

Is Generalized Trust Related To Mistrust Of University Health Care Centre?

Harris Shah Abd. Hamid^{1,2}
Azlin Hj Alwi²
Wan Fatin Munira Wan Mustapha^{1,3}

¹*Department of Educational Psychology and Counselling
Universiti Malaya*

²*Kulliyah of Islamic Revealed Knowledge and Human Sciences
International Islamic University Malaysia*

³*School of Social Sciences
Heriot Watt University (Malaysia)*

^{1,2} Corresponding author: harris75@um.edu.my

Personal characteristics like gender has been shown to be related to people's attitude towards medical treatment. A negative attitude towards health care provider can be expressed as mistrust. This paper examines the relationship between personal characteristics (generalized trust, sex including whether the person had obtained treatment at a health care centre) and mistrust to a university health care centre. Survey respondents are 420 university students with age ranging from 18 to 29 ($M=21.6$, $SD=1.26$). Both types of trusts were similar between the sexes and between students who had and had not visited the health care centre. The finding reveals that generalized trust is not related to mistrust towards healthcare provider. Further studies are needed to establish the extent to which a domain-specific mistrust has marginal benefits over a generalized trust

Keywords: generalized trust, health care, mistrust, university

Trust has been considered as the core ingredient of effective health care provider-patient relationship. Trust is essentially valued in that relationship as patient is dependent to the practitioner whom they perceived as having mastery in medical knowledge. To trust in the health care providers also mean to have expectations of their behaviours, relying upon them to provide alternatives for the patients, as well as providing the necessary information patients may need. When the trusting relationship is maintained, the practical benefits for the patients will be enhanced. However, the absence of trust may result in patients' reluctance to seek treatment and disclose personal information (Rowe & Calnan, 2006).

Although there is a strong evidence that health care related distrust may lead to

poor health outcomes due to interference with effective health care, the impact of trust and distrust in health care-related systems is less well understood (Armstrong, Rose, Peters, Long, McMurphy, & Shea, 2006; Musa, Schulz, Harris, Silverman, & Thomas, 2009). Having a trust in health care providers allow both health care providers and patients to arrive at medical decision pertaining to patients' health outcome (Hayes, 2010) or engagement in health care. In addition, lack of patient trust is associated with less doctor-patient interaction, reduced adherence to recommendations that may be made by doctor to patient, reduce utilization or disengagement of the health care (LaVeist, Isaac, & Williams, 2009), and also poor self-reported health (Armstrong et al., 2006). Trust or mistrust in the health care system is also associated with patient characteristics such

as race (Musa et al., 2009; Simonds, Goins, Krantz, & Garrouste, 2014), age (O'Malley, Sheppard, Schwartz, & Mandelblatt, 2004), the institutions (referring to both the health care providers and systems) (Buchanan, 2000; Gray, 1997), or the health care providers personality and behaviours (Cook, 2001).

Gilson (2006) stated that trust relates to a degree of trustor's vulnerability and risk which embedded in the expectation that trustee will have concern for his interests. This notion can be seen as well in Abelson, Miller, and Giacomini (2009) as the core to the trust relationship is the experience of vulnerability of a person. The activation of a personally important and significant event can also influence the level of trust. For example, Powell et al. (2016) discovered that the main factor patient would feel intimidated and seed their mistrust of physicians is when it comes to receiving a serious diagnosis or prognosis of their health condition.

Generalized trust is defined as "the potential readiness of citizens to cooperate with each other and to engage in civic endeavours" (Stolle, 2002, p. 397); hence, trust will only be built when both parties agreed to invest their commitment in a relationship. Therefore, trust takes two parties and will not occur in a vacuum. However, it is not always a case as having a trust means having the preparedness to trust others and action following it because generalized trust especially in hierarchical structures society may be deemed necessary in patron-client relationship (Stolle, 2002). Consequently, generalised trust has been shown to link to a variety of positive outcomes at the individual level such as self-rated health. Generalized trust is strongly associated with both self-rated health and happiness (Carl a Billari, 2014). Stolle (2002) points out that in a society-centred culture, generalized trust is viewed as the most important mechanism in transmitting their social interaction particularly

in bridging interaction such as formative experience towards diverse association. This type of trust may encourage an individual to extend their trust to other than knowledge-based trust; trust towards people one knows as generalised trust requires one to engage in a broad general population.

This paper seeks to measure the lack of trust, or mistrust, towards a specific health care provider. To provide a context for this paper, the following section provides an overview of Malaysian health care scenario. The overview argues that there is a growing threat to the level of trust held by Malaysian towards the health care provider.

