquialisms.

Constructs related to OCB include, for example, contextual performance (Van Scotter & Motowidlo, 1996).

Recent Research on Organizational Citizenship Behavior

Research has mainly focused on dispositional and attitudinal predictors of OCB. Personality variables such as self-esteem (Van Dyne, Vandevallie, Kostova, Latham, & Cummings, 2000; Tang & Ibrahim, 1998), conscientiousness, agreeableness, and extraversion (Organ & Lingl, 1995; Le Pine and Van Dyne, 2001), individual levels of Individualism-Collectivism (Van Dyne et al., 2000; Moorman & Blakely, 1995), and need for achievement (Tang & Ibrahim, 1998) have been shown to be related to OCB.

Work related variables such as job satisfaction (Tang & Ibrahim, 1998; Organ & Lingl, 1995), procedural justice, (Moorman, Blakely, & Niehoff, 1998, Farh, Earley, & Lin, 1997), and leader behaviors (Podsakoff, MacKenzie, Moorman, & Fetter 1990) have also been linked to OCB.

Organ and Ryan (1995) conducted a meta-analytic review of attitudinal and dispositional predictors of OCB, taking into account 55 studies. They found that attitudinal measures such as job satisfaction, perceived fairness, and commitment showed stronger and more consistent relationships with OCB than dispositional

predictors such as conscientiousness, and positive and negative affectivity. The authors conclude that dispositional predictors exert only an indirect influence on OCB in that they predispose the individual to certain affective states that, in turn, influence individually held attitudes.

Less research has been done on the consequences of OCB. OCB has been shown to influence performance appraisals, individual promotions, performance quantity and quality, efficiency and customer satisfaction (Werner, 1994; Park & Sims, 1989; Podsakoff, Ahearne, & MacKenzie, 1997; Walz & Niehoff, 1996; all cited in Organ & Paine, 1999; Koys, 2001).

Researchers who investigated OCB cross-culturally (for example, Paine & Organ, 2000; Lam & Law, 1999) often looked at two cultural variables to establish differences between cultures, namely, Individualism-Collectivism and Power Distance (Hofstede, 1980). This study also employs these two variables. An account of the studies in which OCB was examined at a cross-cultural level will be given after an introduction to the two constructs of Individualism-Collectivism and Power Distance.

Individualism-Collectivism: Construct Definition

Individualism-Collectivism (IC) refers to the relationships individuals have with the society they live in. The idea of Individualism-Collectivism is fairly old and can be traced back to political philosophers like Rousseau, Locke, or, in China, Confucius. The term Individualism-Collectivism was coined by Hofstede (1980). Between 1967 and 1973, he collected survey data on work goals and values from IBM employees who were nationals of 39 different countries. The sample was later expanded to include a total of 50 nations.

One of the four dimensions that Hofstede found to discriminate between cultures was Individualism-Collectivism. According to Hofstede, the more collectivist nations of his sample showed a preference for using their skills in their jobs, for their jobs providing them with ample training opportunities, and for having good physical conditions to work in.

In contrast, the individualist nations placed more importance on their jobs leaving them with enough personal time, giving them the freedom to use their own approach

to their work, and providing them with challenges. The more individualist nations usually had a higher GNP per capita.

Hofstede went on to compare his survey results with other research data and formulated a theoretical framework (1980, 1997) in which collectivist societies are characterized by the fact that the interest of the group takes precedence over individual interests, and individuals define themselves as part of a specific ingroup more than as unique individuals. People often live together with their extended families, and make more defined ingroup-outgroup distinctions than people from individualist societies.

Other researchers have also done work on the IC dimension, notably Triandis (for example, 1995). He suggests that in collectivist societies, individual behavior is guided by the norms of the ingroup, and that harmony within the ingroup is more important than personal distinction. Individualist societies, on the other hand, stress self-reliance and independence from ingroups.

Generally, most Western European nations, the United States and Australia are considered more individualist, whereas Asian countries are more considered more collectivist.

Individualism-Collectivism is a variable that discriminates not only between, but also within cultures (Wagner, 1995; Wagner & Moch, 1986). Although one culture (for example Japan) might be more collectivist as a whole than another culture (for example the United States), there is great variation within each culture when it comes to individual levels on the IC dimension. Also, within one highly individualist culture (i.e. the United States), there are still significant regional variations in the level of IC (Vandello & Cohen, 1999).

Research on Individualism-Collectivism in Organizational Settings

For collectivists, group membership is closely tied to their definition of themselves. Thus, much research has focused on group behavior in the workplace (for a review, please refer to Earley & Gibson, 1998).

Earley (1993) compared the performance on managerial tasks between subjects from China (collectivist), Israel (collectivist), and the United States (individualist). The

collectivist subjects performed best when working with an ingroup, whereas the individualists performed best when working alone.

Wagner (1995) studied American undergraduate students in a group task and found that the more collectivist students cooperated more with their group members, which he attributes to differences in the importance attached to personal success and competition, and the fact that collectivists feel more reliant on their group than individualists.

A survey study in the United States showed that commitment to the workgroup was higher in collectivist individuals than in individualist individuals (Clugston, Howell, & Dorfman, 2000).

Power Distance: Construct Definition

Power Distance (PD) was another dimension found by Hofstede in his study of national cultures (1980), and was highly correlated with the Individualism-Collectivism dimension. Collectivist nations typically were high power distant, and individualist nations low power distant.

Power Distance refers to inequalities within a society, and was conceptualized by Hofstede as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (1980, p.28). In his study, subjects from high PD cultures were more afraid to disagree with their superiors than subjects from low PD cultures, perceived their superiors' decision making style as autocratic, persuasive, or paternalistic, and also preferred this decision making style over a consultative one.

The strongest predictor for PD in Hofstede's data was geographical latitude, followed by population size and wealth (GNP per capita). Nations high in PD were typically located further south, were bigger, and were less wealthy.

According to Hofstede (1997), organizations in nations high in PD are characterized by tall hierarchies, with the power being centralized at the top, a wide salary range between top and bottom, subordinates expecting to be told what to do, and the ideal boss being a paternalistic one. Nations high in PD in Hofstede's sample were generally Latin American, Arab, and Asian countries, whereas nations low on PD were the United States, Australia, New Zealand and Northern European countries.

However, there were exceptions to this pattern (for example France being high in PD, whereas Argentina was low on it).

Research on Power Distance in Organizational Settings

Few studies used individualized measures of PD. Instead, researchers compared individuals from 2 or 3 cultures on different variables (for example, leadership behavior, Agarwal, DeCarlo, & Vyas, 1999) and used Hofstede's country scores on PD (or IC) to explain any cross-cultural differences in the variables examined.

Two issues arise with this procedure: first of all, Hofstede's data is fairly dated by now, and many countries have undergone tremendous changes since his research (1980). Second, Hofstede examined his data on the country level, and not on the individual level.

Bochner and Hesketh (1994) validated Hofstede's PD and IC dimensions in a survey in a multicultural setting (subjects' ethnic origin was from 28 different countries), and examined the links between these variables and superior-subordinate relationships, decision-making styles, work ethic, task orientation, psychological contract, and individual versus group-level achievement. Subjects from high PD cultures had more contact with their immediate supervisor and described their supervisory style as close and direct. They were also less inclined to argue against management decisions they disagreed with. They showed a stronger tendency towards task orientation and stated more often a belief in Theory X, that is, that people were inherently lazy and had to be pushed to work hard (McGregor, 1960, as cited in Bochner & Hesketh, 1994). As in Hofstede's study, PD and IC were highly correlated, that is, countries high in PD were almost without exception also collectivist. The collectivist portion of the sample believed more strongly that organization members should identify with their company, had more informal contact with their co-workers, believed more strongly that personal advancement depended on the work group as a whole, and worked more often in teams than alone.

The aforementioned study of Clugston, Howell, and Dorfman (2000), which used individualized measures of PD and IC and tested their relationship with organizational commitment, found that high power distant subjects showed higher levels of

normative commitment to the organization, that is, commitment "based on a sense of duty, loyalty, or obligation" (Clugston et al., 2000, p.7).

Earley (1999), in a managerial simulation task with subjects from England, France, Thailand, and the United States, found that for high PD subjects (subjects from France and Thailand), the group's judgement of the collective efficacy and collective performance of the group in the task was more strongly related to the personal judgements of high-status group members. In other words, in high PD groups, higher status members were more influential than the other members. The groups consisted of three members each, with one member possessing certain characteristics (age, level of education, gender) that determined him/her as having a higher status than the other two group members.

Merritt and Helmreich (1996) conducted a survey on group processes with pilots and flight attendants from seven different countries (United States, Hong Kong, Japan, Korea, Thailand, Singapore, Taiwan). Their analysis revealed three cultural dimensions, one of them reflecting high PD and Collectivism, one moderate PD and Individualism, and one low PD and Individualism, with the Asian subjects belonging primarily to the first dimension, characterized by high PD and Collectivism. In the authors' interpretation of their results, subjects high on the first dimension believed that the captain was the sole authority of the crew, and that the crew members were expected to show loyalty to their leader. Group harmony was stressed as important, which was maintained through conformity with the Captain's decisions.

Similar to Hofstede's value survey (1980), Smith, Dugan, and Trompenaars (1996) conducted a 43-country survey on the values of organizational employees, and came up with a three-dimensional model of cultural differences. They called their first dimension Conservatism versus Egalitarian Commitment. Countries situated at the positive pole of this dimension (Egalitarian Commitment) valued achieved status more than ascribed status, and were more universalistic (no preferential treatment for ingroup members as opposed to outgroup members). Country samples at the negative pole of the dimension (Conservatism) considered working overtime an expected part of their job, preferred a strong company involvement in the employees' life, believed that a good manager should be paternalistic, and that employees should not question the authority of their superiors. This dimension clearly resembles Power Distance. Smith et al.'s second dimension, Utilitarian Involvement versus Loyal

Involvement, represents the basis of one's commitment to a group (either because of loyalty or because of utilitarian considerations). There is some overlap between this dimension and Individualism-Collectivism. Smith et al.'s third dimension did not so clearly relate to either PD and IC, which is why it will not be discussed here.

Cross-cultural Research on Organizational Citizenship Behavior

Few studies to date have investigated Organizational Citizenship Behavior in a cross-cultural context.

Tang and Ibrahim (1998) compared the antecedents of OCB in the United States, Egypt, and Saudi Arabia. Their results indicated that almost all proposed antecedents, namely organization-based self esteem, need for achievement, job satisfaction, and work-related stress predicted OCB in all samples. Supervisor consideration was a predictor only for the Egyptian and Arab samples. The authors relate that result to the lower turnover and thus higher commitment of the two Mideastern samples, as well as to leaders' higher concerns for the collective welfare of the group and higher solidarity of workgroups on account of the Islamic culture. One could also explain that result on account of the higher level of Collectivism in the Mideastern samples. Munene (1995) examined a Nigerian correlate of OCB which is similar to tardiness. In his study, job involvement had the largest correlation with the OCB correlate, followed by commitment and job satisfaction.

Farh, Earley, and Lin (1997) first developed an indigenous Chinese OCB measure, then used this measure to test the relationship between OCB and perceptions of distributive and procedural justice in Taiwan. Farh et al. hypothesized that the cultural values of traditionality and modernity would moderate the relationship between justice and OCB. These two values are indigenous Chinese values, but show some resemblance to IC and PD. Modernity represents egalitarianism and open-mindedness, and thus shares some characteristics with low Power Distance and Individualism. Traditionality, which reflects the structured hierarchical relationships in Chinese society, resembles high Power Distance and Collectivism in some aspects. The Chinese OCB scale was five dimensional; three dimensions, identification with company, altruism towards colleagues, and conscientiousness, corresponded with Organ's dimensions (1988) of civic virtue, altruism, and conscientiousness,

respectively. No correspondence was found for Organ's dimensions of sportsmanship and courtesy. Instead, two dimensions labeled "interpersonal harmony" and "protecting company resources" emerged.

In a second study, the relationship between justice perceptions and OCB was more pronounced for individuals who held more modern and less traditional values. The authors argue that this effect is due to the fact that the more traditional and less modern subjects have another form of relationship with their organization, which is more expressive, and thus their performance of OCB is not dependent on justice perceptions.

Lam, Hui, and Law (1999) compared to what extent employees and their supervisors from Hong Kong, Japan, Australia and the United States rated OCB as an expected part of one's job as opposed to extra-role performance. The authors proposed that the Asian subjects, on account of their higher ranking along the Power Distance dimension, would regard OCB more often as part of their job than the western subjects. Results indicated that the differences between employees' and supervisors' perceptions of job roles were larger than the intercultural differences, except for the OCB dimensions of courtesy and sportsmanship.

Paine and Organ (2000) explored the global applicability of OCB by way of an exploratory survey. They interviewed subjects from 29 countries and proposed a model in which the cultural dimensions of Individualism-Collectivism and Power Distance would influence employees' level of commitment and motivation, which in turn would influence perceptions of what constitutes OCB and the likelihood of demonstrating OCB. However, just like Lam and Law (1999), Paine and Organ did not actually measure individual levels of Individualism-Collectivism and Power Distance. Due to the exploratory nature of their study and their small number of subjects ($n = 38$), their findings remain descriptive and can only point to some tendencies, namely that the perception of OCB as well as the willingness to perform OCB differed, and that the subjects from the more collectivist countries perceived OCB more often as an expected part of their job.

Hypotheses

Overall Model

The following study is not only concerned with actual levels of (self-reported) OCB, but also with the importance members of different cultures attach to behaviors classified as OCB, thus conceptualizing OCB in terms of work values. Hofstede defines values as "a broad tendency to prefer certain states of affair over others" (1980, p. 19). Elizur (1984, as cited in Sagie, Elizur, & Koslowsky, 1996) gives a more detailed definition: "A work value can be defined as the importance individuals give to a certain outcome obtained at work context" (p. 503). Cultural background plays a role in shaping individually held work values, which in turn influence, at least to some extent, work behavior (Sagie et al., 1996).

