



Tourists' socially responsible consumption: Concept and scale development

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Tourism consumption has been steadily increasing in China, as has its impact on society, the economy, and the environment; thus, it is necessary to promote socially responsible consumption among tourists. Our primary objective was to develop a scale to measure tourists' socially responsible consumption intention in China. We identified 5 dimensions that we labeled as safeguarding rights and interests, moderating consumption, promotion of local residents' income, respecting local cultures, and conserving resources. Our scale has the same basic principles as more general socially responsible consumption: maximizing the positive impacts of tourism on the environment, economy, and society, and minimizing the negative impacts. The scale was designed mainly for use at the tourism destination, which is an unfamiliar environment for the tourist. Implications of the findings and suggestions for future research are discussed.

Keywords

tourists; socially responsible consumption; scale development; tourism; social responsibility; environmental responsibility

Chinese consumers are becoming more aware of socially responsible consumption (Y. Xu, Zhang, & Liu, 2015), and are acknowledging the social and environmental influences of their consumption behavior. Tourism consumption can exert a positive or negative effect on the economy, society, and environment. According to reports from the National Tourism Data Center of China (China Tourism Academy, 2018), Chinese people traveled domestically on over 5 billion trips in 2017. These high levels of tourism consumption have an extensive and far-reaching impact (H. Xu & You, 2018); thus, it is vital to study tourists' socially responsible consumption (TSRC). Furthermore, as tourist consumption in China occurs mainly in environments that are new and unfamiliar to the visiting tourist, the significance of investigating this context is twofold: First, tourists are more likely to exhibit consumption behaviors that are different to those seen in their usual, everyday environments (Zhang, 2008); consequently, the content and dimensions of TSRC may differ from those of the usual environment of these people. Second, TSRC is focused on the tourists' specific destination.

Responsible tourism, which is an established area of tourism research and practice, is a term far more favored in the industry than are other terms used to describe TSRC, such as sustainable tourism, ecotourism, and ethical tourism (Caruana, Glozer, Crane, & McCabe, 2014). Development of a valid measurement scale is fundamental to research in the field of TSRC to allow in-depth and systematic study of the relationship between TSRC and its antecedent and outcome variables. Although there has been a great deal of research conducted in the field of responsible tourism, the majority of studies have been focused on either business perspectives—such as marketing, corporate social responsibility initiatives (Manente,

Minghetti, & Mingotto, 2012), and the extent to which businesses live up to their promises (Frey & George, 2010)—or on locals’ or hosts’ perspectives (e.g., Koutra & Edwards, 2012; Sin, 2010). By contrast, relatively few scholars have investigated tourists’ own perspectives on their consumption responsibilities (Mahrouse, 2011). Among these researchers, Caruana et al. (2014) investigated tourists’ own accounts of responsible tourism, using qualitative methods to identify nine categories of responsible tourism according to the tourists themselves: participation; learning and educating; preserving the economy, culture, and environment; doing the right thing; authenticity; being nice, quiet, and not crowded with too many people; distancing oneself from large groups of people on package tours; avoiding commercialization; and honest marketing. Other scholars have studied tourists’ perspectives of environmentally responsible behaviors (Juvan & Dolnicar, 2016; Lee, Jan, & Yang, 2013), and in 2018, H. Xu and You presented a definition of TSRC and designed a preliminary qualitative TSRC scale that laid the foundation for the present research.

Literature Review

The Concept and Definition of Socially Responsible Consumption

The concept of *socially responsible consumption* (SRC) was first described by Anderson and Cunningham (1972) in their work on consumers’ social awareness. These authors pointed out that socially aware consumption is a market segment in which the focus is on the promotion of social and environmental welfare. Webster (1975) first defined the socially responsible consumer as one who considers the public outcome of personal consumption in their decision making, or who promotes social change with their purchasing power. This definition gradually drew attention to the study of SRC. However, the broad and abstract attributes of the terms “public outcome” and “social change” limit the operability of this definition. Antil (1984) put forward the concept and a definition of SRC, stating that when consumers make purchasing decisions and carry out purchasing behavior with consideration given to environmental and resource issues, they are concerned with both the satisfaction of personal needs, and probable unfavorable consequences. The prominent feature of this definition is that it is focused on environmental and resource issues; thus, it is more specific than Webster’s definition. Roberts (1995) stated that socially responsible consumers purchase products or services that exert positive (or less negative) impacts on the environment and society, and use their purchasing power to demonstrate their social concern. This definition takes both environmental and social issues into consideration; thus, it is more specific and comprehensive than the previous definitions offered by Webster and by Antil.

Kotler (1991) defined *social marketing* as doing business in a way that maintains or improves both the customer’s and society’s well-being. On the basis of this definition, Mohr, Webb, and Harris (2001) defined *corporate social responsibility* (CSR) as a company’s commitment to minimizing or eliminating any harmful effects and maximizing long-term beneficial impacts on society. Further, considering Webster’s (1975) definition of socially aware consumers, Mohr et al. developed the following definition of the socially responsible consumer: a person who bases their acquisition, usage, and disposition of products on a desire to minimize or eliminate any harmful effects and maximize the long-term beneficial impact on society. In this definition, socially responsible consumer behavior is considered throughout the cycle of consumption; thus, it refines prior definitions of SRC.

