CHAPTER 6

SUMMARY, CONCLUSIONS and RECOMMENDATIONS

This research was undertaken to determine flight attendant preferences for uniform clothing and garment characteristics. Four objectives were developed to aid in accomplishing this task.

The specific objectives of this research were as follows:

- 1. To confirm there were existing problems with the current flight attendant uniform.
- 2. To develop an instrument that could be used to gather flight attendant preferences for uniform clothing and design criteria.
- 3. To determine flight attendant preferences for uniform clothing and design criteria.
- 4. To determine if relationships existed between flight attendant age or years of service, and garment characteristics of uniform silhouette, interior design lines, and fabric.

The successful completion of the above objectives provided design criteria that could be used to recommend the preferences for the ideal uniform design of the 218 participating flight attendants for this investigation. The findings of this research revealed that the flight attendants preferred casual, non-restricting, easy care, functional uniform clothing.

In this chapter the investigation was summarized, and recommendations for future research was presented. This chapter was presented as follows: 1) summary of design process frameworks 2) summary of findings, 3) uniform design criteria/garment characteristics, 4) researcher observations during data collection, 5) recommendations for use of the study, and 6) recommendations for further research.

Summary of Design Process Frameworks

A design process is a set of actions to be carried out in a series or steps and becomes one's strategies (Jones, 1992). The process can be one of many design process frameworks available. It can be a traditional framework or one which evolves from the circumstances. Most important, one should choose whatever framework "will tell you what you don't know, but need to know, in order to proceed" (Jones, 1992, p. xxv).

The frameworks reviewed and discussed in previous chapters each contributed in part to the design process of the flight attendant study. The researcher chose to test the Boles contextual design framework in development at the time, as a fit for the flight attendant study. The framework was developed specifically for research in clothing and focused on the wearers environment, activity and the process of making designs more responsive to user needs. These were all goals of the flight attendant study. Idea development was the first step in the framework and was an ideal fit for this study. The second step of needs assessment was a logical progression and again focused on the wearer and the effect of the activity and environment on the wearer. The needs assessment step enabled the researcher to gather the preferred design criteria necessary to develop an ideal flight attendant uniform. However, this study did not proceed to the uniform development stage. The strategy of the Boles contextual design framework was logical, making it easy to develop and follow all the steps. The framework also

met the most important goal of "telling one what one doesn't know, but need to know, in order to proceed.

Summary of Findings

A questionnaire was developed as the instrument to be used to gather preferences for uniform design criteria from the flight attendants. The questionnaire was pre-tested for clarity with airline and non-airline personnel. The researcher administered the distribution of questionnaires in the flight attendant lounge of a major airline and collected the completed questionnaires for analysis. The sample consisted of 218 female flight attendants employed with an airline based in the southeastern U.S.

Each item on the questionnaire was analyzed using frequency counts and cross-tabulations to determine preferred garments and garment characteristics. Independent chi-square test were used to determine if a significant relationship existed between flight attendant age and variables relative to garment characteristics; and flight attendant years of service and variables relative to garment characteristics. The chi-square significance level for rejection was .05.

Frequency counts and cross tabulations indicated the following upper body and lower body garments and characteristics were preferred by the majority of flight attendants:

- 1). Center front button shirt with choice of long and short straight sleeves, straight shirt body, patch pocket with pen slot, and a polyester/cotton blend, solid white fabric.
- 2). A center front button, v-neck, cardigan sweater with a straight body shape and midhip length. Straight shaped long sleeves and navy blue solid color of a wash and wear blended yarn.
- 3). Slacks with a center front zipper and button closure, trouser style waistband, in seam pockets, tapered leg shape, ankle length in a wash and wear polyester/blend solid navy blue fabric.

Hypothesis 1 stated there was no relationship between flight attendant age and garment characteristics. Three sub-hypotheses, relative to garment characteristics, were created to test hypothesis 1. The findings of the sub-hypotheses indicated a significance between flight attendant age and uniform silhouette only. Therefore, sub-hypothesis 1A was rejected but sub-hypotheses 1B and 1C were not rejected. Only one of the three sub-hypotheses in hypothesis 1 was not rejected which suggested there was no relationship between flight attendant age and garment characteristics. Therefore Hypothesis 1 was not rejected. The highest level of significance in hypothesis 1 was indicated by the 46 and over age group. A greater percentage (14.5%) of those 46 and over preferred a below the knee clothing length. Additionally a greater percentage of those 46 and over preferred the raglan sleeve (21%) and three quarter length sleeve (10%).

The segments of age for this study followed the predetermined segments from studies related to women and shopping preferences (Lumpkin, McConkey, and Williams, 1984; Summers, Belleau, & Wozniak 1992; Rotherberg, 1989; and Shim & Bickle, 1994).

