

# Cultural Values: Their Correlations with Attitudes and Behaviors towards Senior Citizens

**Siah Poh Chua**

Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia  
ORCID: <http://orcid.org/0000-0003-0991-1313>, e-mail: [siahpc@utar.edu.my](mailto:siahpc@utar.edu.my)

**Ong Xiu Hui**

Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia  
ORCID: <https://orcid.org/0000-0001-7380-0840>, e-mail: [shadow31fate@gmail.com](mailto:shadow31fate@gmail.com)

**Tan Siew Huei**

SPD, Singapore  
ORCID: <https://orcid.org/0009-0001-3494-7660>, e-mail: [siewhueitan@gmail.com](mailto:siewhueitan@gmail.com)

**Tan Swee Mee**

Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia  
ORCID: <https://orcid.org/0000-0002-3321-1504>, e-mail: [smtan@gmail.com](mailto:smtan@gmail.com)

In Asian societies, the quality of life among senior citizens depends on the support they receive from their younger generation. Accordingly, this study adopted the ‘value-attitude-behavior hierarchy’ in examining the impacts of Chinese traditional cultural values on the attitudes and behaviors of Malaysian Chinese adolescents towards senior citizens. 482 Malaysian Chinese adolescents were recruited for participation in a purposive sampling and surveys. Participants were asked to fill three scales: Chinese values survey, Kogan’s attitudes towards older people, and interaction with older people. The results implied that traditional cultural values significantly impact the attitudes of these Chinese adolescents toward senior citizens. Besides, the attitudes toward older people are associated with interaction with older people. In addition, the findings also showed that attitudes toward senior citizens are statistical mediators of the cultural values impact on adolescents’ interaction with senior citizens. The results supported applying the value-attitude-behavior hierarchy to better understand the influence of cultural values on the attitudes and behaviors toward senior citizens. Besides, the results also indicate that perseverance in particular cultural values will help the younger generation to improve the intergenerational relationships, especially among the younger generation whose values have been changing to individualistic ideas.

**Keywords:** Attitudes toward older people, cultural values, interaction between elderly and young people, Malaysia, adolescents

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# Культурные ценности: их взаимосвязь с отношениями и поведением по отношению к пожилым гражданам

**Сиах Пох Чуа**

Университет Тунку Абдул Рахман, Перак, Малайзия  
ORCID: <http://orcid.org/0000-0003-0991-1313>, e-mail: [siahpc@utar.edu.my](mailto:siahpc@utar.edu.my)

**Онг Сиу Хуи**

Университет Тунку Абдул Рахман, Перак, Малайзия  
ORCID: <https://orcid.org/0000-0001-7380-0840>, e-mail: [shadow31fate@gmail.com](mailto:shadow31fate@gmail.com)

**Тан Сив Хуэй**

СПД в Сингапуре  
ORCID: <https://orcid.org/0009-0001-3494-7660>, e-mail: [siewhueitan@gmail.com](mailto:siewhueitan@gmail.com)

**Тан Сви Ми**

Университет Тунку Абдул Рахман, Перак, Малайзия  
ORCID: <https://orcid.org/0000-0002-3321-1504>, e-mail: [smtan@gmail.com](mailto:smtan@gmail.com)