Yu (2007) was the first to put forward the concept and a definition of consumer social responsibility in a Chinese context. He pointed out that consumers who purchase and use products, and who receive commercial services should bear the moral responsibility of consciously resisting use of products and behaviors that directly or indirectly endanger socially sustainable consumption and production, to safeguard the overall interests of and long-term benefits for society. The development of this definition indicates that Chinese scholars had at that time started to pay attention to the issue of consumer social responsibility; however, the main emphasis was on the passive responsibility that consumers should accept, with no mention of the subjective initiative of consumers to consciously carry out SRC. Yan and She (2009) defined SRC as behavior that is aimed at fulfilling the social responsibility of protecting the environment and saving

resources at each step of the consumption process, and consciously using consumption power to maintain social justice, promote good social customs, support national economic development, and pursue harmonious and sustainable development. This definition has strong operability. Other Chinese scholars have put forward different definitions of SRC (e.g., Yuan, Yang, & Ding, 2016); however, on the whole, no consensus has been reached, and citing overseas research achievements in SRC is common in research carried out in China.

As Roberts (1995) pointed out, the definition of SRC is subject to dynamic change. Horizontally, the original sole focus on environmental issues (Antil, 1984; Webster, 1975) has extended to include both environmental and social issues (Roberts, 1995); longitudinally, attention to decision making in purchase behavior (Antil, 1984; Roberts, 1995; Webster, 1975) has shifted to include the whole process of purchasing, including product use and disposal (Mohr et al., 2001). The definition of SRC is still being refined, which has provided an important reference point for us to develop and define the concept of TSRC in the current study.

Measurement of Socially Responsible Consumption

Since the concept of SRC was first put forward, the development of a scale to measure SRC has drawn the attention of scholars. Among these, Webster (1975) developed the Socially Conscious Consumer Index and Antil (1984) developed the Socially Responsible Consumer Behavior Scale. Given the environmental concerns that prevailed at that time, these measurement tools are mainly concerned with the environmental protection agenda rather than other issues. Since the 1990s, and particularly since the beginning of the 21st century, obvious progress has been made in improving the quality of SRC scales. Influential scales include Roberts' (1995) measure of SRC behavior, which includes the two dimensions of ecologically conscious consumer behavior and socially conscious consumer behavior. Françoise-Lecompte and Roberts (2006) developed an SRC scale focused on corporate responsibility, country-of-origin preferences, shopping at local or small businesses, purchasing cause-related products, and reducing one's consumption. Further, the Socially Responsible Purchase and Disposal Scale developed by Webb, Mohr, and Harris (2008) includes three dimensions: purchasing based on firms' CSR performance, recycling, and avoidance and use reduction of products with negative environmental impacts.

Yan and She (2009) developed the first SRC scale that was based on data from Chinese consumers. The scale measures nine dimensions, encompassing environmental protection and energy conservation. Xiao (2012) conducted similar studies in which they greatly promoted empirical research on SRC in China. Furthermore, H. Xu and You (2018) developed a qualitative scale to assess tourists' intention to engage in SRC, comprising five dimensions: protecting the environment, promoting local residents' income, moderating consumption, conserving resources, and maintaining market order. Although the reliability and validity of H. Xu and You's scale has not been empirically tested, it was an important reference for us in the present study.

In this review of existing research we have revealed that the development of SRC scales has been characterized by dynamic changes in the various dimensions included in these scales. Over time, the number of dimensions has increased; the initial focus on environmental protection has been extended to include CSR, moderating consumption, and support of domestically produced products. At the same time, both environmental protection and CSR have featured in all scales, which indicates that consumers may pay more attention to these two aspects than they do to the other dimensions in these scales.

Method

Construct Domain and Item Generation

Definition of tourists' socially responsible consumption intention. Churchill (1979) claimed that to develop an appropriate measurement tool, it is important first to identify the category of concepts. Through

a literature review, the researcher can delineate the concept to be measured and identify the items to be tested. On the basis of our literature review, we integrated the definitions of SRC by Mohr et al. (2001) and Roberts (1995), and defined *tourists' socially responsible consumption* as the set of behaviors exhibited during the process of tourists' consumption that indicate the tourist is considering the impact of their consumption behavior on the environment, economy, society, and culture of the destination, and is consciously maximizing the positive impacts and minimizing negative impacts. We used this definition to develop a scale to measure intentions related to TSRC.

Collection of measurement items and scale development. To extract the test items for the initial scale, we adopted three methods: in-depth interviews, focus groups, and a literature review. For the in-depth interviews, we used purposive sampling to recruit interviewees who had previous travel experience. To ensure they understood the interview questions, we selected only those who had a college degree or higher level of education. We interviewed 16 people (seven men and nine women; $M = 37.69$, $SD = 9.12$, range = 22–57 years) from diverse professional backgrounds, including white-collar workers, middle-school teachers, civil servants, tour guides, and students.

To ensure the validity of the interviews, we conducted a pilot study with five undergraduate students. As a result, the core question “What consumer behaviors of tourists are socially responsible?” was changed to “What consumer behaviors of tourists are socially irresponsible?” because the latter version was deemed easier for the interviewee to understand and respond to.

