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# Investigation of Organizational Power Distance Levels of Pilots Working on Airlines in Turkey: Flight Safety and Professional Courtesy Dilemma

Özlem Çapan Özeren¹⁺Ū, Şener Odabaşoğlu²Ū and Güray Tezer³Ū

- 1\*Maltepe University, Civil Air Transport Management Program, Istanbul, Türkiye. (ozlemozeren@maltepe.edu.tr).
- <sup>2</sup> Maltepe University, The Head of Department Aircraft Technologies, Istanbul, Türkiye. (senerodabasoglu@maltepe.edu.tr).
- <sup>3</sup> Beykoz University, Istanbul, Türkiye. (guraytezer@gmail.com).

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Corresponding Author: Özlem Çapan Özeren

## **RESEARCH ARTICLE**

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#### **Abstract**

This study aims to obtain new data that will mediate the development of safety culture by investigating the power distance, which is one of the cultural dimensions of communication, and causes accidents in aviation, through the assertiveness levels of the pilots and their social approval needs. The method of this research is quantitative, data were collected through online questionnaires. The population and the sample of the research are consisted of the civilian pilots in Turkey. The questionnaires were applied to 75 pilots. In male pilots participating in the study; The levels of "Instrumental Use of Power" and "Legitimation of Power", which are subdimensions of organizational power distance, are significantly higher than female pilots. In addition, it has been revealed that female pilots pay less attention to the judgments of others than male pilots. These results suggest that male pilots need more organizational power than female pilots. One of the results of the research is the strong positive relationship between the assertiveness level of the participants and "Consent to Power", which is one of the subdimensions of power distance; it is thought that this relationship stems from the social adaptation capacity of assertive individuals. The study also showed that the main factor determining the behavior of the employees is the organizational culture. Within this scope, sharing the accident reports of Turkish registered aircraft prepared by Transport Safety Investigation Center with researchers and institutions will contribute significantly to the need for resources.

# 1. Introduction

National culture consists of common beliefs, values, and attitudes that shed light on the perception, thought, reasoning, decision-making, and relationship styles of people living together (İlhan, 2019). These common values are shared, through the relations established among the members of the society, and are transformed into actions and reproduced over time. In this way, the culture that societies have developed by transferring it from generation to generation has an integrating role. Individuals carry the effects of the culture they were born and raised in for a lifetime (İlhan & Alimanoğlu Yemişci, 2020).

Culture is a fabric of meaning that guides and develops the attitudes, beliefs and actions, institutions and rules (Acar, 2018), and forms of communication of a certain group of people regarding their lives in society (Hofstede, 2001). According to Blumer (1969, p. 2), individuals establish relationships with each other and with objects through the common values mediated by this fabric of meaning. Individuals are born into a unique national culture in which their daily life practices and interpersonal relationships are

regulated, and they remain under the influence of the culture of the society they belong to until the end of their lives (İlhan & Alimanoğlu Yemişci, 2020). The culture acquired through these influences is internalized through time and becomes the characteristic of the individual (Kottak, 2012). Bourdieu associated the social with the individual and developed the concept of habitus. Habitus, which means the person's social capital, includes all kinds of social bonds and interpersonal relationships (Bourdieu, 1990), and determines the attitudes and behaviours of people. While making their choices, individuals rely on their own habitus (Çağırkan, 2017).

If the concept of culture is defined as the sum of the values, beliefs, rules, and institutions of the society, organizational culture is the sum of all these values and the emphasis is placed on its use to provide competitive advantage (Acar, 2018). In other words, organizational culture is described as a set of common values, beliefs, traditions, assumptions, norms that guide the behavior of employees and keep them together to achieve a goal (Deal ve Kennedy, 1982; Kast ve Rosenzweig, 1985; Nahavandi ve Malekzadeh, 1999). The internal functioning of the employees, their practices regarding human resources, and interpersonal relations constitute the culture of

that organization (Alper ve Erdem, 2021). Organizational culture also affects the emotions, thoughts, and behaviour patterns of its members (Cameron, 2013; Wasti, 1995). The culture of organizations is not independent of the culture of the nation. Because the members of the organization create the organization's own culture by integrating the national culture into their intra-organizational ways of doing business, interpersonal relations, attitudes, and behaviours. Therefore, national culture shapes both organizational culture and working life. In addition to this, according to Hofstede and Peterson (2000), national culture has a bigger role in the social relations individuals establish than the culture of the institution they work in (Hofstede and Peterson, 2000).

On the other hand, the structure of national culture would be better understood by looking at the relationship between the individual and power (İlhan & Alimanoğlu Yemişci, 2020). Studies on organizational culture have focused on the concept of power and its effect. According to these studies, while power is explained as the ability to influence another and to lead them to a certain behavior, individuals who exhibit the ability to attract different people in the direction they want are called "strong" (Koçel, 2018). Culture permanently affects the behavior of society and individuals and the power distance in relationships. The Middle East where Turkey is also located, the Far East, South Asian and North African societies have high power distances (Çetingüç, 2021; 781). Power distance is one of the concepts used to explain power relations in society (Yorulmaz et al., 2018). This concept has been defined as "the degree of inequality between less powerful individuals in the same social system and those who are stronger than them" (Hofstede, 2001, 83). Hofstede's "power distance", which means the unfair distribution of power, is also a major determinant of interpersonal relations at the organizational level. As the difference or distance between the powers grows, the dominance of the stronger individual over the less powerful increases (Solmaz & Serinkan, 2020). Thus, people in social life are positioned to be privileged or at a lower level according to their financial status, political preference, status, rank, seniority, race, religion, and gender (Çetingüç, 2021; 781). On the other hand, power distance shows the extent to which the unequal distribution of power is accepted by the less powerful members of the organization. People working in organizations with high hierarchy and high power distance associated with this high hierarchy have an attitude suggesting that "because they believe their rulers are above and stronger than them; the commands that are given by the organization should be followed without question; the power of the management must be respected, the stronger should always have more privileges, and the less powerful should be subordinate to the powerful" (Bolat ve Duranay, 2018).

Individuals in communitarian and high power distance cultures, such as Turkey, give importance to social harmony and obedience to their hierarchical superiors. Studies, that were conducted in parallel to this, have shown that the individualistic culture is superior to the communitarian culture in promoting aviation safety (Soeters & Boer, 2000; Li et al., 2009). The role of organizational factors in air transportation, which gains momentum with the developing technology and comes to a safe level day by day, is gaining more importance day by day (Ustaömer and Şengür, 2020). Because the accidents experienced due to technical reasons in the early days of aviation are generally the result of human and organizational factors today. Researches have shown that people who cause accidents have common behavioral tendencies, human factors such as stress, fatigue or insomnia

