



## FEA Consumer Needs Model: Looking forward, looking back

Belinda T. Orzada and M. Jo Kallal

University of Delaware, USA

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**Introduction:** In the late 1980s the clothing and textiles profession was at a crossroads of defining an identity separate from Home Economics. Numerous interdisciplinary discussions convened (e.g., Critical Linkages, Clothing for Special Needs, etc.) as ACPTC transformed to ITAA in 1992.

It appears that apparel design scholars are currently at a similar stage of self-assessment. Bye (2010) encouraged design scholarship that creates a stronger foundation in the discipline and shares design process; “design research that can add to the knowledge base and help build theory in our field” (p. 205). The ITAA Design Education and Scholarship Committee now requires the inclusion of context and contribution within the abstracts submitted for juried review of creative design scholarship. Design scholars are encouraged to publish, as well as exhibit, the products of their creative scholarship. In fact, Lee and Jirousek (2015, p. 51) state, “a lack of knowledge about the design process holds back the design discipline.”

The state of apparel design for special needs provided the impetus for developing the conceptual framework for apparel design proposed by Lamb and Kallal in 1992. In many instances previous design solutions focused primarily on meeting “functional needs”. However, some scholars began to recognize that these wearers wanted clothing that did not differentiate them from peers, co-workers, or family.

Thus, the goal for developing the FEA Consumer Needs Model was to provide an overall conceptual framework for designing any type of apparel. The term “apparel” was used to designate a broader meaning in which fashion and functional design were inclusive. The FEA Consumer needs model considers Functional, Expressive and Aesthetic criteria in the design of apparel products. The key to the model is that it facilitates resolving design problems, whether predominantly function- or fashion-oriented, so that a design meets the needs of the intended user/use within their cultural context. The FEA Consumer Needs Model was introduced as a simple teaching tool to facilitate the design research and evaluation phases. In the almost 25-years since, use of this model has gone beyond preparing student designers to understand the needs of the user or consumer of their products to include use as a theoretical framework by practicing designers and design scholars.

**Purpose:** Our purpose in undertaking this research is descriptive. We sought to assess how use of the Lamb and Kallal (1992) FEA Consumer Needs Model and Apparel Design Framework has been demonstrated within scholarly publications and, in particular, how it has been applied as a theoretical framework for design problems.

**Sample:** Articles, abstracts, book chapters, and theses/dissertations citing Lamb and Kallal (1992) published between 1992 and 2016 were included in the study.

**Method:** A content analysis methodology was employed. A coding system was developed to analyze usage of Lamb and Kallal's paper (literature review citation, as a theoretical framework, methods/hypotheses and conclusions/implications). For those publications that applied the concepts developed in Lamb and Kallal, we examined use of the FEA Consumer Needs Model (alone), the Apparel Design Framework (as design process stages), and/or the FEA Consumer Needs Model and Apparel Design Framework combined.

**Results:** Lamb and Kallal's paper has been cited by more than 100 different first authors; some with multiple publications citing the article. This demonstrates its relevance and impact over time. Scholars from around the globe (US, Korea, China, Italy, Finland, Norway, Botswana (Africa), and Canada) have cited concepts from the paper in their literature reviews. Scholars have considered FEA criteria in the design of apparel and non-apparel items, followed the design process stages, and compared this model to other design process models. In scholarship focused on application of the conceptual framework proposed by Lamb and Kallal, many authors used the consumer needs focus to assess FEA criteria (although not always all three) for products targeted to various consumer groups. Some altered the model by either not including all three criteria, or adding additional criteria specific to their target market. Design solutions identified in the sample include those directed towards functional design for health and well-being, sports apparel and smart clothing, fashion apparel, textile design, costume design, fashion history as inspiration, and design of non-apparel items.

**Implications:** We reiterate Lennon, Johnson and Park's (2001) suggestion that theoretical underpinnings of scholarship (in this case design scholarship) should be used to guide the development of research in our field. Many authors in our sample did not elaborate how the FEA Consumer Needs Model was used beyond the first assessment of design criteria for their consumer/user. Further, many did not integrate their results and discussion of implications with findings of others or back to their stated theoretical foundation. As a limitation of this study, analysis of juried abstracts for design exhibition were not included since the requirement for citations and context is new. The authors plan to assess this in the future.

## References

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