The formal interviews took place in June 2016, and each interview lasted between 30 and 60 minutes. The interview data we collected were coded independently by three researchers and then the coding results were compared. To further improve coding reliability, any disagreements or differences between coders' choices were resolved by collective consultation. After the coding analyses, we obtained 41 test items.

Simultaneous to the in-depth interviews, we organized a focus group that included four doctoral candidates and three master's degree candidates. All participants were majoring in tour management and were interested in the research area. They participated in an open-ended discussion that lasted for 2.5 hours around the question, “What consumer behaviors of tourists are socially responsible?” The information presented was consistent with the results obtained from the in-depth interviews, and no new test items were derived.

To further enrich the item pool, we reviewed the related literature, including articles in academic journals and travel newspapers, and blogs. As a result, we added six more items, including “Purchasing local fruit and vegetables as much as possible” (Lee et al., 2013), “Purchasing products from businesses that employ staff with disabilities as much as possible” (Webb et al., 2008), and “Not purchasing products from businesses that do not respect employees” (Françoise-Lecompte & Roberts, 2006). In total, we had generated 47 initial items.

To further test the quality of the scale, we submitted the 47 items to two academic experts and one industry expert, who were asked to screen the items and give their reasons for retention or removal, based on our definition of TSRC. As a result, 12 items were deleted or merged for the following reasons: the information was difficult for tourists to obtain (e.g., buying products from travel companies that try to improve employee conditions), the content of the item violates the law (e.g., not visiting tourist sites where gambling occurs), and the content relates to behavior that may not have been carried out for SRC reasons (e.g., trying to go to a local restaurant). Finally, we derived 35 items to formulate the Tourists' Socially Responsible Consumption Intention (TSRCI) Scale.

Pretest

The purpose of the pretest was to assess the quality of the initial survey. Through online convenience

sampling, we received 321 responses to the TSRCI Scale and 268 (83.5%) of these were valid. In terms of demographic characteristics, 54% of the respondents were women and 46% were men; 47% traveled 1–2 times a year, 41% traveled 3–4 times a year, and 12% traveled more than 4 times a year; 45% were aged between 25 and 34 years, 37% were between 35 and 44 years, 13% were between 45 and 54 years, 4% were between 55 and 64 years, and 1% were aged over 65 years; 90% had a university education and 10% did not; 77.5% were employees of enterprises, 16% were public institution staff, and 2.5% were civil servants; and 21% had a monthly income ranging from CNY¥3,001 to CNY¥5,000 (US\$419.75 to US\$699.75), 52% had a monthly income ranging from CNY¥5,001 to CNY¥9,000 (US\$699.89 to US\$1,259.02), 23.5% had a monthly income of more than CNY¥9,000, and 3.5% had a monthly income of less than CNY¥3,000 (US\$419.61).

The Cronbach's alpha value of the initial TSRCI Scale was .87, which demonstrates that the overall reliability of the scale was high. Principal components analyses were conducted for the 35 items. Factors were extracted according to the principle that the eigenvalue was greater than 1, and the final factor loading matrix was obtained by orthogonal rotation with maximum variance. Items that conformed to one of the following conditions were deleted: (a) the degree of commonality was less than .50, (b) the factor loading was smaller than .50, and (c) the cross-loading value exceeded .40 (Pan, Gao, Zhang, & Wan, 2014). After multiple factor analyses, eight items were deleted and a factor structure of good differentiation was obtained. Therefore, the revised TSRCI Scale included 27 items. To enhance the accuracy and clarity of expression of these items, we asked two university instructors to review the wording; we revised the phrasing of seven items according to their feedback. Ultimately, we obtained a formal scale of 27 items.

The Formal Survey and Sampling

The formal survey comprised four sections.

Tourists' Socially Responsible Consumption Intention Scale. The 27 items of the TSRCI Scale were scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items included "I will buy local fruit to increase the income of local people" and "I conserve the toilet paper provided by the hotel."

Social desirability measure. We adopted items from the Marlowe-Crowne Social Desirability Scale (Strahan & Gerbasi, 1972). The 10-item shortened version of this scale has high reliability and a strong correlation with items in the initial scale (Fischer & Fick, 1993). Responses are made using a forced-choice method, whereby respondents answer either "No" (0 points) or "Yes" (1 point). A higher total score indicates higher social desirability. Items include "I'm always willing to admit it when I make a mistake" and "I always try to practice what I preach."

Collectivism Scale. We used the collectivism scale developed by McCarty and Shrum (2001), which includes three items: "Working hard for the goals of a group, even if it does not result in personal recognition," "Doing what is best for most of the people in the community, even at a personal cost," and "Helping others in the community who are in need." Responses are made on a 5-point Likert scale ranging from 1 (*not at all important*) to 5 (*extremely important*).

Demographic characteristics. We collected data on respondents' yearly travel frequency, gender, age, level of education, and profession.

Survey sampling was conducted by a professional information collection organization (www.wjx.cn). Through convenience sampling, we received 914 responses, 815 (89.2%) of which were valid (see Table 1).