as well as personality traits are determinative, and external causes such as equipment, culture, rules and procedures, and organization also prepare an environment conducive to the accident. By the concept of human factor is meant the mutually sustained relationship between man, machine environment. On the other hand, when we consider every accident, incident and near miss, a chain of errors is encountered. For this reason, causal factors for each event should be categorized separately and in detail with modern analysis methods. The Human Factors Analysis and Classification System (HFACS) was developed to understand the underlying causes that could lead to an accident in aviation. HFACS considers human factors at four levels: unsafe actions, preconditions for unsafe actions, unsafe supervision, and organizational effects (Wiegmann and Shappell, 2003). At the fourth level, Organizational Climate refers to the working atmosphere within the organization (eg structure, policies, culture). In the aviation industry, the organizational culture should be in a form that is independent of power distance and is integrating safety elements into all ways of doing business. This is because one of the reasons for the lack of communication that leads to accidents in aviation is cultural and originates from power distance (Ustaömer, 2020). According to Gladwell (2009), a significant portion of aircraft accidents is due to a lack of communication (Gladwell, 2009). Research has revealed that, in the aviation industry, nations with high power distance have more aircraft accidents. Accordingly, in the root cause analyses carried out in the aircraft crashes in fourteen NATO countries; it has been found that the share of organizational elements in accidents involving pilots from high power distance countries such as India and Taiwan is higher compared to their US counterparts (Martinussen and Hunter, 2010). Regional differences in accident rates suggest that there may be something else behind simple human error in these accidents (Jing, Lu & Peng, 2001). Tear et al., (2018) revealed that national culture interacts with intra-organizational safety culture and power relations in Accordingly, before organizations. evaluating organizational safety culture or before a change attempt regarding this culture, it is extremely crucial to consider the impact of upper and lower dynamics on the culture (Tear et al.,

In organizational cultures where power distance is high, it is seen that the co-pilot uses a "softened language" or "Extreme professional courtesy" during communication to show respect for authority. In middle and far eastern societies where the power distance is high, excessive professional courtesy is more common than western societies. In a simulation study conducted by United Airlines to investigate excessive professional courtesy, the captain of the aircraft was asked to undetectedly stop flying the aircraft during the approach and act as if there was no problem. In the simulation, it was observed that 25 percent of those sitting in the second pilot's seat did not pay attention to what the captain did, or did not take the controls from the captain even if they noticed, and turned a blind eye to the accident (Cetingüc, 2021:785).

In high-risk industries such as aviation, speaking (giving feedback) is like a matter of life and death and has a very crucial role in reducing errors (Bienefeld and Grote, 2014). On the other hand, in a cockpit with a high power distance, even if they see the wrong commands of the captain pilot, the second pilots prefer not to make a sound instead of intervening, and they watch both their own deaths and the deaths of hundreds of people (Çetingüç, 2021;781). Due to the hierarchical discipline in the cockpit, second pilots are reluctant to express their opinions to the captain and give

feedback on a situation that went wrong. This is because pilots who dare to give feedback to the captain are exposed to an environment where they are reprimanded, accused of cowardice, ridiculed, and humiliated, which is governed by a toxic communication incompatible with professionalism. Therefore, when an emergency occurs in a cockpit with the authoritarian captain pilot, it is seen that the second pilot has a fear of retaliation such as "If I interfere with the captain, he will get angry with me and he will make me pay for it" (Reader & O'Connor, 2014; Detert & Edmondson, 2011). In other words, in a cockpit environment where the power distance is high and hierarchical superiors are seen as untouchable, the fact that the captain pilot calls the second pilot nicknames such as "son, kiddo, newbie" and gives commands with imperative forms, and the second pilot does not object to such treatment, and responses with "My Commander, my teacher, my big brother" is far from meeting the requirements of a healthy, safe and equidistant working environment (Çetingüç, 2021;782). As such status differences create feelings of inferiority and superiority in employees, low-status individuals underestimate the value of their own contributions and prefer to wait for higher-status employees to make decisions by applying selfcensorship (Driskell & Salas, 1991).

On March 11, 2018, one of the airspeeds on the TCTRB registered aircraft belonging to MC Aviation malfunctioned and gave an Overspeed warning condition, therefore stall protection system (SPS) was activated and the aircraft started to push the nose down. The captain's reaction was to pull up on the control wheel repetitively and finally ended in dual engine flameout and pass to stall condition accordingly. The cockpit crew who took the training on what to do with an emergency situation, could not respond to the malfunction in a fully coordinated and effective manner as written in the emergency procedures. The captain's behavior interrupted the co-pilot's attempts to read the emergency checklist three times. Despite all the efforts of the co-pilot, the emergency checklist could not be read, the captain pilot held the nose of the airplane and forced the engines, resulting in the loss of both engines. Despite all warnings from the co-pilot the captain continued to hold onto the plane's nose and the pilot did not take the necessary action, which led to the crash of the plane. Despite all these errors of the captain, the fact that the co-pilot does not take the control from the captain is considered a problem within the power distance ( Parallel to this situation, the Guam crash experienced by Korean Air on 06 August 1997 can be given as an example. In the crash, the captain pilot who became sleepy started to descend, thinking that a light they saw twenty miles from Guam was an airport. Although the second pilot realized that the meteorological conditions were not suitable for landing at the airport, he could not express the situation to the captain out of fear because the aircrew knew that the captain did not welcome the warnings from their subordinates. In the end, a warning was given by the flight engineer to the captain for them to go around, who tried to land despite heavy fog and rain at midnight, but the warning was not taken into consideration by the captain. After the engineer insistently told them to pass for the second time, the captain pilot did but because they reacted late to the warning, the accident took place and that caused the plane to crash into the ground and killing 228 people (NTSB, 2000). In the year of the accident, the accident/loss rate of United Airlines, one of the American airlines, was 0.27 per four million departures, while the loss rate of Korean Airlines for the same period was 4.79. This means that Korean Air had 17 times more loss per million departures than United Airlines. After this accident,

Delta and Air France terminated their cooperation with Korean Air (Freivalds, 2009).

In cultures with high power distance, feedback and reporting for errors are low due to fear of punishment. Members of the organization with relatively lower power do not speak up to their hierarchical superiors, even if they are wrong or mistaken, or do not fulfill their responsibilities to prevent mistakes by being overly courteous. The decision to speak up often involves some uncertainty as to whether a concern is justified, whether an idea is worthwhile, or whether a question is reasonable (Tear et al., 2018). Another factor that determines the interaction between teams is the psychological security levels of team members. Edmondson (1999a) used the term psychological security to describe team members' beliefs that they can take interpersonal risks without fear of punishment, rejection, or embarrassment. Accordingly, it is thought that the level of psychological security is a subjective situation that mediates the decision not to remain silent (Bienefeld & Grote, 2014). On the other hand, excessive professional courtesy or softened language can be experienced even in crises with the risk of death at the end. One of the accidents that best reflects this situation occurred on March 10, 1989 in Canada. According to the extremely detailed accident report, it is seen that the root cause of the accident is power distance. From the analyzes in the report, the themes related to power distance were examined and it was tried to draw attention to their role in the accident. According to this report, the Air Ontario type F28 airplane with flight number 1363 took off from Dryden airport without having the ice and snow on its wings cleaned off and crashed into the land 126 meters ahead of the runway end 49 seconds after takeoff. (Moshansky, 1992:1068-1079).