В азиатских обществах качество жизни пожилых граждан в значительной степени зависит от поддержки, которую они получают от молодого поколения. Соответственно, данное исследование использовало «иерархию ценности-отношения-поведение» для изучения влияния традиционных китайских культурных ценностей на отношения и поведение малайзийских китайских подростков с пожилыми людьми. Применялась целенаправленная выборка и методы опроса, собраны данные от 482 малайзийских китайских подростков. Участникам предлагалось заполнить три шкалы: опросник китайских ценностей, шкала отношения Когана к пожилым людям и взаимодействие с пожилыми людьми. Результаты свидетельствуют о том, что традиционные культурные ценности значительно влияют на отношение китайских подростков к пожилым людям. Кроме того, отношение к пожилым людям связано с взаимодействием с ними. Результаты также показали, что отношение к пожилым людям статистически является передатчиком культурных ценностей, которые влияют на взаимодействие подростков с пожилыми людьми. Результаты поддерживают применение «иерархии ценности-отношения-поведение» для понимания, насколько культурные ценности влияют на отношение и поведение подростков с пожилыми людьми. Кроме того, результаты также указывают на то, что сохранение определенных культурных ценностей поможет молодому поколению улучшить межпоколенческие отношения, особенно у тех молодых людей, чьи ценности начинают сдвигаться в сторону индивидуалистических идей.

**Ключевые слова:** Отношение к пожилым людям, культурные ценности, взаимодействие между пожилыми и молодыми людьми, Малайзия, подростки.

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## Introduction

Population aging, which refers to the increasing proportion of older persons in a community, is underway worldwide [36]. As part of this global trend, Malaysia also involves a progressive increase in the older population, which the older generation is defined as people over 60 [30]. The aging population is estimated to increase

from 2.21 million in 2019 to 6.89 million in 2050 [36]. Among 2.2 million older people in 2015, about 7 percent were Malays and Bumiputera, 12.1 percent were Chinese, 7.8 percent were Indians, and 11.4 percent were people of other ethnicity [26].

Malaysian Chinese have a higher aging rate than other ethnicities in Malaysia, due to their lower fertility rates, longer life expectancy, and more emigration

cases [29]. The fertility rate among Malaysian Chinese has decreased and gone below the replacement level of fertility since 2010, which indicates that Malaysian Chinese women do not give birth to enough babies to sustain their population levels. On the other hand, the life expectancy of Malaysian Chinese is longer than other ethnicities in Malaysia, extending the ratio between the senior and the fertility rate [4]. Therefore, preparing different strategies to meet the psychosocial needs of Malaysia's aging population is an apprehension of all.

An important contributor to senior citizens' quality of life is much more related to the attitudes of younger people because their negative attitudes toward senior citizens would have detrimental effects on various quality of life outcomes of these senior citizens [23]. Some studies have scrutinized various influences of culture on attitudes toward senior citizens. For example, Burnes and his collaborators [3] conducted a systematic review of 63 studies and concluded that ageism is a risk factor for senior citizens' physical and mental health. P.Hsu, P.Chong and C.Osawa [14] compared participants from Taiwan, South Korea, and Japan in their study. They reported different attitudes toward senior citizens; the Japanese reported more negative impressions of senior citizens than Taiwanese people, and Koreans were less willing to live with senior citizens than Taiwanese people.

In Asian societies, the influences of cultural values on the quality of life for senior citizens are significant as senior citizens rely upon the support they receive from their younger generation [37]. Similarly, the traditional Chinese culture may also affect Malaysian Chinese adolescents' attitudes toward senior citizens, as most Malaysian Chinese parents uphold children's education as a vital means of preserving Chinese cultural identity. Thus, they invest much effort in preserving traditional Chinese culture and education [25]. S.Ting and D.Lee [31] also found that school proximity and ethnicity-related reasons influence parental school choice of primary schools among Malaysian parents.

Accordingly, this study aims to examine the influence of traditional cultural values on Malaysian Chinese adolescents' attitudes and behaviors toward senior citizens. This study used the value-attitude-behavior hierarchy proposed by P.Homer and L.Kahle [13] as a research framework. The value-attitude-behavior hierarchy proposed that an individual's values would indirectly affect the individual's behaviors through his or her attitudes. In other words, values would act on one's attitudes first, and subsequently, one's attitudes would bestow one's behaviors.

A conceptual framework is shown in Fig. 1. It is assumed that cultural values will affect attitudes and behaviors, and attitudes mediate the relationships between cultural values and behaviors. In other words, an indirect-only mediation effect is expected.