Tabachnick and Fidell (2001) suggested that if a research sample is large enough, it can be divided into two parts at random, with one part used for exploratory factor analysis (EFA) and the other used for

confirmatory factor analysis. In line with this suggestion, we used the SPSS 21.0 function of random selection of individual cases to randomly divided the 815 responses into two parts, the first including 405 cases that were used for the EFA (with an item and sample ratio of 1:8), and the second including 410 cases that were used for the confirmatory factor analysis (with an item and sample ratio of more than 1:10).

Table 1. Respondents' Demographic Information

Indicators	<i>n</i>	%	<i>M</i>	<i>SD</i>	Minimum value	Maximum value
Travel frequency per year (number of trips)			2.8	0.69	1	4
0	42	5.2				
1–2	162	19.9				
2–4	524	64.3				
> 4	87	10.7				
Gender			1.59	0.49	1	2
Male	338	41.5				
Female	477	58.5				
Profession			2.14	1.36	1	5
Enterprise employee	452	55.5				
Civil servant	32	3.9				
Public institution	116	14.2				
Student	197	24.2				
Other	18	2.2				
Age (years)			2.11	0.93	1	6
≤ 24	215	26.4				
25–34	375	46.0				
35–44	156	19.1				
45–54	60	7.4				
55–64	6	0.7				
≥ 65	3	0.4				
Income (Yuan/month)			3.80	1.55	1	7
≤ 3,000	61	7.5				
3,001–5,000	119	14.6				
5,001–7,000	190	23.3				
7,001–9,000	160	19.6				
≥ 9,001	127	15.6				
No income	157	19.3				
Do not wish to answer	1	0.1				
Education			3.84	0.57	1	5
Junior middle school or below	4	0.5				
Senior middle school	28	3.4				
Junior college	101	12.4				
University	642	78.8				
Postgraduate	40	4.9				

Note. CNY¥3,000 = US\$419.61, CNY¥5,000 = US\$699.75, CNY¥7,000 = US\$979.21, CNY¥9,000 = US\$1,258.81.

Results

Exploratory Factor Analysis

Before performing the EFA, we applied Harman's one-factor test to address the issue of common method variance. The first factor before rotation accounted for 20.10% of the variance; this was below the criterion of 40%, which indicates that the data fell within the acceptable range in regard to the issue of common method variance (Podsakoff & Organ, 1986). Further analysis revealed that the Kaiser–Meyer–Olkin value was .85, which is greater than the minimum criterion of .80, and Bartlett's test of sphericity was significant at $p < .01$, indicating that the data were suitable for factor analysis.

EFA involves multiple rounds of exploratory procedures before identifying the best component structure (Wu, 2010a). We performed an EFA on the 27 items using principle axis factoring and oblique rotation. The factor loading matrix, the 20 items obtained, and five factors extracted that accounted for 62.57% of the variance, are shown in Table 2. The Cronbach's alpha coefficient of the overall scale was .80 and the coefficients of each factor were greater than .70, placing them above the minimum level of acceptability as put forward by Nunnally (1978). Thus, the scale passed the internal consistency test.

Table 2. Exploratory Factor Analysis Results

Item	Factor loading	Cronbach's α	Accumulated variance explained (%)
Safeguarding rights and benefits		.85	22.53
1. I will make a complaint to the relevant department if I discover that tourism enterprises are using false advertising.	.81		
2. I will report to the relevant department if I find that scenic destinations are raising prices at random.	.80		
3. I will report to the relevant supervising department if I encounter compulsory consumption.	.80		
4. I will make a complaint to the relevant department if the tour guide demands that a tip be paid.	.78		
5. I will make a complaint to the relevant department if the travel agency reduces the number of tourist attractions included in a travel package I have already paid for, without authorization.	.73		
Moderating consumption		.83	39.96
6. When traveling, I will not purchase products that I will not use.	.85		
7. When traveling, I will not impulsively purchase products that I will not find useful in the future.	.81		
8. When traveling, I will not stay in luxury hotels that are obviously beyond my usual consumption level.	.72		
9. When traveling, I will not buy products for the purpose of showing off.	.71		
10. When traveling, I will not buy items in large quantities, even if the commodities at the destination are cheaper.	.67		
Promotion of local residents' income		.72	50.82
11. I will buy local fruit to increase the income of local people.	.75		
12. I will purchase specialty farm products that are produced locally to increase local people's income.	.75		
13. I will purchase handicrafts produced by craftspeople who live at my travel destination to increase their income.	.71		
14. I will patronize small shops at my travel destination to increase local people's income.	.67		
Respecting local cultures		.76	57.35
15. When traveling, I will always respect the customs of the local people according to their ethnicity.	.84		
16. When traveling, I will observe the religious customs of the destination when traveling.	.79		
17. I will respect the dietary taboos held in my travel destination.	.67		
Conserving resources		.70	62.57
18. When staying in a hotel, I will turn off the television when I stop watching it so as to conserve electricity.	.79		
19. When staying in a hotel, I will turn off the lights when I am not using them so as to conserve electricity.	.79		
20. I will conserve the toilet paper provided by the hotel.	.64		

Note. Items 6, 7, 8, 9, and 10 are reverse-scored.

