

# Attitudes and Behaviors of Uniformed Flight Attendants: A Scale Development Study

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## Abstract

Uniform creates a corporate image in organizations and gives a message to the society. Especially airline companies see the biggest visual identity carriers of their image, culture, corporate identity and status as the flight attendants and their uniforms who spend the longest time with the passenger. The purpose of this study is to develop a scale suitable for determining the dimensions of the attitudes and behaviors of the uniformed flight attendants perceived by the passengers. Data were obtained using the survey technique. The scale of uniform components was developed by researchers. Explanatory factor analysis (EFA) and confirmatory factor analysis (CFA) were applied to the data. Reliability analyzes were conducted to determine the internal consistency coefficients (Cronbach's alpha) of the scales. The confirmatory factor analysis results confirmed the structure of the two-dimensional Flight Attendants Uniformed Attitudes-Behavior Scale developed during the study. As a result of the validity and reliability analysis, it was concluded that the developed scale is a reliable and valid data collection tool.

**Keywords:** Uniform, Airlines, Flight Attendants, Scale Development

## 1. INTRODUCTION

In an increasingly competitive airline industry, it is important for airlines to improve their corporate image. It has been understood that cabin crew uniforms are an important component of corporate image in global competition (Chiqian and Misuk, 2013). The uniform gives passengers many messages about the airline. The uniform is a symbol that indicates that those who wear it are members of a special group, abide by certain norms, and will display standard roles that master the basic skills and values of the group. It is aimed to create the same perception of corporate identity through the uniform (Çakın & Koç, 2016; Spragley & Francis 2006).

Air transport provides a safe, secure and comfortable service. Comfort covers the interior design such as the type of seats, the distance between the seats, the number of toilets, the number of classes to be placed in the cabin, the spaciousness and appearance of the cabin; It also includes in-flight services such as food and beverage service during the flight, their quantity and variety, the taste of the catering, the number of flight attendants, their uniformed attitudes and behaviors, and in-flight movie shows. Uniforms are an integral part of the cabin attendant's job. They also help make the service more tangible (for example, safe, secure, welcoming, hygienic) by giving the passenger an idea of what kind of service to expect (Nelson and Bowen, 2000).

In this context, it is important to create a picture of passenger views regarding the uniformed attitudes and behaviors of cabin attendants who communicate with passengers for a long time. In this study, a theoretical framework was created by first reviewing the relevant literature in order to reveal the dimensions of the attitudes and behaviors of uniformed flight attendants. Then, it was tried to analyze the collected data and interpret the obtained findings.

## 2. LITERATURE REVIEW

## 2.1. The Concept and Functions of Uniform

The word "uniforme" in Italian, used in its uniform, monotonous meanings, is formed by combining the word "form" with the word "uni", which comes to the meanings of shape, form, mold, appearance, image, style (Tanyildiz, 2020).

While investigating the effect of the uniform on the perception of corporate identity in this study, we wanted to go beyond the color, model and employee perception that came to the fore in previous studies. We wanted to measure the perception of the passengers about the details such as diction, wearing style, make-up, general appearance, courtesy rules, communication with the passenger, which are described as part of the uniform specified in the cabin crew uniform handbook. Uniform in the aviation industry makes a non-verbal sense that the wearer is authoritative and professional (Lehna et al. 1999), is responsible for passenger safety and security, cares about passenger comfort, and has the necessary information compared to its competitors. Therefore, we have gathered the function of the uniform under five main headings: authority building, professionalism, passenger safety and security, passenger comfort, competitive position.

**Establishing Authority:** The uniform creates a vehicle that conveys messages to the passenger about the values of the airline. Again, it can give the wearer a sense of professionalism and self-confidence. As such, it helps to increase self-confidence by allowing the user to fulfill their role or "behave as expected" (Nelson and Bowen, 2000). The uniform makes it possible to conduct business, thanks to the authority it establishes. The individual wearing the uniform pays attention to his own movements and influences with his stance and controlled attitude (Black, 2013). Uniforms are symbols of power and authority (Kalisch and Kalisch, 1985).

**Professionalism:** Despite the growing opposition, the view that wearing a uniform promotes professionalism is dominant in the literature. Researchers have revealed that the uniform provides a certain level of confidence for employees to fulfill their roles and to be psychologically prepared. The uniform is a symbolic statement that an individual will adhere to group norms and standardized roles and have mastered related skills. By wearing a uniform, the person implicitly states that he will adhere to the values and beliefs of the organization, master the skills necessary for the position, and be responsible for his/her actions (Adomaitis, and Johnson, 2005; Black, 2013).