The research hypotheses and conceptual framework are outlined as follows:

H1: Cultural values are associated with attitudes toward senior citizens.

H2: Attitudes toward older people are positively associated with adolescents' interaction with senior citizens.

H3: Cultural values were not associated with adolescents' interaction with senior citizens.

H4: Attitudes toward older people are a statistical mediator for the effects of cultural values on adolescents' interaction with senior citizens.

## Methods

### Design

After getting approval from the Scientific and Ethical Review Committee, a cross-sectional self-administered survey was conducted, and it took about six months to complete the data collection. A cross-sectional study was designed to select a sample and measure the outcomes simultaneously [24].

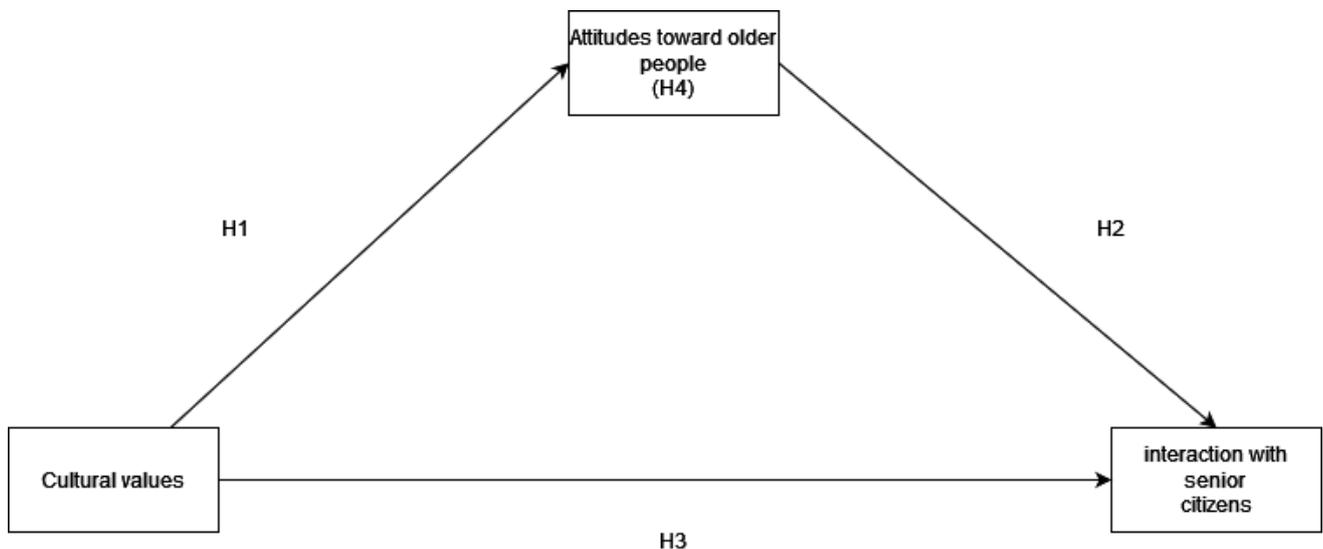


Fig. 1. The conceptual framework

### Participants

A purposive sampling method was used to select participants. An inclusive criterion follows this description: The participants should be Malaysian Chinese studying in Chinese Independent Schools. They are high school students studying in Year One, Year Two, or Year Three (equivalent to Grades 10 to 12). 482 Malaysian Chinese secondary students from eight Chinese Independent Schools (average age = 16.97,  $SD = 0.89$ ) were recruited to participate in the survey. About half of the participants were female (53.6 percent). This sample size is larger than the sample size suggested by J.Hair, M.Howard and C.Nitzl [10], and the minimum sample size should be ten times the most significant number of formative indicators used to measure one construct, which is 400.

### Measurements

There are four sections in the survey questionnaire. They are the demographic information, items from the Chinese Values Survey (CVS), questions on Kogan's attitudes towards older people (KAOP), and participants' interaction with senior citizens. All the questions were in Chinese versions [6; 18].