Confirmatory Factor Analysis

Assessment of the external quality of the overall model. We used Amos 22.0 to test the goodness of fit between the theoretical model (M1, the first-order, five-factor model) derived from the EFA and the data actually observed. To better evaluate the external quality of the model, we put forward a competitive model, that is, the second-order, single-factor model (M2), assuming there exists a higher order factor (i.e., TSRCI) that dominates the five first-order factors. The results for the fit of the two models are presented in Table 3. The absolute, incremental, and simplified fit indices between M1 and M2 reached the minimum acceptable standards (Wu, 2010b), and there was a good fit between the two models and the data actually observed. Further comparison revealed that the absolute and incremental fit levels of M1 were superior to those of M2, but the simplified fit of M2 was slightly better than that of M1. To obtain the better of the two models, we then assessed the internal quality (i.e., reliability and validity) of M1 and M2.

Table 3. *Absolute, Incremental, and Simplified Fit Indices of Models 1 and 2*

Absolute fit indices	χ^2/df	RMR	RMSEA	GFI	AGFI
Acceptable standards	< 2.00	< .05	< .05	> .90	> .90
M1	1.71	.04	.04	.94	.92
M2	1.73	.04	.04	.94	.92
Incremental fit indices	NFI	RFI	IFI	TLI	CFI
Acceptable standards	> .90	> .90	> .90	> .90	> .90
M1	.92	.91	.97	.96	.97
M2	.92	.91	.97	.96	.97
Simplified fit indices	PGFI	PNFI	CN		
Acceptable standards	> .50	> .50	> 200 ($\alpha = .05$)		
M1	.71	.77	29		
M2	.72	.78	28		

Note. M1 = Model 1, M2 = Model 2, χ^2 = chi square, df = degrees of freedom, RMR = root mean square residual, RMSEA = root mean square error of approximation, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normed fit index, RFI = residual fit index, IFI = incremental fit index, TLI = Tucker–Lewis index, CFI = comparative fit index, PGFI = parsimonious goodness-of-fit index, PNFI = parsimonious normed fit index, CN = critical number.

Verification of the internal quality of the overall model.

Composite reliability. The composite reliability values of the five latent variables of M1 fell between .79 and .87 (see Table 4), which is higher than the minimum value of .60 recommended by Bagozzi and Yi (1988) and the ideal standard of .70 recommended by Fornell and Larcker (1981). This shows that M1 had very good internal consistency. Furthermore, the R^2 of the observed variable reflects the reliability of its latent variable; in M1, the R^2 of the observed variables was greater than or equal to the standard of > .50 recommended by Bagozzi and Yi, with the exception of that for Item 10. The composite reliability of M2 failed to reach the ideal level, and its internal consistency was slightly inferior to that of M1.

Content validity. Qualitative methods are usually adopted to verify a scale's content validity, which relates to how accurately the items measure the target construct (Pan et al., 2014). We designed our initial scale with qualitative methods comprising in-depth interviews, a focus group, and a literature review, after which experts were invited to discuss and revise the survey and a pilot study was conducted. Therefore, we observed rigorous control in the development of the scale, and its content validity was acceptable.

Table 4. *Confirmatory Factor Analysis Results for Model 1*

Factor	Item	Standard loading	<i>t</i>	Reliability coefficient (R^2)	Composite reliability	AVE
SRB	Item 1	.82		.68	.87	.58
	Item 2	.77	16.70	.59		
	Item 3	.73	15.53	.53		
	Item 4	.68	14.39	.47		
	Item 5	.79	17.15	.62		
MC	Item 6	.82		.67	.86	.56
	Item 7	.83	18.38	.69		
	Item 8	.71	15.04	.50		
	Item 9	.79	17.29	.62		
	Item 10	.55	11.21	.30		
PLRI	Item 11	.65		.43	.81	.51
	Item 12	.76	12.00	.58		
	Item 13	.69	11.28	.48		
	Item 14	.75	11.90	.57		
RLC	Item 15	.81		.65	.79	.55
	Item 16	.76	13.84	.58		
	Item 17	.65	12.10	.42		
CR	Item 18	.73		.53	.76	.51
	Item 19	.70	11.30	.49		
	Item 20	.72	11.47	.52		

Note. SRB = safeguarding rights and benefits, MC = moderating consumption, PLRI = promotion of local residents' income, RLC = respecting local cultures, CR = conserving resources, AVE = average variance extracted.

Convergent validity. According to Hair, Black, Babin, and Anderson (2009), the convergent validity of a scale can be considered as good when two conditions are met: (a) the standard loading between latent and observed variables is greater than .50, and (b) the average variance extracted (AVE) of latent variables is greater than .50. In M1, the standard factor loadings of the 20 items fell between .55 and .83, which are greater than the standard of .50 and reach significance. The AVE values of the five latent variables fell between .51 and .58, which are greater than .50, satisfying the requirements of the threshold value and showing that M1 had favorable convergent validity. Furthermore, as shown in Table 4, the *t* values of the 20 items in M1 were far greater than 1.96 ($p < .05$), which indicates that the internal quality of the model was good (Wu, 2010b). For M2, the standard loadings fell between .20 and .95; thus, they failed to meet the threshold value. The corresponding AVE values were also smaller than .50. As a result, M2 failed to pass the convergent validity test, which indicates that the internal quality of this model was less than satisfactory.

