

# Being ill in a foreign country:

## International students' trust in American physicians

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### Abstract

A survey with 169 international students was conducted to investigate the relationship between trust in American physicians and students' locus of control, nationality, sex, and years of being in the United States, the number of American friends, the number of international friends, and the number of doctor's visits. Results revealed that international students with an internal locus of control had a greater degree of trust in American physicians than students with an external locus of control. Students with more American friends did not trust their physicians more than students with fewer American friends. International students who stayed in the United States for a longer period also did not trust their physicians more than students who stayed for a shorter time. No difference existed in trust between male and female and between European and non-European students. Findings are somewhat opposite of what we would expect based on other cross-cultural adjustment studies.

**Keywords:** locus of control, cross-cultural adjustment, cultural differences, international students, trust in physicians

### Introduction

America is hosting more than half a million foreign students (Institute of International Education [IIE] 2006). As legal "aliens" with a previously established set of beliefs and values, international students struggle to find a balance between their own cultural heritages and social norms in the host country (Ebbin and Blankenship 1986). The process of searching often causes anxiety and stress (Donald 1985, McClaran and Sarris 1985, Miller 1987) and can likely generate physical illness in the future (Chesebro 1998, Ebbin and Blankenship 1986, Sharif 1994).

Among many challenges international students face in new surroundings is adjustment to the American health care system. Responding to a call by many researchers (Ebbin and Blankenship 1986, McClaran and Sarris 1985, Miller 1987) to investigate international students' experiences in acquiring and receiving university health services (UHS), Cheng (2004) did a study about international students' perceptions and experiences of using the UHS at a public university in Northwest Ohio. Based on focus group discussions, five themes emerged as the problems those students experienced. One of the most important problems was distrust in American health care.

A recent study by Thom, Hall, and Pawlson (2004) showed that a person who trusts a provider is more likely to seek care, to comply with treatment recommendations, and to return for follow-up care than a person who has little trust in the health care system. However, we do not know much about international students' trust in the American health care system. Only qualitative studies (e.g. Cheng, 2004) with convenient samples have been performed to tackle the problem. Questions of how much trust international students have in American physicians, and which factors influence that trust, remain unexplored. Available literature also talks about immigrants' distrust, while ignoring international students who are not immigrants but sojourners. Sojourners are those who stay for a shorter time in a new culture, as opposed to immigrants who reside in a new culture for a long, indefinite period (Kim 1988). Although all relevant literature on immigrants' adaptation (specifically in the case of locus of control) was reviewed in this study, the main purpose was to explore the relationship between trust in American physicians and international students' locus of control, nationality, sex, years of being in the United States, the number of American and international friends, and the number of doctor's visits.

#### *International students' adjustment to American culture and health care*

Studies suggest that international students face two main barriers when receiving health care: language difficulties and cultural differences (Donald 1985, Ebbin and Blankenship 1986, McClaran and Sarris 1985, Miller 1987, Sharif 1994). Because of the patient's lack of English proficiency, the problems may start with making an appointment, acquiring treatment, and finally, filing a claim with his/her insurance company. Cultural factors are a second barrier to receiving adequate health care. In Cheng's (2004) study international students complained about the lack of control and choice over their health related affairs. International students complained about being rushed to sign up for health plans without being given much time to make an informed decision. They did not get the information on how to file claims, so they mostly relied on close friends for health information (McClaran and Sarris 1985, Miller 1987, Sharif 1994). Some Asian students complained about powerful Western medicine. They said they would feel desperate when they found out that they were low on familiar medications and would immediately go to friends from the same country for a "supply." International students also questioned whether doctors told them all the relevant aspects about the prescribed medication, as they did not have enough courage to question a professional's authority. Most students said they would avoid going to the health center or would bear the pain until they visited their home country during breaks (Cheng 2004).

#### *Patients' trust*

Trust is a defining element in any interpersonal relationship, but is particularly central to the patient-physician relationship (Mechanic and Schlesinger 1996). The definition of trust is "acceptance of a vulnerable situation in which the trustee believes that the trustee will act in the truster's best interests" (Thom, Hall, and Pawlson 2004:125). Some researchers defined patient trust as a set of beliefs or expectations that a physician will behave in a certain way (Anderson and Dedrick 1990). Some differentiate between interpersonal trust and social trust. Interpersonal trust refers to trust built through repeated interactions with a physician, while social trust is trust in collective institutions, influenced by the media and general social confidence in particular institutions (Goold 1998). In this study, we concentrate on interpersonal trust. When considering trust in physicians, most of the major studies find that, on a scale from 1 to 5, the mean level of trust in one's physician is near or well above 4 (Hall, Zheng, Dugan *et al.* 2002, Thom, Ribisl, Steward *et al.* 1999, Anderson and Dedrick 1990). Those studies have, however, been conducted with American patients, not internationals. Therefore, the purpose of conducting this research was to measure international students' trust in physicians.