*Demographic information.* In this section, participants were asked to fill in their age and gender.

*Chinese Values Survey.* The Chinese Values Survey consisted of 40 adjective phrases (for example, filial, hard-working, perseverance, humility, loyalty), which were used to measure the importance of Chinese Cultural Values perceived by the participants [7]. Participants were asked to indicate the level of perceived importance for each Chinese Cultural Value presented on a Likert scale with 1= "very unimportant" and 5= "very important." There is no reversed score. Following the suggestions from B.Matthews [20, p. 120], this survey included four factors, namely: (a) integrity and tolerant (17 items); (b) Confucian ethos (10 items); (c) loyalty to ideals and humanity (9 items) and; (d) moderation and moral discipline (3 items). "Integrity and tolerance" is relevant to self-development, such as working hard and self-cultivation. Confucian ethos is linked to relationships with others, such as benevolent authority and respect for tradition. Loyalty to ideals and humanity delves into social responsibility, such as patriotism, ordering relationships by status, and resistance to corruption. "Moderation and moral discipline" is about worldly wisdom, including the three values: repayment of good or evil or others, sense of cultural superiority, and wealth. Reliabilities of the four factors were reported as 0.82 for integrity and tolerance, 0.91 for Confucian ethos, 0.82 for loyalty to ideals and humanity, and 0.57 for moderation and moral discipline [20]. A higher mean score in each factor indicates that the value of that particular factor is perceived as more important.

*Kogan's Attitudes Towards Older People (KAOP).* This scale consists of two subscales and 34 items to evaluate attitudes towards older people [17]. Participants were requested to give their responses to the 34 items on the Likert scale ranging from "1" for "strongly disagree" to "6" for "strongly agree." The first set of 17 items includes worded negative statements (KAOP-), such as "It would probably be better if most old people lived in residential

units with people of their age." The second set of 17 items was worded with positive statements (KAOP+), such as "people grow wiser with the coming of old age." The reliabilities of the KAOP+ is .80, and the KAOP- is .66 [19]. The scores of negative statements were reversed so that a higher mean score indicates that participants have a more positive attitude towards older people.

*Interaction With Older People.* We adapted items from the studies by M.Baranowski [2] and J.Sinnott, B.Raval and H.Shiffman [27] to form the measurement. In this section, participants were asked to rate seven items to indicate how often they interact with senior citizens in different activities, such as watching TV, watching movies, preparing dinner, and doing housework, on a 4-point Likert scale (never, seldom, sometimes, always). A higher mean score indicates that participants have more interactions with senior citizens.

### Data Collection

Before the data collection, we emailed all 37 Chinese independent schools in West Malaysia to inform them about the details and obtained permission to conduct the research. The contact information of these schools was retrieved from the webpage of the United Chinese School Committees Association of Malaysia (also known as Dong Zong) [31]. The Chinese community wholly administers these non-profit educational institutions, and they are independent schools that possess complete authorization to make decisions for delivering teaching content and cultural philosophy [8]. The medium of teaching in these schools is Chinese language or Mandarin. Besides studying Bahasa Malaysia and English languages, students have to study the works of Confucius, Chinese literature, and Chinese calligraphy [8].

Among 37 schools we approached, eight schools agreed to participate, and they responded via emails or telephone calls. After getting ethical approval from the university, we assigned researchers to select participants in the respective schools. We also reminded the school teachers that only students who had obtained signatures from their parents or completed 'Guidance for Parental Informed consent forms' could participate in the survey. The researchers visited the schools at a pre-arranged convenient date and time to conduct the surveys. For schools preferring their teachers to administer the survey, we mailed questionnaires to the schools.

