

## A SOCIAL IMPACT THEORY PERSPECTIVE ON CONSUMERS' INTENTION TO ADOPT RECYCLING IN CHINA

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### Abstract

Consumers always claim that they support ethical consumption, however, previous studies found few of them actually purchase in the way they claimed. Hence, this study focuses on another attribute of ethical consumption: disposing of products with reducing environmental harm, i.e., recycling. As the concept of recycling is rooted in developed countries, this study aims to examine consumers in an emerging market, i.e., China. Moreover, we used Social Impact Theory to fill the literature gap, in which consumers' perceive immediacy, persuasiveness, and supportiveness positively influences consumers' ethical belief, and then lead to consumers' recycling intention. With a sample of 544 participants in China, the empirical results suggest that the variables from Social Impact

Theory significantly affect consumers' ethical beliefs. The results also indicate consumers' ethical beliefs significantly predict consumer intention to recycle. A better understanding of consumers' ethical decision-making in ethical consumption behaviors context is reached accordingly.

Keyword: Social impact theory, Ethical consumption, Green consumer behavior, Emerging market, Sustainability

### Introduction

The concept of ethical consumption and sustainability has grown exponentially and now become a major concern among consumers (Seyfang, 2005; Young, Hwang, McDonald, & Oates, 2010).

Ethical consumption can be understood as a more environmental-friendly consumption practice, and Rakic and Rakic (2015) defined ethical consumption as the behavior to purchase, use, and dispose of products in a manner that reduces environmental harms. The concept of ethical consumption is rooted in many developed markets (Soyez, 2012). For example, the United State Environmental Protection Agency supported a national project and publish a report about recycling economic information to encourage recycling in 2001.

With increasing awareness of ethical

consumption on the participation of society and consumers, manufacturing eco-friendly products has become of growing interest in some industries, such as the fashion industry (Jung, Kim, & Oh, 2016). Hence, in the ethical consumption literature, the term 'ethical fashion' was mentioned (Joergens, 2006). As the raised wave of ethical consumption approaches, scholars shift their attention to the drivers behind the consumers' purchase intention on ethical products from different angles. For example, some studies focused on the identification of antecedent variables such as consumer personality (Lu, Chang, & Chang, 2015; Thøgersen, de Barcellos, Perin, & Zhou, 2015) consumer's personal value (Manchiraju & Sadachar, 2014), consumer motives (Thøgersen et al., 2015), consumers' gender (Lee, 2009) and age (Teng & Wang, 2015). Other researchers discussed in the moral perspective, such as consumer ethical beliefs (Lu

et al., 2015), moral attitude (Chang & Chou, 2018), and ethical judgment (Chan, Wong, & Leung, 2008).

Although these models could be successful in predicting certain antecedents of ethical consumption, these studies also suffer from social desirability biases. Precisely, consumers often claim to support ethical consumption, few actually turned their intention into actual purchasing behavior (Joergens, 2006; Joy, Sherry Jr, Venkatesh, Wang, & Chan, 2012; Szmigin, Carrigan, & McEachern, 2009). Hence, this study intends to avoid the biases by focusing on another attribute of ethical consumption Rakic and Rakic (2015) defined: disposing of products in a manner that reduces environmental harm, i.e., recycling.

As for the application of theories in consumer ethics, Hunt and Vitell (1993)'s ethics model and Theory of Planned Behavioral model (Fishbein & Ajzen, 1975) are widely applied and has been empirically tested (Chan et al., 2008; Chang & Chou, 2018; Ma, Littrell, & Niehm, 2012; Yoon, 2011). However, these two theories lack theoretical understanding and their links among consumers' values, beliefs,

and behavior have not been entirely explained, particularly in the emerging markets. Based on this reasoning, this research contributes to the literature gap by shifting the focus from Hunt and Vitell's model and TPB to sociology's perspective, i.e., Social Impact Theory.

Social Impact Theory (SIT) is widely applied in numerous studies but is neglected in the field (Mir & Zaheer, 1970), especially in the context of emerging markets. Also, there is no prior study used SIT in the ethical consumption context, especially on behaviors like recycling. Hence, against the foregoing backdrop, the objectives of this study are: (1) to explain ethical consumer's adopt intention on recycling from three dimensions of SIT, i.e., immediacy, persuasiveness, and supportiveness; (2) to empirically examine the mediator role played by consumers' ethical belief between social impacts and adopt intention towards recycling in an ethical consumption context.

