

The Moderator Role of Ethical Climate upon the Effect Between Health Personnel's Machiavellian Tendencies and Whistleblowing Intention: The Case of Eskişehir

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Abstract: The main purpose of this study is to identify the causes of whistleblowing acts in organizations. A model has been developed based on the variables of machiavellianism and ethical environment, all of which are thought to affect whistleblowing intentions. Ethical violations observed in active business life and the behaviors shown towards these violations can be explained theoretically through personal differences of individuals. In this context, the effect of the machiavellian personality trait on intention to whistleblowing was examined under the moderator role of ethical climate. The study was conducted on health personnel working in Eskişehir. The population of the research consists of 5,986 people. Out of 1200 questionnaires distributed to related public institutions, 880 questionnaires were returned. As a result, 290 questionnaires were excluded from the study due to incomplete data. The remaining 590 questionnaires were analyzed with SPSS 22, Amos 26 and Process 3.3. According to the findings of the ANOVA, correlation test, and hierarchical regression study, the machiavellian personality trait had a major impact on the intention to whistleblow within the framework of the research's main issue. It has also been found that the effect of the machiavellian tendency on the intention of whistleblowing is moderated by the subdimensions of ethical climate which are 'caring', 'law and codes' and 'independence'.

Keywords: Machiavellianism, ethical climate, whistleblowing, health sector, public institutions

Kamu Sağlık Personellerinin Makyavelist Eğilimlerinin İfşa Etme Niyetleri Üzerindeki Etkisinde Etik İklimin Düzenleyici Rolü: Eskişehir Örneği

Özet: Bu çalışmanın temel amacı organizasyonlarda meydana gelen ifşa etme eyleminin öncüllerini belirlemektir. İfşa etme eylemini etkilediği düşünülen makyavelist kişilik özelliği ve etik iklim değişkenleriyle bir model oluşturulmuştur. Aktif iş yaşamında gözlemlenen etik ihlaller ve etik ihlallere yönelik olarak gösterilen davranışlar teorik olarak bireysel farklılıklar üzerinden açıklanabilmektedir. Bu bağlamda makyavelizmin ifşa etme niyeti üzerindeki etkisi, etik iklimin düzenleyici etkisi altında incelenmiştir. Çalışma Eskişehir ilinde görev yapmakta olan kamu sağlık personelleri üzerinde uygulanmıştır. Araştırmanın evrenini 5.986 kişi oluşturmaktadır. Yaklaşık 1200 adet anket kamu kurumlarına dağıtılmış ve 880 adet anket geri toplanmıştır. Anketler incelenmiş ve 290 adet anket eksik veriler nedeniyle çalışmadan çıkarılmıştır. Kalan 590 anket SPSS 22, Amos 26 ve Process 3.3. istatistik programlarıyla

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analiz edilmiştir. ANOVA, korelasyon analizi ve hiyerarşik regresyon analizleri sonucunda, araştırmanın temel problemi kapsamında, makyavelist kişilik özelliğini ifşa etme niyetini anlamlı derecede etkilediği tespit edilmiştir. Ayrıca makyavelist kişilik özelliğinin ifşa etme niyeti üzerindeki etkisinin, etik iklimin 'başkalarının iyiliğini isteme', 'kanun ve kodlar' ve 'bağımsızlık' alt boyutları tarafından düzenlendiği de tespit edilen bir başka bulgudur.

Anahtar Kelimeler: Makyavelizm, etik iklim, ifşa etme, kamu sağlık sektörü

Introduction

Ethical violations that we frequently encounter today and the process of uncovering ethical violations are closely related to both managers and society. The last thing managers want is to be remembered with a negative image. Because in a highly competitive environment, maintaining a positive image is very important. At this point, managers need to illuminate the events within the organization in a cause and effect relationship as well as monitor employees to ensure that they work effectively and efficiently, and function within the framework of social responsibility and not behave unethically. One of the ways to achieve this is to create an ethical climate within the organization in line with goals and objectives. Thus, it is possible to prevent unethical behaviors such as sexual harassment, mobbing, theft, forgery of documents, machiavellianism, narcissism, and psychopathy etc.

There is a possibility that unethical behaviours may occur, however, organisations take precautions. Whistleblowers, or people who expose illegal activities play a part in exposing such unethical conduct. Particularly in public institutions, the act of whistleblowing has the effect of reducing costs and improving services (Miceli and Near, 2013:433-434). Whistleblowing behavior, on the other hand, may have a negative impact on organizations due to the outcomes. One of the most important issues that managers have focused on recently is to prevent the scandals that arise within the organization from spreading beyond the company. Because the learning of scandals through official institutions or the media putting pressure on both stakeholders and employees (Hamid and Zainudin, 2015:479; Miceli and Near, 2013:433-434). It is for this reason that whistleblowers are described as both heroes and traitors (Hersh, 2002). Still, it is only possible for managers or the society to have information about unethical incidents within the organization, to eliminate ethical violations and to protect the interests of the stakeholders by whistleblowing. Ethical violations, especially in health institutions, are an issue that needs to be addressed in this sense. Internal healthcare professionals are needed to reveal behaviors such as the ill-treatment of patients, damaging state property, insisting on misdiagnosis, deliberate disruption, and harassment (Rauwolf and Jones, 2019:1).

It is very important to reveal unethical behaviors that healthcare professionals may encounter in the workplace. The smallest mistakes made by healthcare professionals can have very serious consequences and this can create serious pressure on public institutions (Runciman and Walton, 2007:3). Ethical violations that take place can cause dilemmas for healthcare professionals in some cases (Zhang and Min, 2020:338). In particular, it is necessary to reveal the reasons why individuals who do not report ethical violations. The Machiavellian personality trait is a personality trait that comes into play in the event of not whistleblowing the mentioned ethical violations. Machiavellian individuals are able to keep their personal gains in front of the interests of society by exhibiting manipulative behaviors towards the situations they encounter (Muris et al., 2017:184). Undoubtedly, it is necessary to avoid putting personal interests first in the health sector. It is necessary for the administrators in public institutions to focus on this problem in terms of both corporate image and public health. Effective and institutional communication networks should be developed, as should preparation for healthcare professionals, and behaviors such as machiavellianism should be guided toward the institution's benefit. In this way, employees will know how to behave in ethical dilemmas they encounter and understand the stages in which and where ethical violation should be reported.