Similarly, students were requested to submit parental informed consent forms and needed to read and give assent to the consent form attached on the first page of the questionnaire. The consent form contained information about the purpose of the study, their rights to withdraw from the survey, the protection of their privacy, and their data confidentiality. The researchers either collected questionnaire forms from the students upon completing the survey or received the school questionnaire by post. A token was given to each participant who completed the survey.

### Data Cleaning and Analyses

H.Kim [16] suggested that an absolute skew value larger than two or an absolute kurtosis larger than seven

may be used as a reference value for determining substantial non-normality. We examined the values of skew and kurtosis for all of the factors. The results showed that all values were within the normality range; the skew values ranged from  $-1.18$  to  $0.39$ , and the kurtosis values were from  $-0.56$  to  $2.01$ . As no questionnaire had more than 5 percent missing values in this study, a mean replacement was used to handle those questionnaires' missing data [10]. The SPSS program analyzed the descriptive results, and the SmartPLS program analyzed the partial least squares structural equation modeling. A measurement model was analyzed first to examine the reliability and validity of the scale, and then a structural model was conducted to examine the relationships among the variables [1; 22].

## Results

### Measurement Model

*Construct Reliability and Discriminate Validity.* We used composite reliability to examine the internal consistency of the scale. Composite reliability is appropriate for the examination of the Partial Least Square Structural Equation Model since the formula checks different outer loadings on the construct [10], and it is equivalence to the bivariate correlation between the construct and the respective indicator [11]. As shown in Table 1, all of the scales' composite reliabilities were from  $0.74$  to  $0.92$ , exceeding the recommended value of  $0.7$  [10]. Correspondingly, the findings suggested that the latent constructs of all scales are acceptable. In addition, the variance inflation factor of all predictors was also below  $5$ , indicating no collinearity issue [9].

Nonetheless, the results of the discriminate analysis showed that the factor "loyalty to ideals and humanity"

is low discriminate with the factors "Integrity and tolerant" and "Confucian ethos," in which the HTMT values are higher than  $0.85$ . Thus, we do not include this factor in our further data analyses. After removing this factor, heterotrait-monotrait ratios of all measurements are below the critical values of  $0.85$  [12], indicating that the discriminate validities of all measurements are acceptable.

*Efficient of Determination, Effect Size, and Collinearity Statistics of Measurements.* Table 2 shows that middle to large effect sizes were found on KAOP and interaction with elderly,  $r^2 = .13$  and  $.19$ , respectively. Nonetheless, only small to middle effect sizes was found among all predictors on KAOP and interaction with elderly,  $f^2 < 0.15$ . No collinearity issue was found as the variance inflation factor of all predictors was also below  $5$  [9].

*Model Fit.* Hair and his colleagues [11] suggested that covariance-based SEM is used to confirm or reject a theoretical model, whereas the partial least squares SEM is used to predicting and explaining a theoretical model. Accordingly, they suggested to use the coefficient of determination to evaluate the structural model of the partial least squares SEM. As shown in Table 2, middle to large effect sizes were found on KAOP and interaction with elderly,  $r^2 = .13$  and  $.19$ , respectively. Besides, KAOP has a larger effect size on interaction with elderly,  $f^2 = .125$ , comparing to other predictors. These results indicate the inclusion of KAOP can increase the explained variance of interaction with elderly and thus the inclusion of KAOP is a better model than without the inclusion of KAOP. Ramayah and his colleagues [22] suggested the use of the standardized root mean square residual (SRMR) to test the model, that the SRMR should be less than  $0.08$ , which is found to be  $0.07$  in this study. Nonetheless, Hair and his colleagues [11] doubted the appropriate of using the model fit in-

Table 1

**Composite Reliability and Discriminate Validity of Measurements**

	Total items	Composite Reliability	HTMT			
			1	2	3	4
KAOP	34	0.91				
Integrity and tolerant	17	0.92	0.30			
Confucian ethos	10	0.78	0.31	0.77		
Moderation and moral discipline	3 (1 item removed)	0.74	0.30	0.30	0.70	
Interaction with elderly	7	0.87	<b>0.44</b>	<b>0.25</b>	<b>0.26</b>	<b>0.15</b>