Health Care in Malaysia

The healthcare delivery system in Malaysia has seen tremendous improvements due to a comprehensive range of health services available. The health care in Malaysia consists of the private and public sectors offers a wide range of services including health promotion, disease prevention, curative and rehabilitative care deliverable through clinics and hospitals.

The health care system has also been used as a model for other developing countries because of its success in improving the health status of Malaysians over time (Lee, 2015). A study by the American publication *International Living*, in its 2014 Global Retirement Index has rated Malaysia's healthcare system as the third best out of 24 countries—evaluated, amongst others based on the cost and quality of healthcare (Liang, 2014). This is not surprising since the Malaysia government has always been committed to its principle of a universal access to high quality health care (Castro, 2009). Many plans have been initiated and put into motion to achieve this. The Country Health Plan: 10th Malaysia Plan 2011-2015 has detailed out the health plan for Malaysia, aims to address issues related to

health services delivery, governance and financing, health awareness and healthy lifestyle and empowerment of individual and community. In the 11th Malaysia Plan (2016-2020), the focus is on the underserved areas, and also to increase capacity of both facilities and healthcare personnel. The four main strategies in this plan include inclusivity, improving system delivery, accessibility, and collaboration with private sector and NGO to increase health awareness.

Various initiatives have also been taken or planned by the Ministry of Health (MOH) to improve and strengthen health services in the community. Integrated health screening which was started in 2008 was intended for holistic care of outpatients in the health clinics and ultimately reduces the disease burden of the community (Hariri et al., 2015). Health risks are prioritised according to age groups. The strategy is to identify and manage risks early and accordingly in order to prevent progression to disease. Another initiative is the Family Doctor Concept (FDC) with the aim of 'One Family One Family Doctor,' address the rising burden of diseases in which each family will be assigned to a doctor. The FDC aims to detect and treat diseases at an early stage by the family doctors, which in turn will reduce the number of patients receiving treatment for serious illnesses in the hospitals (Subramaniam, 2013). In addition, the 1 Malaysia Clinics was launched in 2010 to cater for poorer urban population. This project was launched in 2010, and as a results, 50 clinics are built throughout Malaysia. Other than this, the Social Security Organisation (SOCSSO) has offered medical check-ups to its eligible members age 40 and above. The one-off free health screening is offered as an early detection for health problems like high blood pressure, diabetes and heart disease, as well as to check cholesterol levels, and for prostate cancer in men and cervical/breast cancer in women through Pap smear/mammogram.

However, many Malaysians are seeking for alternative, complementary, or integrative medicine, also referred to CAM (Complementary Alternative Medicine) or TCM (Traditional and Complementary Medicine). CAM or TCM is used to denote health-related practices that are not provided by registered conventional medical practitioners. Among cancer patients for example, numerous studies reported a significantly high degree of complementary and alternative medicine use (Farooqui et al., 2016; Lua, 2009). Also a study among cardiovascular patients shows an increase in the use of TCM (Kew et al., 2015). In view of this demand, the Ministry of Health under the TCM division has established integrated hospitals in 2006. These hospitals practice traditional Malay massage, acupuncture, herbal oncology, as well as postnatal massage (Ministry of Health Malaysia, 2007).

In a sample of diabetes patients, Malay and Muslims in Malaysia were more likely to use TCM compared to other ethnic and religious groups (Ching, Zakaria, Paimin, & Jalalian, 2013). This is also reiterated in a sample of 1,250 households in Pahang (Kew et al., 2015). The result of this study shows that the TCM use among those with cardiovascular risk factors is high. However, there were no clear preferences in terms of gender, age groups, educational level or income. Many of the respondents turned to TCM as a substitute for conventional medicine.

On top of the TCM, there are medical treatment and procedures that were not approved by MOH but very popular among Malaysians. The Facebook pages like Pseudoscience Watch, Root of Science, and Medical Mythbusters had gained popularity in exposing pseudo-scientific medicine. Ozone therapy, for example, was banned by the MOH (Kannan, 2017). Marketers were also observed making baseless and extravagant claim about their product. Unfortunately, people buy into the claims

made and are impressed by promising testimonials presented by the marketers. Consequently, public will consume the product without having a proper check and consultation from the experts on the basis of their poor awareness and wrong belief as a consumer (Verbeke, Sione, Pieniak, Van Camp, & De Henauw, 2005). Hence, the question remained whether this shows a growing mistrust towards the conventional scientific medicine and health care providers.