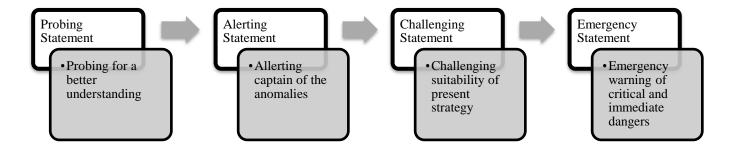
An accident investigation commission, including clinical and social psychologists, was established to investigate why people who saw the snow pile on the wings and were aware of the danger did not talk to the captain. According to the data obtained at the end of the examinations by this commission; it was tried to find out why the pilots, who were flying as passengers at the time of the crash and survived the accident, had not warned the flight crew, although they were aware of the danger. Firstly, Captain Haines, who flew as a passenger on the plane, was asked by the accident commission why he did not take action to warn the flight crew. Captain Haines conveyed that "he assumed that there was a de-icing system on the wings of the aircraft and therefore did not interfere with it when taking off without de-icing". Captain Haines said, "Had I known there was no de-icing system on the plane, I would have blocked its take-off, I would have done everything, including breaking the cockpit door," (Moshansky, 1992: 1071-1084). When pilot Berezuk, who was sitting in the passenger position, was asked why he did not warn the flight crew about the snow pile on the wing, he stated that until the last point or the last second before take-off, he trusted the pilot to perform the de-icing and was not aware that he had no intention of not doing it. He also emphasized the professional courtesy and respect he felt towards the pilots and defined his not interfering in the cockpit as "a courtesy peculiar to the piloting profession". To the question of "So is it fair to say that the courtesy and respect attributed or acknowledged by the crew on March 10, 1989 outweigh your concerns about the amount of snow on the wings?" asked by the commission, he answered "Yes". As the reason for his non-intervention, he said that he "trusted the captain and was reluctant as a pilot to give advice to another pilot flying the plane". The people on the plane to prevent this accident did not take any action and

kept their silence in the face of this fatal problem (Moshansky, 1992).

Organizational silence is not expressing opinions about the problems encountered, just like in this accident (Macit & Erdem, 2020). This MUM effect is explained by the general reluctance of employees to convey negative information despite possible unrest, and therefore preferring to remain silent. It has been suggested that the MUM effect arises from the feeling of uneasiness experienced during the transmission of bad news, the worry of discord between the reporter and the receiver of the news (Morran et al., 1991), and the feeling of guilt about not being able to share the misfortune of the receiver of the news (Tesser and Rosen, 1972) (Rosen and Tesser, 1970: 254). As the power distance increases, employees experience uneasiness when reporting their concerns about injustice or a problem to their superiors, and they keep their opinions to themselves and keep their silence or distort the truth in order to avoid a negative outcome. Studies have revealed that this situation is experienced bilaterally and that superiors avoid receiving feedback or deliberately delay it (Benedict et al., 1988, Brinsfield et al., 2009).

However, when faced with a crisis in the cockpit, the pilot is expected to establish strong and direct communication with the co-pilot and air traffic unit. Regardless of their job descriptions, the fact that all employees in the enterprise take active responsibility in order to prevent all kinds of mistakes and violations that may lead to accidents determines the level of safety culture in the organization (Güneş et al., 2020). Considered also in terms of Crew Resource Management (CRM), power distance is one of the most critical issues in aviation. Softened language and showing respect only to those

who are above oneself hierarchically is one of the most typical indicators of high power distance. In the Avianca-52 accident, which was experienced due to the high power distance and language problems in communication, the plane that made the Bogota-New York flight on January 25, 1990, crashed because it ran out of fuel and 73 passengers on the plane died. The reason for this accident was that the captain pilot of the plane, which was toured for one hour and seventeen minutes during its landing at New York Airport, did not speak English, and therefore, the second pilot, who made contact with the air traffic unit, could not communicate with the tower that the fuel was out and the situation was critical and did not insist on the priority of landing, instead, a softened language was used and eventually the plane ran out of fuel and crashed (NTSB, 1990). In organizations with a high power distance, interpersonal communication is disrupted, and it is seen that accurate and sufficient information cannot be transmitted in a timely manner in emergencies. Employees of organizations with a high power distance may act with hesitance about safety rules, prefer not to interfere with their stakeholders, especially their hierarchical superiors, who misbehave until the last moment, and even if they intervene at the last moment, they cannot prevent the accident from happening because they are late. The accidents experienced as a result of power distance have revealed the importance of equal authorization of the pilots involved in the flying of the aircraft. Within this scope, a fourstep progression to survival that has been developed: "Probing, Challenging, Emergency (PACE)" Alerting. implemented by the second pilot in case their warnings to a captain pilot who makes wrong decisions are not taken into consideration (Fogarty, 2018) Process of PACE is shown in



**Figure 1.** Process of PACE

Approval/attention seeking, which is one of the components of CRM, which has an important place in interpersonal communication and establishing social bonds, is seen at a high rate in individuals who are "Extremely concerned with the opinions of others", "Perfectionists", "Praise-seeking", "Unable to say no", "Helpful" and "Obedisive". However, this need causes the individual to lead a life in line with the wishes and expectations of others rather than his own wishes and needs in countries like Turkey where the communitarian culture is dominant. As the level of need for social approval in individuals increases, the severity of behaviors aimed at seeking the approval of another and avoiding disapproval also increases at the same rate (Karaşar, 2016). In other words, individuals with a high need for approval may be extremely uncomfortable with exhibiting behaviour that they think will not be approved, and may have

an obedient attitude that accepts and overlooks mistakes in order to gain admiration.

"Assertiveness", which is one of the interpersonal communication skills, has been translated into Turkish language as "being able to take initiative", "self-confidence", and "ambitious". Its conceptual equivalent is the ability to calmly defend one's own or someone else's rights without attacking anyone or displaying a passive attitude that admits wrongdoing. According to Jakubowski and Spector (1973), assertiveness is explained as "It does not mean to belittle someone else, it also means not to belittle yourself. One can easily make demands from someone else or reject requests from them, when one is rejected, they find it reasonable, their self-confidence is unshaken" (Jakubowski and Spector, 1973 as cited in Voltan, 1980). Assertiveness is thought of as a kind of decision point between aggression and passivity. In summary, assertiveness is the ability to defend oneself and

one's rights in an honest, direct, and respectful manner in all communication/interactions with relatives, customers, colleagues, or managers, at work or at home. It has been determined that there is a positive and moderate relationship between self-esteem and assertive personality trait (Sucan et al., 2015). In addition, assertive individuals have higher social adaptation abilities (Simarmata & Rahayu, 2018). According to Yusuf (2006), social adaptation is defined as the ability to respond appropriately to social reality, situations and relationships. Studies show that the higher the assertiveness, the higher the social cohesion will be (Simarmata & Rahayu, 2018).

Human behavior emerges as a result of sociological, psychological, and physical influences as well as personality traits of the individual. Power distance is the cultural dimension of communication and is subject to a sociological framework that determines it. In the studies, the accidents that occur as a result of not responding to the emergency situation adequately due to a softened language or excessive professional courtesy in organizations with high power distance and the relationship of these accidents with power distance are discussed.