In the field of business ethics, there are many studies on ethical climate, machiavellianism and whistleblowing (Den Hartog and Belschak, 2012; Güney and Mandacı, 2009; Ray, 2006; Rothwell and Boldwin, 2006; Stylianou et al., 2013; Toker, 2015; Vadera et al., 2009; Wang and Hsieh, 2013; Winter et al., 2004; Zhang et al., 2009b). The ethical violations encountered in active business life and the behaviors directed to these violations should be defined theoretically by the personal differences of the individuals. Since the 1950s, the behaviors of individuals within the organizations has been observed more frequently due to changes in the field of management. From this period on, behavioral patterns, attitudes, perceptions, and feelings have tried to make sense of the decisions of individuals within the organization. The recent major scandals, in particular, have increased the burden on organizations and directed managers and workers to be more cautious. At this point, it is important to examine the relationships between the characteristics of the institution and the personality traits of the employees. As a result of these examinations, it will be easier to achieve a person-organization fit. Although there are many studies examining the relationships between personality traits and organizational structure, it is seen that detailed analyzes of the above variables are not conducted on healthcare professionals. Whether there is a difference between the professional groups of healthcare professionals, the role of ethical climate on the negative impact of the Machiavellian personality trait, and how individuals' whistleblowing

intentions are affected by Machiavellianism and ethical climate have been examined in detail within the scope of this study. In this context, the relationship between the machiavellian personality traits on the intention of whistleblowing was investigated with the moderator role of ethical climate.

Literature Review

Machiavellianism

It is useful to briefly describe the concepts before sharing the findings to determine the interaction between these concepts. Machiavellian tendency, as Niccolo Machiavelli mentioned in his book "Prince" (2018), is a pattern of behavior based on the fact that individuals exhibit manipulative behaviors on other individuals for their own benefit. The fact that individuals are becoming more and more isolated from society and acting only in their own interests has been effective in gaining importance of the concept of machiavellianism. Because the machiavellian individuals show a different orientation towards moral and ethical behavior. For machiavellian individuals there is an exchange between moral and ethical behavior and amoral and unethical behavior (Khan and Bhatti, 2019:30).

At the beginning of the experimental and theoretical studies about the machiavellianism concept, which was made possible by the works of Christie and Geis (1970). Christie and Geis (1970) examined the properties of machiavelist individuals in their theoretical aspects and drew a general framework for the concept of machiavellianism. In the study of Hunter, Gerbing and Boster (1982), it is stated that the concept of machiavellianism should be dealt along with other character traits. According to the results of this study, the concept of machiavellianism is highly related to other concepts such as dogmatism, competitiveness, internal and external locus of control and self-perception. In addition to these concepts, also the relationship between machiavellianism and social intelligence (Austin et al., 2007), job performance (Gable and Dangelo, 1994), psychopathy (Allsopp, Eysenck and Eysenck, 1991), general intelligence (Wilson, Near and Miller, 1996) was investigated. Finally, in studies investigating the relationship between machiavellianism and ethical climate, it has been observed that ethical climate perception decreases as the machiavellianism level increases (Güney and Mandacı, 2009).

Ethical Climate

Another concept analyzed in this study is ethical climate. According to Victor and Cullen (1988), ethical climate is the dominant perception that individuals create

in their minds regarding ethical procedures and practices within the organization. The ethical climate perception created in the minds of individuals is shaped according to the positions, attitudes and organizational forms of the individuals within the organization (Aydemir and Acilar, 2009: 81). The ethical climate has gained importance as a result of transferring the ethical violations to the communities through the media. One of the main factors that make the concept of ethical climate important is that the ethical violations have been observed under the responsibility of organizations as well as the responsibility of individuals.

The concept of ethical climate is based on studies by Higgins, Power and Kohlberg (1984) and Schneider (1983). Based on these studies, Victor and Cullen (1988) established a theoretical framework for the ethical climate concept for the first time. In the study of Victor and Cullen (1988), 5 different ethical climate types emerged as a result of factor analysis. The ethical climate types are formed by the intersection of ethical theories and locus of analysis. These ethical climate types are, 'caring', 'law and code', 'rules', 'instrumental' and 'independence' (Martin and Cullen, 2006:178).

Table 1: The Ethical Climate Types*

| | | Locus of Analysis | | |
|---------------------|--------------------|---------------------|--------------|---------------------|
| | | Individual | Local | Cosmopolitan |
| Ethical Theories | Egoism | <i>Instrumental</i> | | |
| | Benevolence | <i>Caring</i> | | |
| | Principle | <i>Independence</i> | <i>Rules</i> | <i>Law and Code</i> |

* Martin and Cullen (2006:178)

Afterwards, new ethical climate models were developed by Olson (1998), Schwepker (2001), Keiser and Schulte (2007), Luria and Yagil (2008), and Arnaud (2010). The most widely used ethical climate framework in the literature is the model developed by Cullen, Victor and Bronson (1993). Related to the ethical climate perception; workplace behaviors (Appelbaum et al., 2005), ideological approaches (Barnett et al., 1994), ethical behavior and success (Deshpande, 1996a), job satisfaction (Deshpande, 1996b), employee empowerment (Parboteeah et al., 2010) demographic characteristics (Peterson et al., 2001), organizational commitment (Schwepker, 1999) etc. subjects were analyzed.

Whistleblowing

The last concept analyzed in the study is the whistleblowing concept. The origin of the concept briefly means to announce negative situations to others (Hersh, 2002). In the academic literature, whistleblowing means reporting of illegal activities observed within the institution to authorized persons inside or outside the institution (Miceli and Near, 1992). The act of whistleblowing should not be confused with squealism. Because the act of whistleblowing is based on the idea of acting for the benefit of society and organization.

Numerous studies have been conducted to establish the theoretical framework of the whistleblowing concept. The concept of whistleblowing began to gain importance especially with the studies of Miceli and Near (1988). In the following period, types of whistleblowing (Miceli, Near and Schwenk, 1991; Dworkin and Baucus, 1998), perception of organizational justice (Miceli, Near and Rehg, 2012), cultural differences (Miceli and Near, 2013; Park, Blenkinsopp and Ömürgönülşen, 2008), legal measures (Callahan and Collins, 1992), retaliation (Mesmer-Magnus and Viswesvaran, 2005), ethical climate (Huang, Lo and Wu, 2013) etc. were examined to find relationships between whistleblowing.