**Passenger Safety and Security:** Creating identities is important in flight operation (Adomaitis, and Johnson, 2005). Knowing the identity of crew members, especially during flight, affects feelings of safety and security in flight environments. Thus, a uniform not only gives a feeling of self-confidence and professionalism to those who use it, but also gives a feeling of trust and security to those who receive service. As a result, it increases passengers' perception of safety (Sparrow, 1991).

**Passenger Comfort:** The uniform conceals it rather than a costume that reveals identity. In other words, it suppresses individuality and serves as an indicator of the level of commitment to the message it gives (Crane, 2003). Uniform symbolically determines that employees comply with the culture of the institution, group norms and standard roles and act accordingly (Joseph, 1986). The uniform allows the airline to speak a uniform language, responding to comfort and safety expectations (Black, 2013).

**Competitive Position:** One of the most important competitive forces of the airlines, which is the subject of our study, is to create positive images. Thus, every airline uses uniforms as a visual element to more effectively convey the corporate image while providing cabin services (Kim et al., 2015).

From the first days of aviation, flight attendants were given instructions to be followed while in uniform (Black, 2013). These rules of appearance, attitude and behavior can be summarized as follows:

**Table 1.** Airline Uniform Guide Appearance Attitude and Behavior Standards

Dimension	Expressions
Rules of Appearance	<p>The uniform will always be clean, spotless, and ironed, with full buttons and badges. The uniform jacket will be kept buttoned while in full uniform. Shoes must be dyed, dust-free and mud-free. Jackets are not worn during the service. Only standard travel suitcases issued by the airline are used on flights. Nothing belonging to the uniform can be used with civilian clothing and any accessories belonging to civilian clothing cannot be used with the uniform. Jacket and vest pockets cannot be used as they are full and bulging. Hair should be styled neatly and with care. Nail and hand care should be taken care of. Women flight attendants should wear appropriate make-up.</p>
Rules of Attitude and Behavior	<p>Addresses that damage the corporate and professional image should be avoided. The smile on the face should be natural when communicating with your guest. The body language should be positive throughout the entire welcoming process. Welcoming should be the guests by making eye contact and saying "Welcome". The walking in the cabin should be as softly as possible. In general, attention should be paid to personal space in communication. Saying goodbye to the passenger is as important as welcoming them.</p>

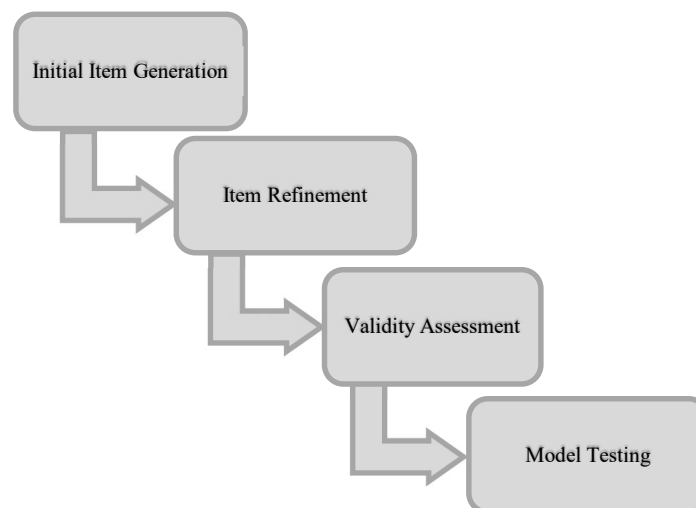
### 3. METHODOLOGY AND RESULTS

#### 3.1. Study Design

When the existing literature is examined, no widely used scale has been found to measure the role of the attitudes and behaviors of the uniformed flight attendants. The scale development phase of this study was based on Churchill's (1979) steps (Wang, Hu, and Zhang, 2020) (see the details in fig. 2). Explanatory factor analysis (EFA) was used to determine the sub-dimensions of the scales used, and confirmatory factor analysis (CFA) was applied to measure whether the concepts were confirmed by the data. Reliability analyzes were performed to determine the internal consistency coefficients (Cronbach's alpha) of the scales.

#### 3.2. Scale Development

##### 3.2.1. Step I. Initial Item Generation



**Figure 1.** Methodological steps

One of the most important stages of scale development is to define the conceptual framework very well (Wymer & Alves, 2013; Cohen & Swerdlik, 2010). For this purpose, the literature on the concept of uniform

was examined in depth with the deductive method and an item pool was created that captures the structures in the conceptual model. Some items have been added to this item pool based on the first author's personal experience in the airline. As a result of the content analysis, a total of 13 measurement items were created with five themes representing the dimensions of flight attendants uniformed attitudes-behavior (UTO) authority building, professionalism, passenger safety and security, passenger comfort, competitive position (see Table 2).