However, there is no detailed study that analyzes the sociological aspect of accidents caused by power distance. However, in cultures where collectivism is dominant, like Turkey; there are thought to be individuals who care too much about what other people would say and that those individuals prefer to remain silent and obey instead of expressing themselves in the face of organizational power distance, they especially abstain or display a harmonious attitude towards their hierarchical superiors because they do not consider themselves equal and/or they are afraid of being disapproved (Macit and Erdem, 2020). As a result, it is thought that there is a relationship between organizational power distance and the employee's need for social approval and assertiveness skills. There is a need for a holistic research that investigates the relationship between organizational power distance and the behaviors that lead to aviation accidents and deals with the results from a psychosocial perspective.

## 1.1. Purpose of the study

This study aims to obtain new data that will mediate the development of safety culture by investigating power distance, which is one of the cultural dimensions of communication, which causes accidents in aviation, through the assertiveness levels of pilots and their social approval needs. With these data, it will be possible to develop communication skills that will contribute to a positive safety culture in aviation. Moreover, this study will provide outcomes that will shed light on the trainings to be given in order to reveal the cultural and communicative barriers that prevent all employees from taking an active role in preventing mistakes and violations, which is one of the most important requirements of safety culture, to provide a suitable environment that will encourage employees to give or report feedback and to improve employees' skills regarding feedback, reporting, and assertiveness.

The hypothesis of this research is based on the assumption that these behaviors of people who cannot defend the truth knowingly because of organizational power distance or who show softened or excessive professional courtesy may be related to their assertiveness skills and the level of their need for social approval. Aviation history has witnessed many aircraft accidents caused by power distance.

It is possible to prevent an aircraft accident caused by power distance, by establishing a safety culture that has been

eliminated from all hierarchies of the employees of the organization, for this, there is a need for an organizational culture that encourages its employees to prevent mistakes / violations under any circumstances. In order to prevent accidents in aviation, it is necessary to establish and maintain a management system that will determine the risks of accidents before they occur and control them at acceptable levels by minimizing their damage after they occur. In aviation, this is called the Safety Management System. The establishment of a safety culture depends on how the safety management system in the organization works. One of the components of the Safety Management System, which is defined as the safety management activities performed by the organization in order to ensure acceptable safety, is the promotion of safety within the organization (SMS, 2015).

On the other hand, it is thought that individuals who are overly sensitive to the judgments of others, who care so much to gain the management's attention and leave a positive impression as to compromise safety, are more affected by cultures with a high organizational power distance. It is assumed that as individuals' assertiveness skills increase, they will be less affected by organizational power distance or they will have more courage to cope with safety risks arising from power distance.

In this study, the relationship between the organizational power distance of pilots and their need for social approval and assertiveness levels will be investigated. In this study, the independent variable is organizational power distance, while the dependent variables are assertiveness skills and the need for social approval.

In line with the purpose of the study, answers to the following questions are sought:

- Is there a relationship between the organizational power distance of the pilots and their assertiveness levels and their need for social approval?
- In which direction and what kind of changes are observed in the assertiveness skills of individuals as the organizational power distance increases?
- In which direction and what kind of changes are observed in organizational power distance as the need for social approval increases?
- Is there a relationship between assertiveness skill and need for social approval?

## 2. Methodology

The design of the research is quantitative and scanning method was used. The population and the sample of the research consists of civilian pilots in Turkey. According to SHGM's 2021 annual report, the number of airline and helicopter pilots in Turkey are 10.734 as of 2021 (SHGM, 2021). The convenience sampling method was chosen as the sample selection method in the research and it was aimed to reach as many different pilots as possible, both from civilian and military backgrounds. Convenience sampling aims to obtain a sample of appropriate elements.

## 2.1.Research method and data collection

Participants in the study were chosen on a voluntary basis. Between the 30th of September and the 25th of December 2021, it was tried to reach the maximum number of samples, including civilian pilots and pilots of military origin, through an electronic survey. Since most of the participants would be on flights, convenient sampling was preferred. Pilots were invited to participate in the online survey via e-mail. Participants were informed by e-mail that their participation was on a voluntary basis, that their answers would be kept anonymous, and it was emphasized that the data gathered from them would only be used for research purposes. Despite sending questionnaires to more than 500 pilots, giving a three-month response time, and all dissemination efforts, only 75 participants were able to respond. This limited the data of the study

After the application of the questionnaire, construct validity was tested with Confirmatory Factor Analysis, validity with criterion validity, and reliability by calculating the internal consistency coefficient.

Questionnaire; Consent form, and demographic questions, including the adapted one, were formed from three different scales whose validity/reliability studies were completed.

These scales are, Yorulmaz et al. (2018) Organizational Power Distance Scale (ODMS); Rathus Assertiveness Inventory by Voltan (1980), Öğmüş et al. (2016) as the Need for Social Approval Scale (SOIO).

The Organizational Power Distance Scale and the Need for Social Approval Scale and the Rathus Assertiveness Inventory were prepared in a 5-point likert type. The scales and subdimensions used for the research are shown in Figure 2.

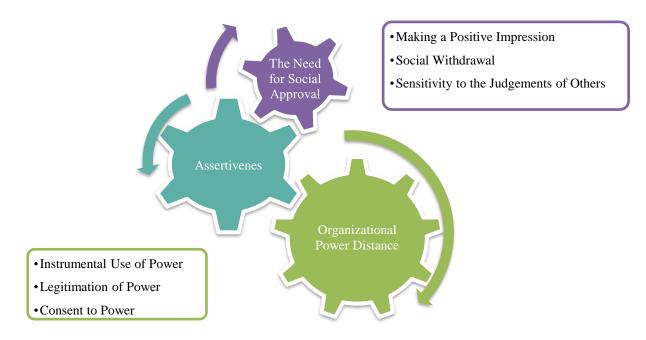


Figure 2. Scales Used in the Study

#### 2.2. Validity and reliability analysis of scales

Confirmatory factor analysis was performed to test the factor structures of organizational power distance, assertiveness, and the need for social approval scales. The

level of agreement of the scales with a certain factor structure was examined by confirmatory factor analysis. In the study, the highest likelihood estimation (maximum likelihood) technique was used. According to the obtained fit indices, it was seen that the factor structure of the scales showed a good fit. Inter-scale fit indices are shown in Table 1.

Table 1. Indices of Concordance Between Scales

	Calculated Fit Indices					
Acceptable Fit Indices	Organizational Power Distance	Assertiveness	The Need for Social Approval			
χ2/sd <5	1,999	2,026	2,493			
GFI >0,90	0,852	0,784	0,902			
AGFI >0,90	0,910	0,909	0,901			
CFI >0,90	0,912	0,905	0,910			
TLI>0,90	0,901	0,906	0,899			
RMSEA <0,08	0,077	0,079	0,077			
RMR <0,08	0,072	0,075	0,079			

Reliability analysis was performed to determine the reliability level of the scale used in the study and the Cronbach alpha coefficient was obtained.

Evaluation criteria used in the evaluation of Cronbach's Alpha Coefficient;

If  $0.00 \le \alpha < 0.40$ , the scale is unreliable.

If  $0.40 \le \alpha < 0.60$ , the scale has low reliability.

If  $0.60 \le \alpha < 0.80$ , the scale is quite reliable.

If  $0.80 \le \alpha < 1.00$ , the scale is highly reliable.