As can be seen from the definitions, machiavellianism, ethical climate and intention to whistleblowing are interrelated concepts. The attitudes of individuals affect their behaviors and structural factors within the institution are effective in the decision-making process. It has been clearly stated in the studies conducted so far that the ethical climate has an effect on positive or negative workplace behaviors (Vryonides et al., 2018; Qi and Liu, 2017; Özden et al., 2019; Ahmad et al., 2014). Numerous studies have been conducted on the interaction of ethical climate and whistleblowing (Rothwell and Baldwin, 2007; Sayğan and Bedük, 2013; Afe et al., 2019; Aydan and Kaya, 2018; Banimahd and Golmohamadi, 2017), the interaction of ethical climate and machiavellianism (Sunani, Subroto and Prihatiningtias, 2014; Junitasari and Ariyanto, 2018), and the interaction of machiavellianism and whistleblowing (Stylianou et al., 2013; Dalton and Radtke, 2013; Junitasari and Ariyanto, 2018; Toker, 2015; Zarefar, Surya and Mela, 2018). However, the number of studies analyzing the interaction between these three concepts is quite limited (Miceli and Near, 2013; Demirtaş, 2014; Zhou et al. 2018).

It has been found in earlier studies that machiavellians do not favor the intention of whistleblowing in their workplaces (Al-Azhar and Zarefar, 2018; Dalton and Radtke, 2013). To the contrary, there are studies claiming the opposite (see,

Basri et al., 2020), the general belief is that there is a negative interaction between machiavellianism and whistleblowing. The main problem of the research is exactly about this negative interaction. To what extent is the strength of the interaction between an individuals' level of machiavellianism and their whistleblowing intentions among healthcare personnel? What might be the organizational structures, regulations or approaches that would eliminate negative interactions between them? Within the scope of the study, it was thought that the moderator effects of ethical climate could be an answer to the questions written above. With the positive perception of ethical climate, it is thought that the machiavellians' negative view about the intention to whistleblowing may change. In cases where it is difficult to decide on the whistleblowing action, individuals may need ethical foundations like codes of ethics, ethical climate or norms and procedures (Singer, Mitchell and Turner, 1988). However, there is a gap in the literature regarding which dimensions of the ethical climate positively affect the whistleblowing intention. With the study to be conducted on the sub-dimensions of ethical climate, it will be revealed more clearly from which perspective should be guided for machiavellian individuals, and this will contribute to the process of transforming negative organizational behaviors and attitudes into positive organizational behaviors and attitudes.

It is necessary to create an ethical climate that will serve both the whistleblowing action and the regulation of this action in a way that will benefit society. Many studies have been conducted on the ethical perceptions of healthcare professionals on this issue (Özden et al., 2019; Ciasullo, Cosimato and Palumbo, 2017; Cheng, Bai and Yang, 2019; Aydan and Kaya, 2018). Although their aim is to protect public health, it is quite natural for some healthcare professionals to show machiavellian tendencies. At this point, machiavellian tendencies need to be driven to constructive rather than destructive behavior. It is thought that the ethical climate will create this positive structure. As stated above, although there are studies on the moderator or mediation role of ethical climate, the importance of the sub-dimensions of ethical climate in the interaction of machiavellianism and whistleblowing has not yet been clarified. Likewise, although there are many publications on ethical climate, machiavellianism and whistleblowing in the health sector, there is a gap in the literature regarding how the sub-dimensions of ethical climate have an impact on these variables on the public health sector. In view of this notion, this study investigated whether the sub-dimensions of ethical climate play a moderator role in the relationship between machiavellianism and the intention to whistleblow among healthcare professionals' perceptions.

Research Model and Hypothesis

The research was designed to determine whether ethical climate has a moderator role in the interaction between machiavellianism and whistleblowing variables with an explanatory and cross-sectional model with quantitative data analysis methods. This research design was chosen in order to test the model statistically and to fill the gap in the literature on a sample that is capable of representing the study.

Machiavellian tendencies play an important role in the ethical decision-making of individuals (Winter et al., 2004: 281; Schafer and Simmons, 2008: 699-700; Sunani, Subroto and Prihatiningtias, 2014:87). The act of whistleblowing is also regarded as an ethical decision-making behavior. It is thought that high machiavellian individuals look negatively at the act of whistleblowing because of their behavior that prioritizes manipulative and personal interests (Singhapakdi and Vitell, 1991; Ross and Robertson, 2000). Therefore, machiavelist individuals find it difficult to act as a whistleblower (Dalton and Radtke, 2013: 153).

“H₁: Machiavellian personality tendency has a negative impact on the intention of whistleblowing.”

On the other hand, the strong ethical climate perceived by the employees within the organization can help them to move away from unethical behaviors (Demirtaş, 2014: 136). As a result of the studies on ethical climate and the act of whistleblowing with the positive interaction between them (Ahmad et al., 2014; Bouville, 2008; Dalton and Radtke, 2013; Elçi, Karabay and Akbaş, 2016; Özler, Şahin and Atalay, 2010; Ray, 2006; Rothwell and Boldwin, 2006; Sayğan and Bedük, 2013; Zhang et al., 2009a), which is based on the Ajzen’s Theory of Planned Behaviour (Liu et al., 2018), it is thought that the effect of machiavelist tendencies on the whistleblowing action will decrease and even change direction with the moderator role of ethical climate. In this context, a hypothesis had been established over the mediating impact of each sub-dimension of the ethical climate in the interaction between machiavellianism and whistleblowing.

“H_{2a}: Ethical Climate’s “Caring” sub-dimension has a moderator effect on the effect of machiavellian personality tendency on the intention of whistleblowing.”

“H_{2b}: Ethical Climate’s “Law and Code” sub-dimension has a moderator effect on the effect of machiavellian personality tendency on the intention of whistleblowing.”

“H_{2c}: Ethical Climate’s “Rules” sub-dimension has a moderator effect on the effect of machiavellian personality tendency on the intention of whistleblowing.”

“H_{2d}: Ethical Climate’s “Instrumental” sub-dimension has a moderator effect on the effect of machiavellian personality tendency on the intention of whistleblowing.”

“H_{2e}: Ethical Climate’s “Independence” sub-dimension has a moderator effect on the effect of machiavellian personality tendency on the intention of whistleblowing.”

In this analysis, the independent variable is Machiavellian propensity (Distrust of Others, Desire for Status, Desire for Control, Amoral Manipulation), which is thought to affect whistleblowing intentions, and the dependent variable which is whistleblowing intentions (Internal Whistleblowing, External Whistleblowing, Silence). Furthermore, the ethical environment (Caring, Law and Code, Rules, Instrumental, Independence) is a moderator variable in deciding the ethical climate factor, which moderates the effect on the relationship between Machiavellian propensity and the purpose to whistleblow.

Accordance with the studies in the literature, the research model and hypotheses generated are shown in Figure 4.