In 1979, Russell Caterinicchio published the first study that measured patients' trust in their physicians (Thom, Hall, and Pawlson 2004). However, the research instruments for evaluating trust in the patient-physician relationship are still in the early stages of evolution (Pearson and Raeke 2000). The first instrument, Anderson and Dedrick's 11-item Trust in Physician Scale was developed in 1990. Later, Safran *et al.* (1998) developed the Primary Care Assessment Survey (PCAS), focusing on specific patient-doctor relationships. In 1998, Kao and colleagues developed a 10-item Patient Trust Scale. All these scales emphasize different dimensions of trust and do not include all. For example, Kao's scale does not include a question regarding willingness to follow a physician's advice as Anderson's and Dedrick's scale does.

In this study, to see which personal characteristics and personality traits influence international students' trust in American physicians, the Hall, Zheng, Dugan *et al.* (2002) 5- dimension scale of trust was used. The scale measures several trust dimensions, as opposed to others who concentrate on one or two. Dimensions of the Hall *et al.* Trust scale include measures of fidelity, competence, honesty, confidentiality, and global trust. *Fidelity* refers to "pursuing a patient's best interests and not taking advantage of his or her vulnerability." It consists of caring, respect, advocacy, and avoiding conflicts of interest. *Competence* deals with "avoiding mistakes and producing the best achievable results." Mistakes include cognitive errors in judgment, and technical errors in execution. Trust in competence also includes trust in communication skills. (Hall *et al.* 2001: 621). *The honesty* dimension refers to telling the truth and avoiding intentional falsehoods. *Confidentiality* refers to "the protection and proper use of sensitive or private information." (Hall *et al.* 2001:622) Finally, *global* trust captures the more holistic aspect of trust. The Hall, Zheng, Dugan *et al.* (2002) 5- dimension model of trust was born out of many studies that measured these dimensions separately (Hall, Zheng, Dugan *et al.* 2001, Kao, Green, Davis *et al.* 1988a, Thom, Ribisl, Steward *et al.* 1999).

*Predictors of trust*

Health communication scholars cannot agree about patient characteristics that are predictors of trust. Some researchers have found that age, gender, education, and income are not significantly correlated with patient trust (Pearson and Raeke 2000, Thom, Ribisl, Steward *et al.* 1999, Kao, Green, Davis *et al.* 1998b). Others (Hall *et al.* 2002) reported that age has a modest, positive correlation with trust. In this study, we wanted to see if the international students' population differs from American students' population when considering trust in American physicians. However, the relationships between income and trust and between education and trust have not been measured for a simple reason. Most international students belong to a relatively similar range of income and education groups. Because the literature review does not provide data about the relationship between international students' trust in physicians and sex – and we know that differences in male and female communication and adjustment do exist (females were found to score higher on host communication competence than male students, Sheldon, 2008) – a research question was posed:

RQ1: How is sex related to trust in physicians?

Because European culture coincides with the American cultural patterns more so than Asian and African cultures do, less new learning is necessary to fit into the host environment (Kim 1988). Along with this line, Chen (2000) found that a significant difference exists between international students coming from European countries and those from non-European countries in their adapting to the U.S. educational system and culture. European students were more satisfied with their communication competence and interactions than those from non-European countries. Olaniran (1996) also confirmed that the more similar to American culture the foreign student's home culture was the less social difficulty the student experienced. Since there is not enough literature on the relationship between trust and nationality of international students, a research question was asked:

RQ2: How is nationality (European, non-European) related to international students' trust in American physicians?

To learn about the host culture, communication with host nationals is critical for international students (Wiseman 2002). Peer groups are the major reference for international students in acquiring health care-related information (McClaran and Sarris 1985, Miller 1987, Sharif 1998). Based on previous studies that found a high level of trust in physicians among American patients (Hall, Zheng, Dugan *et al.* 2002, Thom, Ribisl, Steward *et al.* 1999, Anderson and Dedrick 1990) we would expect that international students learn from American students about American health care. We usually know that negative stories spread much faster than positive stories do. However, little is known about international students' sources of health information. Therefore, the third research question asks:

RQ3: Do international students with more American friends trust their physician more or less than students with fewer American friends?

