

Collaborative Consumption: A cross-cultural comparison between American and Chinese consumers on clothing renting and swapping

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Over-consumption and a throwaway culture contribute to increased textile waste, which is a growing environmental concern. Approximately 14.3 million tons of textiles now make their way to landfills in the US (US EPA, 2014). Similarly, about 26 million tons of textile waste is generated in China annually, which makes up about 3.5% to 4% of the world's waste materials (Xue et al., 2014). Collaborative Consumption (CC), which is based on the shared usage of underutilized or unwanted products, encourages people to focus on product usage rather than ownership (Botsman & Rogers, 2010). Demailly and Novel (2014) estimate that CC could yield a 20% reduction in waste. Renting and swapping, two forms of CC (Botsman & Rogers, 2010), have been suggested as alternative sources of revenue for industry while also extending the life and use frequency of clothing products (WRAP, 2011). Though these concepts of CC are continuing to expand and gain more attention, most are still in their infancy and lack popularity (Demailly & Novel, 2014). Marketing research conducted by The Nielsen Global Survey (2014) reports that those who are willing to share goods with others amounts to about 49% in Asia and 18% in North America. Given the limited literature on the cross-cultural comparisons of CC in the textile and apparel industry, this study was designed to empirically identify the motivations and barriers for CC and to compare the intention towards CC through renting and swapping between consumers in the US and in China.

A convenience sampling strategy was employed with an online survey for data collection in both the United States and China. Multi-item scales were used to evaluate the variables, utilizing a 5-point Likert scale with "1=strongly disagree, to 5 = strongly agree." *Utilitarian value* ($\alpha = .758$) was measured by six items. *Hedonic value* ($\alpha = .926$) was measured by ten items. Both *perceived enjoyment* ($\alpha = .965$) and *attitude* ($\alpha = .950$) were measured by five items. Three items were adapted to measure *performance risk* ($\alpha = .842$), *psychological risk* ($\alpha = .829$) and *financial risk* ($\alpha = .748$) respectively. *Social risk of CC* ($\alpha = .899$) was measured by four items. In addition, two hypothetical scenario statements were developed for clothing renting and swapping, and participants were requested to rate the level of intention to rent or swap clothing using a 5-point scale. Demographic information was also collected, including gender (US: female=56.4%, male=43.6%; China: female =63.9%, male=37.1%), age (US: 18-35=33.6%, 36-50=34.7%, 51-69=31.6%; China: 18-35=67%, 36-50=27.7%, 51-69=5.3%), and education (US: some college =24.8%, college degree=38.7%, Master/MBA or higher=16.6%; China: some college =20.9%, college degree=49.2%, Master/MBA or higher=29.9%). The questionnaire was developed in English, which was first translated into Chinese and then was back-translated into English to ensure an accurate translation.

The results of multiple t-tests illustrate significant differences between the two samples in consumers' intentions, utilitarian shopping value, perceived enjoyment, attitude, as well as perceived social risk, performance risk and psychological risk (Table 1). In addition, a stepwise regression analysis was conducted to test the influences of independent variables on the intention

to rent and swap. The statistical results indicated different factors influencing consumers' intention to rent or swap clothing between the two samples (Table 2). Specifically, American consumers' intention to rent clothing or to attend swapping events was significantly influenced by hedonic value, perceived enjoyment and social risk; while Chinese consumers' intention to rent clothing was significantly impacted by hedonic value, social risk, performance risk, and financial risk. Differently, Chinese consumers' intention to swap clothing was significantly influenced by perceived enjoyment, social risk, performance risk, psychological risk, and financial risk.

Table 1. Multiple t-tests

	US		China		t-value	Sig.
	Mean	Std.	Mean	Std.		
Intention to CC through						
Clothing renting	2.05	1.071	2.24	1.199	-2.255	.024
Clothing swapping	2.33	1.211	2.65	1.369	-3.439	.001
Utilitarian shopping value	3.82	0.567	3.61	0.866	4.234	.000
Hedonic shopping value	3.24	0.859	3.21	0.756	0.509	.611
Perceived enjoyment of CC	2.50	1.021	2.88	1.168	-4.756	.000
Attitude to CC	3.02	1.043	2.85	1.092	2.177	.030
Perceived risks of CC						
Perceived social risk	2.67	0.930	2.96	1.087	-3.942	.000
Perceived performance risk	3.32	0.814	3.81	0.874	-7.797	.000
Perceived psychological risk	2.98	0.860	3.17	1.025	-2.778	.006
Perceived financial risk	3.31	0.805	3.24	0.916	1.016	.310

Table 2. Regression analysis

Dependent variables	Significant independent variables	US				China			
		β	t-value	Sig.	R ²	β	t-value	Sig.	R ²
					.459				.338
Renting	Hedonic shopping	.202	4.888	.000		.113	2.046	.042	
	Perceived enjoyment	.343	6.100	.000					
	Social risk	-.183	-2.818	.005		-.225	-2.924	.004	
	Performance risk					-.158	-2.224	.027	
	Financial risk					-.164	-2.141	.033	
					.476				.425
Swapping	Hedonic shopping	.241	5.922	.000					
	Perceived enjoyment	.313	5.655	.000		.272	3.937	.000	
	Social risk	-.285	-3.986	.000		-.334	-3.878	.000	
	Performance risk					-.182	-2.363	.019	
	Psychological risk					-.232	-2.986	.003	
	Financial risk					-.177	-2.681	.008	

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