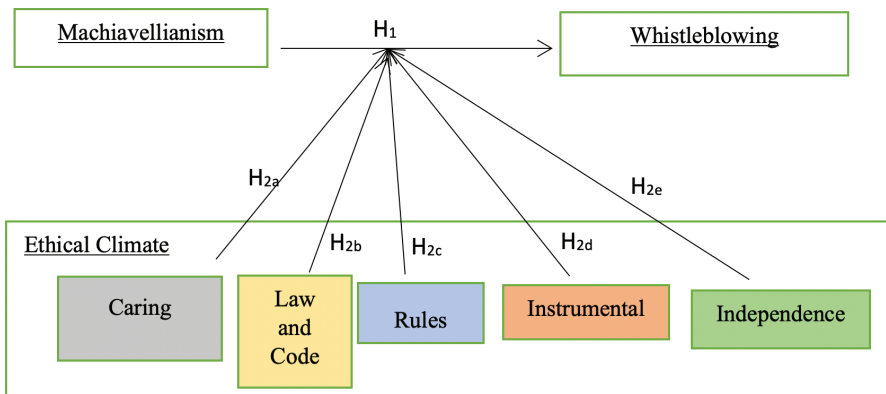


Figure 1: Research Diagram of Hypotheses

Methodology

Data Analysis and Processing

The IBM SPSS 22.0, AMOS 26.0, and PROCESS 3.3 package programs are used to analyze the research data within the framework of the study. Amos 26.0 and Process 3.3 were used to assess the scales' conduct validity, confirmatory factor analysis, and to determine the moderator position of ethical climate perception using

statistics and graphs. First of all, demographic information of the participants was included. The reason for including demographic information is to give detailed information about the scope of the research. Afterwards, the validity and reliability of the scales used in the study were examined, and the model-fit values of the variables were shown in tables as a result of the confirmatory factor analysis. In the next step, correlation analysis was applied in order to determine the relationships between variables and the directions of the relationships.

Finally, in order to test the hypotheses, firstly, regression analysis was conducted for machiavellianism and whistleblowing variables. In addition to this analysis, hierarchical regression analysis was performed by including each sub-dimension of ethical climate into the regression analysis, and the moderator roles of the sub-dimensions of ethical climate were determined statistically.

Population and Sample

The study was conducted on healthcare professionals who work for public institutions. Because the health of patients is the primary goal for healthcare professionals. It is difficult to obtain information from patients, nurses, doctors, and other healthcare professionals, especially due to patient-doctor confidentiality. It is very important to report unethical practices to the relevant supervisors or institutions in such organizations for both public health and health institutions to work effectively and efficiently. Because public institutions are more bureaucratic than private sector institutions and they are taken into consideration, it forces public institutions to act in accordance with the interests of stakeholders and requires transparency (Elçi, Karabay and Akbaş, 2016:57).

The study was conducted on health personnel who work in public institutions, in Eskişehir, a city of Turkey. The population of the study is 5.986 people. The questionnaires were delivered to the relevant people in each health institution. The data collection process took a few days for each health institution, especially due to the hygiene conditions and the principle of working alternately. Since there was no face to face communication with the participants during this period, all detailed information was shared with the participants in the introduction paragraph of the questionnaires. The delivery, collection and adjustment of the questionnaires for analysis started in the first month of 2019 and took approximately 2 months.

During the data collection phase, the 'Convenience Sampling' method was used. In this context, 1200 questionnaires, well above the threshold value that will provide the ability to represent the population, were delivered to five different pub-

lic health institutions shown in Table 2. This population includes doctors, dentists, nurses, technical services personnel and general administrative services personnel. Contractual healthcare workers are not included in the population. In order to preserve the representation ability of each institution in the population, analysis was carried out by preserving the ratio of the number of employees between the institutions with simple proportional calculations.

The questionnaires that were collected were examined selectively in terms of the reliability and validity of the study, and all questionnaires with incomplete, incorrect and random coding were removed from the data set. After all stages were completed, 880 of 1200 questionnaires were returned, 290 of them were not included in the study. Data analysis was performed with the remaining 590 questionnaires.

Table 2: Demographic Characteristics of Participants

| | | | | Frequency | Ratio | | |
|--------------------|-------------------------------|--------------|--------------|-----------------------|---------------|--------------|------|
| | | | | | | | |
| <i>Institution</i> | | | | 215 | 36,4 | | |
| | Yunusemre Devlet Has. | | | 103 | 17,5 | | |
| | Eskişehir Şehir Has. | | | 69 | 11,7 | | |
| | Ağız ve Diş Sağlığı Has. | | | 63 | 10,7 | | |
| | Eskişehir İl Ambulans Servisi | | | 140 | 23,7 | | |
| | Eskişehir İl Sağlık Müd. | | | 590 | 100 | | |
| | <i>Total</i> | | | | | | |
| <i>Gender</i> | | <i>Freq.</i> | <i>Ratio</i> | <i>Marital Status</i> | <i>Freq.</i> | <i>Ratio</i> | |
| | Female | 372 | 63,1 | | Single | 167 | 28,3 |
| | Male | 218 | 36,9 | | Married | 423 | 71,7 |
| | <i>Total</i> | 590 | 100 | | <i>Total</i> | 590 | 100 |
| <i>Age</i> | | <i>Freq.</i> | <i>Ratio</i> | <i>Education</i> | <i>Freq.</i> | <i>Ratio</i> | |
| | 18-25 | 42 | 7,1 | | Elementary S. | 4 | ,7 |
| | 26-35 | 192 | 32,5 | | Secondary S. | 6 | 1,0 |
| | 36-45 | 218 | 36,9 | | High S. | 74 | 12,5 |
| | 46 + | 138 | 23,4 | | College | 131 | 22,2 |
| | | | | | Undergraduate | 249 | 42,2 |
| | | | | | Master | 88 | 14,9 |
| | <i>Total</i> | 590 | 100 | | Doctorate | 38 | 6,4 |
| | | | <i>Total</i> | 590 | 100 | | |

Measures

The scales which were used in the study were prepared with a 5-point Likert type rating. Participants were asked to select the appropriate option from the items ranging from 'strongly disagree' to 'strongly agree'. There are 51 items in the questionnaire.

Machiavellianism Scale: The 'Machiavellianism Scale' which was developed by Dahling, Whitaker and Levy (2009) and translated into Turkish by Ülbeği (2016), was used to determine the machiavelist personality traits of the participants. The scale consists of 16 items and 4 sub-dimensions. This scale was also used in the following studies: Çavuşoğlu and Kutluk (2018), Yasım (2020), Akçakanat and Dinç (2018).

Ethical Climate Scale: The 'Ethical Climate Questionnaire' which was developed by Victor and Cullen (1988) and translated into Turkish by Özyer (2010), was used to measure the ethical climate perceptions of the participants. The scale consists of 26 items and 5 sub-dimensions. This scale was also used in the following studies: Oğuzhan and Sığırı (2014), Taner and Elgün (2015).

