Construction and validation of the Hong Kong Altruism Index (A-Index)

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ABSTRACT

The study aimed to construct a valid and culturally sensitive scale to measure altruism in Hong Kong, namely, the Hong Kong Altruism Index (A-Index). Applying the Delphi technique, 11 behavioral items were selected to be included as to indicate altruistic level in Hong Kong (Study 1). Analysis of a community sample of 1104 participants confirmed the A-Index's structure, theoretical dimensions, and construct validity (Study 2). Particularly, it was found that the concept of altruism can be well explained in four dimensions, including volunteering, monetary donation, blood and organ donation, and informal helping. Normative data were also calculated based on the finalized A-Index scoring method. A subsequent analysis showed all items demonstrated good reliability (Study 3). Finally, a focus group study with participants from a diverse social background (Study 4) provided an in-depth review of all items of the A-Index in Hong Kong. The A-Index is found to be psychometrically valid and practically convenient for measuring altruism. Findings highlighted the importance of cross-cultural awareness in the measurement of social phenomenon with a special discussion on the motive of blood and organ donations.

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1. Introduction

Increasing number of studies suggested people who engage in altruistic acts, such as volunteering and donation, is better regarding physical health, psychological wellbeing, and happiness (Aknin et al., 2013; Borgonovi, 2008; Piliavin & Siegl, 2007; Post, 2005; Schwartz et al., 2012). These benefits extend to later life and contribute to the maintenance of life satisfaction and promotion of positive ageing (Kahana, Bhatta, Lovegreen, Kahana, & Midlarsky, 2013). A recent study observed there is increased level of altruism in people who faced adversity, suggesting altruism is used as a coping strategy to alleviate stress and facilitate the healing from adversity or even a form of posttraumatic growth (Frazier et al., 2013; Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2014). Altruism not only benefits individuals, but it is also seen to be beneficial to the society. Guinot, Chiva, and Mallén (2015) found altruism can reduce relationship conflicts within an organization and subsequently facilitate organization learning capacity, thus improving the competitiveness of the organization in the current challenging economy environment. The benefits of altruism across lifespan and towards the society attract scholars to investigate and advocates to promote altruism.

Although the above-cited literature all refer to and contain the keyword *altruism,* the definitions and measurement of altruism remain unstandardized and ambiguous. For example, Borgonovi (2008), Frazier et al. (2013), and Kahana et al. (2013) all focused on the involvement of volunteering to indicate altruism, whereas Aknin et al. (2013) focused on monetary donation. While Kahana's team measured frequency of volunteering per week, Borgonovi measured the frequency of volunteering in the past 12 months. On the other hand, Frazier et al. used a more structured scale, namely the Community Involvement Inventory (Bono, Snyder, & Duehr, 2015), in measuring volunteering involvement. Similar differences are found when studies measure altruism in a broader context. Schwartz et al. (2012) adopted the 16-item Schwartz Altruism Questionnaire-Adult Version (Schwartz, Keyl, Marcum, & Bode, 2009) as the measure of altruism. The scale includes eight items on general helping (e.g. delay an elevator and hold the door open for a stranger), four items on community connection, two items on helping orientation, and two items on community pressure. On the other hand, Guinot et al. (2015) adopted the altruism subscale from Podsakoff, MacKenzie, Moorman, and Fetter (1990) instrument designed to measure organizational citizenship behavior. The instrument consists of five items (e.g. helps others who have been absent or who have heavy workloads) and respondents are asked to score it on a 5-point scale ranging from strongly disagree to strongly agree.

The wide use of altruism in those studies suggests that they assume a stable and consistent trait of altruism to influence people's involvement or endorse in many different types of behaviors ranging from volunteering, monetary donation, holding the door open for a stranger, to helping others at workplace. In fact, there has been a long debate on whether those behaviors are influenced by the same stable trait of

altruism or they are specific behaviors in different situations (Rushton, Chrisjohn, & Fekken, 1981). In recent years more and more scholars tend to support the consistency. As a result, the Self-Report Altruism Scale (SRA Scale; Rushton et al., 1981) was developed, including 20 different behaviors and assuming that they all indicate the same altruism personality. The scale has shown to be psychometrically reliable on multiple accounts (Krueger, Hicks, & McGue, 2001). However, Rushton et al. also addressed that the 20 items are very specific and require modification for different social contexts, which demonstrates that the operationalized definition of altruism is still context sensitive.

For example, when the SRA scale was introduced to India, an item on the original scale asking whether the respondent would help push a stranger's car out of the snow was modified into "A stranger's scooter is stuck in a pit. Would you help him/her take it out?" as it is meteorologically improbable there will be snow in India (Khanna, Singh, & Rushton, 1993). Chou (1996) further translated the Hindi version into Chinese as the Chinese Self-report Altruism Scale (C-SAS), assuming the contextual similarity between India and Hong Kong. Although Chou's scale demonstrated acceptable internal reliability and criterion validity, its suitability and sensitivity to be used in today's Hong Kong are questionable. Firstly, he only validated the scale on 247 participants, with 74.4% of them were aged 12–15. The relatively small and young sample prohibited scholars to generalize the results to the population. Secondly, several items listed on the C-SRA scale are outdated to the modern era. For example, for the previously mentioned stuck scooter item, it is not likely to see a scooter stuck in a pit in the highly urbanized Hong Kong. Another example is that one item asking respondents whether they would let a stranger take their place in a queue while getting a train ticket, whereas there are a nearly saturated penetration rates of electronic payment for public transport in Hong Kong. These outdated items put the validity of the C-SRA scale in questions.