### 3.2.2. Step II. Item Refinement

After collecting the items and dimensions that can help characterize the flight attendants uniformed attitudes-behavior questions, in-depth information was obtained by the 'verbal panel discussion' method (Erkuş, 2016) and their ideas were consulted on whether the collected items were adaptable. According to the opinions of the academics and industry representatives (6), problematic or repetitive items were removed or necessary corrections were made. In other words, in order to determine the scope validity of the scale, item score values were determined, items with insufficient content validity indices (.80) were removed from the scale. Thus, the information selected through the panel discussion was reduced from 23 to 13 items (see Table 4). For the surveys, we created 13 statements describing the perception of the passengers. The data collection tool has become ready for pilot study by taking its first form. Initial Generation of UTO dimensions and items given in Table 2 and projected dimensions and expressions of scales given in Table 3.

**Table 2.** Initial Generation of UTO Dimensions and Items

Dimension	Item	References
Authority Building	A Symbol of Powerstatus	Campbell (2000), Adomaitis, and Johnson (2005), Lehna et al. (1999), Campbell et al. (2000), Rubinstein (1995), Lehna et al. (1999), Rubinstein (1995) Adomaitis, and Johnson (2005), Kalisch (1985), Black (2013). Nelson and Bowen (2000), Skorupski and Rea (2006).
	Representation Power	Kalisch (1985), Joseph (1986).
Professionalism	Influences the Behavior of the User	Rubinstein (1995).
	High Respect	Nam, and Kim (2003), Adomaitis, and Johnson (2005).
	A Symbolic of Group Norms	Black (2013), Adomaitis, and Johnson (2005), Crane (2003), Silva-Santos et al. (2017), Aygul (2011).
	A Symbolic of Standardized Roles	Black (2013), Adomaitis, and Johnson (2005), Crane (2003), Silva-Santos et al. (2017), Park (2019), Nelson and Bowen (2000).
Passenger Safety and Security	Professionalism	Skorupski and Rea (2006), Lehna et al. (1999), Pearson et al. (2001), Nelson and Bowen (2000), Skorupski and Rea (2006), Shaw and Timmons (2010), Albert et al. (2008), Mangum et al. (1997) Sparrow (1991).
	Control and Discipline	Black (2013), Sterman (2011).
	Calm the Nerves on Board	Black (2013)
	Safety	Sparrow (1991), Rubinstein (1995), Nelson and Bowen (2000), Haise and Rucker (2003).
Passenger Comfort	Security	Black (2013), Rubinstein (1995), Nelson and Bowen (2000), Haise and Rucker (2003).
	Comfort	Kim et al. (2015), Nelson and Bowen (2000).
Competitive Position	A Symbolic of Related Skills	Black (2013), Silva-Santos et al. (2017), Mangum et al. (1997), Skorupski and Rea (2006), Adomaitis, and Johnson (2005).
	Service Quality	Pramudya and Sunaryo (2018), Shafiee et al. (2014), Wilson (2018).
	Members of Organization	Kim et al. (2015), Rubinstein (1995), Joseph (1986).
	Identity of the Institution	Barnes and Newton (2020), Black (2013).
	Visually Message	Kim et al. (2015), Skorupski and Rea (2006), Nelson and Bowen (2000), Crane (2003).
	Face of Airlines	Black (2013), Zeithaml et al. (1996).
	Group Identity	Kalisch (1985), Joseph (1986), Rubinstein (1995), Crane (2003).
	A Non-Verbal Communication Tool	Sterman (2011), Kim et al. (2015), Kalisch (1985).
	Representation of Organization's Culture	Barnes and Newton (2020).
	Positive Identity	Sterman (2011), Nam, and Kim (2003), Santos et al. (2010), Kim et al. (2015), Dirsehana and Kurtulu (2018), Nelson and Bowen (2000), Joseph and Alex (1972), Rubinstein (1995), Skorupski and Rea (2006), Tanyildiz (2020).
	Increase the Competitiveness	Nam, and Kim (2003), Santos et al. (2010), Kim et al. (2015), Namgung&Lee (2016), Park (2019), Nam and Kim (2003), Weon&Kim (2001), Craik (2005).