Table 2

**Coefficient of Determination ( $r^2$ ), Effect Size ( $f^2$ ) and Collinearity Statistics (VIF) of Measurements**

Exogenous	Endogenous	$r^2$	$f^2$	VIF
KAOP		.13		
	Integrity and tolerant		.029	.03
	Confucian ethos		.014	.31
	Moderation and moral discipline		.038	.30
Interaction with elderly		.19		
	Integrity and tolerant		.002	.25
	Confucian ethos		.012	.77
	Moderation and moral discipline		.001	.30
	KAOP		.125	.44

dex that applied in covariance-based SEM for the partial least squares SEM.

**Structural Model**

Table 2 shows bootstrapping results with five thousand samples revealed that only all cultural values were relevant to the attitudes towards senior citizens. Students who value integrity and tolerance were likelier to have a positive attitude towards senior citizens,  $p = 0.002$ . Students who perceived the importance of Confucian ethos were more inclined to have a positive attitude towards senior citizens,  $p = 0.033$ . However, students who perceived the importance of moderation and moral discipline were less likely to have a positive attitude toward senior citizens,  $p < 0.001$ .

Regarding cultural values and behaviors, only Confucian ethos is positively associated with interaction with senior citizens,  $p = 0.028$ . Regarding attitudes and behaviors, participants who have a positive attitude toward senior citizens are more ready to interact with senior citizens,  $p < 0.001$ .

*Mediating Effects of KAOP.* The Decision Tree proposed by X.Zhao, J.Lynch and Q.Chen [39, p. 201] is used to examine the mediating effects of KAOP. The results are shown in Table 2. Bootstrapping results with five thousand samples showed that specific indirect effects of the three cultural values on interaction with senior citizens are significant,  $ps < 0.05$ . These results indicate that attitudes mediate the effects of cultural values on interaction with senior citizens. In addition, as the direct effect of Confucian ethos on interaction with senior citizens is also significant,  $p = 0.028$ , these results indicated a complementary mediating effect, that both Confucian ethos and attitudes affect interaction with senior citizens. Nonetheless, the direct effects of integrity and tolerance on interaction with senior citizens and the direct effect of moderation and moral discipline on interaction with senior citizens are insignificant,  $ps > 0.05$ ,

indicating a mediating-only effect. Both integrity and tolerance and moderation and moral discipline would affect attitudes first and behaviors next.

**Discussion**

This research adopted the value-attitude-behavior hierarchy to examine the influences of cultural values on Malaysian adolescents' attitudes and behaviors toward senior citizens. It was expected that cultural values would affect attitudes first and behaviors next; thus, attitudes mediate the effects of cultural values and behaviors toward senior citizens.

First, the results supported the influences of cultural values on the attitudes toward senior citizens among young adolescents. Among the three factors of cultural values, all were associated with attitudes. Young adolescents who perceived "integrity and tolerance" as an important trait were more inclined to have positive attitudes toward senior citizens. Since "Integrity and tolerance" were relevant to self-development, which includes values such as filial piety, working hard, tolerance with others, and self-cultivation [20, p. 119], the findings are consistent with filial piety-related findings, such as X.Dong and Y.Xu's study [7].

Besides, the results also showed a positive association between Confucian ethos and attitudes toward senior citizens. Confucian ethos upholds relationships with others, including being benevolent to authority and respecting tradition [20]. These findings are consistent with the findings of K.Hwang [15] and X.Wei and Q.Li [35], who reported that learning the values of building and keeping a harmonious relationship with others can be an appropriate way of increasing positive attitudes toward older people.