Thus, it is proposed that individually held work values (operationalized here as the importance organization members attach to the different OCB dimensions) will exert a mediating influence on the relationship between the two cultural variables IC and PD and self-reported OCB, as well as IC and PD having a direct effect on self-reported OCB (see Figure 1).

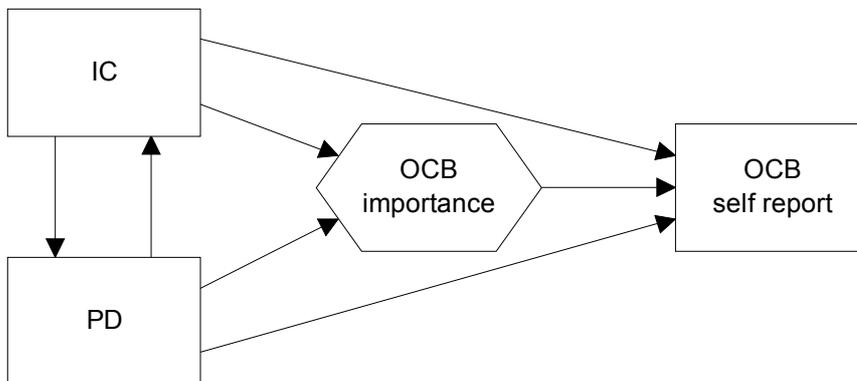


Figure 1: Hypothesized model of the relationship between cultural dimensions, OCB importance and OCB self report.

In accordance with Figure 1, seven general hypotheses (Hypotheses 1a-d and Hypotheses 2a-c) are proposed below. Further hypotheses which will specify the relationships between IC and PD and the four different dimensions of OCB will be presented after the general model has been outlined.

Hypothesis 1a: The importance attached to OCB will have a significant relationship with self-reported OCB.

Hypothesis 1b: The two cultural dimensions of IC and PD will have a significant relationship with the importance attached to OCB.

Hypothesis 1c: The two cultural dimensions of IC and PD will have a significant relationship with self-reported OCB.

Hypothesis 1d: The importance attached to OCB will mediate the relationship between IC / PD and self-reported OCB, as well as PD / IC exerting a direct influence on self-reported OCB.

Hofstede's study is over 20 years old (1980), but there have been other, more recent studies on work values (for example Smith, Dugan, & Trompenaars, 1996) which replicated the rank order of the surveyed nations closely. The following hypotheses are proposed:

Hypothesis 2a: The ranking of individual scores on the IC dimension, averaged across cultures, will significantly correspond with the ranking of these cultures in Hofstede's study.

Hypothesis 2b: The ranking of individual scores on the PD dimension, averaged across cultures, will significantly correspond with the ranking of these cultures in Hofstede's study.

Hypothesis 2c: The dimensions of IC and PD will be intercorrelated, in such a way that high Collectivism correlates positively with high Power Distance.

Specific Hypotheses

A general outline of the relationships between the independent variables IC and PD and the dependent variable OCB was given with Hypotheses 1 a-d and 2 a-c. Now,

more specific hypotheses regarding the relationships between IC and PD and the four sub-dimensions of OCB will be presented.

As the aforementioned studies have shown, collectivists work in teams more often than alone (Bochner & Hesketh, 1994), perform better when working with an ingroup than when working alone (Earley, 1993), cooperate more than individualists (Wagner, 1995), are more committed to their workgroup (Clugston, Howell, & Dorfman, 2000), have more contact with their co-workers, and believe that one should identify with one's company (Bochner & Hesketh, 1994).

The following hypothesis is proposed:

Hypothesis 3: The importance attached to OCB will vary as a function of levels of IC.

Moorman and Blakeley (1995) studied OCB as a function of a person's individual level of IC, that is, within one culture. They proposed that people with a collectivist orientation would be more motivated to perform OCB because collectivists cooperate more within a group, subordinate their goals to the goals of the group or organization, and show more concern for the welfare of the group. Their results showed that people with collectivist values did indeed report more OCB of the dimensions Interpersonal Helping, Individual Initiative, and Loyal Boosterism. No difference for the dimension Personal Industry was found. The authors argue that because Personal Industry refers to behaviors which can be classified as in-role and thus are motivated more by self-interest than concern for the welfare of the group, there should not be a difference in the performance of Personal Industry between collectivists and individualists.

Van Dyne, Vandewalle, Kostova, Latham, and Cummings (2000) also examined the effect of individual level IC on OCB in a single-culture setting, housing cooperatives in the United States. They proposed that collectivist individuals would perform more OCB (operationalized here as helping behaviors), and that this relationship would be fully mediated by collectivists' higher level of organization-based self-esteem. Their results supported their hypotheses.

In accordance with the above findings the following hypotheses are proposed:

Hypothesis 3a: Collectivism will have a significant positive relationship with the importance attached to OCB of the dimension Interpersonal Helping.

Hypothesis 3b: Collectivism will have a significant positive relationship with the importance attached to OCB of the dimension Loyal Boosterism.

Hypothesis 3c: Collectivism will not have any relationship with the importance attached to OCB of the dimension Personal Industry.

Contrary to Moorman and Blakeley's findings (1995), I do not expect that collectivists will show more OCB of the dimension Individual Initiative than individualists. Showing initiative involves a certain level of confrontation with members of the relevant ingroup, in contrast to helping one's co-workers or being a loyal supporter of one's organization. Even though collectivists might be more inclined to show Individual Initiative because of a greater concern for the work group or the organization (Clugston, Howell, & Dorfman., 2000; Bochner & Hesketh, 1994), they are also more concerned about harmony within the group (Triandis, 1995). This again should make them less inclined to show Individual Initiative. Thus, no difference between collectivists and individualists regarding this OCB dimension is expected.

The following hypothesis is proposed:

Hypothesis 3d: Collectivism will not have any relationship with the importance attached to OCB of the dimension Individual Initiative.

For self-reported OCB, the same tendencies as for OCB values are expected. The following hypotheses are proposed:

Hypothesis 4: The amount of self-reported OCB will vary as a function of levels of IC.

Hypothesis 4a: Collectivism will have a significant positive relationship with the amount of self-reported OCB of the dimension Interpersonal Helping.

Hypothesis 4b: Collectivism will have a significant positive relationship with the amount of self-reported OCB of the dimension Loyal Boosterism.

Hypothesis 4c: Collectivism will not have any relationship with self-reported OCB of the dimension Personal Industry.

Hypothesis 4d: Collectivism will not have any relationship with self-reported OCB of the dimension Individual Initiative.

As the aforementioned studies have shown, people high in Power Distance are less inclined to argue against a management decision they disagree with, state more often a belief in Theory X (Bochner & Hesketh, 1994), show higher levels of normative commitment (Clugston, Howell, & Dorfman, 2000), are more influenced by the opinion of high status members of their group (Earley, 1999), and expect subordinates to show loyalty to their leader (Merritt & Helmreich, 1996).

The following hypotheses are proposed:

Hypothesis 5: The value attached to OCB will vary as a function of levels on the PD dimension.

Hypothesis 5a: Power Distance will have a significant positive relationship with the importance attached to OCB of the dimension Loyal Boosterism.

Hypothesis 5b: Power Distance will have a significant negative relationship with the importance attached to OCB of the dimension Individual Initiative.

As regards the relationship between PD and the importance attached to Personal Industry, I would again argue that one's standing along the Power Distance dimension should have no effect on the appraisal and performance of Personal Industry behaviors. Although Smith, Dugan and Trompenaars (1996) found that employees high in Conservatism, which resembles high Power Distance, considered working overtime more often an expected part of their job, I would still think that Personal Industry behaviors are mainly motivated by self-interests, like attaining a promotion, and that these self-interests should not differ significantly between people high or low in Power Distance.

Thus, the following hypothesis is proposed:

Hypothesis 5c: Power Distance will not have any relationship with the importance attached to OCB of the dimension Personal Industry.

For self-reported OCB, similar tendencies as for OCB values are expected. The following hypotheses are proposed:

Hypothesis 6: The amount of self-reported OCB will vary as a function of levels on the PD dimension.

Hypothesis 6a: Power Distance will have a significant negative relationship with self-reported OCB of the dimension Individual Initiative.

Hypothesis 6b: Power Distance will not have any relationship with self-reported OCB of the dimension Personal Industry.

Hofstede (1980, 1997) states that in high PD cultures, the relationships between subordinates and superiors are more emotionally loaded. Thus a superior could either be admired or detested, and that would influence the performance of OCB.

The following hypothesis is proposed:

Hypothesis 6c: Power Distance will have a significant positive relationship with self-reported OCB of the dimension Loyal Boosterism - if one is satisfied with one's superior-subordinate relationship.

Figures 2 and 3 show graphic representations of hypotheses 2c – 6c (see next page).

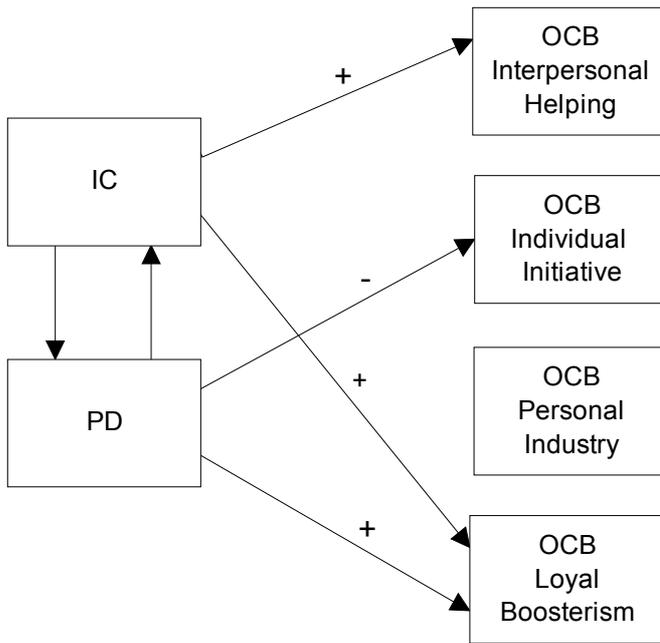


Figure 2: Value attached to OCB as a function of levels on IC and PD.

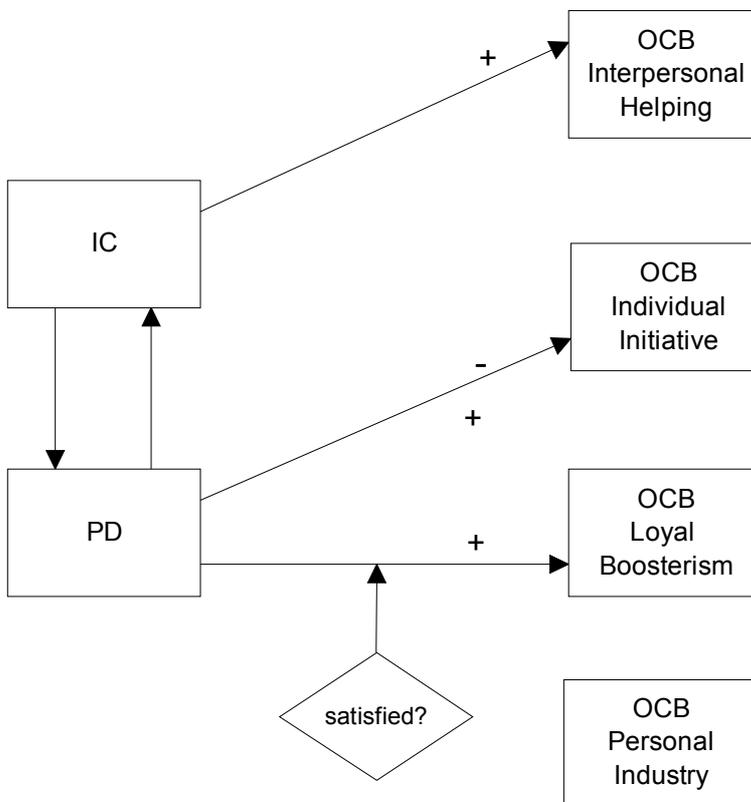


Figure 3: Self-reported OCB as a function of levels of IC and PD.

METHOD

Participants

The sample in this study included 150 professionals from all over the world, with the majority of the participants being from and working in Europe or the USA. See Table 1 for a complete listing.

Table 1. Countries of citizenship and countries of employment of the study sample

	Citizen of this country		Employed in this country	
	N	%	N	%
Australia	11	7	14	9
Canada	1	0.7	1	0.7
China	2	0.1	1	0.7
Denmark	1	0.7		
Finland			1	0.7
Germany	13	9	12	8
India	20	14	12	8
Indonesia			1	0.7
Ireland	33	22	23	16
Italy	1	0.7		
Mauritius	1	0.7		
Netherlands			1	0.7
Pakistan	1	0.7		
Singapore	2	1	2	1
Spain			1	0.7
Sweden	3	2	4	3
Switzerland			2	1
Thailand	1	0.7	1	0.7
United Kingdom	3	2	7	5
USA	56	37	67	45
Venezuela	1	0.7		

The vast majority of the participants was between 22 and 35 years old (n=128, 85%), and of Caucasian or White ethnicity (n=109, 72%). More men than women participated in this study (n=87, 58%).

About half of the participants worked in the computer industry or a computer-related industry (n=77, 51%). A complete listing of industries and professions can be found in the Appendix. Almost all participants had an educational level equivalent at least to an undergraduate degree (n=140, 95%), and most indicated holding an entry level or junior management position (n=137, 92%).