The Cronbach alpha coefficients obtained and the reliability analysis of the scales are shown in Table 2.

In line with these criteria, the scales are highly reliable.

**Table 2.** Reliability Analysis of Scales

	Cronbach Alpha
Organizational Power Distance Scale	0,814
Acceptance of Power	0,825
Instrumental Use of Power	0,836
Legitimation of Power	0,799
Consent to Power	0,726
Assertiveness	0,824
Need for Social Approval	0,874
Sensitivity to the Judgements of Others	0,789
Social Withdrawal	0,774
Making a Positive Impression	0,804

## 3. Findings

## 3.1. Demographic findings

The questionnaires were filled out by 75 pilots. When the distribution of the participants by age groups is examined, the percentage of people in the 20-30 age group is 2.7 percent; The percentage of people in the 31-40 age group is 6.7 percent; The percentage of people aged 41-50 is 32 percent, and the percentage of people aged 50+ is 58.7 percent.

The rate of those with a military background in their professional career is 70.7 percent. 76 percent of the participants are working, 6.7 percent are not working, and 17.3 percent are retired. When the distribution of total professional experience is examined; the rate of employees working for 1-5 years is 6.7 percent; the rate of employees working for 6-10 years is 5.3 percent; the rate of employees working for 11-20

years is 6.7 percent; the rate of employees working for 21-30 years is 41.3 percent, the rate of employees working for 31-40 years is 30.7 percent, and the rate of employees working for more than 40 years is 9.3 percent.

When the distribution by monthly income is analyzed, the rate of those with an income of less than 5000 TL is 6.7 percent; the rate of those with 5001-10000 TL is 10.7 percent; 8 percent of those with 10001-15000 TL; the rate of those with 15001-20000 TL is 10.7 percent, and the rate of those whose income is more than 20000 TL is 64 percent.

When the change of organizational power distance scale according to gender When the change of organizational power distance scale by gender was given in table 3. It was seen that the sub-dimensions of instrumental use of power and legitimation of power differed significantly according to gender (p<0.05). Men's levels of instrumental use of power and legitimation of power are significantly higher than women's

Table 3. The Change of Organizational Power Distance Scale by Gender

		N	Average	Standard deviation	t	р
	Men	68	17,6	3,3		
Acceptance of Power	Women	7	15,7	1,3	2,175	0,145
-	Total	75	17,4	3,3		
	Men	68	12,8	4,3		
Instrumental Use of Power	Women	7	9,7	2,7	3,492	0,046*
	Total	75	12,5	4,2		
	Men	68	5,9	2,0		
Legitimation of Power	Women	7	3,7	0,8	8,089	0,006*
	Total	75	5,7	2,0		
	Men	68	23,7	4,2		
Consent to Power	Women	7	25,7	2,8	1,470	0,229
	Total	75	23,9	4,1		

When the change of organizational power distance scale according to working time is examined; while it was observed that the sub-dimension of acceptance of power differed significantly according to the working time (p<0.05), it was seen that the other sub-dimensions did not show a significant difference. According to the results of the TUKEY test, which was conducted to determine which group the difference

originated from for the acceptance of power sub-dimension, which showed a significant difference; it has been observed that the level of acceptance of power of the employees who have been working for 6-10 and 11-20 years is significantly higher than the other working time groups. The Change of Organizational Power Distance Scale by Working Time Groups are shown in Table 4.



Table 4. The Change of Organizational Power Distance Scale by Working Time Groups

		$\mathbf{N}$	Average	Std. Deviation	F	р
	1-5 year	5	17,2	3,96		-
	6-10 year	4	20,25	1,71		
	11-20 year	5	20,6	3,65		
Acceptance of Power	21-30 year	31	17,58	2,14	4,45	0,001*
Acceptance of Power	31-40 year	23	16,52	3,75	4,43	0,001*
	40+	7	19,29	1,8		
	Total	75	17,43	3,25		
	1-5 year	5	11,8	4,32		
	6-10 year	4	13,75	2,75		
	11-20 year	5	16	5,24		
Instrumental Use of Power	21-30 year	31	11,94	4,04	1,54	0,19
ilistrumentar Use of Tower	31-40 year	23	11,74	3,92		0,17
	40+	7	14,86	5,01		
	Total	75	12,51	4,22		
	1-5 year	5	6,2	3,11		
	6-10 year	4	6,25	1,5		
	11-20 year	5	6,8	1,92		
Legitimation of Power	21-30 year	31	5,52	1,9	0,57	0,723
Degrammation of Fower	31-40 year	23	5,43	1,95	0,57	0,723
	40+	7	5,43	2,15		
	Total	75	5,65	1,98		
	1-5 year	5	23,6	2,7		
	6-10 year	4	21,75	3,86		
	11-20 year	5	21,8	3,42		
Consent to Power	21-30 year	31	23,81	4,34	1,31	0,271
	31-40 year	23	24,04	4,22		
	40+	7	27	3,51		
	Total	75	23,92	4,13		

When the change of organizational power distance scale according to income is examined; while the change of legitimation of power sub-dimension according to income is significant, the change of other sub-dimensions according to income is not significant. According to the results of the TUKEY test, which was conducted to determine which group the difference originated from for the legitimation of power

sub-dimension, which showed a significant difference; the legitimation of power level of those with an income of 5001-10000 TL is significantly higher than those whose income is less than 5000 TL and whose income is 20000+ TL. The change of organizational power distance scale according to income are shown in Table 5.

Table 5. The Change Of Organizational Power Distance Scale By Income

	Monthly Income (TL)	N	Average	Std. Deviation	F	p
	< 5000	5	16,6	2,1		
	5001-10000	8	19,1	3,2		
	10001-15000	6	17,8	1,9		
Acceptance of Power	15001-20000	8	17,6	5,6	0,736	0,57
	20000+	48	17,1	3		
	Total	75	17,4	3,3		
	< 5000	5	10,8	3,3		
	5001-10000	8	12,9	4		
	10001-15000	6	14,8	5,8		
Instrumental Use of Power	15001-20000	8	12,5	3	0,684	0,606
	20000+	48	12,3	4,3		
	Total	75	12,5	4,2		
	< 5000	5	5	2		
	5001-10000	8	7,3	2,5		
	10001-15000	6	6,3	2,3		
Legitimation of Power	15001-20000	8	6,4	2,2	2,571	0,045*
	20000+	48	5,3	1,7		
	Total	75	5,7	2		
	< 5000	5	23,4	4		
	5001-10000	8	22,8	3,2		
Consent to Power	10001-15000	6	23,8	5,9	0,702	0,593
	15001-20000	8	22,3	4,9	0,702	0,333
	20000+	48	24,5	4		
	Total	75	23,9	4,1		

When the change of the need for social approval scale according to gender was examined, it was seen that the sub-dimension of sensitivity to the judgments of others showed a significant difference according to gender (p<0.05), while the sub-dimensions of social withdrawal and making a positive

impression did not differ significantly according to gender. The sensitivity level of men to the judgments of others is significantly greater than that of women. The change of the need for social approval scale according to gender are shown in Table 6.

