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# Investigating the determinants of Chinese adult children's intention to use online health information for their aged parents



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#### ABSTRACT

*Background:* The increasing number of older people and the dissemination of health information via the Internet have emerged and both are challenging to Chinese society. Available online health information highlights the importance of decision making processes, specially in relation to the elderly who almost have no online presence and depend on their adult children's help. The researchers mostly focus on parents' health information search for their children, however, they overlook the adult children's intention to use online health information for their aged parents.

*Objective:* This study fills this gap by extending the Theory of Planned Behavior (TPB) to identify the determinants of adult children's intention to use online health information for their aged parents.

*Method:* Relying on survey method, the data were collected from teachers and students at different participating Universities in Wuhan, China. The Partial Least Squares (PLS), a structural equation modeling technique, was employed to test the research model.

*Results*: This study found that attitude, subjective norm, perceived behavioral control and risk (p < 0.05) were the predictors of intention to use online health information, whereas, trust (p > 0.05) was not listed among the predictors.

*Conclusions:* This study is a significant addition to the literature, in that it confirms the utility of the TPB with additional variables in predicting adults' children intention to use online health information for their aged parents.

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### 1. Introduction

Over the past decades, many parts of the world, such as the USA, Australia and UK, have witnessed a dramatic increase in the aging population [1]. China is not an exception to this global population transformation. By the end of 2015, China's elderly population aged more than 60 years old has reached 212 million, an increase of 8.91 million over the previous year, which constitutes 15.5% of the Chinese population and 24.9% of the global elderly population. It is estimated that people over 60 years old could be 400 million in China by 2050 [2]. At the same time, more than 100 million people have had at least one chronic disease and many have had multiple chronic diseases [3]. Age-dependent chronic diseases such as heart disease, stroke, cancer and dementia are likely to increase, which leads to a big challenge to health workers and planners [4].

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The older people mainly depend on relatives, friends, and their children for medical information to achieve the healthy aging [5]. China Aging Development Report [6] indicated that the elderly dependency ratio raised from 20.66% in 2012-21.58% in 2013, which imposed more stress on Chinese adult children who must support their elderly parents. In China, the Confucian concepts of loyalty, filial piety, benevolence, and righteousness, which demands that children should be devoted to their parents and requires that parents should be considerate of their children, are one of the most salient and commonly shared cultural values [7]. This cultural value, as well as traditional, extended family structure in Chinese society, has made the family the very core of an individual's life, especially for the elderly [8]. Accordingly, the Chinese have developed a set of behavioral rules for family life: parents must take financial responsibility for children; adult children must provide care and respect for the elderly. According to the statistics of a project called Chinese General Social Survey (CGSS), about 49.9% aged parents are willing to live with their adult children. The majority of aged parents (about 80%) at least have a child who

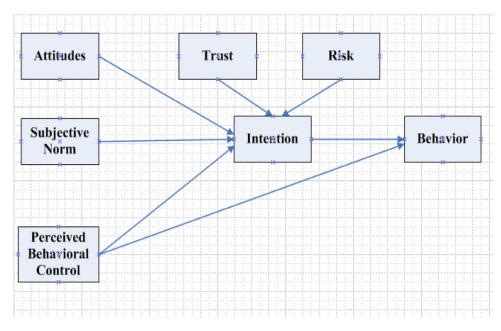


Fig. 1. Research Model.

lives near from them, and about 58% adult children will meet their parents at least once a week [9].

It is known that many of today's younger are children of China's one-child policy, which means that they alone are responsible for taking care of their parents, especially their health care after their parents retire. In order to keep their parents' health in good condition, they have to spend not only huge medical expenditures but also their time. In order to solve this problem, Chinese adult children turn to Internet for help. The 37th Statistical Report on Internet Development showed that the population of Chinese cyber citizens is 688 million up to the December of 2015 with the Internet penetration being 50.3% [10]. The needs for health care from the elderly are increasing and internet-based health information system has the potential to improve the health information access and ease the communication between health service providers and patients [11]. Furthermore, Internet-based health information is a common source for adult people and their relatives to increase their understanding about health issues and disease [12,13].

In China, the most frequently accessed information among cyber citizens who have above average incomes and more than 25 years is health information [14]. It seems that searching health information on the Web has yet to develop as a trend in China. The Internet is gradually important source of health information for patients and users [15]. However, individuals depend on the Internet for health-related information and are reporting that this information influences their health behaviors [16]. Gray et al. [17] found that the Internet is the vital source for health information and influences health behavior, although people are concerned about trust, risk and have little skills and knowledge to use it. Users depend on online health information for a range of causes such as readily accessible, more up-to-date information, anonymity, consumeroriented health care model, and increased interest in alternative approaches to health care [18–20].

While the researchers in different countries mostly research on parents' health information search for their children [21,22,19,23,24,25,26], they seldom focus on adult children's intention to use health information for their aged parents, letting alone focus on their intentions to use online health information especially in Chinese context. Thus, it is necessary to examine the adult children's intention to use online health information for their aged parents. This study fills this gap by extending Theory of Planned Behavior (TPB) to identify the determinants of adult children's intention to use online health information for increasing the understanding of diagnosis and treatment for their parents' health issues.

### 2. Theoretical framework and hypotheses

The research model which was extended from the Theory of Planned Behavior (TPB) [27] is shown in Fig. 1. Trust and risk were added into the research model. The model hypothesizes that the most important determinant of adult children's searching behavior is the intention, whereas intention, in turn, is predicted by attitude, subjective norm, perceived behavioral control (also thought to directly predict behavior), trust and risk perception.

#### 2.1. The theory of planned behavior

The TPB is a well-established and most influential theory in predicting behavior and explaining the determinants of people's decision making [28]. The TPB postulates intentions as the most important determinant of behavior. Behavioral intentions "are motivational factors that capture how people are willing to try to perform a behavior" [27]. An average correlation of 0.53 was reported between intentions and behavior in a meta-analysis of 87 studies [29]. Attitude, perceived behavioral control (PBC) and subjective norm are three independent determinants of intention.

Attitude captures a person's overall evaluation of performing a behavior. The attitude toward a behavior refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" [30]. Dünnebeil et al. [31] found the positive relationship between attitudes and intention to use electronic health. Subjective norm is defined as "person's perception that most people who are important to him think he should or should not perform the behavior in question". Many previous studies on information system use found the positive relationship between subjective norm and behavioral intentions toward technology [32,33]. In the case of online health information search, if an adult child believes important people such as relatives or friends think that searching health information for their parents are important, they are more likely to intend to perform these behaviors. Download English Version:

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