## Literature Review

### *Ethical Consumption*

'Ethical consumption' or 'green

consumption' refers to people's daily activities that involve minimal production of wastes and pollutants (Chang, 2015; Rakic & Rakic, 2015). The concept refers to consumers who choose to purchase products that have minimal impacts on the environment and society (Chan et al., 2008; Ma et al., 2012). For example, BYOB (Chan et al., 2008; Chang & Chou, 2018), ethical clothing (Shen, Wang, Lo, & Shum, 2012), buying organic food (Chang & Chang, 2017; Lee, 2009), and fair trade (Ma et al., 2012) are typical products relating to ethical consumption. And little ethical consumption research focused on the intention of disposing products.

### *Social Impact Theory*

Social Impact Theory (SIT) indicates that an individual's attitude towards a certain topic is influenced by others in society. Latané (1981) defined it as 'the influence on an individual's feelings, thoughts, or behavior that is exerted by the real or implied presence/actions of others.' Also, SIT illustrates a useful framework to better understand the impacts individuals received from society. Precisely, Latané suggested that an indi-

vidual experiences social impact as a function of the strength, immediacy, and number of sources of impacts. Hence, plenty of psychological research applied SIT theory to explain academic issues.

Moreover, SIT was modified by the advancement of modern computer technology in which computer simulation technique was applied and three specific antecedents were proposed: immediacy, persuasiveness, and supportiveness (Nowak, Szamrej, & Latané, 1990). Considering the advance and the appropriate application, we adopted Nowak et al. (1990)'s model to account for how consumers adopt their attitudes on ethical consumption like recycling products by receiving the social impact from others.

### *Consumer Ethical Beliefs*

Ethics has received increased attention from private and public sectors as well as from academics in the last several decades (Chan et al., 2008). Lu et al. (2015) defined consumer ethical beliefs as consumers' ethical attitudes toward questionable consumption. As there exists a gap between the support of ethical consumption and actual purchase behavior,

we argue that it is essential to incorporate the SIT model and consumers' ethical beliefs in the study.

### Hypothesis Development

To summarize, we postulate that several factors of social influences are positively related to consumer's ethical beliefs. Specifically, we argue that immediacy, supportiveness, and persuasiveness are three antecedents of consumers' ethical beliefs, which would further influence the purchase intention of recycling products. Figure 1 depicts the theoretical model and summarizes the hypotheses.

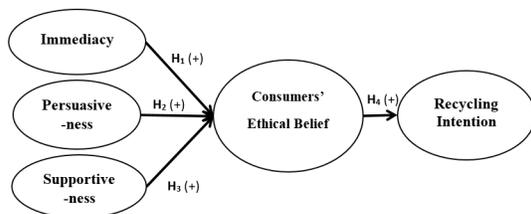


Figure 1 Proposed Research Framework

Taken together, the above discussion suggests the following hypotheses.

Hypothesis 1: In the context of recycling, immediacy will be a positive predictor of consumers' ethical beliefs.

Hypothesis 2: In the context of recycling, persuasiveness will be a positive predictor of consumers' ethical beliefs.

Hypothesis 3: In the context of recycling, supportiveness will be a positive predictor of consumers' ethical beliefs.

Hypothesis 4: Hypothesis 4: In the context of recycling, consumers' ethical beliefs will have a positive influence on the relationship between social impact factors (i.e., immediacy, persuasiveness and supportiveness) and the intention of recycling.

### Methods

#### *Sample and Data Collection Procedure*

The questionnaire includes three sections. The first section is a scenario regarding recycling and several relevant items based on prior research that aimed at recoding respondents' answers to the scenario. After reading the assigned scenario, each respondent was asked to recall the last time when they practiced recycling. Those who couldn't recall a specific time when they recycled items or never recycled before were dropped from

further analysis. The second section of the questionnaire is closed-ended questions, anchored by a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The third section of the questionnaire contains a couple of questions regarding respondents' demographics.

### *The Measurement of the Constructs*

To ensure content validity, the measures for constructs used in this study were based on a thorough literature review. Immediacy is defined as the 'distance between consumers and others' and is operationalized from Lin and Utz (2015). Three items were adopted: (1) My relationship with the people who posted messages advocating for the recycling is (5-point Likert Scale from very close to very distant); (2) I feel emotionally close to the people who posted messages advocating for recycling; (3) My frequency of interaction with the people who posted messages advocating for the recycling is (5-point Likert Scale from Always to Never).

Persuasiveness is defined as the extent to which consumers are motivated

and successful in influencing people who initially disagree with them (Nowak et al., 1990). Four items were modified from Dillard, Weber, and Vail (2007) to evaluate consumers' perceived persuasiveness from others. The four items are: On average, the message I received by advocates of recycling is persuasive/ compelling/ logical/plausible.

Supportiveness in this study is defined as the behavior that consumers seek similar opinions, attitudes, and behaviors to reinforce /maintain their original attitudes (Nowak et al., 1990). The operationalization of this construct follows Nowak et al. (1990), four items were described as following: Regarding to ethical consumption on recycling, my friends who share with the same ethical belief with me would (1) post news or messages in support of me; (2) share personal experiences in support of me; (3) express personal opinions in support of me; (4) send messages in support of me.