In contrast, young adolescents who perceive "moderation and moral discipline" as an important trait tended

Table 3

**Path Coefficients of the Direct and Indirect Effects (One-Tailed Test)**

	Hypotheses	B	SE	T values	P values
<b>Direct effects</b>					
<b>Cultural values → attitudes toward older people</b>	H1				
Integrity and tolerant → KAOP		0.22	0.07	3.18	0.002
Confucian ethos → KAOP		0.15	0.07	2.14	0.033
Moderation and moral discipline → KAOP		-0.18	0.05	3.87	< 0.001
<b>Attitudes toward older people → Interaction with older people</b>	H2				
KAOP → Interaction with older people		0.34	0.04	7.78	< 0.001
<b>Cultural values → Interaction with older people</b>	H3				
Integrity and tolerant → Interaction with older people		0.05	0.06	0.84	0.403
Confucian ethos → Interaction with older people		0.14	0.06	2.20	0.028
Moderation and moral discipline → Interaction with older people		-0.03	0.04	0.69	0.489
<b>Specific indirect effect</b>	H4				
Integrity and tolerant → KAOP → Interaction with older people		0.074	0.027	2.732	0.007
Confucian ethos → KAOP → Interaction with older people		0.051	0.024	2.099	0.036
Moderation and moral discipline → KAOP → Interaction with older people		-0.062	0.018	3.568	< 0.001

to be less inclined to have positive attitudes toward senior citizens. Since this factor includes a sense of cultural superiority and wealth [20, p. 119], the findings suggested that young adolescents who clung to personal loss and gain were less likely to have a positive attitude toward senior citizens. As senior citizens need more care and social support from others, young adolescents who uphold personal loss and gain would perceive older people as unvalued. These results are consistent with the findings of Y.Zhang, J.Wang and Q.Hu [38] that Chinese youth prefer independence to living together with senior citizens due to the social changes since the traditional filial piety values have been changing to individualistic ideas.

Secondly, our results showed that the attitudes of young adolescents were positively associated with their behaviors toward senior citizens. Simply put, young adolescents with positive attitudes toward senior citizens were more inclined to interact with them in different situations. These results are consistent with studies and theories that suggest attitudes are a significant predictor of behaviors [5; 28].

Thirdly, these results partially supported the value-attitude-behavior hierarchy, which proposed that value indirectly affects behaviors through attitudes. Consistent with the prediction of the value-attitude-behavior hierarchy, the results showed that both integrity and tolerance and moderation and moral discipline affect attitudes first and behaviors next. In other words, cultural values influence young adolescents' attitudes toward senior citizens, and forming such attitudes further influences young adolescents' behavioral interaction with senior citizens.

Nonetheless, the results also showed that Confucian ethos affects attitudes and behaviors, which indicates that specific cultural values may have more significant effects and thus may affect both attitudes and behavior simultaneously. However, the results of effect size suggested that attitudes still have a more significant effect,  $f^2 = 0.125$ , on behavior than the three cultural values have,  $f^2 = 0.002$  for Integrity and tolerant,  $f^2 = 0.012$  for Confucian ethos, and  $f^2 = 0.001$  for moderation and moral discipline.

In a discussion of the ecological model of human development proposed by Baumeister, N.Vélez-Agosto and his collaborators [34] argued that culture is said to be a part of the macro system. However, there is no clear explanation of how the macrosystem interacts with other systems, such as how culture affects daily human activities. These findings suggested that the value-attitude-behavior hierarchy can be generalized under the cultural context to understand how cultural values affect attitudes and behaviors toward senior citizens.

Accordingly, developing positive attitudes toward senior citizens among young adolescents is a feasible strategy for improving young adolescents' relationships with senior citizens. Learning and preserving specific Chinese cultural values are strategies to maintain the relationship between the old and the young, especially for young Malaysian Chinese adolescents who are rarely exposed to these Chinese cultural values because of the school system they join. Educators may consider integrating specific cultural values in the school textbooks to inculcate particular positive attitudes toward senior citizens for these young adolescents in the school curriculum.