**Table 3.** *Projected Dimensions and Expressions*

Dimension	Expressions
Authority Building	Uniforms integrity of airline cabin attendants is respected.
Professionalism	Images of airline uniformed cabin attendants create an aesthetic perception. Airline uniformed cabin attendants comply with the requirements of professionalism. Airline uniformed cabin attendants are good at communicating and maintaining positive communication with passengers.
Passenger Safety and Security	Airline uniformed cabin attendants create a sense of security and safety for passengers.
Passenger Comfort	Airline uniformed cabin attendants display a positive attitude when interacting with passengers. Airline uniformed cabin attendants provide fast and qualified service to passengers. Airline uniformed cabin attendants always have a helpful attitude. Cabin crew in airline uniforms take a sincere interest in the problems conveyed.
Competitive Position	The appearance-image of the flight crew in airline uniforms makes me positive. Airline uniformed cabin attendants usually have a neat appearance. The appearance and behavior of airline uniformed cabin attendants conforms to the corporate representation of the airline.

Developed scale items were sent to experts to get their opinions and assess both Item-Content Validity Index (I-CVI) and Scale-Content Validity Index (S-CVI). As per results given in Table 4, both indexes were found to be 0.95, hence we concluded that the content validity was established.

**Table 4.** *The Content Validity Indexes*

Item	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Number of Agreement	I-CVI
1	4	4	4	4	4	4	6	1,00
2	4	3	4	3	4	4	6	1,00
3	2	4	3	4	4	3	5	0.83
4	4	3	2	3	4	4	5	0.83
5	3	4	4	4	4	4	6	1,00
6	3	2	3	3	4	3	5	0.83
7	3	3	4	3	4	3	6	1,00
8	4	4	3	4	3	3	6	1,00
9	4	3	3	3	3	3	6	1,00
10	4	4	4	4	3	4	6	1,00
11	3	3	4	3	4	4	6	1,00
12	4	3	4	3	2	4	5	0.83
13	3	4	4	4	4	4	6	1,00
							<b>S-CVI</b>	<b>0.95</b>
<b>Proportion relevant</b>	<b>0.92</b>	<b>0.92</b>	<b>0.92</b>	<b>1.00</b>	<b>0.92</b>	<b>1.00</b>	<b>S-CVI/UA</b>	<b>0.95</b>

Scale Content Validity Index (S-CVI), Item Content Validity Index (I-CVI), Universal Agreement Calculation Method (UA)

After developing scale statements based on literature reviews and expert opinions, a pilot study was conducted with a sample size of 60 participants between March 2021 and April 2021 in order to ensure the soundness of the survey questions and to check whether the collected data answered the research questions. Data were collected face-to-face from passengers of airlines operating at Istanbul Airport in Turkey. In the pilot application phase of the research, the questionnaire consists of 13 questions and two parts: (i) demographic information questions such as gender, age, marital status, occupation; (ii) uniformed attitude-behavior scale of flight attendants. The pre-evaluation questionnaire was graded as a 5-Point Likert Type (1: Strongly Disagree, 2: Disagree, 3: Neither Agree nor Disagree, 4: Agree, and 5: Strongly Agree). Data from the pilot study was analyzed to discover any disadvantages or potential threats to the survey questions. The reliability of the questions/statements was checked by using Cronbach's alpha test via SPSS 24 and also subjected to explanatory factor analysis. The Cronbach Alpha value of the scale developed in this study was calculated as 0.806, which gave us the result that the scale was reliable. One item "Airline uniformed flight attendants create a sense of security and safety for passengers" was excluded from the first scale due to the emergence of cross loaded.

Inappropriate items were eliminated from the scale, which passed the expert opinion and the pilot study stages,

and thus the scale was given its final form. The final application questionnaire, consisting of 1 scale with a total of 13 items, excluding demographic questions, was filled in by 520 participants in March and April 2021. 10 responses that were not reliable for various reasons were excluded from the data, and a total of 501 participants' responses were evaluated in the analysis. Airlines operating on domestic routes in Turkey constitute the universe of the research in this study. Passengers who have boarded an aircraft at least once in their lifetime were selected as target participants. Since data was collected during the Covid-19 Pandemic process, the survey was conducted online due to the scarcity of flights. Convenience sampling method was preferred due to pandemic limitations, which is one of the sampling methods based on probability in the research.

**Table 5. Demographic of the Respondents**

Characteristic	Category	Frequency	Percentage (%)
Gender	Female	311	62.1
	Male	190	37.9
Age	18-25	100	20.0
	26-35	145	28.9
	36-45	129	25.7
	46-55	101	20.2
	>55	26	5.2
Education	Primary	4	0.8
	Secondary	49	9.8
	Associate Degree	63	12.6
	Bachelor	247	49.3
	Master degree or above	138	27.5
Sector	Private	327	65.3
	Public	86	17.2
	Retired	38	7.6
	Other	50	10.0
City of domicile	Istanbul	341	68.1
	Ankara	34	6.8
	Izmir	17	3.4
	Other	109	21.8
Frequency of flights per year	1-3	237	47.3
	4-6	131	26.1
	7-12	47	9.4
	>12	86	17.2
Preferred flight class	Economy	476	95.0
	Business	25	5.0
Preferred airline	Turkish Airlines	237	47.4
	Anadolujet	92	18.2
	Pegasus	147	29.4
	Onur Air	14	2.8
	Sun Express	9	1.8
	Other	2	0.5
Total		501	100.0