The majority of the participants (n=125, 83%) was satisfied to very satisfied with their current employer, and also, if applicable, with their current supervisor (n=112, 79%). Average tenure was 2.4 years (Median 1.2 years), and roughly half of the sample intended to stay with their current employer for more than two years (n=80, 55%). About half of the sample had lived or was living abroad (n=79, 53%), for an average duration of 3.7 years (Median 2 years). The majority of the participants indicated having a partner (n=92, 62%).

For a more detailed description of the demographics of the sample, please refer to Table 2.

Table 2. Demographic characteristics of the study sample

	Mean	Median	Range in years
Age	29.9	28	20 - 57
Tenure	2.4	1.2	0.04 - 28
Length profession	5.3	4	0.08 - 28
Living abroad (n=79)	3.7	2.0	0.10 - 40
	N		%
Industry^a			
Banking/Finance/Consultancy	18		12
Computer related	77		51
Health/Education/Research/Media	25		17
Construction/Manufacturing	15		10
Other	14		9
Education			
High school or equivalent	7		5
Undergraduate degree	60		41
Graduate degree	80		54
Gender			
Male	87		58
Female	63		42
Ethnicity			
Asian	39		26
African-American/Black	2		1
Caucasian	106		70
Hispanic/Latino	3		2
Partner ?			
Yes	92		61
No	58		39
Partner of different nationality ? (n=92)			
Yes	30		32
No	62		68
Partner of different ethnicity ? (n=92)			
Yes	15		16
No	77		84
Education abroad ?			
Yes	24		16
No	126		84
Work abroad ?			
Yes	55		37
No	95		63
Intention to stay (n=146)			
6 months to 1 year	35		24
1-5 years	81		56
More than 5 years	19		13
Until retirement	10		7
Job satisfaction			
Satisfied – very satisfied	125		83
Neither satisfied nor dissatisfied	16		11
Dissatisfied – very dissatisfied	9		6
Satisfaction with supervisor (n=142)			
Satisfied – very satisfied	112		79
Neither satisfied nor dissatisfied	19		13
Dissatisfied – very dissatisfied	11		8
Position			
Entry level	70		47
Junior management	67		45
Senior management	13		8

^afor a complete listing of industries and participants' professions, please refer to the Appendix.

Procedure

To facilitate the recruitment of an international research sample, the questionnaire was presented via the Internet, on a website of the University of Konstanz. A print version of the questionnaire existed as well for those participants who had no access to the Internet. Only 10 participants, all from the same German company, were provided with a print version of the questionnaire.

The recruitment strategy followed a "snowball principle": I sent a short letter of introduction including the address of the website per e-mail to potential participants, and I asked them to forward this letter to colleagues and friends who they thought might be interested in participating in the study. Thus, it is not possible to estimate a response rate. The vast majority of the potential participants I approached were not known to me personally. After the participants had filled out the questionnaire on-line, the data was sent to an e-mail account and then transformed into a textfile which could be imported into a statistical software package (in this case, JMP). Due to a total breakdown of the university's webserver in December/January 2000/2001, about 30 data sets were incomplete.

Participation in the study was voluntary and confidential, and participants were offered the opportunity to get feedback after conclusion of the study. About 15 participants did request feedback.

Measures

For a complete description of all scales employed in this study, please refer to the Appendix.

Importance of Organizational Citizenship Behavior: OCB

The importance attached to OCB was assessed using a questionnaire developed by Moorman and Blakely (1992). This questionnaire consists of 19 items, with five items each measuring Interpersonal Helping, Individual Initiative, and Loyal Boosterism, and four items measuring Personal Industry. Moorman and Blakely developed and validated their scale in a single-culture setting, and further usage of the scale (Moorman & Blakely, 1995; Moorman, Blakely, & Niehoff, 1998) also occurred in only one culture.

To measure the importance attached to OCB, participants were asked to think of an imaginary colleague of theirs and to indicate what qualities this colleague should have in order to contribute the most to the workgroup. Items were assessed using a 6-point Likert scale ranging from "Essential" to "Irrelevant".

Sample items include:

"Voluntarily helps new employees settle into the job" (Interpersonal Helping scale).

"For issues that may have serious consequences, expresses opinions honestly even when others may disagree" (Individual Initiative scale).

"Performs his/her duties with unusually few errors" (Personal Industry scale).

"Encourages friends and family to utilize organization products" (Loyal Boosterism scale).

The Cronbach's alpha for the entire scale was .81. For the four sub-scales, the Cronbach's alphas were as follows: For the Interpersonal Helping sub-scale (OCB-IP), .60, for the Individual Initiative sub-scale (OCB-II), .70, for the Personal Industry sub-scale (OCB-PI), .71, for the Loyal Boosterism sub-scale (OCB-LB), .83.

Self-reported Organizational Citizenship Behavior: OCB-S

To assess self-reported OCB (OCB-S), I again used the OCB-scale by Moorman and Blakely (1995), but with a different response format. This time, participants were asked to indicate how often they themselves engaged in OCB behaviors, rephrasing the questions in the first person singular (for example: "I voluntarily help new employees settle into the job"). Items were assessed using a 7-point Likert scale ranging from "Always" to "Never".

The Cronbach's alpha for the entire scale was .85. For the four sub-scales, the Cronbach's alphas were as follows: For the Interpersonal Helping sub-scale (OCB-S-IP), .67, for the Individual Initiative sub-scale (OCB-S-II), .78, for the Loyal Boosterism sub-scale (OCB-S-LB), .84, for the Personal Industry sub-scale (OCB-S-PI), .68. By excluding one item from the Personal-Industry sub-scale (OCB-S-PI-1, see Appendix), the Cronbach's alpha rose to .78. A check with the OCB scale measuring importance attached to OCB showed that exclusion of this item did not alter the Cronbach's alpha of that scale. Thus, the item was excluded from further analysis, with the Personal Industry sub-scale now containing three items.

Individualism-collectivism IC

IC was assessed using a ten-item scale presented by Earley and Erez (1997). This scale captures IC in an organizational context. Sample items include: "Employees like to work in a group rather than by themselves", "Cooperation among team members usually helps to solve problems".

Subjects were told to answer these questions in regard to workplace norms and behaviors.

Items were assessed using a 7-point Likert scale ranging from "Completely agree" to "Completely disagree". The Cronbach's alpha of the scale was .80.

Power Distance PD

PD was assessed using an eight-item measure developed by Earley and Erez (1997) based on Hofstede's construct definition (1980). Sample items include: "In most situations managers should make decisions without consulting their subordinates", "In work related matters, managers have a right to expect obedience from their subordinates".

Items were assessed using a 7-point Likert scale ranging from "Completely agree" to "Completely disagree". Subjects were told to answer these items in regard to workplace norms and behaviors.

The Cronbach's alpha for the scale was .67.

Job Satisfaction

In this study, job satisfaction was measured with one item only. Participants were asked to rate their overall satisfaction with their company at the present time with a 5-point Likert scale ranging from "Very satisfied" to "Very dissatisfied". According to a meta-analysis by Wanous, Reichers, and Hudy (1997), single-item measures to assess general job satisfaction yield estimated reliabilities comparable to satisfaction scales, and they seem to be more robust than scale measures to assess overall satisfaction.

Statistical Analyses

I assessed Hypotheses 1a-d, and Hypotheses 3a – 6c with hierarchical regression. I included four control variables in all hypotheses tests. Two of them, gender and age,

were chosen to control for general demographic influences. The other two, job satisfaction and position, were chosen because of their potential prediction value for Organizational Citizenship Behavior. Job satisfaction in particular has been shown to predict OCB (Organ & Lingl, 1995; Organ & Ryan, 1995; Organ & Paine, 1999). The four control variables were entered at Step 1 of the regression equation, and the independent variables at Step 2. Whenever a hypothesis test was only concerned with the relationship between one of the two predictor variables and the dependent variable, the other one was entered as a fifth control variable at Step 1.

To assess mediation in Hypothesis 1d, I used the three-equation approach recommended by Baron and Kenny (1986).

To assess the interaction effect predicted in Hypothesis 6b, I used moderated regression analysis, introducing the interaction in Step 3 of the regression equation, after entering the control variables at Step 1 and the independent variables at Step 2. Hypotheses 2a-c were assessed by calculating correlation coefficients. In the case for Hypotheses 2a and 2b, these were rank-order correlations.

To check whether the scores on the independent and dependent variables were distributed normally, Shapiro Wilk's W-Tests were performed. Four scales were not distributed normally. These were the PD scale (with more participants being low on PD than high on it), the OCB-II scale, the OCB-S-IP scale, and the OCB-S-PI scale. In all these cases, the distributions were typically skewed towards the positive poles of the dimension, but not in an extreme fashion.

However, as the sample size for all analyses was at least $n = 128$, the normality assumption according to the central limit theorem should apply to this sample (Hays, 1967). The central limit theorem states that, as the sample size increases, the sampling distribution approaches normal shape. Thus, all analyses were performed with parametric tests.

RESULTS

Descriptive statistics and correlations between the independent and dependent variables, and the control variables, are reported in Table 3.

Hypotheses 1. The Relationship between IC, PD, OCB, and OCB-S

These hypotheses were tested using hierarchical regression. Controls (age, gender, job satisfaction, position) were entered at Step 1, and the independent variables at Step 2.

Prediction of Self-reported OCB

Hypothesis 1a stated that the importance attached to OCB would have a significant relationship with self-reported OCB. Hypothesis 1c stated that IC and PD would have significant relationships with self-reported OCB. Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 4.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 19% of the variance ($F = 8.66$, $p < 0.001$). The addition of OCB, PD, and IC in Step 2 of the regression equation did contribute significantly to the prediction of OCB-S, producing a significant $\Delta F = 25.0$ ($p < 0.001$), and explaining an additional 21% of the variance ($R^2 = 0.41$, $F = 14.19$, $p < 0.001$ for the whole model). However, only the beta for OCB reached significance ($\beta = 0.47$, $p < 0.001$), while the betas for PD and IC failed to reach significance in this equation.

Thus, Hypothesis 1a was supported by the data, whereas Hypothesis 1c was not supported by the data.

Table 3. Descriptive statistics and correlations^a

	Mean	S. D.	. 1 ¹	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Gender ²																	
2 Age	29.86	6.93	- 0.00														
3 Satisfaction	4.07	0.85	- 0.04	0.01													
4 Position	1.62	0.64	0.02	0.36†	0.08												
5 OCB-IP	4.24	0.58	- 0.07	0.06	- 0.10	- 0.11											
6 OCB-II	4.33	0.66	0.02	0.06	0.0	0.11	0.33†										
7 OCB-PI	4.16	0.82	- 0.11	0.09	0.15	0.28*	- 0.01	0.14									
8 OCB-LB	3.30	1.04	- 0.08	0.09	0.12	0.15	0.32†	0.43†	0.23‡								
9 OCB	4.01	0.52	- 0.12	0.11	0.09	0.16	0.54†	0.68†	0.55†	0.82†							
10 OCB-S-IP	5.04	0.74	- 0.20‡	0.17*	0.16*	0.08	0.33†	0.11	0.03	0.14	0.21*						
11 OCB-S-II	4.82	0.87	- 0.02	0.22‡	0.05	0.31†	0.05	0.44†	0.09	0.30†	0.34†	0.37†					
12 OCB-S-PI	5.06	0.96	- 0.18*	0.11	0.04	0.27†	0.02	0.11	0.50†	0.14	0.31†	0.19*	0.28†				
13 OCB-S-LB	4.46	1.23	- 0.25‡	0.12	0.25‡	0.20*	0.25‡	0.22‡	0.24‡	0.68†	0.56†	0.28†	0.32†	0.26‡			
14 OCB-S	4.86	0.65	- 0.23‡	0.21‡	0.18*	0.32†	0.23‡	0.33†	0.33†	0.49†	0.55†	0.61†	0.71†	0.64†	0.75†		
15 PD	3.17	0.68	0.03	- 0.06	0.07	0.06	- 0.05	- 0.10	0.18*	0.19*	0.12	0.05	- 0.08	- 0.01	0.21*	0.03	
16 IC	5.18	0.61	0.17*	- 0.18*	0.01	- 0.08	0.21‡	0.15	0.04	0.22‡	0.23‡	0.16*	0.05	- 0.06	0.07	0.09	0.07

^asignificant correlations between the dependent variables and further demographic variables are reported in the Appendix.

¹Spearman's Rho correlation

²0 = female, 1 = male

* significant at $p < 0.05$

‡ significant at $p < 0.01$

† significant at $p < 0.001$

Table 4. Regression analysis predicting self-reported OCB (OCB-S)

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.19	8.66†	0.19	8.66†
Gender	0.23	3.09‡				
Age	0.09	1.13				
Satisfaction	0.15	2.02*				
Position	0.29	3.57†				
<u>Step 2</u>			0.41	14.19†	0.21	25.00†
OCB	0.47	6.82†				
PD	- 0.04	- 0.66				
IC	0.04	0.61				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=149

Prediction of the Importance Attached to OCB

Hypothesis 1b predicted that PD and IC would have a significant relationship with the importance attached to OCB.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 5.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 4% of the variance ($F = 1.69$, $p > 0.05$). The addition of PD and IC in Step 2 of the regression equation contributed significantly to the prediction, producing a significant $\Delta F = 6.54$ ($p < 0.01$), and explaining an additional 8% of the variance ($R^2 = 0.12$, $F = 3.32$, $p < 0.01$ for whole model). However, only the beta for IC was significant ($\beta = 0.26$, $p < 0.001$).

Thus, the hypothesis was partially supported by the data: The data suggests that only IC, but not PD, is a predictor for the importance people attach to OCB.