Discriminant validity. When the square root of the AVE of latent variables is greater than the correlation coefficient between the latent variable and other variables, the discriminant validity of a scale can be considered acceptable (Fornell & Larcker, 1981). We found that the arithmetic square root of the AVE values of the latent variables in M1 were all greater than the correlation coefficients between the latent variables, which indicates that the latent structure of the model had very favorable discriminant validity (see Table 5). As there was only one second-order factor in M2, there was no need to conduct a discriminant validity test on this model.

Comparative analysis of the two models showed that M1 reached the corresponding standards in terms of both external and internal quality, and was the more appropriate theoretical model of the two.

Table 5. *Arithmetic Square Roots of Average Variance Extracted Values of Latent Variables and Correlation Coefficients Between Latent Variables*

Latent variable	SRB	MC	PLRI	RLC	CR
SRB	.76				
MC	-.00**	.73			
PLRI	.28**	-.23**	.72		
RLC	.24**	.54**	.19**	.74	
CR	.22**	.34**	.31**	.54**	.72

Note. The arithmetic square root of the average variance extracted value is shown on the diagonal line; correlation coefficients are shown below the diagonal line. SRB = safeguarding rights and benefits, MC = moderating consumption, PLRI = promotion of local residents' income, RLC = respecting local cultures, CR = conserving resources.

Criterion validity. Criterion validity is the degree of consistency between the measured outcomes and criteria that accurately indicate the measured concepts (Li & Xin, 2008). It is assessed by examining the causal relationships between the tested variables and other variables that could have a theoretical relationship with them, or by conducting an analysis of variance (Yan & She, 2009). McCarty and Shrum (2001) found that collectivism and recycling behavior are correlated, in that respondents who exhibit collectivism believe that recycling is important. In the development of their scale, Webb et al. (2008) also found a positive correlation between collectivism and SRC. We used Amos 22.0 to test the causal relationship between collectivism and TSRCI in five dimensions. The results reveal that all the indicators in the causal model fell within an acceptable scope, and that collectivism had significant positive impacts on all five dimensions of the TSRCI Scale; that is, its standardized path coefficients with safeguarding rights and benefits, moderating consumption, promotion of local residents' income, respecting local cultures, and conserving resources were .37, .22, .41, .60, and .64, respectively, which indicates that our scale had very favorable criterion validity.

Social desirability. *Social desirability* refers to the extent to which questionnaires or scale items are affected by the approval or disapproval of public opinion. People tend to give positive answers to measures of behaviors that are approved by society, and negative answers to measures of behaviors that are not approved by society (Wei, Han, Zhang, Sun, & Zhang, 2015). Socially desirable responding may reduce the credibility of a scale; thus, we examined the correlation between social desirability and the TSRCI Scale, and found that although social desirability had a significant correlation with the five factors, the coefficient was very low (Webb et al., 2008), ranging between .13 and .27 ($ps < .001$). Therefore, we believe the impact of social desirability on this research was negligible.

Discussion

Findings and Theoretical Significance

We proposed a new definition of the concept of TSRC, that is, that tourists attach importance to the influence of their consumption behaviors on the environment, economy, society, and culture, and consciously maximize the positive influence and minimize the negative impacts during tourism

consumption. Using qualitative and quantitative research methods, we developed the TSRCI Scale comprising the five factors of safeguarding rights and benefits, moderating consumption, promotion of local residents' income, respecting local cultures, and conserving resources. Safeguarding rights and benefits, moderating consumption, and conserving resources are factors similar to those in SRC scales developed by previous scholars, whereas respecting local cultures and promotion of local residents' income are new factors. Thus, although TSRC has the same essential meaning as SRC, of maximizing one's positive impact on the environment, economy, and society, and minimizing one's negative impact, TSRC has the particularity of the consumption attribute of mainly carrying out SRC to support the tourist destination. In addition, we have extended prior measures of this concept, such as the scale that H. Xu and You (2018) developed using qualitative methods, and which contains dimensions designed to assess environmental protection and safeguarding market order, rather than promotion of local residents' income and respect for local cultures.

There were three main differences in our approach in the current study in comparison with prior research: Environmental protection and CSR are present in most SRC scales, but were not included in our TSRCI Scale. Regarding the absence of the environmental protection aspect, McKercher, Mackenzie, Prideaux, and Pang (2014) asserted that "A holiday is not only a physical escape from one's home region, it is also a psychological escape from the range of duties and obligations one might feel at home" (p. 435). Thus, tourist behaviors that conflict with environmental protection in tourism destinations, such as littering and walking on the grass in areas where this is not permitted, may be considered as neglecting responsibility in a new, unfamiliar environment; the lack of an environmental dimension in our scale may be for this reason. The absence of a CSR dimension could lie in the fact that tourists' consumption occurs in a place that is unfamiliar to them. Tourists usually know little about the destination's tourism enterprise, and this information asymmetry means the CSR problem is easily ignored in tourists' intention to engage in SRC.

The presence in our scale of dimensions to assess safeguarding rights and benefits and moderating consumption indicates that tourists regard these actions as social responsibilities they should undertake. Although both factors can be considered as stemming from self-interest, they are objectively beneficial to society. These two aspects appear in all existing SRC scales we identified (Françoise-Lecompte & Roberts, 2006; Xin, 2011; Yan & She, 2009). This indicates that TSRC and general SRC share a focus on certain issues; thus, a study on TSRC is not completely removed from that of general SRC, with the latter serving as important reference to the former.