Data were analyzed using the SPSS 24 package program to examine the demographic characteristics of the participants (gender, age, education, sector, city of domicile, frequency of flights per year, preferred class, preferred airline) (see Table 5). More than half of the respondents were female (62.1%). Participants were mostly 26 to 35 (28.9%) or between the ages of 36-45 (25.7%). Most of the respondents had university (49.3%) or postgraduate education (27.5%) More than half of the respondents worked in the private sector (65.3%) and lived in Istanbul (68.1%). Looking at the annual flight frequency of the participants, most of them fly one to three times (47.3%) or four to six times (32.2%) a year. The participants prefer almost economy flight class (95%). The majority of the participants prefer Turkish Airlines (47.4%) or Pegasus Airlines (29.4%).

Explanatory factor analysis is widely used to ensure construct validity (Adams et al., 2007; Ho, 2006). Normality Kolmogorov-Smirnov test was used to test the suitability of the data for analysis. As a result of the

normality test, the skewness and kurtosis coefficients of the scales were -2 to +2; It was accepted that the data in question showed a normal distribution (Bryne, 2010). We performed the Kaiser–Meyer–Olkin (KMO) test to determine sampling adequacy, which requires a minimum acceptable value of 0.5. The KMO value of the UTO scale was 0.900; The KMO value of the corporate image scale was 0.845 and the KMO value of the purchase intention scale was 0.762, which proved to be sufficient for a desired sampling. Bartlett's test showed significance ( $p < 0.001$ ) by marking adequate relationships between constructs. Thus, we determined that we could proceed with exploratory factor analysis (EFA) and that the results could be reliable. Explanatory factor analysis was applied to determine the factor structures for the scales used in the study. In the process of deciding on the total number of factors, a principal component analysis with varimax rotation method was used. One item “Airline uniformed flight attendants comply with the requirements of professionalism” was excluded from the first scale due to the emergence of cross loaded. As a result of EFA, a structure consisting of 10 items and two factors explaining 67.774% of the total variance was obtained. It originally had an eight-factor structure. Considering the meanings of the items, factors were named as "Service Quality" and "Corporate Perception", respectively. The results of the factor analysis for the first scale is summarized in Table 6.

**Table 6.** UTO Scale Items and Factor Loadings

Factors	Scale Items	Factor Loadings	Eigen Values	Variance Explained (%)
Factor 1 Service Quality	Airline uniformed flight attendants always have a helpful attitude.	0.861	4.988	37.291
	Airline uniformed flight attendants are good at communicating and maintaining positive communication with passengers.	0.842		
	Flight attendants in airline uniforms take a sincere interest in the problems conveyed.	0.829		
	Airline uniformed flight attendants provide fast and qualified service to passengers.	0.800		
	Airline uniformed flight attendants display a positive attitude when interacting with passengers.	0.718		
Factor 2 Airline Image	The appearance-image of the flight crew in airline uniforms makes me positive.”	0.817	1.389	26.484
	Images of airline uniformed flight attendants create an aesthetic perception.	0.725		
	The appearance and behavior of airline uniformed flight attendants conforms to the corporate representation of the airline.	0.646		
	Uniforms integrity of airline flight attendants is respected.	0.616		
	Airline uniformed flight attendants usually have a neat appearance.	0.591		
Total variance explained				63.774

In order to reveal whether the scales used in the study differ according to the characteristics of the passengers, the t-Test was performed between groups with two, and the Anova Test between groups with more than two. Passengers aged 18-25 have higher perceptions of UTOF compared to other passengers, while passengers aged 56 and over have lower perceptions of Service Quality than other passengers.

### 3.2.3. Step III. Validity Assessment

Confirmatory factor analysis (CFA) was performed using the AMOS 23 package program to confirm the factor results obtained from the EFA tests and to prove the study items. The properties of the scale items were analyzed with model fit indices. It was assessed using the commonly used goodness-of-fit indicator proposed (Hu&Bentler, 1998; Mackenzie et al., 2011): chi-square ( $\chi^2/df$ ), comparative index of fit (CFI), root mean square error approximation (RMSEA), the goodness of fit index (GFI) and root mean square residual (RMR). The modification indices of the model were examined and the suggested relations between the theoretically supported error terms were added (Jöreskog & Sörbom, 1993). Having P values less than 0.01 means that the items loaded on the factors correctly. When we look at the standardized path coefficients, it is seen that the



item that has the most effect on F1 in the UTO scale is item 12 ( $\beta_0=.867$ ) and item 2 on F2 ( $\beta_0=.746$ ). When the fit index values were examined, it was concluded that the scales generally showed a good level of fit. In the confirmatory factor analysis, the path coefficients of all the items under the factors were found to be statistically significant. It was concluded that the scales provided factorial construct validity since each factor correctly and meaningfully represented the variables constituting it (see Table 7).