Whistleblowing Scale: In order to determine the participants' intention to whistleblowing, the 'Whistleblowing Scale' which was developed by Park, Rehg and Lee (2005) and translated into Turkish by the authors of this research was used in the study. And also, Celep and Konaklı's study (2012), a new scale was developed using the items of the scale developed by Park, Rehg and Lee. However, in this study, instead of the scale developed by Celep and Konaklı, the scale that was translated from the original and whose validity and reliability analyzes were carried out by the researchers, was preferred. This scale consists of 9 items and 3 sub-dimensions. This scale was also used in the following study: Trongmateerut and Sweeny (2013), Farooqi, Abid and Ahmed (2017), Bhal and Dadhich (2011).

Confirmatory factor analysis was performed to determine the validity and reliability of the scales which were used in the study. The standard values and the resulting model for each variable are shown in Figure 2, Figure 3 and Figure 4.

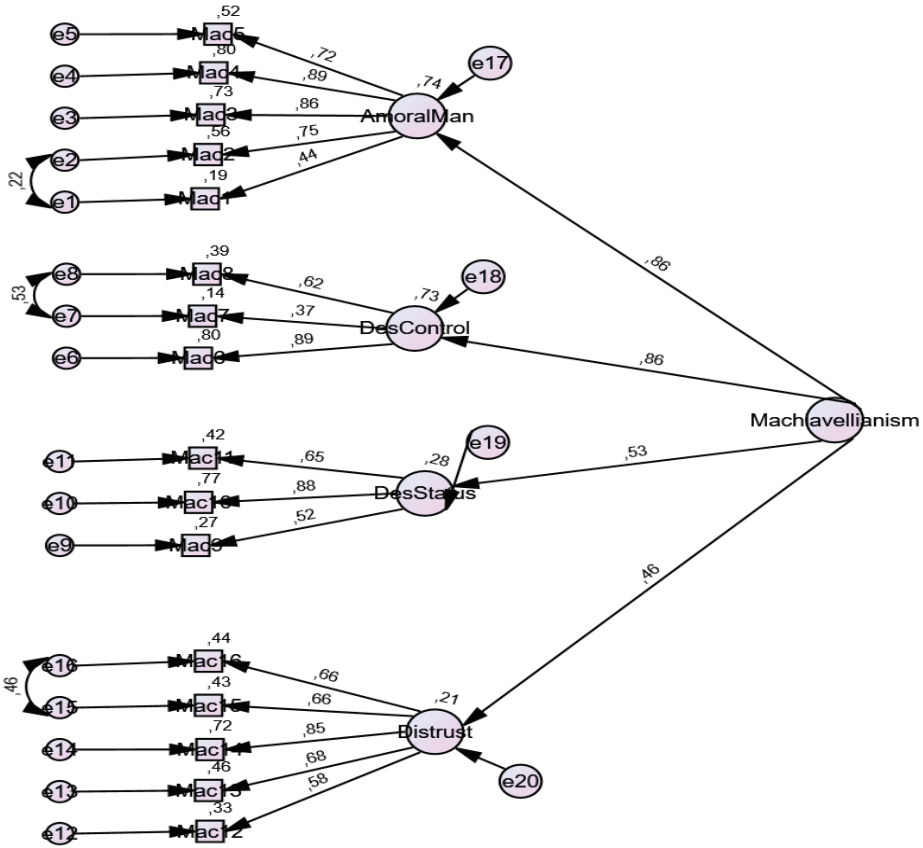


Figure 2: Confirmatory Factor Analyze of Machiavellianism Scale

As shown in Figure 2, as a result of the confirmatory factor analysis, the factor load was found to be over 0.4 in all the items of machiavellianism scale. Therefore, no items were excluded from the analysis. It is observed that the 4-dimensional structure is still preserved. In accordance with the theoretical basis, 3 modifications are made between e1-e2, e7-e8 and e15-e16.

According to the results of the confirmatory factor analysis applied to the Machiavellian Scale, the model fit values are as follows: ($\chi^2=273,744$; $\chi^2/df=2,822$; p value=0,000; RMR=,087; GFI=,945; CFI=,957; NFI=,935; RMSEA=,056).