In terms of promoting local residents' income, respecting local cultures, and conserving resources as dimensions of the TSRCI Scale, there is a clear trend toward tourists in China supporting the destination. Tourists hope that their consumption will increase the income of the residents of their tourist destination, are respectful of local cultures, and avoid resources being wasted. The presence of these three dimensions indicates that TSRC is distinct from general SRC, and that TSRC is an independent concept with a unique value for research.

We have made two main theoretical contributions with this study. First, we have opened a new avenue of research on tourism consumption behavior. Prior research on specific tourism consumption behaviors, mainly including low-carbon consumption and ecotourism consumption, has been closely related to the environment and ecology. In our definition of TSRC we have gone beyond the research scope of low-carbon and ecological issues, and adopted a broader awareness of social care. Thus, we have not only enriched the theoretical study of tourism consumption behavior, but our study also could have applications for the sustainable development of tourism. Second, we have laid the foundations for the construction of an independent TSRC theory system. The main aim of studying TSRC is to promote and popularize SRC behaviors among tourists. Before this can happen, relevant theories must be proposed and a relatively independent and complete theoretical system should be formed. The use of our definition and of the TSRCI Scale will allow future researchers to investigate the relationship between TSRC and antecedent variables.

Practical Implications

The TSRCI Scale can be used by relevant tourism departments to directly measure the SRC intentions, behavior, and views of Chinese tourists, so that members of these departments can understand and introduce guiding measures to promote TSRC. The five dimensions identified in our scale exist only in the context of tourists' intentions. For these to be transformed into actions and practice, employees of destination administrative departments, industry associations, and other organizations should undertake targeted activities to help make TSRC behavior become a trend, including introducing convenient channels for complaints and claims, increasing publicity and reminders for tourists about moderating their consumption, offering information about and channels for tourists to promote incomes of the local people in the destination area, and encouraging and reminding tourists to respect the culture of the destination area, and conserve resources. Tourist marketers could also segment the market according to the level of TSRCI and the performance of the tourists on the different dimensions, and could formulate targeted marketing strategies for each segment.

Limitations and Future Directions for Research

This study has some limitations. First, the history of the travel consumption economy in China is relatively short, which could mean that tourists' understanding of SRC is limited. Second, we used online sampling; future researchers could conduct richer and wider sampling using other respondent sources. Third, we mainly investigated the intention of tourists rather than their behavior, which could have more practical significance. Therefore, future researchers could investigate tourists' social responsibility consumption behavior.

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References

- Anderson, W. T., Jr., & Cunningham, W. H. (1972). The socially conscious consumer. *Journal of Marketing*, 36, 23–31. <https://doi.org/10.2307/1251036>
- Antil, J. H. (1984). Socially responsible consumers: Profile and implications for public policy. *Journal of Macromarketing*, 5, 18–39. <https://doi.org/10.1177/027614678400500203>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74–94. <https://doi.org/10.1007/BF02723327>
- Caruana, R., Glozer, S., Crane, A., & McCabe, S. (2014). Tourists' accounts of responsible tourism. *Annals of Tourism Research*, 46, 115–129. <https://doi.org/10.1016/j.annals.2014.03.006>
- China Tourism Academy. (2018). *China tourism statistics bulletin 2017* [In Chinese]. Retrieved from <https://bit.ly/2lWJEg9>
- Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64–73. <https://doi.org/10.1177/002224377901600110>
- Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne Social Desirability Scale. *Educational and Psychological Measurement*, 53, 417–424. <https://doi.org/10.1177/0013164493053002011>

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
<https://doi.org/10.1177/002224378101800104>

Françoise-Lecompte, A., & Roberts, J. A. (2006). Developing a measure of socially responsible consumption in France. *Marketing Management Journal*, 16, 50–66. Retrieved from <https://bit.ly/2mrAIQn>

Frey, N., & George, R. (2010). Responsible tourism management: The missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. *Tourism Management*, 31, 621–628.
<https://doi.org/10.1016/j.tourman.2009.06.017>

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Englewood Cliffs, NJ: Prentice Hall.

Juvan, E., & Dolnicar, S. (2016). Measuring environmentally sustainable tourist behaviour. *Annals of Tourism Research*, 59, 30–44. <https://doi.org/10.1016/j.annals.2016.03.006>

Kotler, P. (1991). *Marketing management: Analysis, planning, implementation, and control* (7th ed.). Englewood Cliffs, NJ: Prentice Hall.

Koutra, C., & Edwards, J. (2012). Capacity building through socially responsible tourism development: A Ghanaian case study. *Journal of Travel Research*, 51, 779–792.
<https://doi.org/10.1177/0047287512451141>

Lee, T. H., Jan, F.-H., & Yang, C.-C. (2013). Conceptualizing and measuring environmentally responsible behaviors from the perspective of community-based tourists. *Tourism Management*, 36, 454–468.
<https://doi.org/10.1016/j.tourman.2012.09.012>

Li, C., & Xin, L. (2008). Research on methods of evaluating the reliability and validity of questionnaires [In Chinese]. *Chinese Journal of Health Statistics*, 25, 541–544.
<https://doi.org/10.3969/j.issn.1002-3674.2008.05.034>

Mahrouse, G. (2011). Feel-good tourism: An ethical option for socially-conscious Westerners? *ACME: An International E-Journal for Critical Geographies*, 10, 372–391.

