



Meta-analysis on the Effects of Fashion Product Attributes on Fashion Product Purchasing Decision

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Keywords: Meta-analysis, Fashion product attribute, Effect size, Purchasing decision

Introduction. Fashion companies need to pay attention to the fashion product attributes affecting purchase in order to improve competitiveness. However, individual studies conducted in the clothing and textile field have difficulties in integrating the study results, due to differences in study subjects. This study aims to statistically integrate existing different study results released in the past ten years through a meta-analysis, and present unified information to offer more effective information to fashion companies.

Background and Research Questions. Product attributes are the information source of consumers evaluating products, and can be divided into extrinsic and intrinsic factors, according to the attribute's nature (Olson & Jacoby, 1972). Intrinsic factors are those that cannot change a product without changing product itself, and aesthetics, functionality and quality belong to intrinsic factors. Extrinsic factors are those decided by external elements, not by product's own physical part, and price, brand and reliability belong to the extrinsic factors (Eckman et al., 1990). This study identifies the total effect size of fashion product attributes affecting fashion product purchase by integrating study results related with fashion product attributes published. This study categorizes the attributes reported as fashion product attributes into intrinsic and extrinsic factors, and offers information on effect size by fashion product attribute. Lastly, this study calculates the effect size, finds subjects sensitive to fashion product attributes according to moderate variables, and offers the information concerned.

Method. This study is a meta-analysis that statistically integrates the quantitative study results of individual studies using the effects of fashion product attributes on purchase through the effect size of correlation coefficients. The analysis data of this study is the papers published on Korean academic journals and master's and doctoral degree theses published from January 2000 to March 2015 from the databases of Korean Studies Information Service System and National Assembly Library. The data concerned was collected using search windows offered by academic journal search engines. The keywords used for data collection were purchase of clothes, apparel purchase, fashion purchase, attributes of clothes and fashion attributes, and 2,106 degree theses and 1,639 papers published on academic journals were searched as a search result. Concerning the searched theses and papers, the cases not targeting qualitative research and fashion products were excluded by reviewing the titles of them primarily. After that, the abstracts of the selected theses and papers were reviewed, and correlations were analyzed. Among them, final 24 of theses and papers were selected. As for the coding of theses and papers, the publication year, publication status, subject's characteristics and product characteristics, purchase channels and fashion product attributes were coded as major categorical variables for sub-group analysis together with correlation coefficients. The fashion product attributes categorized into intrinsic and extrinsic factors. This study analyzed coded data using CMA2.0 program. For computation

of effect size, this study used the effect size of correlation coefficients on fashion product attributes and conversion to the generally used Fisher's z scale .

Results and Discussion. To statistically put together individual study results, this study conducted a homogeneity test. As a result ($Q=805.735$, $I^2=97.145$, $df=23$, $p<.001$), the effect sizes of each study result were different, and therefore, a random-effects model was used for meta-analysis (Borenstein et al., 2009). As a result of calculating the total effect size of fashion product attributes affecting clothes purchasing decision, the total effect size was .256, which means having slightly lower effect size than medium level. According to the investigation on the effects of fashion product attributes through preceding studies, the effects of 20 product attributes were reported as significant. To categorize the details, this study classified the fashion product attributes into intrinsic and extrinsic factors. As a result of examining the effect size of categorized fashion product attributes, the mixed factors ($ES=.420$) showed bigger effect size than the intrinsic factors with .222 and the extrinsic factors with .235. This study measured the effect size, according to major categorical variables reported by existing individual studies. As a result of measuring the effect size, according to the characteristics of study subjects, the effect size was bigger in the mixed gender group ($ES=.279$) than the female group ($ES=.144$). Also, the general public group showed a bigger effect size than the collegian group (general public group's $ES=.268$, collegian group's $ES=.144$, $p<.05$). As a result of measuring the effect size, according to fashion product characteristics, significant differences were revealed in the order of sports apparel ($ES=.477$), SPA brand garment ($ES=.225$), general garment and fashion accessories ($ES=.212$) and prestigious apparel ($ES=.199$). According to measured effect size of purchase channel, the effect size was slightly bigger, when purchase was made from non-stores ($ES=.235$) than from stores ($ES=.230$), but the difference was not significant. Concerning publication type, the effect size was bigger in the unpublished studies ($ES=.252$) than the published studies ($ES=.185$), but the difference was not significant, therefore, it was judged that there was no publication bias. As a result of looking at the effect size trend, according to publication year, through meta regression analysis, the effect size of recently published study results were slightly higher, but there was no significant difference. As result of statistically integrating the studies, the fashion product attributes significantly affect purchasing decision. As for the effect size of the attributes, the mixed factors including intrinsic and extrinsic factors was highest, and the similar effect sizes of intrinsic and extrinsic factors were revealed. When the study subject was both males and females, and when it was general public, compared with collegians, the product attributes showed higher effect on purchase, when sportswear was purchased.

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