Table 5. Regression analysis predicting the importance attached to OCB

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.04	1.69	0.04	1.69
Gender	0.09	1.14				
Age	0.06	0.65				
Satisfaction	0.08	0.97				
Position	0.14	1.57				
<u>Step 2</u>			0.12	3.32‡	0.08	6.54‡
PD	0.11	1.35				
IC	0.26	3.27†				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=150

Prediction of a Mediated Relationship between Collectivism and self-reported OCB

Hypothesis 1d predicted a partial mediation of IC and PD as predictors for self-reported OCB by the importance attached to OCB. To assess this mediation, three preconditions need to be met (Baron & Kenny, 1986): First, the independent variable should have a significant relationship with the mediator. Second, the independent variable should have a significant relationship with the dependent variable. Third, the effect of the independent variable (IC) on the dependent variable (OCB-S) should be less (partial mediation) or should disappear (full mediation) after also entering the mediator (OCB) into the equation.

Hypothesis 1b stated precondition 1 (PD and IC predicting OCB). As the beta for PD failed to reach significance in this hypothesis test, further analysis was only done with IC.

Results from Hierarchical Multiple Regression Analysis testing precondition 1 are shown in Table 6.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 4% of the variance ($F = 1.69, p > 0.05$). The addition of IC in Step 2 of the regression equation contributed significantly to the prediction, producing a

significant $\Delta F = 13.18$ ($p < 0.01$), and explaining an additional 8% of the variance ($R^2 = 0.12$, $F = 3.98$, $p < 0.001$ for whole model).

Thus, the first precondition for a mediated model between IC and OCB-S was met.

Table 6. Regression analysis predicting the importance attached to OCB, IC as predictor in Step 2

	β	t	R^2	F	ΔR^2	ΔF
<u>Step 1</u>			0.04	1.69	0.04	1.69
Gender	0.09	1.14				
Age	0.06	0.65				
Satisfaction	0.08	0.97				
Position	0.14	1.57				
<u>Step 2</u>			0.12	3.98‡	0.08	13.18†
IC	0.29	3.55†				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=150

Precondition 2 was that the predictor IC have a significant relationship with the dependent variable OCB-S.

Results from Hierarchical Multiple Regression Analysis testing this precondition are shown in Table 7.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 19% of the variance ($F = 8.66$, $p < 0.001$). The addition of IC in Step 2 of the regression equation contributed significantly to the prediction, producing a significant $\Delta F = 5.54$ ($p < 0.05$), and explaining an additional 3% of the variance ($R^2 = 0.22$, $F = 8.06$, $p < 0.001$ for whole model).

Thus, the second precondition for a mediated model between IC and OCB-S was met.

Table 7. Regression analysis predicting OCB-S, IC as predictor in Step 2

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.19	8.66†	0.19	8.66†
Gender	0.23	3.09‡				
Age	0.09	1.13				
Satisfaction	- 0.15	2.02*				
Position	0.29	3.57†				
<u>Step 2</u>			0.22	8.06†	0.03	5.54*
IC	0.16	2.18*				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=149

The third precondition of the mediator Hypothesis was that the effect of the independent variable (IC) on the dependent variable (OCB-S) be less (partial mediation) or disappear (full mediation) after also entering the mediator (OCB) into the equation.

Results from Hierarchical Multiple Regression Analysis testing this precondition are shown in Table 8.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 19% of the variance ($F = 8.66$, $p < 0.001$). The addition of IC and OCB in Step 2 of the regression equation contributed significantly to the prediction, producing a significant $\Delta F = 26.66$ ($p < 0.001$), and explaining an additional 22% of the variance ($R^2 = 0.41$, $F = 16.54$, $p < 0.001$ for whole model).

But only the beta for OCB reached significance in this equation ($\beta = 0.46$, $p < 0.001$). Thus, when also entering the importance attached to OCB as a predictor of self-reported OCB, IC is no longer a significant predictor of self-reported OCB ($\beta = 0.04$, $p > 0.05$). This means that a full mediation effect is present. Hypothesis 1d, however, predicted a partial mediation by OCB for both IC and PD. Thus, the hypothesis was only partially supported.

Table 8. Regression analysis predicting self-reported OCB (OCB-S), predictors OCB and IC

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.19	8.66†	0.19	8.66†
Gender	0.23	3.09‡				
Age	0.09	1.13				
Satisfaction	0.15	2.02*				
Position	0.29	3.57†				
<u>Step 2</u>			0.41	16.54†	0.22	26.66†
OCB	0.46	6.75†				
IC	0.04	0.61				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=150

Hypotheses 2: The Ranking of IC and PD across Cultures and the Relationship between IC and PD

Comparison of the Rank Orders in this Study with the Rank Orders in Hofstede's Study

Hypotheses 2 a and 2b stated that the ranking of individual scores on the IC and PD dimensions, averaged across cultures, would correspond with the ranking of these cultures in Hofstede's study (1980).

These Hypotheses were tested by performing a rank order correlation. Results are shown in Table 9.

In this analysis, I only included those countries with more than ten respondents. These countries were Australia (n=11), Germany (n=13), India (n=20), Ireland (n=33), and the USA (n=56). The five countries were ranked according to their mean scores on IC and PD, each individual was assigned his or her country's rank, and a rank order correlation (Spearman's Rho) was performed. For PD, the rank order could be exactly

replicated ($r = 1$), and for IC, the correlation was highly significant ($r = 0.97$, $p < 0.001$). Thus, the hypotheses were supported.

Table 9. Rank order correlation of Hofstede's PD and IC ranks and study's PD and IC ranks^a

	Rank Hofstede PD	Rank Hofstede IC
Rank PD	1.00†	
Rank IC		0.97†

^afor a listing of the rank orders in this study and Hofstede's study, please refer to the appendix.

†significant at $p < 0.001$.

$n = 133$

As a further test of this hypothesis, it was also checked whether the means of IC and PD differed significantly between countries. There was no effect for PD ($R^2 = 0.04$, $F = 1.37$, $p > 0.05$), but there was an effect for IC ($R^2 = 0.09$, $F = 3.24$, $p < 0.01$). A post-hoc test (Tukey-Kramer) revealed that the Indian mean for IC was significantly higher than the US mean. I would still maintain, however, that Hypotheses 2a and 2b are supported by the data, considering the extremely high rank order correlation coefficients given the fact that some of the sample sizes were quite small.

The Relationship between PD and IC

Hypothesis 2c predicted a significant positive correlation between IC and PD.

However, the variables were not significantly correlated ($r = 0.07$, $p > 0.05$).

As this result is not in line with other researchers' results and theorizing (for example Hofstede, 1980, 1997), I tested whether the relationship between PD and IC was maybe better explained by a non-linear model. This turned out to be the case. The linear fit between the two variables was non-significant ($R^2 = 0.005$, $F = 0.77$, $p > 0.05$). However, a cubic relationship was significant ($R^2 = 0.06$, $F = 3.20$, $p < 0.05$). This relationship suggests that participants with a very low PD score also have a very low IC score, and participants with a very high PD score also have a very high IC score, but that there is no such clear relationship for those participants with moderate scores on both dimensions.

Hypotheses 3 and Hypotheses 5: Predicting the four Sub-dimension of OCB

Prediction of the Importance Attached to Interpersonal Helping

Hypothesis 3a predicted a positive relationship between IC and the importance attached to OCB of the dimension Interpersonal Helping.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 11.

The four control variables age, gender, job satisfaction and position, as well as PD, were entered in Step 1 and explained 3% of the variance ($F = 1.24$, $p > 0.05$). The addition of IC in Step 2 of the regression equation contributed significantly to the prediction, producing a significant $\Delta F = 9.49$ ($p < 0.01$), and explaining an additional 6% of the variance ($R^2 = 0.09$, $F = 2.31$, $p < 0.05$, for whole model).

Thus, Hypothesis 3a was supported by the data.

Table 11. Regression analysis predicting OCB Interpersonal Helping.

	β	t	R^2	F	ΔR^2	ΔF
<u>Step 1</u>			0.03	1.24	0.03	1.24
Gender	0.04	0.46				
Age	0.11	1.21				
Satisfaction	- 0.09	- 1.13				
Position	- 0.14	- 1.59				
PD	- 0.02					
<u>Step 2</u>			0.09	2.31*	0.06	9.49‡
IC	0.24	2.93‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

n=150

Prediction of the Importance Attached to Loyal Boosterism

Hypothesis 3b predicted a positive relationship between IC and the importance attached to OCB of the dimension Loyal Boosterism. Hypothesis 5a predicted a positive relationship between PD and the importance attached to OCB of the dimension Loyal Boosterism.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 12.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 5% of the variance ($F = 1.7, p > 0.05$). The addition of IC and PD in Step 2 of the regression equation contributed significantly to the prediction, producing a significant $\Delta F = 7.95$ ($p < 0.001$), and explaining an additional 9% of the variance ($R^2 = 14\%, F = 3.78, p < 0.01$, for whole model).

Thus, both hypotheses were supported by the data.

Table 12. Regression analysis predicting OCB Loyal Boosterism

	β	t	R^2	F	ΔR^2	ΔF
<u>Step 1</u>			0.05	1.70	0.05	1.70
Gender	0.09	1.11				
Age	0.03	0.30				
Satisfaction	0.11	1.34				
Position	0.14	1.58				
<u>Step 2</u>			0.14	3.78‡	0.09	7.95†
PD	0.16	2.04*				
IC	0.26	3.19‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=150

Prediction of the Importance Attached to Individual Initiative

Hypothesis 3d predicted that IC would not have any relationship with the importance attached to OCB of the dimension Individual Initiative, and Hypothesis 5b predicted that PD would have a negative relationship with OCB of the dimension Individual Initiative.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 13.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 1% of the variance ($F = 0.43, p > 0.05$). The addition of IC and PD in Step 2 of the regression equation contributed significantly to the prediction,

producing a significant $\Delta F = 3.03$ ($p < 0.05$), and explaining an additional 4% of the variance ($R^2 = 5\%$, $F = 1.28$, $p > 0.05$, for whole model). This effect was only attributable to IC, however ($\beta = 0.17$, $p < 0.05$). The beta for PD, although, as predicted, negative, failed to reach significance ($\beta = -0.12$, $p > 0.05$).

Thus, Hypothesis 5b must be rejected. The results for Hypothesis 3d are more difficult to interpret: Although IC was a significant predictor for the importance attached to Individual Initiative, the regression model as a whole failed to reach significance. As IC and OCB Individual Initiative are also not significantly correlated with each other (see Table 3), I would conclude that Hypothesis 3d, which predicted no relationship between IC and Individual Initiative, cannot be rejected by the data.

Table 13. Regression analysis predicting OCB Individual Initiative

	β	t	R^2	F	ΔR^2	ΔF
<u>Step 1</u>			0.01	0.43	0.01	0.43
Gender	- 0.01	- 0.17				
Age	0.03	0.29				
Satisfaction	- 0.01	- 0.08				
Position	0.10	1.07				
<u>Step 2</u>			0.05	1.28	0.04	3.03*
PD	- 0.12	- 1.43				
IC	0.17	2.04*				

*significant at $p < 0.05$

n=150

Prediction of the Importance Attached to Personal Industry

Hypotheses 3c and 5c predicted no significant relationship between IC and PD and the importance attached to OCB of the dimension Personal Industry.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 14.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 7% of the variance ($F = 2.79$, $p < 0.05$). The addition of IC and PD in Step 2 of the regression equation did not contribute significantly to the prediction, producing a $\Delta F = 2.4$ ($p > 0.05$).

Thus, Hypothesis 3c cannot be rejected by the data.

However, the beta for PD reached significance in the equation ($\beta = 0.17, p < 0.05$). As PD was also significantly correlated with OCB Personal Industry, Hypothesis 5c must be rejected.

Table 14. Regression analysis predicting OCB Personal Industry.

	β	t	R ²	F	ΔR^2	ΔF
Step 1			0.07	2.79*	0.07	2.79*
Gender	0.10	1.29				
Age	0.01	0.16				
Satisfaction	0.13	1.65				
Position	0.19	2.26*				
Step 2			0.10	2.69*	0.03	2.40
PD	0.17	1.96*				
IC	0.07	0.85				

*significant at $p < 0.05$

n=150

Hypotheses 4 and 6: Predicting the four Sub-dimensions of Self-reported OCB

Prediction of Self-reported Interpersonal Helping

Hypothesis 4a predicted a positive relationship between IC and self-reported OCB of the dimension Interpersonal Helping.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 15.

The four control variables age, gender, job satisfaction and position, and PD, were entered in Step 1 and explained 9% of the variance ($F = 2.95, p < 0.01$). The addition of IC and PD in Step 2 of the regression equation did contribute significantly to the prediction, producing a $\Delta F = 8.31$ ($p < 0.01$), and explaining an additional 5% of the variance ($R^2 = 0.14, F = 3.99, p < 0.001$, for whole model).

Thus, the data supported Hypothesis 4a.

Table 15. Regression analysis predicting OCB-S Interpersonal Helping

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.09	2.95‡	0.09	2.95‡
Gender	0.19	2.35*				
Age	0.14	1.68				
Satisfaction	0.16	1.98*				
Position	0.03	0.30				
PD	- 0.05	- 0.58				
<u>Step 2</u>			0.14	3.99†	0.05	8.31‡
IC	0.23	2.90‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=149

Prediction of self-reported Loyal Boosterism

Hypotheses 4b and 6c predicted a positive relationship between IC and PD and self-reported OCB of the dimension Loyal Boosterism. For PD, however, a moderator effect was predicted: PD would only show a positive relationship with self-reported Loyal Boosterism if satisfaction with one's supervisor was high.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 16.