Manente, M., Minghetti, V., & Mingotto, E. (2012). Ranking assessment systems for responsible tourism products and corporate social responsibility practices. *Anatolia*, 23, 75–89.
<https://doi.org/10.1080/13032917.2011.653633>

McCarty, J. A., & Shrum, L. J. (2001). The influence of individualism, collectivism, and locus of control on environmental beliefs and behavior. *Journal of Public Policy & Marketing*, 20, 93–104.
<https://doi.org/10.1509/jppm.20.1.93.17291>

McKercher, B., Mackenzie, M., Prideaux, B., & Pang, S. (2014). Is the hospitality and tourism curriculum effective in teaching personal social responsibility? *Journal of Hospitality and Tourism Research*, 38, 431–462. <https://doi.org/10.1177/1096348012451452>

Mohr, L. A., Webb, D. J., & Harris, K. E. (2001). Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *The Journal of Consumer Affairs*, 35, 45–72. <https://doi.org/10.1111/j.1745-6606.2001.tb00102.x>

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw-Hill.

Pan, Y., Gao, L., Zhang, X., & Wan, Y. (2014). Research on consumer values in the context of Chinese culture: Scale development and comparison [In Chinese]. *Management World*, 4, 90–106.
<https://doi.org/10.19744/j.cnki.11-1235/f.2014.04.010>

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544. <https://doi.org/10.1177/014920638601200408>

- Roberts, J. A. (1995). Profiling levels of socially responsible consumer behavior: A cluster analytic approach and its implication for marketing. *Journal of Marketing Theory and Practice*, 3, 97–117. <https://doi.org/10.1080/10696679.1995.11501709>
- Sin, H. L. (2010). Who are we responsible to? Locals' tales of volunteer tourism. *Geoforum*, 41, 983–992. <https://doi.org/10.1016/j.geoforum.2010.08.007>
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 28, 191–193. <https://doi.org/fhs99r>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York, NY: HarperCollins.
- Webb, D. J., Mohr, L. A., & Harris, K. E. (2008). A re-examination of socially responsible consumption and its measurement. *Journal of Business Research*, 61, 91–98. <https://doi.org/c76qvr>
- Webster, F. E., Jr. (1975). Determining the characteristics of the socially conscious consumer. *Journal of Consumer Research*, 2, 188–196. <https://doi.org/10.1086/208631>
- Wei, J., Han, H.-F., Zhang, C.-Y., Sun, L.-J., & Zhang, J.-F. (2015). Reliability and validity of the Marlowe-Crowne Social Desirability Scale (Short Form) in middle school students [In Chinese]. *Chinese Journal of Clinical Psychology*, 4, 585–599. <https://doi.org/10.16128/j.cnki.1005-3611.2015.04.004>
- Wu, M. (2010a). *Questionnaire statistical analysis in practice* [In Chinese]. Chongqing, China: Chongqing University Press.
- Wu, M. (2010b). *Structural equation modeling: Operation and application of Amos* [In Chinese]. Chongqing, China: Chongqing University Press.
- Xiao, J. (2012). Research on the Socially Responsible Purchase and Disposal Scale in China [In Chinese]. *The Theory and Practice of Finance and Economics*, 33, 89–93. <https://doi.org/10.3969/j.issn.1003-7217.2012.02.018>
- Xin, J. (2011). Research on responsible consumer behavior and group segmentation based on the Socially Responsible Consumer Behavior Scale-Chinese version [In Chinese]. *Journal of Nanjing Agricultural University (Social Sciences Edition)*, 11, 37–43. <https://doi.org/ddbf>
- Xu, H., & You, X. (2018). An analysis of the socially responsible consumption intention of tourists based on demographic characteristics [In Chinese]. *Journal of Arid Land Resources and Environment*, 32, 196–201. <https://doi.org/10.13448/j.cnki.jalre.2018.030>
- Xu, Y., Zhang, E., & Liu, Z. (2015). A study on the Consumer Responsibility Consumption Index in China: Taking six main cities as examples [In Chinese]. *China Economic Studies*, 24, 73–85. <https://doi.org/10.19365/j.issn1000-4181.2015.04.007>
- Yan, J., & She, Q. L. (2009). Research on the Socially Responsible Consumer Behavior Scale [In Chinese]. *Journal of Management Sciences*, 22, 73–82. <https://doi.org/ddbg>
- Yu, Y. (2007). Preliminary research on consumer social responsibility. *Journal of Commercial Economics*, 3, 12–15. <https://doi.org/10.3969/j.issn.1002-5863.2007.03.006>
- Yuan, Y.-H., Yang, W.-G., & Ding, C.-H. (2016). Research on consumer social responsibility from a social networking perspective [In Chinese]. *Journal of Guangdong Polytechnic Normal University*, 2, 74–80. <https://doi.org/10.13408/j.cnki.gjsxb.2016.02.017>
- Zhang, L. Y. (2008). A new framework for tourism research: A study of consumer behavior and phenomena in unconventional environments [In Chinese]. *Tourism Tribune*, 23, 12–16. <https://doi.org/ddbh>