Consumers' ethical beliefs regard to what is ethical or unethical (Lu et al., 2015) and the four items were used: (1) Buying products labeled as 'environmentally friendly' even if they don't work as

well as competing goods; (2) Purchasing something made of recycled materials even though it is more expensive; (3) Buying only from companies that have a strong record of protecting environment; (4) Recycling materials such as cans, bottles, newspapers, etc.

Ethical consumers' intention is defined as 'The willingness of an individual to perform a certain behavior' (Wu & Chen, 2014). This study based on previous studies (Lu et al., 2015; Soyez, Francis, & Smirnova, 2012) and measure consumers' recycling intention as (1) I intend to make a special effort to recycling; (2) I intend to switch to recycled goods for ecological reasons; (3) When I have a choice between conventional goods and recycled goods, I intend to choose the one less harmful to other people and the environment (4) If I buy goods next time, I will also consume recycled goods; (5) In the future, I am going to consume recycled goods; (6) I intend to consume recycled goods next time.

#### *The Reliability and Validity of Constructs*

The scales from the questionnaire was measured via exploratory factor

analysis (EFA) to screen poorly fitting items, and confirmatory factor analysis (CFA) for further measure purification (Gerbing & Hamilton, 1996). The criteria for acceptable psychometric properties require both that (1) loadings in a CFA exceed 0.70; (2) loadings are greater than cross-loadings (Gefen, Straub, & Boudreau, 2000). As a result, few items will be removed from the scale.

### Results

Means, standard deviations, and correlations among the study variables are presented in Table 1.

Table 1. Means, standard deviations, and correlations among the study variables

|                     | Mean | S.D. | IM    | PE    | SU    | BEF   | INT |
|---------------------|------|------|-------|-------|-------|-------|-----|
| Immediacy           | 3.81 | 1.19 | 1     |       |       |       |     |
| Persuasiveness      | 4.16 | 0.90 | .57** | 1     |       |       |     |
| Supportiveness      | 3.93 | 0.95 | .56** | .69** | 1     |       |     |
| Ethical Belief      | 4.11 | 0.85 | .37** | .59** | .58** | 1     |     |
| Recycling Intention | 4.34 | 0.79 | .35** | .61** | .57** | .78** | 1   |

\*\* p < 0.001

Research question 2 asked if consumers' ethical beliefs mediate the relationship between social impacts and adopt intention towards recycling in an ethical consumption context. Previous researchers simulate researches and found that boot-

strapping is the most powerful method to detect mediation among other alternatives (Hayes, 2013). Hence, bootstrapping analysis was chosen to test for mediation, and the SPSS process macro that Hayes (2013) developed was used. The process of bootstrapping generates a large sample from the original data through continuous sampling with replacement. The claim of a significant indirect effect of bootstrapping is that the interval must contain no zero. Thus, in the following tables of the results, the coefficients from ordinary least squares (OLS) analysis were also reported in an unstandardized form, which follows with Hayes (2013) argument. The empirical results were shown in Table 2 and 3.

Hypotheses 1-3 are the responses to research question 1, which focuses on explaining ethical consumers' adopt intention on recycling from three social impact theory dimensions (i.e., immediacy, persuasiveness, and supportiveness). Hypothesis 1 predicted that immediacy will be a positive predictor of consumers' ethical beliefs in the recycling context. Based on 10,000 bootstrap samples and controlled gender, job, age, education and salary, the bias-corrected bootstrap 95% confidence intervals sit between 0.01 to

0.08. This result suggested the total effect of immediacy on consumer's ethical belief is significant ( $b = 0.09$ ,  $p < 0.001$ ,  $R^2 = 0.74$ ). Thus, hypothesis 1 is supported.

Table 2. OLS results for hypothesis 1-3

| Variable         | Ethical Belief |               |               |
|------------------|----------------|---------------|---------------|
|                  | Equation (1)   | Equation (2)  | Equation (3)  |
| Constant         | 1.08***(0.12)  | 0.73***(0.12) | 0.91***(0.12) |
| Gen              | 0.61***(0.02)  | 0.55***(0.02) | 0.56***(0.02) |
| Job              | 0.12***(0.04)  | 0.07(0.03)    | 0.09***(0.04) |
| Age              | 0.11(0.07)     | 0.13*(0.07)   | 0.11(0.07)    |
| Edu              | -0.01(0.03)    | -0.27(0.03)   | -0.02(0.03)   |
| Salary           | -0.03(0.01)    | -0.01(0.01)   | 0.00(0.01)    |
| Immediacy        | 0.09***(0.02)  |               |               |
| Persuasiveness   |                | 0.24***(0.02) |               |
| Supportiveness   |                |               | 0.19***(0.02) |
| R <sup>2</sup> = | 0.74           | 0.78          | 0.76          |