The issues regarding the alternatives to health care institutions need to be examined. The existing literature had showed that mistrust to healthcare institutions is related to the willingness to seek help and comply with treatment provided by the institution. Therefore, it is important to understand the factors that influence the level of mistrust towards healthcare institutions. The objective of the study is to examine the relationship between mistrust of a university-based health care centre and personal trust, sex, and visitation history.

Method

Participants

Students in a Malaysian university with English as a primary medium of instruction were selected to participate using convenience sampling. A total of 420 respondents (85 males, 234 females, 1 not stated) with age range from 18 to 29 ($M=21.6$, $SD=1.26$) completed the questionnaire. Of the 420 respondents, 360 (85.7%) had visited the University's Health and Wellness Centre (UHWC), and 58 (13.8%) had not.

Measures

Medical Mistrust Index (MMI) was developed by LaVeist, Arthur, Morgan, Rubinstein and Plantholt (2003) as a 17-items measure and later refined into a 7-item

measure (LaVeist, Isaac, & Williams, 2009). It comprises 7 items rated on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree). The questionnaire includes all 17 original items. Based on internal consistency analysis involving the 17 items, the 7-item measure was used for subsequent analysis. The MMI's 7-items internal consistency was reported to be .76 (LaVeist, Isaac, & Williams 2009) and .74 (Eaton et al., 2015).

Meanwhile, the Generalized Trust (GT) measure has 20 items and for this study they were measured on a 4-point Likert scale (1 = Very Untrue of Me OR Strongly Disagree to 4 = Very True of Me OR Strongly Agree). The GT is one subscale from the Trust Inventory developed by Couch, Adams, and Jones (1996). The internal consistencies for the whole Inventory range from .87 to .92 while the test-retest stability for the GT is .80 (Couch & Jones, 1997).

Search using Google Scholar did not yield studies using MMI or GT on Malaysian samples. The original English version of MMI and GT were used in this study.

Procedure

The questionnaires were administered over a period of three weeks among students residing in a public university's campus. Internal reliability is assessed through Cronbach's alpha. The relationship between Medical Mistrust Index and Generalized Trust was examined through Pearson correlation. Independent samples t-test was used to compare the scores of MMI and GT between sex (i.e., males-females) and previous visitation of the UHWC (i.e., Yes-No).

Results

The scale's internal consistency (see Table 1) is acceptable for the purpose of

investigating relationship among the variables. The centres of the scores for both variables are highly similar. In terms of the spreads, however, the variables have different ranges, but similar standard deviations. The differences between the spread

indices may not be enough to conclude that the scores have a limited range which would be problematic for correlation analysis.

Table 1

Descriptive statistics for the GT and MMI

Variable	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>a</i>
GT	2.69	.44	2.05	.731
MMI	2.67	.44	2.71	.674

The are no gender differences for the two measures used. The GT scores are similar for males ($M=2.65$, $SD=.29$) and females ($M=2.7$, $SD=.30$), $t(403) = -1.433$, $p = .153$. The MMI scores are also similar for both males ($M=2.69$, $SD=.42$) and females ($M=2.66$, $SD=.44$), $t(408) = .526$, $p = .599$. The lack of sex based differences justify aggregating the data for further analysis.

Direct personal experience does not seem to be related to level of both general trust and trust towards health care provider. The GT scores are similar for students regardless of their visitation status (Yes: $M=2.69$, $SD = .30$, No: $M=2.70$, $SD=.27$), $t(402) = -.237$, $p = .813$. The MMI scores are also similar for both groups (Yes: $M=2.67$, $SD = .44$, No: $M=2.64$, $SD=.42$), $t(407) = .417$, $p = .677$.

It seems that MMI is not able to differentiate patient vs non-patient just like GT. However, it does seem that MMI and GT are measuring different constructs as suggested by the lack of correlation between the two. GT scores are not correlated to MMI scores, $r(N=397) = -.055$, $p = .237$. As expected based on the restricted range of age (low SD value), both GT and MMI are not correlated to age, $r(N=403) = -.012$, $p = .815$ and $r(N=408) = -.031$, $p = .531$ respectively. The non-significant correlation between MMI and the other variables does not warrant further analysis like multiple regression to be made.

Discussion

The study shows a lack of relationship between MMI and the selected personal characteristics. Several possible interpretations can be made based on the results obtained. First, the findings are not definitive in revealing the utility of MMI as a domain-specific measure of trust. Perhaps MMI falls under an extended social circle termed Network Trust which lacks incremental validity compared to General and Partner Trust (Couch, Adams, & Jones, 1996). It could also be possible that the present findings are true only for this relatively homogenous student samples especially in terms of levels of education. Third, the study examined experience with healthcare provider as a dichotomous measure. Perhaps the frequency and nature of health consultation would affect the levels of mistrust. Lastly, the lack of relationship between MMI and PT suggests a discriminant validity of the measure. Future study should then test convergent and concurrent validities like the ones conducted by Eaton et al. (2015) but for Malaysian samples.