As Tsekouras (2005) suggested, acculturation takes place gradually. Researchers most often talk about four stages of acculturation: honeymoon, crisis/culture shock, recovery and adjustment. Kim (1988) sees the human as a "system," who, when confronted with a new culture, goes through "disequilibrium." The person then incorporates feedback to bring the "system" back into balance. By adjusting to a new culture, we learn a new repertoire (or set) of thoughts, feelings, and behaviors. We actually become a different person through "transformation," and, in a way, a more "complete" person or a person with more choices. Kim sees cross-cultural travel as empowering. Because we do not know the relationship between trust in physicians and acculturation, a research question was asked:

RQ4: Do international students who have been in the United States for a longer time trust their physicians more than students who have been for a shorter time?

*Locus of control*

Locus of control explains whether an individual attributes future events and their outcomes to his/her own ability and behavior under his/her control or whether he/she attributes these events and outcomes to outer forces that are beyond one's own control (Black 1990). Individuals who believe that they can control their own destiny tend to possess an internal locus of control while individuals who believe outer forces such as luck or fate determine their destiny possess an external locus of control (Ward and Kennedy 1992). In general, people possess both perceptions but to different degrees (Rotter 1966). According to previous research, internals tend to be more educated (Lachman and Leff 1989) and have higher household incomes (Rotter 1966, Hoffman *et al.* 2003). Internals are more action-oriented than externals. They tend to take more risk in businesses. Externals, on the other hand, often engage in avoidance behavior (Janssen and Carton 1999).

Internal and external loci of control can explain the way in which international students interact and their psychological health (Black 1990). A study conducted among New Zealand adults in Singapore showed that respondents with an external locus of control had more difficulty communicating in everyday life and more difficulty living in a new culture. They experienced a higher level of mood disturbance, depression, confusion, and anger. Seipel (1988) examined Koreans in the United States and reported that respondents with an internal locus of control maintained more positive psychological health, described in terms of greater life satisfaction, than did those with an external locus of control.

These studies are consistent with Young Kim's (2001) theory of communication and cross-cultural adaptation. The theory proposes that active interaction with a host environment facilitates cultural learning and adaptation and brings positive outcomes of effective intercultural communication and psychological health. Individuals with an internal locus of control participate in intercultural communication more actively than individuals with an external locus of control participate and are psychologically healthier. Wheelless, Erickson, and Behrens (1986) found that international students with external loci were more likely to subscribe to their culture's values. Persons with an internal locus of control reflect less influence from their cultural environment. Based on Black (1990), Seipel's (1988) and Wheelless *et al.* (1986) findings, a hypothesis is presented:

H1: International students with an internal locus of control will have a greater degree of trust in American physicians than students with an external locus of control.

**Method***Sample*

The participants consisted of 169 international students (97 men and 72 women). Students ranged in age from 17 to 50 years ( $Mdn = 26$ ,  $M = 28.4$ ,  $SD = 6.27$ ). One-fifth (20.7%) of all respondents were Europeans, and the rest were from Asia, Latin America, Africa and Australia. The students' average length of time in the United States was 3.29 years ( $SD = 2.02$ ), ranging from 2 months to 15 years.

*Procedure*

Through the International Cultural Center at a large southern research university, emails were sent to all 1,433 international students enrolled during the 2007 spring semester. The email contained a link to a questionnaire, posted on [www.surveymonkey.com](http://www.surveymonkey.com). Therefore, all members of the international population at the university had an equal chance of being included in the study. Of 1,433 international students, 172 returned the questionnaire (response rate = 12%). Of those, 169 respondents completed them sufficiently for the analysis used in this study. Compared to a study done at Michigan State University where around 20% of the total 19,000 students replied to a web mail survey (Kaplowitz, Hadlock & Levine, 2004), our number of returned questionnaire was much lower. However, we did not send the reminder mail notification to students since we had enough number of students to draw significant conclusions.

The online survey was used because the method allows the researcher to collect data very fast, 24 hours per day and at a low cost. Generally, web-based surveys allow large samples to be collected as easily as smaller samples (Reips 2002). Moreover, comparisons of data collected online and via modes that are more traditional tend to confirm that no major differences occur (Krantz and Dalal 2000).