After the evaluation of goodness of fit, the reliability, convergent and discriminant validity were examined (see Table 7). For the convergent validity of the measurement models, firstly the mean variance (AVE) and construct reliability (CR) were calculated based on the factor loading values obtained as a result of DFA. It is recommended that  $AVE \geq .5$ ;  $CR \geq .5$  and  $CR \geq AVE$  for convergent validity (Hair et al., 2014). These results show that all factors have high confidence (All CR values above .70) (Fornell & Larcker, 1981). The fact that the AVE values of the factors are lower than the CR values and the AVE value is above .5 indicate that the factors have convergent validity.

**Table 7.** Confirmatory Factor Analysis Results

Scale	Items	Path	Factor	$\beta_0$	$\beta_1$	CMIN/DF	RMSEA	CFI	GFI	AVE	CR
UTO	UTO6	<---	F1	.768	1.000	4.008	.078	.960	.952	.54	.92
	UTO10	<---	F1	.742	1.044						
	UTO9	<---	F1	.818	1.199						
	UTO12	<---	F1	.867	1.172						
	UTO11	<---	F1	.824	1.193						
	UTO2	<---	F2	.746	1.000						
	UTO7	<---	F2	.720	1.156						
	UTO3	<---	F2	.701	.989						
	UTO4	<---	F2	.445	.766						
	UTO1	<---	F2	.629	.981						

$\beta_0$ : Standard path coefficients     $\beta_1$ : Non-standard path coefficients

Finally, discriminant validity, which is one of the validity types, is carried out to determine whether the factors formed after explanatory factor analysis are distinctive and to support the construct validity of the scales. It is used to reveal the positive (+) and negative (-) side and level of the relationship between the analyzed correlation results. In order to evaluate the discriminant validity in the study, the relationships between the factors of the crisis scale were analyzed using the Pearson correlation technique. To ensure discriminant validity, correlations between constructs are recommended not to exceed 0.85 according to Kline (2011), and 0.90 according to Hair et al. (2014). As shown in Table 8, correlation values between constructs in all three measurement models support discriminant validity.

Constructs		1	2	3	4	5
UTOF1	1. Service Quality	1.000				
UTOF2	2. Airline Image	.566**	1.000			

\*\*p<0.001

#### 4. CONCLUSION

Appearance is an important element of nonverbal communication (Kalisch and Kalisch, 1985). Custom clothing is often seen as a symbolic representation of an organization's identity and culture (Barnes and Newton, 2020). Uniforms have certain forms or differences depending on the purpose. It gives the user a sense of belonging and requires the audience to expect actions appropriate to their role (Park, 2019). In uniformed businesses, customers tend to form first impressions, make judgments about professionalism, and form lasting ideas based on visual cues (Skorupski and Rea, 2006).

In this study, it was tried to create a valid and reliable scale that could measure the opinions of the passengers



about the attitudes and behaviors of the uniformed cabin attendants. With the data collected from 501 participants, it was concluded that it was appropriate to perform CFA after the EFA was done first. The fit indices of the CFA conducted within the scope of this scale, on the other hand, revealed that the model was acceptable. It is possible to list the factors of the scale developed as the attitudes and behaviors of uniformed cabin attendants as follows:

- Service Quality: Cabin crew uniforms represent the airline. The behavior in uniform can affect a passenger's perception of service quality. Since the uniform is a tool to identify the attendants, it presents the attendant to the passenger as an addressee to whom he or she can ask questions or convey the problem he or she has experienced during the welcome, flight, and farewell of the passengers.
- Airline Image: The flight uniforms worn by cabin crews today are a moving visual identity that influences the image formation of a company. In this respect, both the behavior in the in-flight uniform and the environment in which the flight attendant is in uniform creates a corporate image of the airline to which the flight attendant belongs.

The findings of the study reveal that a reliable and valid scale has been developed to measure the dimensions of uniformed behavior of cabin crew in separate structures.

### **Limitations & further research**

There are some limitations in addition to the contributions of this study. This research was conducted only at airports in Istanbul and online due to the pandemic, time and cost constraints. In addition, due to the uncontrollable variables related to international flights due to the pandemic, only domestic flights were included in the study.