The four control variables age, gender, job satisfaction and position, and the predicted moderator variable supervisor satisfaction, were entered in Step 1 and explained 15% of the variance ($F = 4.16$, $p < 0.01$). The addition of IC and PD in Step 2 of the regression equation did contribute significantly to the prediction, producing a $\Delta F = 3.78$ ($p < 0.05$), explaining an additional 5% of the variance in the data ($R^2 = 0.20$, $F = 4.16$, $p < 0.001$, for whole model). However, this effect was largely attributable to PD ($\beta = 0.17$, $p < 0.05$), whereas for IC only a trend at the 10% significance level was noticeable ($\beta = 0.14$, $p < 0.10$).

Thus, Hypothesis 4b was not supported by the data when applying conventional significance levels.

The addition of the interaction term of PD and supervisor satisfaction in Step 3 did not improve the prediction of the dependent variable at all ($\Delta F = 0.30$, $p > 0.05$). Thus, contrary to what I expected, PD was a significant predictor of self-reported OCB of the dimension Loyal Boosterism no matter if one was satisfied with one's supervisor or not, giving Hypothesis 6c only partial support.

Table 16. Regression analysis predicting OCB-S Loyal Boosterism.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.15	4.16‡	0.15	4.16‡
Gender	0.21	2.52‡				
Age	0.02	0.22				
Satisfaction	0.19	1.94*				
Position	0.17	1.82				
Sat. Supervisor	0.08	0.83				
<u>Step 2</u>			0.20	4.16†	0.05	3.78*
PD	0.17	2.03*				
IC	0.14	1.68 ^a				
<u>Step 3</u>			0.20	3.64†	0.002	0.30
PD*Sat. Supervisor	- 0.04	- 0.44				

^asignificant at $p < 0.10$

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=128

Prediction of Self-reported Individual Initiative

Hypothesis 4c predicted no significant relationship between IC and self-reported OCB of the dimension Individual Initiative, and Hypothesis 6a predicted a significant negative relationship between PD and self-reported Individual Initiative.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 17.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 11% of the variance ($F = 4.54$, $p < 0.01$). The addition of IC and PD in Step 2 of the regression equation did not contribute significantly to the

prediction, producing a $\Delta F = 1.64$ ($p > 0.05$). The beta for PD, however, although not significant ($\beta = -0.10$, $p > 0.05$), did show the expected negative direction.

Thus, Hypothesis 6a did not receive support, whereas Hypothesis 4c, which predicted no relationship between IC and self-reported Individual Initiative, cannot be rejected by the data.

Table 17. Regression analysis predicting OCB-S Individual Initiative.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.11	4.54‡	0.11	4.54‡
Gender	0.03	0.34				
Age	0.12	1.41				
Satisfaction	0.03	0.41				
Position	0.27	3.16‡				
<u>Step 2</u>			0.13	3.63‡	0.02	1.64
PD	- 0.10	- 1.26				
IC	0.12	1.44				

*significant at $p < 0.05$

‡significant at $p < 0.01$

n=149

Prediction of Self-reported Personal Industry

Hypotheses 4d and 6b predicted no significant relationships between IC and PD and self-reported OCB of the dimension Personal Industry.

Results from Hierarchical Multiple Regression Analysis testing these hypotheses are shown in Table 17.

The four control variables age, gender, job satisfaction and position were entered in Step 1 and explained 11% of the variance ($F = 4.39$, $p < 0.01$). The addition of IC and PD in Step 2 of the regression equation did not contribute significantly to the prediction, producing a $\Delta F = 0.08$ ($p > 0.05$).

Thus, the both hypotheses cannot be rejected by the data.

Table 18. Regression analysis predicting OCB-S Personal Industry.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.11	4.39‡	0.11	4.39‡
Gender	0.20	2.47‡				
Age	- 0.01	- 0.12				
Satisfaction	0.02	0.30				
Position	0.27	3.20‡				
<u>Step 2</u>			0.11	2.93‡	0.001	0.08
PD	- 0.04	- 0.50				
IC	- 0.003	- 0.03				

*significant at $p < 0.05$

‡significant at $p < 0.01$

n=149

Further Analyses of the Data

Because of the large number of demographic variables that did not go into the regression equations but still might have prediction power for the dependent variables, I conducted some further analyses. Results are reported only for those variables that had more than two significant effects ($p < 0.05$). In addition, when these demographic variables showed to have significant prediction value for one of the dependent variables, an additional Hierarchical Multiple Regression Analysis was conducted as a stricter test of the Hypotheses. The additional control variables were added in Step 1 along with the four other demographic variables age, gender, satisfaction, and position. If the additional demographic variables in this first Step already failed to have significant betas, no further analysis was conducted.

Tenure

Tenure had a positive relationship with self-reported OCB ($R^2 = 0.04$, $F = 5.97$, $p < 0.05$).

When entering Tenure as a fifth control variable into a Multiple Hierarchical Regression Analysis predicting OCB-S, however, the beta did not reach significance ($\beta = 0.10, p > 0.05$). Thus, no further analysis was conducted.

Tenure also had a positive relationship self-reported interpersonal helping behaviors ($R^2 = 0.07, F = 11.02, p < 0.001$). Here, the addition of tenure as a sixth variable in Step 1 of the regression equation did significantly improve the prediction of self-reported Interpersonal Helping. Thus, the analysis for Hypothesis 4a was repeated.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 18.

The five control variables age, gender, job satisfaction, position and tenure, and PD as well, were entered in Step 1 and explained 15% of the variance ($F = 4.09, p < 0.001$). The addition of IC in Step 2 did contribute significantly to the prediction, producing a $\Delta F = 10.78 (p < 0.001)$, and explaining an additional 6% of the variance ($R^2 = 0.21, F = 5.20, p < 0.001$, for whole model).

Thus, after additionally controlling for tenure, Hypothesis 4a was still supported by the data.

Table 18. Regression analysis predicting OCB-S Interpersonal Helping, Tenure as a fifth control variable in Step 1.

	β	t	R^2	F	ΔR^2	ΔF
<u>Step 1</u>			0.15	4.09†	0.15	4.09†
Gender	0.17	2.19*				
Age	0.03	0.32				
Satisfaction	0.21	2.63‡				
Position	- 0.02	- 0.29				
Tenure	0.28	2.99‡				
PD	- 0.04	- 0.57				
<u>Step 2</u>			0.21	5.20†	0.06	10.78†
IC	0.25	3.20‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=149

Tenure also had positive prediction value for self-reported Individual Initiative behaviors ($R^2 = 0.06$, $F = 9.78$, $p < 0.01$). When entering Tenure as a fifth control variable into a Multiple Hierarchical Regression Analysis predicting self-reported Individual Initiative, however, the beta did not reach significance ($\beta = 0.15$, $p > 0.05$). Thus, no further analysis was conducted.

Ethnicity

In all cases when ethnicity was a significant predictor of any of the predictor variables or dependent variables, it was always the sub-group of the Asian participants in the sample that was responsible for the statistical effect. Thus, ethnicity was re-coded into a binary variable, differentiating between those participants who were of Asian ethnicity ($n = 39$) and those who were not ($n = 109$). As such, the variable had prediction value for the importance attached to OCB ($R^2 = 0.05$, $F = 7.32$, $p < 0.01$), in particular for the value attached to Loyal Boosterism ($R^2 = 0.08$, $F = 12.78$, $p < 0.001$). A similar effect was also observed for self-reported Loyal Boosterism ($R^2 = 0.05$, $F = 6.86$, $p < 0.01$). In all these cases the Asian part of the sample scored significantly higher on the OCB dimensions.

When entering Asian ethnicity as a fifth control variable at Step 1 of a Hierarchical Multiple Regression Analysis predicting OCB, the beta for Asian ethnicity reached significance. Thus, the analysis for Hypothesis 1b was repeated. However, PD was not entered into the analysis as a predictor as it had already failed to reach significance in the less strict hypothesis test.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 19.

The five control variables age, gender, job satisfaction, position and Asian ethnicity were entered in Step 1 and explained 10% of the variance ($F = 3.34$, $p < 0.01$). The addition of IC in Step 2 did contribute significantly to the prediction, producing a $\Delta F = 10.29$ ($p < 0.01$), and explaining an additional 6% of the variance ($R^2 = 0.16$, $F = 4.62$, $p < 0.001$, for whole model).

Thus, after additionally controlling for ethnicity, Hypothesis 1b was still supported by the data.

Table 19. Regression analysis predicting the importance attached to OCB (OCB), Asian ethnicity as a fifth control variable.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.10	3.34‡	0.10	3.34‡
Gender	0.09	1.16				
Age	0.11	1.22				
Satisfaction	0.09	1.10				
Non-Asian	- 0.25	- 3.08‡				
Position	0.13	1.56				
<u>Step 2</u>			0.16	4.62†	0.06	10.29‡
IC	0.25	3.17‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=150

When entering Asian ethnicity as a fifth control variable at Step 1 of a Hierarchical Multiple Regression Analysis predicting the importance attached to Loyal Boosterism, the beta for Asian ethnicity reached significance. Thus, the analysis for Hypotheses 3b and 5a was repeated.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 20.

The five control variables age, gender, job satisfaction, position and Asian ethnicity were entered in Step 1 and explained 14% of the variance ($F = 4.59, p < 0.001$). The addition of IC and PD in Step 2 did contribute significantly to the prediction, producing a $\Delta F = 5.06$ ($p < 0.01$), and explaining an additional 5% of the variance ($R^2 = 0.19, F = 4.90, p < 0.001$, for whole model).

However, only the beta for IC reached significance ($\beta = 0.22, p < 0.01$), whereas the beta for PD did not reach significance ($\beta = 0.11, p > 0.05$). Thus, after additionally controlling for ethnicity, Hypothesis 3b still received support, but Hypothesis 5a did not receive support with this stricter hypothesis test.

Table 20. Regression analysis predicting OCB Loyal Boosterism, Asian ethnicity as fifth control variable.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.14	4.59†	0.14	4.59†
Gender	0.09	1.15				
Age	0.09	1.03				
Satisfaction	0.12	1.54				
Position	0.13	1.58				
Non-Asian	- 0.31	- 3.93†				
<u>Step 2</u>			0.19	4.90†	0.05	5.06‡
PD	0.11	1.41				
IC	0.22	2.80‡				

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=150

When entering Asian ethnicity as a fifth control variable at Step 1 of a Hierarchical Multiple Regression Analysis predicting self-reported Loyal Boosterism, the beta for Asian ethnicity reached significance. Thus, the analysis for Hypothesis 6c was repeated, this time, however, without the moderator supervisor satisfaction as this variable failed to reach significance in the less strict hypothesis test. A re-analysis of Hypothesis 4b was also not done as this hypothesis was already not supported in the less strict hypothesis test.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 21.

The five control variables age, gender, job satisfaction, position and Asian ethnicity were entered in Step 1 and explained 21% of the variance ($F = 6.67$, $p < 0.001$). The addition of PD in Step 2 did not contribute significantly to the prediction when applying a conventional significance level of $p < 0.05$. However, the prediction approached significance, with a $\Delta F = 3.5$ ($p < 0.06$), explaining an additional 2% of the variance ($R^2 = 0.23$, $F = 6.23$, $p < 0.001$, for whole model).

Strictly speaking, Hypothesis 6c was not supported by the data with this stricter hypothesis test.

Table 21. Regression analysis predicting OCB-S Loyal Boosterism, Asian ethnicity as a fifth control variable.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.21	6.67†	0.21	6.67†
Gender	0.22	2.84‡				
Age	0.07	0.84				
Satisfaction	0.24	3.02‡				
Position	0.15	1.69				
Non-Asian	- 0.25	- 3.10‡				
<u>Step 2</u>			0.23	6.23†	0.02	3.50 ^a
PD	0.15	1.85 ^a				

^asignificant at $p < 0.07$

*significant at $p < 0.05$

‡significant at $p < 0.01$

† significant at $p < 0.001$

n=135

Asian ethnicity also had an influence on the two independent variables, with the Asian participants being more collectivist ($R^2 = 0.03$, $F = 4.93$, $p < 0.05$) and more power distant ($R^2 = 0.05$, $F = 7.27$, $p < 0.01$). Because of these results, the correlation between IC and PD was re-calculated for Asian participants only, but it was still non-significant ($r = -0.06$). However, for the Asian participants, there was a significant non-linear, quadratic relationship between IC and PD ($R^2 = 0.20$, $F = 4.15$, $p < 0.05$), indicating that those participants who scored either at the high end or the low end of the Power Distance dimension were also high in Collectivism, but not those who scored in the middle of the range on the PD dimension.

Education

Education had positive prediction power for the importance attached to OCB of the dimension Personal Industry ($R^2 = 0.06$, $F = 9.76$, $p < 0.01$) and for self-reported Personal Industry behaviors as well ($R^2 = 0.05$, $F = 7.09$, $p < 0.01$), indicating that people with higher levels of education valued and reported Personal Industry behaviors less often.

When entering Education as a fifth control variable at Step 1 of a Hierarchical Multiple Regression Analysis predicting the importance attached to Personal Industry, the beta for Education reached significance. Thus, the analysis for Hypotheses 3c and 5c was repeated.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 22.

The five control variables age, gender, job satisfaction, position and education were entered in Step 1 and explained 14% of the variance ($F = 4.41, p < 0.001$). The addition of IC and PD in Step 2 did not contribute significantly to the prediction when applying a conventional significance level of $p < 0.05$. However, the prediction approached significance, with a $\Delta F = 2.58 (p < 0.10)$, explaining an additional 3% of the variance ($R^2 = 0.17, F = 3.96, p < 0.001$, for whole model). The beta for IC did not reach significance ($\beta = 0.10, p > 0.05$). The beta for PD also did not reach significance when applying a conventional significance level of $p < 0.05$, however, it was significant at $p < 0.06 (\beta = 0.15)$.