### Measures

**Trust.** To measure trust in American physician, respondents were asked to answer 11 questions measuring fidelity, competence, honesty, confidentiality, and global trust. Their answers were measured on the 5-point Likert scale, ranging from 1, *strongly disagree*, to 5, *strongly agree*. Because some items contained negative statements, their answers were later re-coded, so that 1 represents *strongly agree* and 5 *strongly disagree*. The items were summed as a scale, such that the larger the value of the scale, the greater the amount of trust in physicians. The mean score of all the items for the Trust scale was 3.25 ( $SD = .65$ , Cronbach's  $\alpha = .91$ ).

**Locus of control.** Locus of control is a personality dimension introduced by Rotter in 1966. Eight items on the locus of control were chosen from Levenson's (1974) original nine-item scale. The Levenson scale is now widely accepted as an alternative to Rotter's (1966) original scale (Lam and Mizerski 2005). However, researchers indicated that one of Levenson's internal locus of control items correlates poorly with other scale items, so the item is excluded from our study. Of eight items, three items measured the internal locus of control, while the others measured the external locus of control. Sample items included "My life is determined by my own actions," "When I get what I want, it is usually because I am lucky." All of the items were measured on a five-point Likert scale ranging from 1, representing *strongly disagree*, to 5, representing *strongly agree*. The items were summed into a scale, such that the larger the value of each scale, the greater the internal or external locus of control. The mean score of all the items for the internal locus of control dimension was 3.76 on a 0-5 possible range ( $SD = .68$ , Cronbach's  $\alpha = .636$ ), whereas the mean score for the external locus of control dimension was 2.31 ( $SD = .67$ , Cronbach's  $\alpha = .76$ ). Those reliabilities are acceptable and are similar to Lam and Mizerski (2005) findings (Cronbach's  $\alpha = .61$  and  $\alpha = .72$ , respectively).

Factor analysis was performed to check the factors' groupings using a principal component solution and varimax rotation to find variable groupings. The final factors accounted for 66.44% of the variance.

**Demographics.** The questionnaire measured participants' sex, age, and ethnicity. For regression analysis, we recoded nationality into 1 representing *European*, and 0 representing *Non-European* students. Respondents were asked how many times they had seen an American physician during their stay in the United States, and what percentage of their friends are American students, and what percentage of their friends are international students.

### Results

Table 1 represents descriptive statistics for each item of the Trust scale and Table 2 descriptive statistics for items of the locus of control scale. The overall trust score was 3.25, which is a little bit lower than Hall et al. (2002), Thom et al. (1999) and Anderson and Dedrick (1990) found using their scales. This shows that international students have less trust in American physicians than average American patient.

Locus of control score indicates that international students had internal locus of control more often than external locus of control. Table 3 shows the factor loadings for locus of control scale. Factor analysis was done just to check if the items that measured the locus of control cluster together.

Four in 10 international students reported that they have seen an American doctor 1-2 times and 19% have seen a doctor 2-3 times. Every fifth student reported that he/she has seen a doctor more than eight times since they have been in the United States.

Independent *t* tests were conducted to see if a difference exists between male and female international students (research question 1) and between those coming from European countries and those from non-European countries (research questions 2) in their trust in American physicians. Results found no significant differences in reported trust between these groups.

The third research question asked if international students with more American friends trust their physician more than students with fewer American friends. Pearson product-moment correlations were computed to test this. Alpha was set at .05 for the analysis. Table 4 shows results. Correlation analysis revealed a negative association between trust and the number of American friends,  $r(169) = -.14, p < .05$ . The results are in the opposite direction than we would normally expect. However, because of the lack of relevant research, a hypothesis was not posed. The fourth research question asked if international students who have been in the United States for a longer time trust their physicians more than students who have been for a shorter time. Again, no significant correlation was found between trust and years spent in the United States.

The first hypothesis predicted that international students with an internal locus of control would have a greater degree of trust in American physicians than students with an external locus of control. A small but significant relationship was found between trust in a physician and internal locus of control,  $r(169) = .22, p < .01$ . Therefore, the hypothesis was supported.

In addition to predicted relationships, some unexpected results emerged from correlation analysis. A negative relationship was found between trust and external locus of control,

$r(169) = -.15, p < .05$ . A negative relationship was also found between the external locus of control and the number of doctor's visits. A positive relationship was found between the internal locus of control and the number of American friends. While years spent in the United States was not related to a higher trust in physicians as hypothesized, it was related to the number of visits to American doctors, and to the number of American and international friends. No correlations were found between trust and other tested variables: years spent in the United States, the number of international friends and the number of doctor's office visits (see Table 4).