a Unstandardized coefficients shown with standard errors in parentheses.  
\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Hypothesis 2 and 3 argued that persuasiveness and supportiveness will be a positive predictor of consumers' ethical beliefs in the recycling context, respectively. The bias-corrected bootstrap 95% confidence intervals of hypothesis 2 rely between 0.12 to 0.22, which suggested the persuasiveness on consumers' ethical belief is significant ( $b = 0.24$ ,  $p < 0.001$ ,  $R^2 = 0.78$ ). The result supports Hypothesis 2. The bias-corrected bootstrap 95% confidence intervals of hypothesis 3 contains no zero (0.09 to 0.19); hence, the result supported that the supportiveness is a positive predictor on consumer's ethical

Table 3 OLS regression results for hypotheses 4

| Variable         | Recycling Intention |                |               |                |               |                |
|------------------|---------------------|----------------|---------------|----------------|---------------|----------------|
|                  | Equation (4)        | Equation (5)   | Equation (6)  | Equation (7)   | Equation (8)  | Equation (9)   |
| Constant         | 2.03***(0.18)       | 0.96***(0.14)  | 1.47***(0.17) | 0.82***(0.13)  | 1.73***(0.17) | 0.88***(0.13)  |
| Gen              | 0.34***(0.03)       | -0.27***(0.03) | 0.25***(0.02) | -0.25***(0.03) | 0.25***(0.03) | -0.27***(0.03) |
| Job              | 0.22**(0.05)        | 0.10*(0.04)    | 0.14*(0.05)   | 0.08*(0.04)    | 0.18***(0.05) | 0.09*(0.04)    |
| Age              | 0.14(0.10)          | 0.03(0.08)     | 0.17(0.09)    | 0.05(0.07)     | 0.13(0.10)    | 0.03(0.07)     |
| Edu              | -0.03(0.04)         | -0.02(0.03)    | -0.06(0.04)   | -0.03(0.03)    | -0.04(0.04)   | -0.03(0.03)    |
| Salary           | 0.00(0.01)          | 0.00(0.01)     | 0.00(0.01)    | 0.00(0.01)     | 0.00(0.01)    | 0.00(0.01)     |
| Immediacy        | 0.13***(0.02)       | 0.04*(0.02)    |               |                |               |                |
| Persuasiveness   |                     |                | 0.39***(0.03) | 0.17***(0.03)  |               |                |
| Supportiveness   |                     |                |               |                | 0.32***(0.03) | 0.14***(0.02)  |
| Ethical Belief   |                     | 1.00***(0.04)  |               | 0.89***(0.05)  |               | 0.93***(0.04)  |
| R <sup>2</sup> = | 0.36                | 0.66           | 0.48          | 0.68           | 0.44          | 0.68           |

<sup>a</sup>Unstandardized coefficients shown with standard errors in parentheses.

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

belief ( $b = 0.19$ ,  $p < 0.001$ ,  $R^2 = 0.76$ ). As for the mediation effect, hypothesis 4 predicted the mediating power of consumer's ethical beliefs. Following the above procedure, the result is the outcome of 10,000 bootstrap samples and factors such as gender, job, age, education, and salary are all controlled. The bias-corrected bootstrap 95% confidence intervals all contain no zero, which supports hypothesis 4. Specifically, factors relating to social impact had significant effects on the purchase intention (Equation 4,6,8). Further, the ethical belief affects the purchase intention significantly (Equation 5,7,9). Accordingly, hypothesis 4 is supported.

#### Discussion and Future Research

Based on the model proposed and tested, this research provides three substantive contributions to theory. First, we postulate that several factors of social influences (i.e., immediacy, supportiveness, and persuasiveness) are positively related to consumers' ethical beliefs, which will further influence their recycling intention. Second, we conducted our study on recycling, an emerging but under-researched product in the field of ethical consumption. Most existing research focused on products like fair-trade foods, or fair-trade non-foods (Ma et al., 2012) and a few pieces of researches aims at recycling. This study is expected to trigger future studies to emphasize ethical consumption, particularly on recycling the used product.

Granted, the study has limitations. First, the sampling limits the generalization of the research as this study restricted the sample frame to specific residential areas such as metro and cities. Hence, the sample may not be appropriate to represent the entire population of ethical consumers. A second limitation is an assumption that treats consumer ethical belief as uni-dimension. Other dimensions of consumer ethical beliefs may better capture the multifaceted variable in which they occur in the ethical consumers. Third, this study failed to put other variables such as pricing components into consideration, though the SIT model is the foundation of this study. Lastly, cultural discrepancies can be considered when the study result is extended to other cultural contexts.

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