Since the flight attendants uniformed attitudes-behavior scale was developed by researchers, it is thought to make an important contribution to the aviation literature. This approach can be used by academics as a new measurement technique. The attitude and behavior scale of uniformed cabin attendants developed within the scope of the study and its relations with other dimensions of passengers' behaviors can be examined. For example, the attitudes and behaviors of uniformed cabin crew may affect the passengers' re-use of that airline.

### **REFERENCES**

- Adams, J., Khan, H. T. A. Reaside, R. and White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. Los Angeles-London-New Delhi-Singapore: Sage.
- Adomaitis, A. D and Johnson, K.P. (2005). Casual Versus Formal Uniforms: Flight Attendants' Self-perceptions and Perceived Appraisals by Others. *International Textile & Apparel Association*. 23(2), 88-101.
- Albert, M. N., Wocial, L., Meyer, H. K., Na, J. and Trochelman, K. (2008). Impact of Nurses' Uniforms on Patient and Family Perceptions of Nurse Professionalism. *Applied Nursing Research*. 21, 181-190.
- Aygu, I. (2011). Trends in Civil Aviation Flight Personnel Uniform Design and a Proposal. Marmara University Fine Arts Institute Industrial Product Design Department. *Unpublished Master Thesis*.
- Barnes, V. and Newton, L. (2020): Women, Uniforms and Brand Identity in Barclays Bank. Business History. *Informa UK Limited, trading as Taylor & Francis Group*, 1-30.
- Black, P. (2013). Lines of Flight: The Female Flight Attendant Uniform. *Fashion Theory The Journal of Dress Body & Culture*. 17(2), 179-196.
- Byrne, B. M. (2010). *Multivariate Applications Series. Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming*. (2nd ed.). Routledge/Taylor & Francis Group.
- Çakın, N. and Koç, S. (2016). Hastanelerde Personel Giyimi, Kişisel Görünüm Politikaları ve Hasta Bakımına Etkisi. *Hemşirelikte Eğitim ve Araştırma Dergisi* 201, 163-9.
- Campbell, S., O'Malley, C, Watson, D, Charlwood, J. And Lowson, S. (2000). The Image of Children's Nurse: A Study of Qualities Required by Families of Children's Nurses' Uniform. *Journal of Clinical Nursing*. 9, 71- 82.
- Chiqian, S. and Misuk, L. (2013). A Comparison Analysis of Color Characteristics and Images in Flight Attendant Uniforms of Korea, China and Japan. *Journal of Fashion Business*. 17(6), 111-124.