### Additional analyses

Multiple regression analysis was employed to provide an assessment that is more rigorous. This statistical tool assesses the relative predictive power of different independent variables on a particular dependent variable. Stepwise regression analysis was run with trust as a dependent variable, and external locus of control, internal locus of control, the number of American friends, the number of international friends, the years of being in the United States, nationality, sex, and the number of doctor's visits as independent variables. Collinearity statistics were satisfactory, with all tolerances greater than .74.

The results of the regression analysis found two significant predictors of trust in physicians explaining together 9.8% of variance,  $F(8, 146) = 1.98, p < .05$ . The strongest predictor was internal locus of control ( $B = .23, \beta = .24, SE B = .09, p < .05$ ) explaining 5.2% of variance in the trust in physician, followed by the number of American friends ( $B = -.17, \beta = -.19, SE B = .09, p < .05$ ) explaining 3.3% of variance. This analysis shows that trust is positively influenced by internal locus of control and negatively influenced by the number of American friends.

### Discussion

Few quantitative studies have investigated how international students' cultural, social and personal differences relate to their level of trust in American physicians. In order to find this relationship, a survey with 169 international students was administered at a large southern research university.

Based on correlation, multiple regression and *t* test analysis findings, the results of this study suggest that international students with more American friends do not trust their physicians more than students with fewer American friends. International students who stayed in the United States for a longer time also do not trust their physicians more than students who stayed for a shorter time. However, international students with an internal locus of control have a greater degree of trust in American physicians than students with an external locus of control. Hence, the only prediction made in this study seems to be supported. The results of testing research questions show no difference in trust between male and female, and between European and non-European students.

The Hall, Zheng, Dugan et al. (2002) Trust scale had an excellent reliability. As the results suggest, the mean Trust score was 3.25, which is a little bit lower than Hall et al., Thom et al. (1999) and Anderson and Dedrick (1990) found using their scales. One of the explanations for low score may be that the difference is due to using a different measurement. It may also be possible that international students trust American physicians less than American students.

Results indicate a significant, but negative relationship between trust and the number of American friends students had. In contrast to what we would expect, more American friends mean less trust in American physicians, and not more. We may speculate that gossip and dramatic stories international students hear about American doctors are actually told by American students. Because international students do not have much personal experience with American health care, it is easier to accept the stories that are coming from "trustworthy sources." Therefore, the McClaran and Sarris (1985), Miller (1987) and Sharif (1998) claims that peer groups are the major reference for international students in acquiring health care-related information may be relevant to how much trust international students have in American physicians. However, to make such a statement we need to investigate what international students' sources of health information are.

International students who stayed in the United States for a longer time do not trust their physicians more than students who stayed for a shorter time. These findings reveal that trust in physicians does not develop gradually as Tsekouras (2005) suggested for cross-cultural adjustment. However, he tested host communication competence and not trust in physicians. Not measuring the relationship between host communication competence and trust in physicians is one of the limitations of this study, and the relationship between these two constructs should be tested in the future studies.

Results indicate a significant relationship between trust in the physician and the internal locus of control. These findings are consistent with Black (1990), Seipel (1988) and Wheelless et al. (1986) who suggested that respondents with an external locus of control would experience difficulty living and subscribing to a new culture. In this sense, sojourners and immigrants seem to have the same problem; regardless their immigrant status. Locus of control appeared to be a meaningful construct that can help explain international students' trust in a physician. Locus of control may tell us why some students trust doctors more and others less when in a new environment. However, we have to keep in mind that the association between trust and internal locus of control is still weak.

Results show no relationship between trust and sex. This is consistent with most studies that tested patient characteristics as the predictors of trust (Pearson and Raeke 2000, Thom, Ribisl, Steward *et al.* 1999, Kao, Green, Davis *et al.* 1998b).

No significant differences exist in reported trust between students from European countries and those from non-European countries. This is opposite of what would be expected based on the Chen (2000), Olaniran (1996) and Kim (1988) findings. However, those researchers did not directly measure the trust in physicians but rather how well students adjusted to the new environment. Therefore, we can speculate that trust in physicians may not be an important category of cross-cultural adjustment as may be an actual health behavior.

Some additional findings not directly tested emerge from our analysis. For example, students who score higher on the external locus of control visit doctor's offices less often than students with an internal locus of control. In addition, students who score higher on internal locus of control tend to have more friends that are American. Although years spent in the United States are not related to higher trust in physicians as hypothesized, they are related to the number of visits to American doctors and to a number of American and international friends. This seems logical, the longer the students stay, the more competence they have while interacting with people from a host society.