**Table 6.** The Change of The Need For Social Approval Scale by Gender

		N	Average	Std. Deviation	F	p
C :4::4 4 41	Men	68	28,7	5,9		
Sensitivity to the Judgements of Others	Women	7	24	6,2	3,983	0,049*
Judgements of Others	Total	75	28,3	6,1		
	Men	68	18,2	6		
Social Withdrawal	Women	7	15,7	3,8	1,1	0,298
	Total	75	17,9	5,9		
Making a Positive Impression	Men	68	19,3	6		
	Women	7	18,7	5,5	0,057	0,812
	Total	75	19,2	5,9		

When the change of need for social approval scale according to income is examined; social withdrawal sub-dimension showed a significant difference according to income (p<0.05), while other sub-dimensions did not differ significantly. According to the results of the TUKEY test, which was conducted to determine which group caused the difference for the social withdrawal sub-dimension, which showed a significant difference; the average of social withdrawal of those with an income of 15001-20000 TL and an income of 5001-10000 TL is significantly higher than the

average of those with an income of <5000 TL and 20000 TL. It has been observed that the level of acceptance of the power of the employees who have been working for 6-10 and 11-20 years is significantly higher than the other working time groups. Participants whose income is both below 5000 TL and above 20 thousand TL exhibit less social withdrawal behavior compared to other income groups.

The Change Of Need For Social Approval Scale by income are shown in Table 7.

**Table 7.** The Change of Need For Social Approval Scale by Income

	Monthly Income (TL)	N	Average	Std. Deviation	F	p
	< 5000	5	24,8	5,6		
	5001-10000	8	30	4,1		
Sensitivity to the Judgements	10001-15000	6	32,8	4,5	1,681	0,164
of Others	15001-20000	8	29,3	11,2	-,	2,221
	20000+	48	27,6	5,2		
	Total	75	28,3	6,1		
	< 5000	5	14,8	5,6		
	5001-10000	8	21,5	3,9		
Social Withdrawal	10001-15000	6	18,5	7,1	3,249	0,017*
Social Williamur	15001-20000	8	22,8	10,1	3,247	
	20000+ Total	48 75	16,8 17,9	4,5 5,9		
	< 5000	5	17	6		
	5001-10000	8	21	3,1		
Making a Positive Impression	10001-15000	6	23,3	9	1,483	0,217
making a rosarve impression	15001-20000	8	20,8	7	1,405	0,217
	20000+ Total	48 75	18,4 19,2	5,5 5,9		

When the change of the need for social approval scale according to the working time groups is examined; While it was observed that the sub-dimension of sensitivity to the judgments of others showed a significant difference according to the working time (p<0.05), it was observed that the other sub-dimensions did not show a significant difference. According to the results of the TUKEY test, which was conducted to determine which group the difference originated

from for the "sensitivity to the judgments of others" subdimension, which showed a significant difference; the average

of those who have been working for more than 40 years is significantly higher than those who have been working for 1-5 years, 6-10 years, 21-30 years and 31-40 years. In addition, the average of those who have been working for 11-20 years is significantly higher than those who have been working for 6-10 years and 31-40 years. the change of the need for social



approval scale according to the working time groups are shown in Table  $8. \,$ 

Table 8. The Change Of The Need For Social Approval Scale by The Working Time Groups

		N	Average	Std. Deviation	F	р
	1-5 year	5	26,2	3,56		
	6-10 year	4	23,5	3,7		
Sensitivity to the	11-20 year	5	33	7,45	2,827	0,022*
Judgements of Others	21-30 year	31	28,39	5,73	2,027	0,022
	31-40 year	23	26,78	6,27		
	40+	7	33,43	3,91		
	Total	75	28,27	6,06		
	1-5 year	5	17,8	7,09		
	6-10 year	4	15	3,92		
	11-20 year	5	23,6	9,29		
Social Withdrawal	21-30 year	31	17,77	4,59	1,765	0,132
	31-40 year	23	16,61	5,54		
	40+	7	20,71	7,87		
	Total	75	17,93	5,88		
	1-5 year	5	19,2	6,06		
	6-10 year	4	17,25	2,22		
3611 B 11	11-20 year	5	20,8	8,17		
Making a Positive Impression	21-30 year	31	20,23	5,57	0,876	0,502
Impression	31-40 year	23	17,39	5,92		
	40+	7	20,86	7,2		
	Total	75	19,23	5,92		

# 3.2. Correlations Between Scales

Correlation analysis was performed to determine the relationships between the scales and the Pearson correlation

coefficient was obtained and given in the table 9.

 Table 9. Correlations Between Scales

		Acceptance of Power	Instrumental Use of Power	Legitimation of Power	Consent to Power	Assertiveness	Sensitivity to the Judgement of Others	Social Withdrawal	Making a Positive Impression
Acceptance	r	1	,506**	,489**	-,084	-,043	,514**	,454**	,260*
of Power	p	1	,000	,000	,473	,711	,000	,000	,024
Instrumental	r	,506**	1	,380**	-,230*	-,123	,364**	,454**	,479**
Use of Power	p	,000	1	,001	,047	,292	,001	,000	,000
Legitimation	r	,489**	,380**	i	-,228*	-,156	,260*	,368**	,269*
of Power	p	,000	,001	,049 ,1	,182	,024	,001	,020	
Consent to	r	-,084	-,230*	-,228*	4	,808**	,094	-,354**	-,375**
Power	p	,473	,047	,049	1	,000	,421	,002	,001
	r	-,043	-,123	-,156	,808**	i	,108	-,277*	-,302**
Assertiveness	p	,711	,292	,182	,000	1	,355	,016	,008
Sensitivity to the	r	,514**	,364**	,260*	,094	,108		,548**	,453**
Judgements of Others	p	,000	,001	,024	,421	,355	1	,000	,000
Social	r	,454**	,454**	,368**	-,354**	-,277*	,548**	1	,738**
Withdrawal	p	,000	,000	,001	,002	,016	,000	1	,000
Making a Positive	r	,260*	,479**	,269*	-,375**	-,302**	,453**	,738**	1
Impression	p	,024	,000	,020	,001	,008	,000	,000	1

The assertiveness scale has a positive and significant relationship at the level of 80.8 percent with consent to power which is a subdimension of the organizational power distance scale. The assertiveness scale has a negative and significant relationship at the level of 27.7 percent with social withdrawal, and at the level of 30.2 percent with making a positive impression which are subdimensions of the need for social approval scale.

Acceptance of power, which is a subdimension of the organizational power distance scale, has a positive and significant relationship at the level of 51.4 percent with sensitivity to the judgments of others, at the level of 45.4 percent with social withdrawal, and at the level of 26 percent with making a positive impression which are subdimensions of the need for social approval scale.

Instrumental Use of Power, which is a subdimension of the organizational power distance scale, has a positive and significant relationship at the level of 36.4 percent with sensitivity to the judgments of others, at the level of 45.4 percent with social withdrawal, at the level of 47.9 percent with making a positive impression which are subdimensions of the need for social approval scale.

Legitimation of Power, which is a subdimension of the organizational power distance scale, has a positive and significant relationship at the level of 26 percent with sensitivity to the judgments of others, at the level of 36.8 percent with social withdrawal, and at the level of 26.9 with making a positive impression which are subdimensions of the need for social approval scale.