In conclusion, in terms of theoretical contribution, the study supported applying the value-attitude-behavior hierarchy to understand the influence of cultural values on the attitudes and behaviors toward senior citizens. Furthermore, the study revealed that other cultural values significantly influenced young adolescents' attitudes toward senior citizens. As M.Park and C.Chesla [21] proposed, focusing on filial piety and collectivism in Confucianism may interfere with exploring other cultural values. Accordingly, future studies may further investigate the influences of other relevant cultural values on the attitudes and behaviors of young adolescents toward senior citizens.

In terms of practical contribution, these findings are significant for the Malaysian Chinese community that is developing into an aging society within a decade, where senior citizens are usually cared for by the younger generation. Therefore, acquiring Chinese cultural values by young adolescents of Chinese origin in Malaysia has become a pressing act as it will help instill a positive attitude as the legacy of the community with the hope that these young adolescents will be more likely to take actions to improve quality of life of their senior citizens.

Nonetheless, the interpretation of the results should be with more caution. Although a purposive sampling method was used to recruit participants in this study, the findings may be generalized to only some young Malaysian Chinese adolescents studying in independent Chinese schools. Future studies may consider recruiting young Malaysian Chinese adolescents from national and international schools and different Chinese communities across the world, such as those of Taiwan and mainland China, to examine the robustness of the findings and to discern the relative impact of different Chinese cultural values on the attitudes toward older people in different sociocultural contexts. Furthermore, as a cross-sectional design was used in this study, it should be more prudent for the cause-and-effect interpretation. Meanwhile, an experimental design clarifies the cause-and-effect explanation of the results.

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#### **Information about the authors**

*Siah Poh Chua*, PhD in Psychology, Associate Professor, Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia. ORCID: <http://orcid.org/0000-0003-0991-1313>, e-mail: [siahpc@utar.edu.my](mailto:siahpc@utar.edu.my)

*Ong Xiu Hui*, MPhil, PhD candidate in Social Science, Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia. ORCID: <https://orcid.org/0000-0001-7380-0840>, e-mail: [shadow31fate@gmail.com](mailto:shadow31fate@gmail.com)

*Tan Siew Huei*, Master in Education, Lead Teacher at SPD Singapore. ORCID: <https://orcid.org/0009-0001-3494-7660>, e-mail: [siewhueitan@gmail.com](mailto:siewhueitan@gmail.com)

*Tan Swee Mee*, PhD in social Science, Assistant Professor, Universiti Tunku Abdul Rahman, Kampar Campus, Perak, Malaysia. ORCID: <https://orcid.org/0000-0002-3321-1504>, e-mail: [smtan@gmail.com](mailto:smtan@gmail.com)

#### **Информация об авторах**

*Suax Poh Чуа*, кандидат психологических наук, доцент, Университет Тунку Абдул Рахман, кампус Кампар, Перак, Малайзия, ORCID: <http://orcid.org/0000-0003-0991-1313>, e-mail: [siahpc@utar.edu.my](mailto:siahpc@utar.edu.my).

*Ong Siu Хуи*, магистр философии, кандидат социальных наук, Университет Тунку Абдул Рахман, кампус Кампар, Перак, Малайзия, ORCID: <https://orcid.org/0000-0001-7380-0840>, e-mail: [shadow31fate@gmail.com](mailto:shadow31fate@gmail.com)

*Tan Siew Хуэй*, магистр образования, ведущий преподаватель СПД в Сингапуре, ORCID: <https://orcid.org/0009-0001-3494-7660>, e-mail: [siewhueitan@gmail.com](mailto:siewhueitan@gmail.com)

*Tan Сви Ми*, кандидат социальных наук, доцент, Университет Тунку Абдул Рахман, кампус Кампар, Перак, Малайзия, ORCID: <https://orcid.org/0000-0002-3321-1504>, e-mail: [smtan@gmail.com](mailto:smtan@gmail.com)

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