Thus, even after additionally controlling for education, both Hypotheses, which stated that the predictors would have no relationship with the dependent variable, cannot be rejected by the data, but the results for Hypothesis 5c indicate that PD might be a predictor of the importance attached to Personal Industry in a larger sample.

Table 22. Regression analysis predicting OCB Personal Industry, education as a fifth control variable.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.14	4.41†	0.14	4.41†
Gender	0.06	0.77				
Age	- 0.01	- 0.10				
Satisfaction	0.17	2.16*				
Position	0.20	2.30*				
Education	- 0.25	- 3.13‡				
<u>Step 2</u>			0.17	3.96†	0.03	2.58 ^a
PD	0.15	1.87 ^a				
IC	0.10	1.19				

^asignificant at $p < 0.08$

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=150

When entering Education as a fifth control variable at Step 1 of a Hierarchical Multiple Regression Analysis predicting self-reported Personal Industry, the beta for Education reached significance. Thus, the analysis for Hypotheses 4d and 6b was repeated.

Results from Hierarchical Multiple Regression Analysis testing this hypothesis are shown in Table 23.

The five control variables age, gender, job satisfaction, position and Education were entered in Step 1 and explained 15% of the variance ($F = 4.66$, $p < 0.001$). The addition of IC and PD in Step 2 did not contribute significantly to the prediction of self-reported Personal Industry ($\Delta F = 0.17$, $p > 0.05$).

Thus, even after additionally controlling for education, both hypotheses, which stated that the predictors would have no relationship with the dependent variable, cannot be rejected by the data.

Table 23. Regression analysis predicting OCB-S Personal Industry, education as a fifth control variable.

	β	t	R ²	F	ΔR^2	ΔF
<u>Step 1</u>			0.15	4.66†	0.15	4.66†
Gender	0.16	1.99*				
Age	- 0.04	- 0.48				
Satisfaction	0.06	0.77				
Position	0.28	3.29†				
Education	- 0.19	- 2.31*				
<u>Step 2</u>			0.15	3.34‡	0.002	0.17
PD	- 0.05	- 0.63				
IC	0.01	0.12				

*significant at $p < 0.05$

‡significant at $p < 0.01$

†significant at $p < 0.001$

n=149

DISCUSSION

Discussion of the General Findings

The purpose of this study was to examine how cultural variables relate to the performance and evaluation of Organizational Citizenship Behavior. It was hypothesized that Individualism-Collectivism and Power Distance would have significant relationships with the importance people attach to OCB and the amount of OCB they themselves perform. The results support most of the hypotheses, but not all of them, and some results warrant further investigation.

The Relationship between the two OCB Conceptualizations

As expected, self-reported OCB and the importance attached to OCB were highly correlated. This suggests a high degree of congruence between personal values regarding OCB, and actual behavior. Congruence was highest for the OCB dimension Loyal Boosterism and lowest for the OCB dimension Personal Industry. This indicates that, for Personal Industry, situational variables might have a stronger influence on actual behavior, thus making the relationship between values and behavior weaker. It could also indicate that Personal Industry is uniformly valued - who would not agree that it is very important to meet deadlines and be on time - but not as uniformly performed.

The Relationship between IC, PD, and OCB

I had expected that both independent variables, IC and PD, would predict the importance attached to OCB. Contrary to this expectation, PD did not have significant prediction value for the importance attached to OCB. Considering the prediction values PD had for the four sub-dimensions of OCB in this study, these results are not surprising. Alternative explanations why PD was not such a strong predictor for these sub-dimensions will be given below, when the relevant hypotheses will be discussed.

IC was a significant predictor of the importance attached to OCB.

I had also expected that both IC and PD would influence self-reported OCB. To be precise, I had predicted a partial mediation effect to take place. IC and PD would

significantly and independently predict self-reported OCB, but at the same time the importance attached to OCB would act as a mediator (see Figure 1). This mediator would account for some, but not all of the influence the independent variables had on self-reported OCB.

As for the importance attached to OCB, PD again was not a significant predictor of self-reported OCB, so that the test of the mediation effect was done with IC only. For IC, contrary to the hypothesis, a full mediation effect was present. IC was a significant predictor for self-reported OCB when entered into the regression equation alone, but not when simultaneously taking into account the importance attached to OCB.

This suggests that, in this research sample, the cultural variable IC did not seem to directly influence actual behavior at all, but that the influence was an indirect one, via the values one holds for Organizational Citizenship Behavior.

These findings clearly contribute to our knowledge about OCB. Previous research typically operationalized OCB only in terms of actual behavior (for example, Koys, 2001, Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000; Moorman & Blakely, 1995), but not in terms of values. The results of this study suggest that the norms that individuals hold as a result of their belonging to a certain cultural group have no direct effect on actual OCB, but only via the values concerning OCB. Further research would be necessary to confirm this finding.

Also, demographic variables such as gender, age, satisfaction, and position in the company had a much stronger influence on self-reported OCB than on the importance attached to OCB, where they typically had no prediction value at all. Similarly, IC and PD were consistently better predictors of the importance attached to the four sub-dimensions of OCB than of self-reported behavior of these four-sub-dimensions.

Thus, self-reported OCB seems to depend not only on one's norms and values about OCB, but also on a multitude of other variables or influences, thus rendering cultural norms and values automatically less important. This makes some sense: what I think is important should be quite clearly related to how I was brought up, what values were held in my family or my cultural system. But what I would actually do in any given situation would also be influenced by how I felt about my job, my work experience, or my level of responsibility.

The Ranking of Nationalities along the IC and PD Dimensions

The next set of hypotheses addressed the ranking of the different cultures along the IC and PD dimensions. In particular, it was predicted that this ranking would correspond with the ranking that Hofstede found in his study (1980). The data supported these hypotheses, which is interesting given that Hofstede's study is over 20 years old.

Culturally transmitted norms and values seem to remain distinctly different, and resilient to all those influence that are supposed to bring us closer together and shape us into "global citizens", such as new communications technologies, the increasingly world-wide operations of large companies, the so-called "global players", and with that the advent of the same brands and entertainment choices around the world.

This is all the more surprising given that this research sample consisted of very well educated people who often actually worked for a "global player" and had spent some part of their lives in another country.

On the other hand, the sample as a whole, despite the expected national differences, showed fairly little variation on IC and PD. The sample was uniformly low on Power Distance, and collectivist. Also, when testing whether the mean PD and IC scores differed significantly between countries, it turned out that most of them did not, with one exception: Indians were significantly more collectivist than US-Americans. One could therefore argue that interpreting a rank order in this case is not useful. But it is intriguing that the ranking of the cultures in this study so closely (or, as regards PD, perfectly) corresponds to Hofstede's ranking 20 years earlier. Furthermore, the sample sizes for some of the countries were quite small, making it difficult to achieve significance. Lastly, I am not aware if Hofstede or other researchers who examined values cross-culturally ever tested whether means differed significantly between the cultures they examined.

Taken together, I would therefore argue that many cultures have retained their distinctive characteristics despite the trend towards globalization. At the same time, however, they have in fact moved closer together, and they might increasingly do so, in particular those members of a culture who have comparable levels of education and work experience. The fact that many participants in this study also worked in a similar type of industry and profession (the majority of the participants worked in a computer-related industry and profession) might also account for their relative

similarity as regards IC and PD. As Sagie and Koslowsky state: "Within the business world, companies from different nationalities competing with each other in global markets tend to develop similar "play rules", i. e. common work values. Thus high-tech firms all around the world appear to have a similar, hard working, knowledge-based and creativity-oriented spirit." (1998, p. 166). An emphasis on creativity and on merit based on knowledge rather than seniority seems to correspond with low Power Distance. Thus, the effect that this study's participants were fairly low on Power Distance could also be a result of the prevailing types of industries and professions in this sample.

On another matter, and quite unexpectedly, the results of this study are in stark contrast with Hofstede's results and reasoning (1980, 1997). In his study, collectivist nations were typically high in Power Distance, and individualist nations low in Power Distance. In collectivist countries, stronger demands are placed on the individual for adhering to in-group norms, and subordinating personal goals to the goals of the in-group. This should lead to a greater acceptance of authority, thus resulting in higher Power Distance.

For this sample, however, IC and PD were not at all correlated in a linear fashion. One explanation might be the relative comparability of personal levels of education and, presumably resulting from this, economic position in this sample. Hofstede reports that, when holding economic development constant, the relationship between IC and PD disappears on a nation level (1997). Maybe the same applies to the individual level. If all members of this sample did have comparable levels of income (which can only be tentatively concluded from their comparable levels of education and position), that could explain the lack of correlation between IC and PD. Along the same lines, and as already noted above, the lack of a correlation might also be due to the fact that the prevailing types of industries and professions in this sample were belonging to the high-tech sector. Sagie and Koslowsky (1998) argue that high-tech companies endorse in similar work values worldwide because they compete in the same global marketplace. This could result in employees having uniformly low Power Distance norms for the workplace, no matter how individualist or collectivist or power distant in life areas other than work they would be.

IC and PD were related to each other in a non-linear fashion, however: for the entire sample, a cubic fit was significant. Such a relationship is not easily interpreted, but it looked as if very low PD corresponded with high Individualism, and very high PD with high Collectivism, with a slight reverse trend for medium levels of PD and IC. The prediction however, although significant, was rather small, and mostly due to the distribution of IC and PD in the Asian portion of the sample. There will be more discussion of the characteristics of the Asian sub-sample later.

The remaining hypotheses were concerned with the relationship between PD and IC and the four sub-dimensions of OCB. Generally speaking, the prediction for the importance attached to different dimensions of the OCB was consistently better than for self-reported behavior of these dimensions.

The Relationship between IC and Interpersonal Helping

As predicted, IC was a powerful predictor of the importance attached to Interpersonal Helping, as well as for self-reported Interpersonal Helping. These results are in line with the findings of Moorman and Blakely (1995), who also found that collectivists reported more Interpersonal Helping behaviors, as well as with the results of Wagner (1995), who found that collectivists cooperated more in a group task, and the findings of Clugston, Howell, and Dorfman (2000), who showed that collectivists were more committed to their work-group than individualists.

The Relationship between IC, PD, and Loyal Boosterism

For the importance attached to Loyal Boosterism, IC and PD, as expected, were significant predictors. For self-reported Loyal Boosterism, however, IC was only a significant predictor on the 0.10 significance level, but PD again was a significant predictor. This result is not quite in line with my reasoning. I had predicted a moderator effect, by which only those high PD employees who were satisfied with their supervisor would report more Loyal Boosterism, but not those who were not satisfied. According to Hofstede (1997), in high PD cultures, paternalistic structures in the workplace are more common. Superiors demand obedience and loyalty from their subordinates, but in return provide them with more job security, for example. Such a paternalistic relationship is characterized by more dependence on the

superior, which should render the emotional quality of the relationship more relevant. In other words, if I am not happy with my supervisor, but dependent on him or her in many ways, my unhappiness could grow to outright dislike or even hatred, and, in that case, I would be hardpressed to perform Loyal Boosterism. But the results of this study indicate that high PD employees reported more Loyal Boosterism regardless of their satisfaction with their supervisor. However, the moderator Hypothesis was quite difficult to test because the overwhelming majority of the participants was satisfied to very satisfied with their supervisor in the first place.

Thus, the data suggest that the evaluation and the performance of Loyal Boosterism both seem to be related to one's standing along the Power Distance dimension, that is, how readily one accepts and expects hierarchies and power differentials between, for example, employees of the same company, and how comfortable one is with paternalistic structures in the workplace. The results are in line with Clugston, Howell, and Dorfman's finding (2000) that individuals high in PD displayed more normative commitment to the organization, and with Smith, Dungan, and Trompenaar's finding (1996) that high conservatism, a concept that shows some overlap with high Power Distance, was correlated with a preference for a paternalistic manager.

IC's relationship with Loyal Boosterism is less clear. Although collectivists did attach more importance to Loyal Boosterism, they did not report performing more if it. This result is in contrast to Moorman and Blakely's findings (1995), where Collectivism was significantly related to the performance of Loyal Boosterism. The result does not seem to indicate a problem of statistical power either, as the correlation between IC and self-reported Loyal Boosterism was quite small and non-significant. One very tentative explanation for this effect could lie in the nature of Loyal Boosterism behaviors: they seem to be easier cherished than performed. Although most people, and collectivists with their stronger interpersonal orientation especially, would readily agree that they are intended to benefit and express loyalty to the organization, their actual performance might depend on many other factors as well. Similar to initiative behaviors, Loyal Boosterism behaviors do require a person to speak up, which might be easier for those employees who have more say within the company. Indeed, position was one of the demographic predictors that showed a significant relationship with self-reported Loyal Boosterism, indicating that employees holding a higher position engaged more in Loyal Boosterism. Thus, even though collectivists might

value Loyal Boosterism more, they might not perform more of it due to a number of other factors, among them demographic variables.

The Relationship between IC, PD, and Individual Initiative

For the OCB dimension Individual Initiative, the results do not exactly confirm the predictions. I had expected that it would be of no relevance to the evaluation and the performance of Individual Initiative behaviors whether one was collectivist or individualist, mainly because there are arguments for and against both sides, and it is hard to decide which would weigh more. Individualists, characterized by a striving for independence and distinction, and with little fear of confrontations, might value and perform initiative behaviors more. On the other hand, collectivists, with their stronger concern for the welfare of the group and a greater readiness to subordinate personal goals to goals of the collective, might value and perform initiative more.