- Cohen, R. J. and Swerdlik, M. E. (2010). *Test Development: Psychological Testing and Assessment*. New York: McGraw-Hill.
- Craik, J. (2005). *Uniforms Exposed: From Conformity To Transgression*. Oxford: Berg Publishers.
- Crane, D. (2000). *Fashion And Its Special Agendas Class, Gender, and Identity in Clothing*. The University of Chicago Press.
- Dirschana, T. Kurtulus, S. (2018). Measuring Brand Image Using A Cognitive Approach: Representing Brands As A Network in the Turkish Airline Industry. *Journal of Air Transport Management*. 67, 85–93.
- Erkus, A. (2016). *Measurement and Scale Development in Psychology-I*. 3rd. Edition. Ankara: Pegem Academy Publications.
- Fornell, C. & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*. 18(1), 39–50.
- Hair, J.F. (2014). *A Primer on Partial Least Squares Structural Equations Modeling (PLS- SEM)*. SAGE Publications, Thousand Oaks.
- Haise, C. L. and Rucker, M. (2003). The Flight Attendant Uniform: Effects Of Selected Variables on Flight Attendant Image, Uniform Preference, and Employee Satisfaction. *Social Behavior and Personality*, 31(6), 565-576.
- Ho, R. (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. New York: Chapman and Hall/CRC.
- Hu, L., & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*. 6(1), 1–55.
- Joseph, N. and Alex, N. (1972). The Uniform: A Sociological Perspective. *American Journal of Sociology*. 77, 719-730.
- Joseph, M. (1986). *Uniforms and Nonuniforms: Communication Through Clothing*. New York: Greenwood Press.
- Jöreskog, K. G. & Sörbom, D. (1993). *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*. Scientific Software International; Lawrence Erlbaum Associates, Inc.
- Kalisch, B. and Kalish, P. (1985). Dressing for Success. *American Journal of Nursing*. 85, 887-893.
- Kim, J. U., Jang Hyeon Kim, J. H. and Kim, Y. S. (2015). Aesthetic Characteristics of Globalism in Flight Attendants' Uniform Design. *Fashion & Textile Research Journal*. 17 (1), 42-52.
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling*. New York: Guilford Press.
- Lehna, C., Pfoutz, S., Peterson T. G., Degner, K., Grubaugh, K. And Lorenz, L. (1999). Nursing Attire: Indicators of Professionalism?. *Journal of Professional Nursing*. 15(3), 192-199.
- Mackenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct Measurement and Validation Procedures In MIS and Behavioral Research: Integrating New And Existing Techniques. *MIS Quarterly*. 35(2), 293–334.
- Mangum S, Garrison C, Lind C and Hilton, H. (1997). First Impressions of the Nurse and Nursing Care. *Nurs Care Qual*. 11(5), 39-47.
- Nam, Y. S. and Kim, B. H. (2003). *A Study on the Uniform Design Based on Korean Image*. *Journal of Fashion Business*. 7 (6), 10-20.
- Namgung, J. R., & Lee, H. Y. (2016). Customer Loyalty according to Low-Cost Carriers Flight Attendant's Uniforms : Focusing on the Mediating Effects of Emotional Image. *Journal of Tourism & Leisure Research*, 28(5), 261-278 .
- Nelson, K. And Bowen, J. (2000). The Effect of Employee Uniform on Employee Satisfaction. *The Cornell Hotel and Restaurant Administration Quarterly*. 41(2), 86–95.
- Park, H. (2019). The Customer Attitude to Airline's Color Image-Focused on the Color Image of Airline Cabin Crew's Uniforms. *Hye-Yoon Park / Journal of Distribution Science*. 17(2).43-51.
- Pearson A., Baker H., Walsh K. and Fitzgerald M. (2001). Contemporary Nurses' Uniforms-History and Traditions. *Journal of Nursing Management*. 9, 147-152.
- Pramudya, A. K. and Sunaryo, A. S. (2018). The Role of Customer Trust in Mediating Influence of Brand Image and Brand Awareness of the Purchase Intention in Airline Tickets Online. *Journal of Applied Management (JAM)*. 16 (2), 224-233.
- Rubinstein, R. P. (1995). *Dress Codes: Meanings and Messages in American Culture*. Boulder: Westview Press.
- Santos, M., Rebelo, F., Santos, R. and Teles, J. (2010). Flight Attendant Uniform Concept Preference Study Using Kansei Ergonomics. *International Conference on Kansei Engineering and Emotion Research*.
- Shafiee, M.M., Sanayei, A., Shahin, A. and Dolatabadi, H. R. (2014). The Role of brand image in Forming Airlines Passengers' Purchase Intention: Study of Iran Aviation Industry. *Int. J. Services and Operations Management*, 19(3), 360-376.
- Silva-Santos, M. C., Oliveira, M. S., Giacomini, A. M., Laktim, M. C. and Baruaque- Ramos, J. (2017). Flammability on Textile of Flight Crew Professional Clothing. *In IOP Conference Series: Materials Science and Engineering*. 254(5), 1-6.
- Skorupski, V. J., & Rea, R. E. (2006). Patients' Perceptions of Today's Nursing Attire: Exploring Dual Images. *JONA: The Journal of Nursing Administration*. 36(9), 393-401.
- Sparrow, S. (1991) An Exploration of the Role of the Nurses' Uniform Through A Period of Non-Uniform Wear on An Acute Medical Ward. *Journal of Advanced Nursing*. 16 (1), 116-122.

- Spragley, F. and Francis, K. (2006). Nursing Uniforms: Professional Symbol or Outdated Relic?. *Nursing Management*. 37(10), 55-58.
- Sterman, S. (2011). The Protective Role of Uniforms and Their Communication Power in Society. *Tedi*. 1, 9 – 15.
- Tanyildiz, G. (2020). The Change of History and Clothing of Istanbul Firefighters from the 19th Century to Present. *Unpublished MA Thesis*. Isik University.
- Wang, C., Hu, R. and Zhang, T. (2020). Corporate Social Responsibility in International Hotel Chains and its Effects on Local Employees: Scale Development and Empirical Testing in China. *International Journal of Hospitality Management*, 90.
- Weon, K. M., & Kim, Y. I. (2001). Characteristics of Color and Color Name in Korea Fashion Apparel Industries. *Journal of Korean Society of Color Design Studies*, 15(1), 37-48.
- Wilson, N. (2018). The Impact of Service Quality and Brand Image Toward Customer Loyalty in the Indonesian Airlines Industry. *Jurnal Manajemen Indonesia*. 18(3), 222-234.
- Wymer, W. and Alves, H. M. (2013). Scale Development Research in Nonprofit Management and Marketing: A Content Analysis and Recommendation for Best Practices. *International Review on Public and Nonprofit Marketing*. 10(1), 65-86.

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