Hypothesis 2 stated there was no relationship between flight attendant years of service and garment characteristics. Three sub-hypotheses, relative to garment characteristics, were

created to test hypothesis 2. The findings of the sub-hypotheses indicated a significance between flight attendant years of service and fabric characteristics only. Therefore sub-hypothesis 2C was rejected but sub-hypotheses 2A and 2B were not rejected. Only one of the three sub-hypotheses in hypothesis 2 was not rejected which suggested there was no relationship between flight attendant years of service and garment characteristics. Therefore hypothesis 2 was not rejected. There was an indication of a relationship between pocket style, waist style and years of service with each range. A higher percentage (8%) of those with five years of service or less preferred a pocket with a flap. A higher percentage (10%) of those with 6-24 years of service or more preferred a patch pocket with a pen slot. The trouser style waist was preferred by a greater percentage (71%) of those with five years of service or less while a higher percentage (8%) of those with 6-24 years of service preferred the elastic waistband. A higher percentage (23%) of those with 25 years of service or more preferred a waistband with side or back elastic.

An analysis of flight attendant years in relation to flight attendant age indicated that 7% of the those in the 44 to 51 age range had only 5 years of service or less. Additionally this group had the widest spread between years of service and age, ranging from 5 to 35 years of service. All other age groups were concentrated within 15 years.

<u>Uniform Design Criteria/Garment Characteristics</u>

Three garments were listed by the majority of flight attendants as preferred uniform clothing; 1) shirt, 2) sweater, and 3) slacks. Tables 8, 9, and 10 (see p. 23,24,25) were developed to illustrate the preferred garment characteristics for each of the three garments.

It was not an objective of this research to develop prototypes from the design criteria. However, the reported design criteria could be used as guidelines for the development of future flight attendant uniforms.

Some significant relationships were indicated by the analysis of data. These relationships might also be taken into consideration in the development of future flight attendant uniforms. The highest level of significance was indicated by the 46 and over age group. A greater percentage (14.5%) of those 46 and over preferred a below the knee clothing length. Additionally a greater percentage of those 46 and over preferred the raglan sleeve (21%) and three quarter length sleeve (10%). There was a slight indication of significance between flight attendant years of service and fabric characteristics. In each years of service group there was an indication of a relationship between pocket style

and waist style. A higher percentage (8%) of those with five years of service or less preferred a pocket with a flap. A higher percentage (10%) of those with 6-24 years of service preferred a plain patch pocket and a higher percentage (22%) of those with 25 years of service or more preferred a patch pocket with a pen slot. The trouser style waist was preferred by a greater percentage (71%) of those with five years of service or less while a higher percentage (8%) of those with 6-24 years of service preferred the elastic waistband. A higher percentage (23%) of those with 25 years of service or more preferred a waistband with side or back elastic.

Data Collection Observations

During the administration of the instrument, the researcher noted factors that influenced the responses of the flight attendants, such as: 1) researcher clothing, 2) time of month, and 3) weather. When the researcher wore colors or styles that appeared comfortable or pleasing to the flight attendants, request for those items appeared on the questionnaire. When the researcher wore navy blue twill slacks, white turtle-neck top and a kelly green cardigan sweater the request for those items and colors increased as compared to the response for those items and colors on previous days. Another example was an outfit consisting of a red mid thigh blazer, black taper slacks and black silk turtle-neck the response for similar items, colors and shape appeared more often. Upon realizing that the flight attendants were being influenced in that manner, the researcher attempted to wear the same basic outfit each day consisting of khaki twill slacks, and navy cotton knit shirt with Virginia Tech identification for the remainder of the administration.

A specific time of the month appeared to influence responses. Flight attendants receive bid sheets during the month to bid for future trips. There is a time limit on the bidding process so the flight attendants are consumed with that duty for about a week. During that week, the response from flight attendants was limited. However, at the beginning of a new month, with new flying trips, the response was high when more flight attendants were checking in and out for duty.

Weather conditions also appeared to influence responses. When the weather was foul and flights were canceled or delayed there were more idle flight attendants available to participate in the research. Foul weather increased the request for foul weather gear and temperatures were reflected by the request for long or short sleeves and heavy or light weight articles of clothing.

Flight attendants were receptive and interested in the study. The findings of this investigation and flight attendant comments indicated that the flight attendants want to have a voice in choosing the uniforms they are expected to wear. The preference for a casual uniform was precipitated by the need for a durable and physically functional style uniform.

Recommendations for Use of the Study

The findings of this study should be beneficial to uniform manufacturing companies and airline management who may see that flight attendants desire a uniform that functions for all their needs. The preferred design criteria/garment characteristics could be incorporated into a current uniform design by manufacturers.

Recommendations for Future Study

To complete the design criteria for this research and lead to the development of a prototype, further investigations could be conducted in the following areas:

1. Preferences and expectations of fellow workers, administration and passengers as related to the flight attendant uniforms.

- 2. Studies of physical movement while flight attendants perform duties during flight, perform emergency procedures and juggle their own luggage and food in the airport.
- 3. Studies of the high percentage of foot problems that result from long hours of standing and walking while on duty and the recommendation of a more comfortable shoe to help eliminate those problems and reduce fatigue.
- 4. Flight attendants could be interviewed from other airlines.
- 5. Environmental studies related to temperature and impact could also be pursued.
- 6. Consideration should be given to researchers clothing when administering instrument and attempt to wear clothing that will not influence or bias subject responses.