For the importance attached to Individual Initiative, contrary to the Hypothesis, IC was in fact a positive predictor, although the prediction model as a whole failed to reach significance. For self-reported initiative behaviors, however, IC was not a predictor. Maybe collectivists value initiative behaviors more than individualists because they realize their importance for the welfare of the workgroup, but do not engage in them because of the threat that Individual Initiative poses to the interpersonal harmony between group members.

I had expected Power Distance to have a negative relationship with Individual Initiative. Being used to workplace structures where obedience is expected and power differentials and hierarchies are the rule, people high in Power Distance should value and engage less in Individual Initiative, as these behaviors are not encouraged or valued in high PD cultures. However, in this sample, PD failed to be a significant negative predictor of Individual Initiative. The prediction did show the expected negative direction, however. This, taken together with the fact that the sample as a whole was fairly low on PD, could indicate that, in a more power distant sample, this hypothesis might yet prove to be correct.

The Relationship between IC, PD, and Personal Industry

For Personal Industry, as proposed in the hypotheses, neither PD nor IC were significant predictors of self-reported Personal Industry, and IC was also a non-

significant predictor of the importance attached to Personal Industry. This result is in line with Moorman and Blakely's findings (1995), who also found no relationship between IC and OCB of the dimension Personal Industry. However, PD turned out to be a significant predictor of the importance attached to Personal Industry behaviors when only entering the four control variables age, gender, satisfaction, and position into the regression equation. When also entering education as a control variable into the equation, PD did not have significant prediction value anymore. Still, as PD and Personal Industry are also significantly correlated, some thought should be given to their relatedness.

Personal Industry is a dimension of OCB that stands apart from all the other OCB dimensions, as it entails behaviors that are quite closely tied to one's actual job and are less clearly linked to the welfare of the organization as a whole. In other words, organization members might perform their work with extra special care and few errors not so much because they have the welfare of the organization in mind, but more so to get promoted, or not fired. In addition, Personal Industry could be considered an expression of organizational obedience, which should be valued more by employees who are more power distant. In an organization with a more paternalistic structure, obedience to one's superior should be a value in itself. Thus, employees high in PD should attach more importance to Personal Industry. However, for self-reported Personal Industry, a host of other variables, such as attaining a promotion, should have an influence that would diminish the difference between high and low power distant employees.

The Relationship between OCB, IC, PD, and Asian Ethnicity

Lastly, a few words about the influence of demographic variables on OCB are necessary. Participants of Asian ethnicity, in contrast to all other ethnicities represented in this sample, valued OCB more, particularly Loyal Boosterism behaviors, and they also performed more Loyal Boosterism behaviors.

Interestingly, when entering Asian ethnicity as a predictor into a regression equation predicting Loyal Boosterism, Power Distance ceased to be a significant predictor of Loyal Boosterism. Considering that participants of Asian ethnicity were also higher in Power Distance, the predictor variable, this result is not too surprising. One could consider Asian ethnicity an approximation or manifestation of culture. If this is the

case, then the effect any cultural variable should have on the dependent variable should disappear once culture is controlled for.

Participants of Asian ethnicity were also more collectivist than participants of other ethnicities. I assumed that this could be the reason why they valued OCB more. But this was not the case. Instead, Asian ethnicity seems to be an independent predictor of OCB, and also, of self-reported Loyal Boosterism. Thus, there must be another variable that accounts for the fact that Asians perform and value OCB more than Non-Asians. As there are many different conceptualizations and measures of Individualism-Collectivism (see for example Earley, 1998; Freeman & Bordia, 2001; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997) there is a possibility that maybe the measure used in this study did not tap the whole breadth of the dimension, so that Asian ethnicity is, in fact, an approximation of a broader IC concept.

IC is probably the most well-known cultural variable, but there are numerous other variables that distinguish between cultures, such as Uncertainty Avoidance (Hofstede, 1980), or Conservatism (Smith, Dungan, & Trompenaars, 1996). It might well be the case that one of these variables explains the effect that people of Asian ethnicity value and perform some dimensions of OCB more.

Asian participants were also more collectivist and more power distant, a finding that has been confirmed by researchers many times before (for example, Hofstede, 1980, Earley, 1993). I reasoned that if the Asian part of the sample was more collectivist, and at the same time, more power distant, then maybe the expected positive linear relationship between IC and PD could be found in the Asian sample. This was not the case. But IC and PD were highly related in a non-linear, quadratic fashion. Very low PD corresponded with high Collectivism, and very high PD also corresponded with high Collectivism, whereas medium PD corresponded with medium to low levels of IC.

How can this result be interpreted? It seems as if, for the Asian sub-sample, people who endorse collectivist values are either very high or very low in Power Distance. Maybe there are two different kinds of Collectivism displayed here, namely, horizontal Collectivism and vertical Collectivism. These concepts were proposed by Triandis (1995), who argued that IC is not, as proposed by Hofstede (1980, 1997), one bipolar dimension, with Individualism and Collectivism being the two extremes along a

continuum, but that there is a second dimension: horizontality-verticality, resulting in two kinds of Collectivism and Individualism each.

Horizontal collectivists perceive themselves as part of a collective of equals, whereas vertical collectivists perceive themselves as part of a collective whose members are not equal (for example in status) to each other. Horizontal individualists perceive themselves as autonomous individuals, but emphasize equality to other autonomous individuals, whereas vertical individualists perceive themselves as autonomous individuals in a society characterized by differences in equality among its members (Singelis, Triandis, Bhawuk, & Gelfand, 1995).

There is an obvious similarity between the concept of verticality-horizontality and Power Distance. Thus, in the Asian sub-sample, there seemed to be horizontal collectivists, vertical collectivists, and horizontal individualists, but no vertical individualists.

Implications for Theory and Practice

Originally, I had set out to explore how members of different cultures differed in their evaluation and in their performance of OCB. Taken together, the results of this study suggest that, indeed, cultural variables do have significant relationships with OCB, but for the most part, different cultures did not differ significantly in their levels of IC or PD, nor in their performance or evaluation of OCB. This makes statements about differences between countries or cultures difficult. Further research would be needed to assess whether this lack of cultural variation is a general trend or was an artifact of this sample.

The Relationship between IC and OCB: Implications

The results of the study clearly suggest that collectivists do value and perform OCB more. IC, being a cultural variable, represents values and norms that shape the individual's self-concept. Thus, similar to dispositional variables, it is not easily changed or manipulated, and thus far there has been little research evidence that values are modifiable once they have been acquired (Roe & Ester, 1999). However, companies could try to foster collectivist values, such as cooperation with members of one's

ingroup, and the pursuit of collective organizational goals instead of personal goals, and thus encourage employees to perform more OCB. Individual compensation and benefits, for example, could be tied to team performance. Or teams could be organized in ways that make cooperation more likely, for example by giving team members some say in selecting other team members, or by having long-term teams. Also, companies could utilize Collectivism as a selection criterium for jobs that require a lot of cooperation, or allocate jobs according to the values employees hold. As the performance of OCB is so clearly linked to the importance attached to it, organizations could try to foster OCB values in their employees, for example by incorporating these values into their mission statement, by introducing mentoring programs for new employees, by encouraging employees to voice their opinions, by rewarding employees who have been exemplary "good citizens", and so on.

The Relationship between PD and OCB: Implications

The relationship between Power Distance and OCB was less clear in this study. High power distant employees do value and perform Loyal Boosterism behaviors more. Employees who accept and expect relationships between superiors and subordinates to be characterized by obedience and loyalty on the subordinate's behalf and a more paternal attitude on the superior's behalf seem to be more willing to display acts of loyalty. They also seem to feel more like a member of the organizational family, promoting and praising the company even after hours. Although these are certainly desirable attributes of any organization member, fostering high PD in an organization does not seem such a good idea to me. Tall hierarchies typically hinder innovation, and at a time where turnover is rather high and job security fairly low in many countries, organizational structures that foster high Power Distance will not work well. In other words, in exchange for loyalty and obedience towards the organization or one's supervisor, the employee does not seem to get a whole lot back.

The Relationship between IC and PD: Implications

The conclusions above could also help explain the fact that the participants in this study were uniformly low on Power Distance. Although Hofstede claims that cultural variables are slow to change (1997), the data of this study clearly suggest that, for younger, well-educated professionals, some shift in values has taken place, with

everyone moving towards more collectivist and less power distant values. This would imply that organizations with operations in many countries need to reassess the needs and preferences of their workforce.

There is an alternative explanation, however, for the fact that the sample as a whole turned out to be so collectivist, which concerns the scale employed in this study.

There are many measures available for IC, and most of them are based on slightly different conceptualizations of the construct. The measures also differ in scope. The scale employed in this study was focused on IC in an organizational setting, thus having a fairly narrow scope.

Many of the items of this scale ask for peoples' preference for team performance versus individual performance. Nowadays, teamwork is often considered the choice organizational structure to guarantee good performance, so that it almost automatically carries a strong positive connotation. That could explain how this sample as a whole turned out to be fairly collectivist. There might have been more variation in the data when trying to assess a broader IC concept that not only regards organizational norms and behavior, but also IC in a family context, for example. Such measures exist (for example, Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997), but due to the breadth of the IC construct they try to captivate, their reliabilities are typically low. To make future research on IC, PD, and OCB more comparable, it would be good to have more information on how different measures of the same constructs converge. Ideally, there would be just a few, well-validated scales for each construct.

Another, more radical conclusion would be to question the usefulness of IC and PD in general for differentiating between different cultures. Maybe there are other cultural variables that have more discrimination power for today's workforce. In fact, in a study by Spector, Cooper, and Sparks (2001), where the researchers tried to validate Hofstede's research scales on a sample consisting of professionals from 23 nations (with a total of over 6000 participants), almost all scales turned out to have unacceptably low reliabilities. When factor-analyzing the questionnaire items, most of them did not load on the proposed factors. Spector et al. argue that this lack of internal consistency of the scale could be due to a change in values in some of the countries examined. However, as Hofstede derived his dimensions of cultural differences from analyzing the very same questionnaire items that now show to have

poor internal consistency, one could also call into question the external validity of the scale, that is, the usefulness of the constructs themselves. The idea of Individualism-Collectivism is fairly old and can be traced back to political philosophers like Rousseau, Locke, or, in China, Confucius, and the construct has been proven useful for distinguishing between and within cultures many times (for a review, refer to Earley & Gibson, 1998). As such, one can probably safely assume that Individualism-Collectivism is an externally valid construct. The same cannot be said so easily for Power Distance, however: almost all research originates from Hofstede's formulation of the construct (1980).

Limitations, Strengths, and Future Research

Limitations: Common Method Artifacts

The fact that the measures of the independent and dependent variables were obtained from the same source is one of the limitations of the sample. All relationships might be artificially inflated because of common method artifacts. The high correspondence between the importance attached to OCB and self-reported OCB could also be due to the fact that the scales to measure them were essentially the same and the responses to one of them might have influenced the responses to the other. One could have used two different OCB scales instead of one to avoid this problem. But different OCB scales typically refer to slightly different conceptualizations of OCB, and to my knowledge there has not been any research done on how different OCB scales relate to each other. Finally, despite the high correspondence between the importance attached to OCB and self-reported OCB, the correlations are not approaching alarmingly high levels, ranging between $r = .33$ and $r = .68$, which shows that the participants clearly managed to differentiate between the two OCB operationalizations.

Limitations: Social Desirability Bias

There is no way of knowing whether the study participants really performed as much OCB as they claimed they did, or whether social desirability came into play. One could argue that data from a more objective source, such as supervisor or peer

ratings, might be more objective to assess OCB performance. However, when using third person ratings, I might get rid of social desirability in the data, but other psychological effects might occur instead, such as the halo effect, or implicit personality theories on behalf of the rater.

Also, considering that the survey was done anonymously on-line, and that participation was entirely voluntary and not at all related to one's employer, the risk of social desirability distortion in the data should be low. In fact, an experimental study by Joinson (1999), comparing social desirability for Internet vs. paper-and-pencil questionnaires, showed that social desirability was lower for participants filling out an Internet questionnaire than for the paper-and-pencil condition. Along the same lines, a meta-analysis on social desirability distortion by Richman, Kiesler, Weisband, and Drasgow (1999) found that social desirability distortion in the data was low when participants were alone, anonymous, and could backtrack, all of which was possible in the current study. Finally, a study by Ellingson, Sackett, and Hough (1999) tested the usefulness of social desirability corrections for personality measurements. The authors concluded that such correction scales were ineffective for approximating honest scores for the personality measures.

In addition, many social desirability scales do not seem appropriate for use in non-Western cultures because they often contain questions regarding quite intimate behaviors, and they typically have not been validated in non-Western settings either. Finally, as this study was really concerned with how OCB was evaluated differently in different cultures and how this evaluation impacted performance, there was not really a need to find out the "true" or absolute rate of OCB performance. Instead, it was important in this study that there were no systematic influences on the self-report that differed between cultures, that is, one culture showing a strong social desirability bias and another one not showing one at all.

Limitations: Cross-sectional and Correlational Data

Another flaw is the entirely cross-sectional nature of the data, making it unfortunately impossible to draw any causal conclusions. It would be logical to assume though that IC and PD represent norms and values that shape the individual self-concept, whereas norms and values concerning OCB might more likely be formed during later years in life. This would make a causal influence by PD and IC on OCB more plausible than

the other way around. Future research should examine this assumption, for example with a longitudinal design that would allow for cross-lagged comparisons between the predictor variables and the dependent variables.

Limitations: No Assessment of a Response Rate and Non-strategic Sampling

Because of the recruitment strategy of the sample, it was not possible to assess a response rate. This is of course a disadvantage, as there is no way of knowing whether the response rate for this survey was exceptionally low or high or whether there were specific non-responders. But the questionnaire was easily accessible on-line and did not take very long to complete, and, as such, it was not a great commitment to take part in this study. Thus, I think that response rates were mostly influenced by situational factors such as whether the potential participants were very busy with work when they received information about the survey.