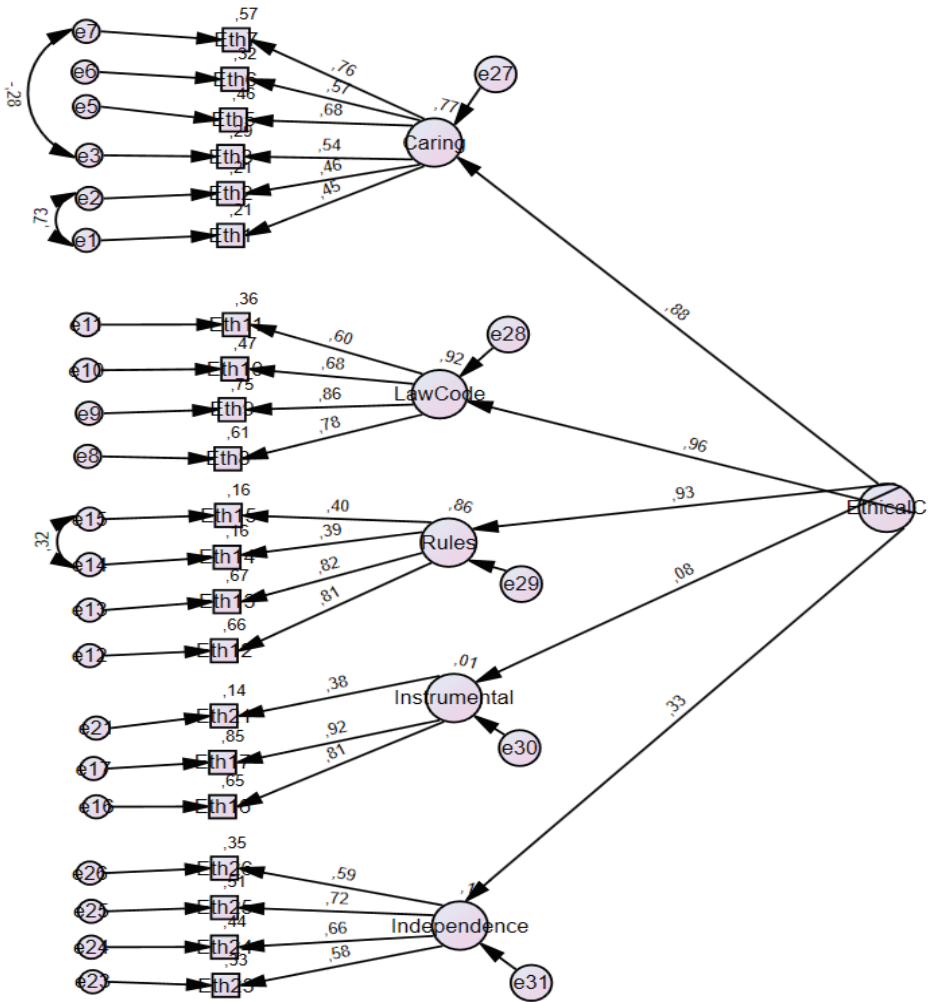


Figure 3: Confirmatory Factor Analyze of Ethical Climate Scale

As shown in Figure 3, according to the results of the confirmatory factor analysis conducted on the ethical climate scale, the items number '4, 18, 19, 20 and 22' were excluded from the analysis due to low factor loadings. It is observed that the 5-dimensional structure is still preserved. As on the scale of machiavellianism, with the theoretically meaningful, 3 modifications are made between e1-e2, e3-e7 and e14-e15 for the ethical climate scale.

According to the results of the confirmatory factor analysis applied to the Ethical Climate Scale (without the numbers of items: 4,18,19,20 and 22), the mod-

el fit values are as follows: ($\chi^2=594,877$; $\chi^2/df=3,287$; p value=0,000; RMR=,075; GFI=,913; CFI=,916; NFI=,884; RMSEA=,062).

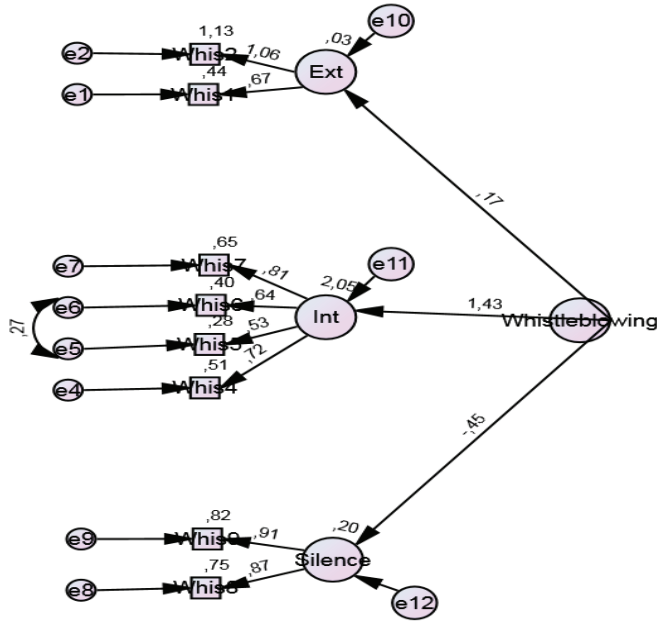


Figure 4: Confirmatory Factor Analyze of Whistleblowing Scale

As shown in Figure 4, according to the results of the confirmatory factor analysis conducted on the whistleblowing scale, the item number '45' was excluded from the analysis due to low factor loadings. It is observed that the 3-dimensional structure is still preserved. 1 modification is made between e5-e6. As a result of confirmatory factor analysis, model fit values for all the scales which were used in the study are shown in Table 3.

According to the results of the confirmatory factor analysis applied to the Whistleblowing Scale (without the number of item: 45), the model fit values are as follows: ($\chi^2=53,554$; $\chi^2/df=3,347$; p value=0,000; RMR=,068; GFI=,978; CFI=,980; NFI=,972; RMSEA=,063).

Table 3: Model Fit Values of Confirmatory Factor Analysis

| Factor Analysis Models | | | | | | | |
|------------------------|-------------------------------------|--------------------------|--------------------------|---|---|---|---|
| | χ^2/SD | RMR | GFI | CFI | NFI | RMSEA | |
| MS | 2,822 | ,087 | ,945 | ,957 | ,935 | ,056 | |
| ECQ | 3,287 | ,075 | ,913 | ,916 | ,884 | ,062 | |
| WS | 3,347 | ,068 | ,978 | ,980 | ,972 | ,063 | |
| Model-Fit Criteria* | $0 \leq \chi^2/SD \leq 3$ -Good Fit | ≤ 5 -Acceptable Fit | Researcher defines level | Value close to .90 or .95 reflects a good fit | Value close to .90 or .95 reflects a good fit | Value close to .90 or .95 reflects a good fit | Value of .05 to .08 indicates close fit |

The model fit values obtained as a result of the confirmatory factor analysis are verified by the studies conducted by Schumacker and Lomax (2016), Meydan and Şeşen (2011), Hu and Bentler (1999) and Brown (2015). In Schumacker and Lomax's study (2016), it is stated that GFI, CFI and NFI values close to .90 are acceptable. The scales are considered valid when all good and acceptable model-fit values are considered.

According to the results of the reliability analysis of the newly formed model, the Cronbach Alpha coefficients of all scales were found to be over 0.70. Reliability coefficients of all scales and sub-dimensions are shown in Table 4.

Table 4: Results of Reliability Analysis

| | Number of Items | Cronbach Alpha Coefficients |
|-------------------------------------|-----------------|-----------------------------|
| Distrust of Others | 5 | ,826 |
| Desire for Status | 3 | ,717 |
| Desire for Control | 3 | ,753 |
| Amoral Manipulation | 5 | ,844 |
| Machiavellianism Scale Total | 16 | ,860 |
| Caring | 6 | ,780 |
| Law and Code | 4 | ,815 |
| Rules | 4 | ,713 |
| Instrumental | 3 | ,729 |
| Independence | 4 | ,729 |
| Ethical Climate Questionnaire Total | 21 | ,849 |
| Internal Whistleblowing | 4 | ,782 |

| | | |
|----------------------------|---|------|
| External Whistleblowing | 2 | ,830 |
| Silence | 2 | ,879 |
| Whistleblowing Scale Total | 8 | ,768 |

Findings

Correlation Analyze: Correlation analysis is a statistical method used to determine the association and direction of the relationship between variables. Correlation analysis, which shows the relationship between variables, can be performed between independent and dependent variables as well as between independent variables (Nakip, 2006:342). In order to better understand the moderator role of ethical climate, correlation analysis was conducted for all variables. The direction of the relationship between the variables is shown in Table 5.

