



Assessing a Survey: Motivations of Collaborative Consumption of Clothing

Diana Saiki, Ball State University, Muncie IN
Alyssa Adomaitis, The New York City College of Technology, CUNY

Introduction and Significance: There are many barriers to eco-friendly consumption of clothing. Ineffective promotional strategies have affected the popularity of eco-clothes as companies concentrate on fast fashion. In addition, clothes that please environmentalists often fail to appeal to the average consumers (Gam, 2011). An alternative strategy in which consumers can contribute to sustainable efforts is through collaborative consumption (CC). The concept of CC refers to two or more individuals consuming economic goods, engaging in joint activities in an effort to lower resource consumption; allowing businesses and the society to be increasingly resource-light in the short and long term (e.g., Dall Pizzol, Ordovás de Almeida, & Do Couto Soares, 2017). The efficacy of CC is predicated on its potential to save resources by means of shared utilization of products, services, or resources. In this case individuals seek to borrow or rent instead of owning; provided the cost of using the product or service is not more than the savings accrued by owning.

Relevant Theory and Pertinent Literature Review: The Attitudinal Model of Collaborative Consumption (AMCC) summarizes the potential motivations behind CC of clothing using varying consumption theories, such as Self-Determination Theory (Adomaitis, Kobia, & Saiki). These motivations include: 1) sustainability, 2) enjoyment, 3) reputation, and 4) economic benefits. According to the AMCC, these motivations contribute to a positive attitude that leads to behavioral intent and then to CC behavior. The researchers subsequently developed a survey to assess CC given the AMCC.

Grimshorn and Jordan (2015) in their study on millennials found enjoyment was a primary reason to participate in CC with consumers enjoying the unique styles and looks they could create with clothing from a clothing library. They also enjoyed knowing they were being eco-friendly and the social interactions that CC stimulated. Researchers have found reputation is an important extrinsic motivation for CC, particularly in online environments where sharing information increases visibility and a sense of community (Nov, Naaman & Ye, 2010). Grimshorn and Jordan (2015) found millennial participants felt others respected them for CC, because it meant they were environmentally aware and that it enhanced their reputation for being unique (wearing clothing not commonly found in stores). CC has been found to provide financial freedom and allows consumers to own clothing while saving money (Bardhi & Eckhardt, 2012). Given the limited research on CC of clothing and the environmental impacts of clothing products, it is important to further examine the AMCC model. The purpose of this study was to assess the AMCC model and the related survey instrument.

Method: The process of developing the questions for a survey to test the AAMC involved developing a list of 32 motivation items and 10 CC behaviors to best represent model variables from previous research literature. These items were found reliable and valid (Saiki, Adomaitis, & Kobia, 2018). After approval from the IRB (# 1310016-1), the final survey was made available to business students through an online data pool at a Midwestern University for two weeks twice during the 2018 and 2019 academic semesters. Data analysis included an exploratory factor analysis. Kaiser's criteria

known as eigenvalue greater than or equal 1 rule (Kaiser, 1960) was applied to decide the number of factors to retain (O'Connor, 2000). The sample size of 279 was fair (Comrey & Lee, 1992). The exploratory factor analysis using a principal-axis factor extraction was conducted to determine the factor structure. After the factor analysis, further analyses were made between the revised model constructs and CC Behavior.

Table. Results of the Factor Loading analysis (n=279)

	OC	S	AE	R	BI
CC is ecological	S	.84			
CC environmentally friendly	S	.82			
Participating in CC helps save natural resources	S	.81			
CC is efficient in terms of energy consumption	S	.80			
I can save money if I participate in CC	E	.71			
My participation in CC benefits me financially	E	.67			
Consumers can obtain goods as a result CC	SB	.65			
CC is a sustainable mode of CC	S	.65			
Through CC individuals can exchange valuable resources	SB	.64			
My participation in CC can improve my economic situation	EJ	.62			
People enjoy the benefits of sharing products through CC	SB	.52	.47		
All things considered, I think CC is a positive thing	A	.41	.75		
Sharing goods, services within a CC community makes sense to me	A		.73		
I think CC is enjoyable	EJ		.72		
All things considered, I find participating in CC be a wise move	A		.72		
All things considered, I think participating in CC is a good thing	A	.42	.71		
I think CC is exciting	EJ		.69		
I think CC is fun	EJ		.69		
I think CC is pleasant	EJ		.68		.41
I think CC is interesting	EJ		.63		
CC is a better mode of consumption than selling and buying	R		.46	.45	
I gain status by participating in my CC community	EC			.86	
I earn respect by participating in CC	R			.84	
People in my community who participate in CC have more prestige	R			.83	
Participating in CC community improves my image within the community	R			.76	
My participation in CC saves me time	EC			.61	
All people in a society benefit from CC	SB			.42	
I can see myself increasing my CC activities in the future	BI				.76
I plan to increase my CC in the future	BI				.75
I expect to continue to participate in CC of apparel items in the future	BI		.41		.72
It is likely that I will frequently participate in collaborative CC in the future	BI				.72
All things considered, I expect to continue CC in the future	BI		.46		.68