Besides the SRA scale, another widely used measurement of general altruism is the World Giving Index (WGI; Charities Aid Foundation, 2016). The WGI includes three questions asking respondents whether they have exhibited three types of behaviors in the past month, namely, volunteering, donation, and informal help. The measurement treats the three types as equally weighted components of altruism. Although the WGI has not been academically validated, it has been frequently cited for international comparison (Helliwell, Layard, & Sachs, 2016). People in Hong Kong pride themselves as one of the top 20 countries in the five-year WGI. However, there is a significant gap between Hong Kong people's participation in volunteering (around 15%) and the other two behaviors (63% donation and 56% informal help). Furthermore, although it is commonly observed across culture that there are positive correlations between WGI and happiness, the model does not fit well in Hong Kong (Aknin, Hamlin, & Dunn, 2012; Aknin et al., 2013; Helliwell et al., 2016). Contrast to its high ranking on WGI, the latest World Happiness Report showed Hong Kong ranked the 75th in happiness, lower than countries that are currently active in war and under threat of extreme terrorism (e.g. Libya; Helliwell et al., 2016). The unusual phenomenon in Hong Kong raises speculation on whether the general measurement of "giving" or altruism is valid in Hong Kong context.

In summary, although scholars tend to consider various types of helping behaviors can be indicating a consistent and stable trait of altruism, there is no validated and up-to-date tool to measure altruism in Chinese context. It is also theoretically unclear whether we can group different types of helping behaviors into the same concept of altruism, or several general types such as the WGI does, and then examine their effects indiscriminately. The gaps may hurdle or mislead our understandings with the effects of altruism. In view of the gaps, the present paper tried to clarify the theoretical construct of altruism in the Hong Kong context, and also establish a theoretically valid, culturally sensitive, and easily administrated measurement of altruism, i.e., the Hong Kong Altruism Index (A-Index).

2. Overview of the studies

The present paper included a series of studies conducted in a 21-month period from April 2014 to December 2015. Study 1 reflected local academia and professionals' views on the theoretical construct and operationalization of altruism. Based on Study 1, a tentative A-Index was proposed. Study 2 verified the theoretical construct and validity of the proposed A-Index on a random community sample of 1104 Hong Kong residents. Based on Study 2, the A-Index was finalized and normative results of the scale in Hong Kong population were also calculated based on the survey. Study 3 confirmed the test-retest reliability of A-Index. Finally, Study 4 further explored the transferable validity of the A-Index by a qualitative study on participants from diverse socio-cultural background. All studies have received ethical approval from the University's Human Research Ethics Committee.

3. Study 1 – experts' construct

3.1. Objectives

Study 1 aimed to propose a tentative A-Index for further examination. Behavioral items that local experts think are suitable for indicating altruism, time frame for each item, and theoretical dimensions of those items would be derived from this study.

3.2. Method

An extensive literature review was conducted by the first author on both local and non-local existing scales available for measuring altruism. After removing those duplicates, a pool of 28 behaviors was eventually collected. The major sources include the Altruistic Personality Scale (Rushton et al., 1981), the European Commission Eurobarometer Survey on Poverty and Social Exclusion 2009 (European Commission, 2010), and the Survey on Volunteering in Hong Kong 2009 (Agency for Volunteer Service, 2011).

All 28 items were then reviewed and determined its accountability by experts in the field using the Delphi technique. The Delphi technique was developed by Dalkey and Helmer (1963) at the Rand Corporation. It is characterized by a panel expert review and feedback process which allow selected experts to provide their opinions anonymously and develop consensus with the topic concerned (Hsu & Sandford, 2007). Four local experts, including three researchers in the field and one experienced NGO operator, were invited to review all shortlisted behaviors and assess whether or not each item is suitable for measuring altruism in Hong Kong. The panelists were asked to rate independently based on two criteria: (1) the behavior must fit the academic definition of altruism, referring to "any behavior that is designed to increase another person's welfare, and particularly those actions that do not seem to provide a direct reward to the person who performs them" (Batson, Ahmad, & Stocks, 2011; Dovidio, Piliavin, Schroeder, & Penner, 2006; Penner, Dovidio, Piliavin, & Schroeder, 2005); and (2) the behavior should be likely encountered by most Hong Kong people. In addition, the panelists were invited to suggest the time frame for each item and whether we can group some items into one theoretical dimension. The behavior would be included if all four experts unanimously deemed such behavior as suitable. After the first round of review, the panelist achieved consensus on including nine items and excluding five items. They remained disagreement on the other 14 items. In addition, the panelists further proposed three additional items to be included. The panelists were requested to write down notes of why they think an item should be excluded or included. The notes were shared with other panelists in the second round to allow them to revise their judgements. The panel achieved consensus on a list of 11 items after the second round of review.