Table 5: Inter-Variable Correlation Analysis

| | | Ethical Climate | Machiavellianism | Whistleblowing |
|------------------|---------------------|-----------------|------------------|----------------|
| Ethical Climate | Pearson Correlation | 1 | -,008 | ,227** |
| | Sig. (1-tailed) | | ,427 | ,000 |
| | N | 590 | 590 | 590 |
| Machiavellianism | Pearson Correlation | -,008 | 1 | -,113** |
| | Sig. (1-tailed) | ,427 | | ,003 |
| | N | 590 | 590 | 590 |
| Whistleblowing | Pearson Correlation | ,227** | -,113** | 1 |
| | Sig. (1-tailed) | ,000 | ,003 | |
| | N | 590 | 590 | 590 |

**Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

According to the correlation analysis, a positive and weak relationship was found between 'ethical climate' moderator variable and 'whistleblowing' dependent variable ($r = ,227$). A negative and relatively weak relationship was found between the 'machiavellianism independent variable' and the whistleblowing dependent vari-

able ($r = -,113$). In addition, there is no significant relationship between ethical climate and machiavellianism variables.

Hierarchical Regression Analysis: Hierarchical regression analysis is applied when independent variables affect dependent variables at different times and at different rates. In order to determine the role of moderator variable within the scope of hierarchical regression analysis, independent variables are included in the model group-by-group. In order to achieve this, firstly the independent variable and then both the independent and the moderator variable, and finally the interaction term obtained by multiplying the standardized values of the independent variable and the moderator variable are included in the regression analysis. Within the scope of the hierarchical regression analysis, after the analysis of the first group, the analysis of the second group is made and thus it is determined how the variables in the second group change the effect level in the first group (Gürbüz and Şahin, 2017: 276).

In order to test the study's hypotheses, basic linear regression analysis was used to examine the relationship between the machiavellianism independent variable and the whistleblowing dependent variable. Following that, the sub-dimensions of the ethical environment, which are thought to control the impact between machiavellian tendencies and whistleblowing intention, were included in the study, and hierarchical regression analysis was performed.

Within the framework of the study's hypotheses, simple linear regression analysis was used to assess the degree of impact between machiavellian propensity and the intention to whistleblowing. The results are shown in Tables 6 and 7.

Table 6: Machiavellianism-Whistleblowing Regression Model Summary

| Model | R | R ² | Adjusted R ² | Std. Error of Estimate |
|-------|-------------------|----------------|-------------------------|------------------------|
| 1 | ,113 ^a | ,013 | ,011 | ,69139 |

a: Independent Variable-Machiavellianism

Table 7: Machiavellianism-Whistleblowing Regression Model's Results

| Variable | B | Std. Error | t | p |
|------------------|-------|------------|--------|--------|
| Machiavellianism | -,119 | ,043 | -2,746 | ,006** |
| Constant | 4,048 | ,106 | 38,026 | ,000 |

R²= ,013, Adjusted R²=,011, F_(1,588)=7,542 ve **p<,01

a= Independent Variable

As shown in Table 6, machiavellianism has a significant effect on the intention to whistleblowing at $p < 0.01$ level. It is seen that a unit change in machiavellianism effects the intention to whistleblowing ($p < .01$ level) significantly and negatively by around 11 percent. According to the analysis results, the H_1 hypothesis was supported.

In order to determine the moderator role of the ethical climate, the sub-dimensions of the ethical climate were added one by one to the hierarchical regression analysis.

'Caring' Sub-Dimension

The results of the hierarchical regression analysis for the machiavellian tendency, the intention to whistleblowing, and the 'Caring' sub-dimension are shown in Tables 8, 9 and 10.

Table 8: Machiavellianism-Whistleblowing-Caring Sub-Dimension Regression Model Summary

| Model | R | R ² | Adjusted R ² | Std. Error of Estimate | R ² Change | F Change | p |
|-------|-------|----------------|-------------------------|------------------------|-----------------------|----------|------|
| 1 | ,219a | ,048 | ,045 | ,67947 | ,048 | 14,807 | ,000 |
| 2 | ,265b | ,070 | ,065 | ,67213 | ,070 | 14,717 | ,000 |

a= Constant, Zscore-Machiavellianism, Zscore-Caring

b= Constant, Zscore-Machiavellianism, Zscore-Caring, Interaction Term

Table 9: Machiavellianism-Whistleblowing-Caring Sub-Dimension-ANOVA

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | p |
| 1 | Regression | 13,673 | 2 | 6,836 | 14,807 | ,000 ^b |
| | Residual | 271,007 | 587 | ,462 | | |
| | Total | 284,679 | 589 | | | |
| 2 | Regression | 19,946 | 3 | 6,649 | 14,717 | ,000 ^c |
| | Residual | 264,733 | 586 | ,452 | | |
| | Total | 284,679 | 589 | | | |

a= Dependent Variable: Intention to Whistleblowing

b= Constant, Zscore-Machiavellianism, Zscore-Caring

c= Constant, Zscore-Machiavellianism, Zscore-Caring, Interaction Term

Table 10: Machiavellianism-Whistleblowing-Caring Sub-Dimension Coefficients

| Coefficients ^a | | | | | | |
|---------------------------|-------------------------|----------------|------------|--------------|---------|------|
| Model | B | Unstandardized | | Standardized | t | p |
| | | Coefficients | Std. Error | | | |
| 1 | Constant | 3,766 | ,028 | | 134,624 | ,000 |
| | Zscore-Machiavellianism | -,064 | ,028 | -,093 | -2,287 | ,023 |
| | Zscore-Caring | ,131 | ,028 | ,189 | 4,670 | ,000 |
| 2 | Constant | 3,775 | ,028 | | 135,926 | ,000 |
| | Zscore-Machiavellianism | -,056 | ,028 | -,081 | -2,012 | ,045 |
| | Zscore-Caring | ,122 | ,028 | ,175 | 4,352 | ,000 |
| | Interaction Term | ,083 | ,022 | ,150 | 3,726 | ,000 |

a= Dependent Variable: Intention to Whistleblowing

Summarizes the hierarchical regression model are shown in Table 8. When the adjusted R² value in the first model is compared with the adjusted R² values in the second model, it is seen that the rate of explaining the dependent variable of the first model is 4.5% and the rate of explaining the dependent variable of the second model including the interaction term is 6.5%. Both models were statistically significant (p < .05). Therefore, in the model including the interaction term, the rate of explaining the dependent variable significance increased by 2%.

In Table 10, the interaction coefficients of the hierarchical regression analysis are given. Both models were found to be statistically significant at p < .05 level. This means that the interaction term - the standardized version of the mean scores of the machiavellian tendency and the standardized version of the mean scores of Caring - significantly effects the dependent variable. When the unstandardized coefficients column is examined, it is seen that the interaction term effects the dependent variable positively (B = .083) at the level of p = .000. In short, it was found that the sub-dimension of 'caring' has a moderator effect.