A=Attitude; BI=Behavioral Intent; EC = Economics; EJ = Enjoyment; OC=Original category; R=Reputation; S=Sustainability; SB=Social Benefits

Results: The eigenvalue greater or equal to one rule suggested a four-factor solution for the 32 motivation items, and the screen plot portrayed a sharp drop between items 1-4 and 5-32, strongly suggesting that four factors underlie the 32 questions. For interpretation of the four factors, a Varimax orthogonal rotation was used. This rotation had sums of squared loadings ranging from 0.41 to 0.84, and the grouping of items reminded one in cluster analysis. The first factor was *sustainability*, the second factor was *attitude/enjoyment*, while the third was *reputation*, and finally *behavioral intent* was the fourth factor (see Table 1). The sustainability construct had a Cronbach's

alpha of .93, the *attitude and enjoyment* construct had a Cronbach's alpha of .94, and the *reputation and behavioral intent* constructs had Cronbach's alpha of .87 and .95 respectively. The Cronbach's alpha of .87 could be increased to .88 if item 24 (All people in a society benefit from collaborative consumption) was deleted. A revised model was made given the above data where Sustainability, Attitude/Enjoyment, Reputation, and Behavioral Intent lead to CC behavior with clothing. Preliminary analysis revealed attitude and behavioral intent were statistically related to CC behavior.

Discussion, Further Research: Examining the motivations to CC are important in potentially influencing CC behavior, which ultimately is helpful to the environment. This study found four particular motivations, Sustainability, Attitude/Enjoyment, Reputation, and Behavior. In this sample of college students, attitudes such as having fun, enjoyment, status, and wise decision making related to CC behavior. This information can be helpful in promoting CC behavior. Further studies could examine which four factors influence other demographic groups including age, gender, demographic region, and education.

References:

- Adomaitis, A., Kobia, C., & Saiki, D. (2017). Retail apps.: Changing the traditional consumer behavior model with collaborative consumption. *International Textile and Apparel Association Proceedings*, #77. Retrieved from http://lib.dr.iastate.edu/itaa_proceedings/2016/posters/18/
- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881-898.
- Comrey, A.L., & Lee, H.B. (1992). *A First Course in Factor Analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dall Pizzol, H., Ordovás de Almeida, S., & do Couto Soares, M. (2017). Collaborative consumption: A proposed scale for measuring the construct applied to a car sharing setting. *Sustainability*, 9(5), 1-16
- Gam, H. J. (2011). Are fashion-conscious consumers more likely to adopt eco-friendly clothing? *Journal of Fashion Marketing and Management: An International Journal*, 15 (2), 178-193.
- Grimshorn, C., & Jordan, M. (2015). *Ownership-a challenged consumer ideal. A study of two collaborative consumption practices: Clothes swapping and clothing libraries* (Unpublished master's thesis). Lund University, Lund, Sweden.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20, 141-51.
- Nov, O., Naaman, M., & Ye, C. (2010). Analysis of participation in an online photo-sharing community: A multidimensional perspective. *Journal of the Association for Information Science and Technology*, 61(3), 555-566.
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments & Computers*, 32, 396-40.
- Saiki, D., Adomaitis, A.A., & Kobia, C. (2018). Examining collaborative consumption of fashion goods. *International Textile and Apparel Association Proceedings*, #78. Retrieved from https://lib.dr.iastate.edu/itaa_proceedings/2018/posters/144/