Consent to Power, which is a subdimension of the organizational power distance scale, has a negative and significant relationship at the level of 35.4 percent with social withdrawal, and at the level of 37.5 percent with making a positive impression which are subdimensions of the need for social approval scale.

## 4. Conclusion and Discussion

In the male pilots who participated in the study; the levels of "Instrumental Use of Power" and "Legitimation of Power", which are sub-dimensions of organizational power distance, are significantly higher than in female pilots. According to this, it is understood that the men in the study stand closer to the management, compared to the women, in order to gain benefits. In addition, it is understood that male employees use some legal rules and regulations to justify the unbalanced power distribution more than women. In addition, female pilots pay less attention to the judgments of others than male pilots. These results suggest that male pilots need more organizational power than female pilots.

The most important outcome of the study is the strong positive relationship between the assertiveness level of the participants and the "Consent to Power" dimension, which is one of the sub-dimensions of power distance. According to this, as the assertiveness levels of the pilots increase, the dimension of "Consent to Power" also increases. According to Gramschi, individuals have a tendency to accept the social manipulations of the dominant majority in society (Gramschi, 1971). The tendency to consent works similarly in organizations. Especially if the culture of fear is dominant in the organization or the risk perception of the employees is high, the dimension of "Consent to Power" similarly increases.

According to the findings of the study; The dimension of "Consent to Power" does not mean accepting power without

questioning, on the contrary, the individual who consents to power does not adopt the practices of the power holders and does not choose to be close to those who have power or to take part in regulations that support the unequal distribution of power. However, although they do not approve of it, they do not object to it as well. The reason for the lack of objection is not the fear of making a negative impression or of being disapproved by others. The "Consent to Power" dimension is related to the fact that the employees in the organization with a high power distance think that they do not have the capacity to make a change in the practices in the organization. For example, cabin crew Hartwick, who served in the Air Ontario accident, seems to have an unwavering conviction that the situation will not change, even though they report the snow puddle on the wing to the captain. According to the study, if the organizational culture does not impose the consequences of non-compliance with all stakeholders and holds only one person responsible, if the person objecting to the practice does not achieve any change with this objection and faces various difficulties due to this behavior in the following periods, it will not be surprising that they choose not to speak up against the wrong practices in other similar situations. When the MUM effect, which means a general reluctance to convey negative information, is added to this, the negative effect of the organization's power distance in terms of causing accidents will increase even more.

The dimension of "Consent to Power" can be expressed with the proverb "If you can't beat them, join them", and it can be considered as a kind of confession of the helplessness experienced in this state. This confession includes a judgment that excludes all options other than accepting the situation. This judgment is the result of a cognitive effort. According to this, one was convinced that complying with the management's decisions was the most correct option and that any other action was a waste of money; so they consented to power. Assertive individuals are those who can defend their rights and adapt to new situations they encounter. In other words, the social adaptation skills of assertive individuals are also improved. Therefore, it is thought that the positive relationship between the assertiveness levels of the employees and the dimension of "Consent to Power" stems from the social adaptation capacity of the assertive individuals. In this state, if the assertive individual has nothing else to do to change the outcome in an organization with high power distance, it is a behavior expected from them to accept the situation and consent. In the accident that caused the crash of the registration of TC-THG plane belonging to MC Aviation in Iran, the fact that the copilot did not take control despite all these mistakes made by the captain is considered a problem due to the power distance. The courteous initiative of Korean Air's flight engineer was not enough to stop the captain who was determined to go around. The voice of the flight engineer in the Tenerife crash was not heard, warning the captain to make sure there was no other aircraft on the runway. The extremely softened language used by the second pilot of Avianca 55 in their communication with the tower did not succeed in conveying the urgency of landing priority to the air traffic controller, as the plane was about to crash because it ran out of fuel. The reasons for the occurrence of these accidents, in which High Power distance is effective, show similarities. Almost all of these accidents happened due to erroneous decisions made by the captain pilots/air traffic contollers or the hierarchically empowered people that threaten flight safety, and their insistance on the decisions they made despite all

warnings. Other members of the crew either did not object to this wrong decision or objected weakly. In CRM practices carried out to prevent power distance related accidents, it is aimed that all members of the team do not remain silent in the face of each other's wrong decisions, that they have communication skills to stop each other's mistakes when necessary, and that all members of the team have the competence to listen to each other and take into account their warnings. Airline Operators have also updated their standard application procedures in order to prevent accidents that may arise from power distance in CRM applications.

This study revealed that assertive individuals working in organizations with high power distance do not oppose some wrong practices in the organization, but, on the contrary, they adapt to the situation. For this reason, it is against the ordinary flow of life to put the personal characteristics of individuals in a place independent of the organizational culture and to expect employees to exhibit behaviors that are not encouraged by the organizational culture. This study also showed that the main factor determining the behavior of the employees is the organizational culture. It is suggested that further research on this subject should be handled on a macro scale and structured

in a way that includes the effects of national culture. Within this scope, it is of vital importance that detailed reports of accidents in our country are brought into the literature and educational content in order to take lessons from their results, include them in practices, and thus establish a safety culture.

There is no doubt that comprehensive accident reports (Moshansky, 1992) published by the Canadian Accident Commission as a case study, which includes interviews with crew and passengers who survived aircraft accidents, accompanied by clinical and social psychologists (Moshansky, 1992), will shed light on academic research on this subject. In this context, sharing Turkish registered aircraft accident reports with researchers and institutions will contribute significantly to the need for resources.

## **Appendices**

When the path coefficients of the items of the need for social approval scale are examined; the lowest coefficient was found to be 0.298, and the highest coefficient was 0.806. therefore, there is no item excluded from the scale. The path coefficients of the items of the need for social approval scale are shown in Figure 3.

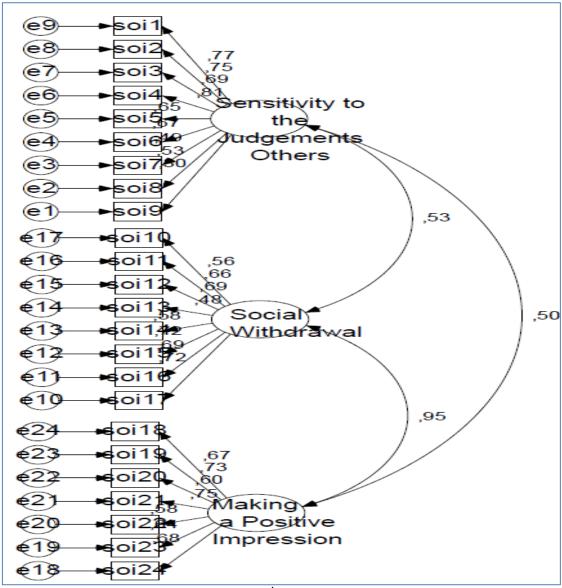


Figure 3. The Path Coefficients Of The Items Of The Need For Social Approval Scale

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When the path coefficients of the organizational power distance scale items were examined, although the coefficient of the 13th item was low, it was not excluded from the study.

The Path Coefficients Of The Organizational Power Distance Scale İtems are shown in Figure 4.