A limitation of the study is the relatively low number of students who had not visited the UHWC. If the numbers were analysed for males, the limitation is more obvious. Only nine males were non-visitor compared to 89 who had visited the

UHCW. However, visitation record does not seem to depend on the students being a male or female. Chi-square analysis show the lack of association between the two, $X^2(1)=2.358$, $p=.125$. Future studies should consider sampling procedure that would ensure a fair comparison can be made for people with direct and indirect experience with a health care provider.

Another limitation is the variability of age data. Although the range (18 to 29) looks good, the spread as measured by the standard deviation (1.26) is less than adequate to detect the relationship between age and the other variables in the study. Age group differences may reveal different level of trust to health care provider. For example, the level of trust to physician is higher among survey respondents who are older than 50 years compared to those between 18 to 30 (Boulware, Cooper, Ratner, LaVeist, & Powe, 2003). Future studies should consider participants with wider range of age and demographic characteristics like level of education, and employment.

The rise of non-communicable diseases like diabetes increase people's awareness and need for health care treatments and interventions. The lack of trust in health care provider can worsen the health scenario. The level of medical mistrust had been showed to be related to poorer communication with health care provider (White, Chakkalakal, Presley, Bian, Schildcrout, Wallston et al., 2016). A concerted effort need to be taken to combat both the dispositional and induced mistrust. From a health psychology perspective, understanding the personal belief, attitude, traits, and motivation regarding health-related behaviour is important. Developing tools to measure these variables would go a long way in the concerted efforts to improve health status of Malaysians.

Acknowledgement and Note

The authors would like to thank the students at the International Islamic University Malaysia (IIUM) who helped in the data collection.

References

- Abelson, J., Miller, F. A., & Giacomini, M. (2009). What does it mean to trust a health system? A qualitative study of Canadian health care values. *Health Policy*, *91*(1), 63-70.
- Armstrong, K., Rose, A., Peters, N., Long, J. A., McMurphy, S., & Shea, J. A. (2006). Distrust of the health care system and self-reported health in the United States. *Journal of General Internal Medicine*, *21*(4), 292-297.
- Buchanan, A. E. (2000). Trust in managed care organizations. *Kennedy Institute of Ethics Journal*, *10*(3), 189-212.
- Boulware, L. E., Cooper, L. A., Ratner, L. E., LaVeist, T. A., & Powe, N. R. (2003). Race and trust in the health care system. *Public Health Reports*, *118*, 358 – 365.
- Carl, N., & Billari, F. C. (2014). Generalized trust and intelligence in the United States. *PLoS ONE*, *9*(3).
- Castro, J. M. (2009, August 8). Health care in Malaysia. Archived at <http://www.expatform.com/articles/health/health-care-in-malaysia.html>
- Cook, J. A. (2001). Sexuality and people with psychiatric disabilities. *SIECUS Report*, *29*(3), 20.
- Ching, S. M., Zakaria, Z. A., Paimin, F., & Jalalian, M. (2013). Complementary alternative medicine use among patients with type 2 diabetes mellitus in the primary care setting: A cross-sectional study in Malaysia. *BMC Complementary*