This study has several limitations. First, only self-ratings were used to measure the variables. Because adaptation to a host environment is a gradual process, a longitudinal study would be suitable to trust in physicians at different stages of international students' adaptation to the host culture and health care system. Data about the level of trust students already had at arriving in the United States could be collected on the first few days that international students come to the school. To establish causal relationships between trust and students' cultural, social and personal differences, stronger evidence is necessary. For example, we do not know if international students learn "trust" from their American friends, or from other sources of information (media, family, school). Next, we cannot assume that all European or non-European students think alike, so students from the Great Britain and Italy for example, may have different views on trust. Also the linguistic background may influence communication in general and development of trust in particular. Finally, Hall, Zheng, Dugan et al. (2004) study has only 11 items which prevents us to do a factor analysis or to compare how students score on separate dimensions (since there is 2 items per dimension).

A study that will concentrate only on sources of international students' information about American health care and doctors is needed. We also have to be careful not to equalize the patients' views about particular physicians and their views about the medical system in general as the two may be completely independent. Finally, better measures for trust are needed.

It would be interesting to do a longitudinal study to see if students' attitudes toward physicians changed after 5 or 10 years. We could also ask students if they plan to return to their home country after getting degrees in the United States. Then we would be able to compare if there is a difference in trust scores between those who plan to return home and those who plan to stay in the United States after they get their degrees. Finally, the findings of this study can be used in physicians' training as well as in introductory programs for international students.

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Table 1. Descriptive statistics for trust scale

Trust in physician	Mean	SD
Your doctor will do whatever it takes to get you all the care you need	3.24	.96
Sometimes your doctor cares more about what is convenient for him/her than about your medical needs	3.00	.93
Your doctor's medical skills are not as good as they should be	3.31	.88
Your doctor is extremely thorough and careful	3.26	.96
Sometimes, your doctor does not pay full attention to what you are trying to tell him/her.	3.19	.97
Your doctor is totally honest in telling you about all of the different treatment options available for your condition.	3.43	.83
You worry that private information your doctor has about you could be used against you	3.56	.96
You completely trust your doctor's decisions about which treatments are best for you.	3.16	.86
Your doctor only thinks about what is best for you.	3.19	.77
You have no worries about putting your life in your doctor's hands.	3.09	.96
Overall, you have complete trust in your doctor.	3.19	.91

Table 2. Descriptive statistics for locus of control scale

Locus of control	Mean	SD
My life is determined by my own actions.	4.19	.79
When I get what I want, it is usually because I worked hard for it	3.99	.85
I can pretty much determine what will happen in my life	3.11	1.01
To a great extent my life is controlled by accidental happenings	2.57	.94
When I get what I want, it is usually because I am lucky	2.35	.86
It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad luck.	2.50	1.04
I feel like what happens in my life is mostly determined by powerful people.	2.21	.89

Table 3. Locus of control: Primary factor loadings

Factors	Loading	Eigenvalue	Variance
Factor 1: Internal Locus of Control			
My life is determined by my own actions.	.74		
When I get what I want, it is usually because I worked hard for it	.83	3.12	24.21
I can pretty much determine what will happen in my life	.65		
Factor 2: External Locus of Control (Chance)			
To a great extent my life is controlled by accidental happenings	.70		
When I get what I want, it is usually because I am lucky	.84	1.31	22.58
It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad luck.	.61		

Factor 3: External Locus of Control (Powerful Others)			
I feel like what happens in my life is mostly determined by powerful people.	.92	1.05	21.65
My life is chiefly controlled by powerful others.	.88		

Total variance explained = 68.44%

Table 4. Correlations between trust in physicians and individual differences

Subscale	1	2	3	4	5	6	7
				Students ( <i>n</i> = 169)			
1. Trust	-	-.15*	.22**	-.02	.03	-.14*	.10
2. External locus of control		-	-.40**	-.04	-.17*	-.02	-.01
3. Internal locus of control			-	.04	.01	.19*	-.08
4. Years in the US				-	.49**	.27**	-.18*
5. No. visits to physician					-	.17*	-.10
6. No. of American friends						-	-.52**
7. No. of international friends							-

\*\* Correlation is significant at the 0.01 level, one-tailed.

\* Correlation is significant at the 0.05 level two-tailed.

#### About the author

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