To conduct more analyses, it would have been preferable to have more ethnicities and countries represented in large enough numbers to allow for comparisons between them. Further research on the cultural variations of OCB should try to have a more theory-driven, systematic sampling strategy than the one employed here.

Strengths: Examining Work Values and Work Behaviors

The study also has some notable strengths. To my knowledge, it is the first study that explicitly examined the relationship between OCB and two well known cultural variables, IC and PD, in a cross-cultural setting. It is also the first study to look at not only actual OCB, but also at the norms and values people attach to OCB, and how the two are related to each other. Examining work values instead of or in addition to work behaviors seems a very worthwhile activity to me. One can assume that work values do govern work behavior to a certain extent, yet they are less influenced by situational factors than actual behavior is. As such, they seem to be "cleaner" indicators of behavioral tendencies than actual behavior itself. In this study, for example, just relating IC and PD to self-reported OCB would have produced weaker and somewhat more disappointing results about the connection between these variables.

Strengths: Individualized Assessment of IC and PD

Another merit of this study is the fact that individualized measures of IC and PD were used. Very typically for cross-cultural studies examining PD, and less so, IC, participants are simply assigned a rank of IC and PD according to the ranking of their culture of origin in other value studies, such as Hofstede's study (for example, Offermann and Hellmann, 1997; van Oudenhoven, Mechelse, and de Dreu, 1998; Eylon and Au, 1999). As the results of this study show, there might not be enough variation between individuals from different cultures to really justify a rank order, even though the ranking might still be very close to Hofstede's ranking. By simply assigning a rank order there is also no possibility for exploring culture change.

Strengths: Novel Method

The study was innovative regarding its sampling strategy and data collection. Especially for diploma students who typically lack the time and resources to recruit large and homogenous samples, the Internet as a recruitment forum seems ideal. I would actually regard my own sampling strategy as quite primitive considering what other possibilities the World Wide Web offers. For example, one could place advertisements on frequently visited web-sites, or on special interest sites that would enable researchers to recruit a more specific sample, or one could get in touch with newsgroups. Of course, there is the realistic possibility that response rates could be very low due to the anonymity of the recruitment process. Furthermore, it also seems a bit old-fashioned (and environmentally unfriendly) to me to use paper and pencil questionnaires when an electronic measure would work just as well, given the fact that so much communication nowadays happens electronically.

Strength or Limitation? The Sample

The participants in this study were a very select group of people in that they all had a high level of education. This could be interpreted as either a strength or a weakness, depending on one's standpoint. If one's goal was to make generalizations from these respondents to other members of the same culture, then this sample would have limited prediction value. But if one wanted to derive statements about today's highly professional workforce, and potentially tomorrow's senior management of globally operating companies, then this sample would be quite ideal.

Conclusions

This study set out to explore the links between Organizational Citizenship Behavior and the norms and values that are shaped by one's cultural background. The results indicate that there are strong relationships between these variables, in particular between the importance people attach to OCB and their degree of Collectivism. Collectivist people who assign greater importance to cooperation and teamwork are also more likely to value behaviors that benefit the organization as a whole more than the individual organization member, and they also report having a stronger interpersonal orientation on the job in general.

People high in Power Distance, who are characterized by valuing organizational obedience more, also value and report acts of loyalty towards the organization more often.

In this study, contrary to other studies and common theorizing, the amount of Collectivism was not positively related to the amount of Power Distance (for example, Hofstede 1980, 1997). Collectivist people with their stronger interpersonal orientation and their greater readiness to subordinate personal goals to the goals of the group were not at the same time favoring organizational obedience and paternalistic structures in the workplace.

The importance people attach to OCB acted as mediator between the degree of Collectivism the participants had and their self-reported OCB. Assuming a plausible causal pathway, collectivist norms and values influenced how important one regarded OCB in general, and this, in turn, influenced how much OCB one performed.

The link between Collectivism and OCB has been confirmed by other studies before, whereas the weaker relationship between Power Distance and OCB has not been examined before to my knowledge. The findings of the study suggest that cultural values do indeed to a certain extent shape work values and govern organizational behavior. Fostering more collectivist attitudes towards one's workgroup or the organization, for example by introducing team-oriented compensation structures, could therefore help increase the performance of Organizational Citizenship Behavior, in particular helping and loyalty behaviors. As there is such a strong relationship between the evaluation of OCB and the performance of OCB, integrating

OCB as a core value into the organizational culture could also lead to more performance of OCB.

The puzzling finding that Collectivism and high Power Distance were not positively correlated raises several questions. The zero correlation could have been an artifact of this sample, or be due to the fact that in this study, both variables were only operationalized in an organizational context. Future research should re-examine the relationships between the two variables, possibly by trying to measure both Collectivism and Power Distance in a broader context. If the zero correlation between the two variables would be confirmed, this could indicate a shift in cultural values. Support for a possible shift in values also comes from the fact that the sample as a whole was uniformly quite collectivist and low in Power Distance, as opposed to displaying different value patterns. This also indicates that the two variables IC and PD were not very useful in this sample for distinguishing between people from different cultural backgrounds.

Thus, this could mean that we are in fact all moving closer together, with our respective cultural backgrounds getting more similar to each other. But it could also mean that we all have remained distinctly different, but that other cultural variables would do a better job of distinguishing between us.

Further research regarding the connection between OCB and cultural variables would be needed, in particular longitudinal studies or quasi-experimental designs to determine causal direction. Cultural variables other than PD and IC and their relationship with OCB should be examined. Future research should also try to have a more theory-driven recruitment procedure, so that more cross-cultural comparisons would be possible.

SUMMARY

This study sought to establish a link between Organizational Citizenship Behavior (OCB) and two cultural variables, Individualism-Collectivism (IC) and Power Distance (PD). OCB represents working behaviors that are voluntary contributions of individual organization members. Examples of OCB include helping behaviors, showing initiative, or being a loyal organization member.

IC refers to the relationship individuals have with the society that surrounds them. For people who are more collectivist, maintaining harmonious relationships with members of the in-group is considered more important than personal distinction. For people who are more individualist, self-reliance and independence from in-groups are considered more important.

PD refers to how individuals view power differentials within a society. High power distant individuals accept and expect that power is not distributed equally within, for example, an organization, and they consider obedience to one's superior important, whereas the opposite applies to low power distant individuals.

OCB was not only conceptualized in terms of working behaviors, but also in terms of work values. This was achieved by measuring the importance individuals attach to OCB. A partially mediated model was proposed by which the two independent variables would predict actual OCB via OCB values, while at the same time also independently predicting actual OCB.

It was proposed that a higher degree of Collectivism would positively predict actual OCB as well as OCB values regarding interpersonal helping behaviors and loyalty behaviors. A higher degree of PD would negatively predict actual OCB as well as OCB values regarding initiative behaviors, and positively predict OCB values regarding loyalty behaviors. For actual loyalty behaviors, it was proposed that satisfaction with one's supervisor would act as a moderator.

It was also expected that a high degree of Collectivism would positively correlate with a high degree of Power Distance.

Data was gathered by way of an internet survey from 150 professionals from all over the world. The survey included demographic questions, measures of actual OCB as well as OCB values, and measures of IC and PD.

Results from Hierarchical Multiple Regression Analyses supported some, but not all of the hypotheses. Instead of the expected partial mediation, there was a full mediation effect present for IC. OCB values did fully mediate the relationship between IC and actual OCB. PD failed to have a significant relationship with either overall actual OCB or OCB values.

Collectivism did positively predict helping behaviors and values, and also loyalty values, but not loyalty behaviors. High Power Distance did also positively predict loyalty values, and loyalty behaviors, without the predicted moderator effect present. No connection could be shown between high PD and OCB initiative.

Contrary to the hypothesis and previous research results, IC and PD were not correlated at all.

The Results indicate that Collectivism is indeed a predictor of OCB, especially OCB values. A possible causal pathway is suggested by which cultural values influence the norms and values one holds regarding the workplace, which in turn influence actual work behaviors.

For PD, only the link between OCB loyalty and high PD could be established. The fact that there was no moderator effect present could be due to the fact that the sample as a whole was satisfied to very satisfied with their supervisor. PD's failure to negatively predict OCB initiative is attributed to the fact that the sample as a whole was low power distant. It is suggested that the relationship between PD and OCB initiative should be re-examined in a more power distant sample.

The fact that IC and PD were not correlated at all, taken together with the fact that the sample as a whole was fairly collectivist while at the same time low in Power Distance, could indicate a possible overall shift in values, especially for young, well-educated professionals. It could also indicate that IC and PD are not the most useful variables to distinguish between the individuals in this sample.

Taken together, the results of this study clearly suggest that there is a link between the performance and evaluation of OCB and one's cultural background. Further research would be necessary to determine causal direction. Variables other than IC and PD that have been shown to distinguish people from different cultural backgrounds and their relationship with OCB should be examined.

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APPENDIX A

Further Demographic Information: Listings of Industries and Participants' Professions

Table 24. Listings of industries and participants' professions

Type of industry and profession	n	%
Banking/Finance	6	4
Investment banker	2	
Software engineer	1	
Programmer analysis	1	
Software project management	1	
Venture capital	1	
Computer related (IS, MIS, DP, Internet)	35	23
Administration	1	
Admin executive	1	
Business systems analyst	1	
Computer network architect	1	
Consultant	2	
Engineer	1	
Executive assistant	2	
Human resources	1	
IT administrator	1	
IT analyst	4	
IT consultant	3	
IT manager	2	
IT project management	2	
IT training	1	
Marketing	1	
Project coordinator	1	
Public relations	1	
Research and development	1	
Sales admin	1	
Service	1	
Software engineer	3	
Systems analyst	1	
Teaching/training	1	
Web project specialist	1	
Computer related (software)	29	19
Computer operator	1	
Computer programmer	2	
Consultant	2	
Development and design	3	
Engineer	2	
Information security specialist	1	
IT consultant	3	
Network analyst	1	
Physicist	1	
Project manager	1	
Software engineer	10	
Software manager	1	
Technical team leader	1	

Table 24 continued

Type of industry and profession	n	%
Computer related (hardware)	13	9
Administration	1	
Engineer	2	
Hardware engineer	1	
IT consultant	3	
IT engineer	1	
IT training	1	
Marketing	1	
Microelectronic Fabrication	1	
Training and education	1	
Sales trainer	1	
Consultancy	12	8
Client relations	1	
Consultant	4	
IT consultant	4	
Manager	1	
Product development	1	
Software consultant	1	
Education / Research	19	13
Administration	1	
College lecturer	1	
Ecologist	1	
Editorial	1	
Graduate student	3	
History professor	1	
Instructional designer	1	
IT analyst	1	
Medical research	1	
Molecular biology research	1	
Optics engineering	1	
Physicist	2	
Project assistant	1	
Teaching	2	
Web developer	1	
Engineering/Construction	11	7
Civil engineer	1	
Engineer	7	
Mechanical engineer	2	
Software engineer	1	
Manufacturing/Distribution	4	3
Lab manager	1	
Secretary	1	
Systems validation	1	
Software engineer	1	
Medical / Health services	3	2
Academic	1	
Registered nurse	2	
Entertainment/Media/Publishing	3	2
Editor	1	
Journalist	2	
Picture research	1	

Table 24 continued

Type of industry and profession	n	%
Other	14	9
Environmental advocacy	1	
Equal opportunity manager	1	
Financing	1	
Human resources	1	
Insurance claims	1	
IT consultant	1	
Librarian	1	
Mental health worker	1	
Operations coordinator	1	
Product manager	1	
Program manager	1	
Project manager	1	
Public transportation manager	1	
Software engineer	1	

Further Significant Correlationsh between the Study Variables

Table 25. Significant correlations between the independent and dependent variables and other control variables

	Asian? ¹	Education	Length Work	Length Profession	Education abroad? ¹	Work abroad? ¹	Life abroad	Partner? ¹
OCB-IP	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
OCB-II	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
OCB-PI	-	-0.25‡	n.s.	n.s.	n.s.	-0.18*	n.s.	n.s.
OCB-LB	0.29†	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
OCB	0.23‡	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
OCB-S-IP	n.s.	n.s.	0.26†	0.19*	n.s.	n.s.	n.s.	0.17*
OCB-S-II	n.s.	n.s.	0.25‡	0.27†	n.s.	n.s.	n.s.	n.s.
OCB-S-PI	n.s.	-0.22‡	n.s.	n.s.	n.s.	-0.18*	n.s.	n.s.
OCB-S-LB	0.21‡	n.s.	n.s.	n.s.	-0.23‡	-0.18*	-0.17*	n.s.
OCB-S	n.s.	n.s.	0.20*	0.21‡	n.s.	-0.16*	n.s.	n.s.
PD	0.22‡	n.s.	n.s.	n.s.	-0.23‡	-0.27†	-0.29†	n.s.
IC	0.17*	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

¹1=yes, 0=no, Spearman's Rho correlations.

*significant at $p < 0.05$.

‡significant at $p < 0.01$.

†significant at $p < 0.001$.

The Rank Orders of the Nations in this Study Compared to the Rank Orders of the Same Nations in Hofstede's Study (1980) on the PD and IC Dimensions (only nations with ≥ 10 respondents included).

Table 26. Rank order comparison between this study and Hofstede's study

Nation	Rank IC ^a	Rank IC	Rank PD ^a	Rank PD
	this study	Hofstede	this study	Hofstede
India	1	1	1	1
Ireland	2	3	5	5
Australia	3	4	3	3
Germany	4	2	4	4
USA	5	5	2	2

^arank 1 = highest degree of Collectivism / Power Distance

n = 133