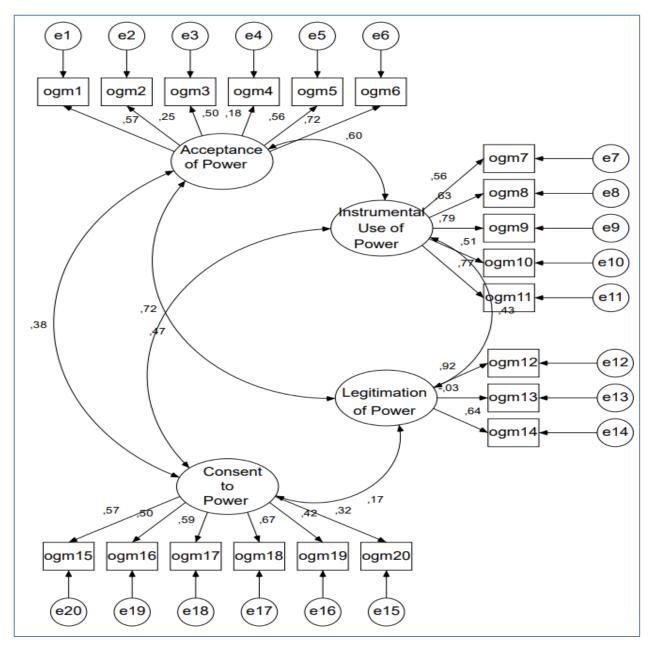


Figure 4. The Path Coefficients Of The Organizational Power Distance Scale Items

Path coefficients of the assertiveness scale range from 0.222 to 0.671, and there is no item left out of the scale.

Path coefficients of the assertiveness scale are shown in Figure 5.

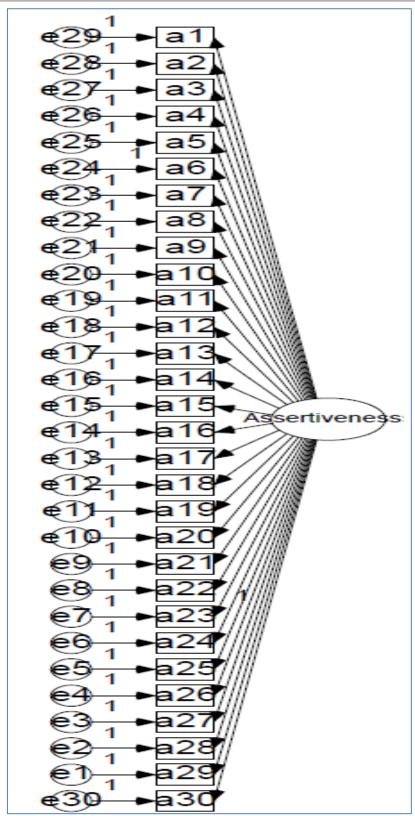


Figure 5. The Path Coefficients Of The Assertiveness



The Need for social approval standard regression coefficients is shown in Table 10.

**Table 10.** The Need for Social Approval Standard Regression Coefficients

			Estimate
soi9	<	Sensitivity to the Judgments of Others	,298
soi8	<	Sensitivity to the Judgments of Others	,530
soi7	<	Sensitivity to the Judgments of Others	,493
soi6	<	Sensitivity to the Judgments of Others	,667
soi5	<	Sensitivity to the Judgments of Others	,653
soi4	<	Sensitivity to the Judgments of Others	,806
soi3	<	Sensitivity to the Judgments of Others	,692
soi2	<	Sensitivity to the Judgments of Others	,755
soi1	<	Sensitivity to the Judgments of Others	,775
soi17	<	Social Withdrawal	,715
soi16	<	Social Withdrawal	,687
soi15	<	Social Withdrawal	,720
soi14	<	Social Withdrawal	,584
soi13	<	Social Withdrawal	,484
soi12	<	Social Withdrawal	,685
soi11	<	Social Withdrawal	,660
soi10	<	Social Withdrawal	,556
soi24	<	Making a Positive Impression	,679
soi23	<	Making a Positive Impression	,639
soi22	<	Making a Positive Impression	,577
soi21	<	Making a Positive Impression	,746
soi20	<	Making a Positive Impression	,603
soi19	<	Making a Positive Impression	,725
soi18	<	Making a Positive Impression	,674

Assertiveness Scale Standard Regression Coefficients are shown in Table 11.

**Table 11.** The Assertiveness Scale Standard Regression Coefficients

			Estimate
Rae29	<	Assertiveness	,003
Rae28	<	Assertiveness	,481
Rae27	<	Assertiveness	,483
Rae26	<	Assertiveness	-,258
Rae25	<	Assertiveness	,340
Rae24	<	Assertiveness	,453
Rae23	<	Assertiveness	,478
Rae22	<	Assertiveness	,424
Rae21	<	Assertiveness	,530
Rae20	<	Assertiveness	,306
Rae19	<	Assertiveness	,331
Rae18	<	Assertiveness	,235
Rae17	<	Assertiveness	,635
Rae16	<	Assertiveness	,671
Rae15	<	Assertiveness	,511
Rae14	<	Assertiveness	,500
Rae13	<	Assertiveness	,463
Rae12	<	Assertiveness	,534
Rae11	<	Assertiveness	-,501
Rae10	<	Assertiveness	,575
Rae9	<	Assertiveness	,402
Rae8	<	Assertiveness	,325
Rae7	<	Assertiveness	,436
Rae6	<	Assertiveness	,230
Rae5	<	Assertiveness	,442
Rae4	<	Assertiveness	-,222
Rae3	<	Assertiveness	,266
Rae2	<	Assertiveness	-,485
Rae1	<	Assertiveness	-,368
Rae30	<	Assertiveness	,277

Organizational power distance scale standard regression Coefficients are shown in Table 12.

 Table 12. The Organizational Power Distance Scale Standard Regression Coefficients

			Estimate
ogm1	<	Acceptance_of_Power	,573
ogm2	<	Acceptance_of_Power	,253
ogm3	<	Acceptance_of_Power	,504
ogm4	<	Acceptance_of_Power	,179
ogm5	<	Acceptance_of_Power	,563
ogm6	<	Acceptance_of_Power	,724
ogm7	<	Instrumental_Use_of_Power	,565
ogm8	<	Instrumental_Use_of_Power	,628
ogm9	<	Instrumental_Use_of_Power	,785
ogm10	<	Instrumental_Use_of_Power	,515
ogm11	<	Instrumental_Use_of_Power	,768
ogm12	<	Legitimation_of_Power	,916
ogm13	<	Legitimation_of_Power	-,026
ogm14	<	Legitimation_of_Power	,643
ogm20	<	Consent_to_Power	,318
ogm19	<	Consent_to_Power	,415
ogm18	<	Consent_to_Power	,667
ogm17	<	Consent_to_Power	,594
ogm16	<	Consent_to_Power	,496
ogm15	<	Consent_to_Power	,574

## **Ethical approval**

Yes. Maltepe University Ethics Committee approved the Research with a letter 2021/25-01 dated 24.09.2021

## **Conflicts of Interest**

The authors declare that there is no conflict of interest regarding the publication of this paper.

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