- and *Alternative Medicine*, 13(1), 148.
- Couch, L. L., Adams, J. M., & Jones, W. H. (1996). The assessment of trust orientation. *Journal of Personality Assessment*, 67(2), 305-323.
- Couch, L. L., & Jones, W. H. (1997). Measuring levels of trust. *Journal of Research in Personality*, 31(3), 319-336.
- Eaton, L. A., Driffin, D. D., Kegler, C., Smith, H., Conway-Washington, C., White, D., & Cherry, C. (2015). The role of stigma and medical mistrust in the routine health care engagement of black men who have sex with men. *American Journal of Public Health*, 105(2), e75-e82.
- Farooqui, M., Hassali, M. A., Shatar, A. K. A., Farooqui, M. A., Saleem, F., ul Haq, N., & Othman, C. N. (2016). Use of complementary and alternative medicines among Malaysian cancer patients: A descriptive study. *Journal of Traditional and Complementary Medicine*, 6(4), 321-326.
- Gilson, L. (2006). Trust in health care: theoretical perspectives and research needs. *Journal of Health Organization and Management*, 20(5), 359-375.
- Gray, B. H. (1997). Conversion of HMOs and hospitals: What's at stake? *Health Affairs*, 16(2), 29-47.
- Hariri, S., Bennett, N. M., Niccolai, L. M., Schafer, S., Park, I. U., Bloch, K. C., Unger, E.R., Whitney, E., Julian, P., Scahill, M. W., Abdullah, N., Levine, D., Johnson, M. L., Steinau, M. Markowitz, L. E., & HPV-IMPACT Working Group. (2015). Reduction in HPV 16/18-Associated high grade cervical lesions following HPV vaccine introduction in the United States—2008–2012. *Vaccine*, 33(13), 1608-1613.
- Hayes, B. (2010). Trust and distrust in CPR decisions. *Journal of Bioethical Inquiry*, 7(1), 111-122.
- Kannan, H. K. (2017, May 3). Ozone therapy treatments now banned in Malaysia. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/government-public-policy/2017/05/236163/ozone-therapy-treatments-now-banned-malaysia>
- Kew, Y., Chia, Y. L., Lai, S. M., Chong, K. Y., Ho, X. L., Liew, D. W., Moy, F. M., & Selvarajah, S. (2015). Traditional and Complementary Medicine (TCM) among study population with cardiovascular risk; use and substitution for conventional medicine in Pahang, Malaysia. *Medical Journal of Malaysia*, 70(2), 86-92.
- LaVeist, T. A., Arthur, M., Morgan, A., Rubinstein, M., & Plantholt, S. (2003). The cardiac access study: A study of access to invasive cardiology among White and African American patients. *Journal of the American College of Cardiology*, 41(7), 1159–1166.
- LaVeist, T. A., Isaac, L. A., & Williams, K. P. (2009). Mistrust of health care organizations is associated with underutilization of health services. *Health Services Research*, 44(6), 2093-2105.
- Lee, P. O. (2015). *What lies ahead for Malaysian healthcare?* (Vol. 4). ISEAS Economics Working Paper.
- Liang, T. Y. (2014, February 10). US magazine: Malaysia's healthcare is No. 3 worldwide. *The Star*. Retrieved from <https://www.thestar.com.my/news/nation/2014/02/10/malaysian-healthcare-third-best-worldwide-us-magazine/>
- Lua, P. L. (2011). The role of complementary indigenous Malay therapies: Perspectives from palliative care

- patients. *Journal of Complementary and Integrative Medicine*, 8(1).
- Musa, D., Schulz, R., Harris, R., Silverman, M., & Thomas, S. B. (2009). Trust in the health care system and the use of preventive health services by older black and white adults. *American Journal of Public Health*, 99(7), 1293-1299.
- O'Malley, A. S., Sheppard, V. B., Schwartz, M., & Mandelblatt, J. (2004). The role of trust in use of preventive services among low-income African-American women. *Preventive Medicine*, 38(6), 777-785.
- Powell, R. E., Doty, A., Casten, R. J., Rovner, B. W., & Rising, K. L. (2016). A qualitative analysis of interprofessional healthcare team members' perceptions of patient barriers to healthcare engagement. *BMC Health Services Research*, 16(1), 493.
- Rowe, R., & Calnan, M. (2006). Trust relations in health care—The new agenda. *The European Journal of Public Health*, 16(1), 4-6.
- Simonds, V. W., Goins, R. T., Krantz, E. M., & Garrouette, E. M. (2014). Cultural identity and patient trust among older American Indians. *Journal of General Internal Medicine*, 29(3), 500-506.
- Stolle, D. (2002). Trusting strangers—The concept of generalized trust in perspective. *Austrian Journal of Political Science*, 31(4), 397-412.
- Subramaniam, S. (2013, October 21). Role empowerment for family doctor. Retrieved from <https://fms-malaysia.org/2013/10/21/role-empowerment-for-family-doctor-dr-s-subramaniam/>
- Verbeke, W., Sioen, I., Pieniak, Z., Van Camp, J., & De Henauw, S. (2005). Consumer perception versus scientific evidence about health benefits and safety risks from fish consumption. *Public Health Nutrition*, 8(4), 422-429.
- White, R. O., Chakkalakal, R. J., Presley, C. A., Bian, A., Schildcrout, J. S., Wallston, K. A., Barto, S., Kripalani, S., & Rothman, R. (2016). Perceptions of provider communication among vulnerable patients with diabetes: influences of medical mistrust and health literacy. *Journal of Health Communication*, 21(sup2), 127-134.