As can be seen from the graph above, the interaction between the machiavellian tendency and intention to whistleblowing in the case of low perception of the 'Caring' sub-dimension is negative and the slope of the interaction is steeper. In cases where there is a high perception of the 'Caring' sub-dimension, it is seen that the slope of the interaction between machiavellian tendency and intention to whistleblowing is reduced. According to the results, the strength of the negative impact

of the machiavellian tendency on the intention to whistleblowing is significantly reduced by the “reducing” moderator effect of the ‘Caring’ sub-dimension. H_{2a} hypothesis was supported.

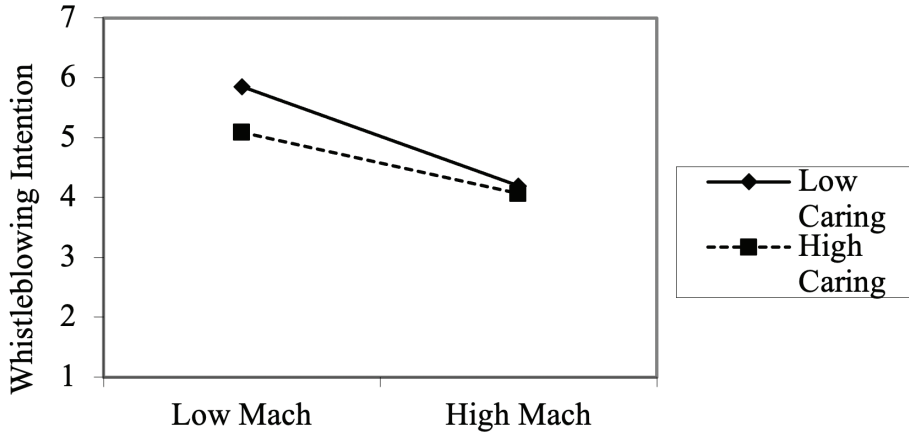


Figure 5: Moderator Role of ‘Caring’ Sub-Dimension

‘Law and Code’ Sub-Dimension

The results of the hierarchical regression analysis for the machiavellian tendency, the intention to whistleblowing, and the ‘Law and Code’ sub-dimension are shown in Tables 11, 12 and 13.

Table 11: Machiavellianism-Whistleblowing-Law and Code Sub-Dimension Regression Model Summary

| Model | R | R2 | Adjusted R2 | Std. Error of Estimate | R2 Change | F Change | p |
|-------|-------|------|-------------|------------------------|-----------|----------|------|
| 1 | ,203a | ,041 | ,038 | ,68183 | ,041 | 12,676 | ,000 |
| 2 | ,227b | ,051 | ,047 | ,67868 | ,052 | 10,687 | ,000 |

a= Constant, Zscore-Machiavellianism, Zscore-Law and Code

b= Constant, Zscore-Machiavellianism, Zscore-Law and Code, Interaction Term

Table 12: Machiavellianism-Whistleblowing-Law and Code Sub-Dimension-ANOVA

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | p |
| 1 | Regression | 13,673 | 2 | 6,836 | 14,807 | ,000 ^b |
| | Residual | 271,007 | 587 | ,462 | | |
| | Total | 284,679 | 589 | | | |
| 2 | Regression | 19,946 | 3 | 6,649 | 14,717 | ,000 ^c |
| | Residual | 264,733 | 586 | ,452 | | |
| | Total | 284,679 | 589 | | | |

a= Dependent Variable: Intention to Whistleblowing

b= Constant, Zscore-Machiavellianism, Zscore-Law and Code

c= Constant, Zscore-Machiavellianism, Zscore-Law and Code, Interaction Term

Table 13: Machiavellianism-Whistleblowing-Law and Code Sub-Dimension Coefficients

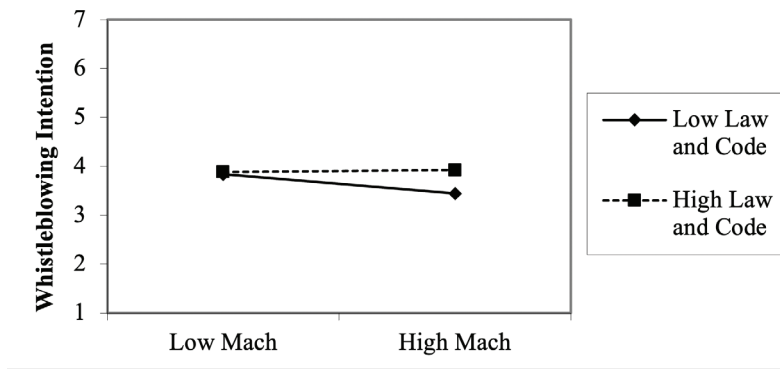
| Coefficients ^a | | | | | | |
|---------------------------|-------------------------|-----------------------------|------------|---------------------------|---------|------|
| Model | B | Unstandardized Coefficients | | Standardized Coefficients | t | p |
| | | B | Std. Error | | | |
| 1 | Constant | 3,766 | ,028 | | 134,158 | ,000 |
| | Zscore-Machiavellianism | -,066 | ,028 | -,095 | -2,343 | ,019 |
| | Zscore-Law and Code | ,118 | ,028 | ,170 | 4,195 | ,000 |
| 2 | Constant | 3,772 | ,028 | | 134,498 | ,000 |
| | Zscore-Machiavellianism | -,087 | ,042 | -,083 | -2,049 | ,040 |
| | Zscore-Law and Code | ,131 | ,033 | ,161 | 3,962 | ,000 |
| | Interaction Term | ,107 | ,042 | ,104 | 2,543 | ,011 |

a= Dependent Variable: Intention to Whistleblowing

As shown in Table 11, when the adjusted R² value in the first model is compared with the adjusted R² values in the second model, it is seen that the rate of explaining the dependent variable of the first model is 3.8% and the rate of explaining the dependent variable of the second model including the interaction term is 4.7%. Both models were statistically significant (p < .05). Therefore, in the model including the interaction term, the rate of explaining the dependent variable significance increased by 0.9%.

In Table 13, the interaction coefficients of the hierarchical regression analysis are given. Both models were found to be statistically significant at $p < .05$ level. This means that the interaction term - the standardized version of the mean scores of the machiavellian tendency and the standardized version of the mean scores of Law and Code- significantly effects the dependent variable. When the unstandardized coefficients column is examined, it is seen that the interaction term effects the dependent variable positively ($B = .107$) at the level of $p = .011$. In short, it was found that the sub-dimension of 'Law and Code' has a moderator effect.

Figure 6: Moderator Role of 'Law and Code' Sub-Dimension



Where the perception of the 'law and code' sub-dimension is low, the effect of machiavellian tendency on whistleblowing intention is negative. However, as the perception of 'law and code' sub-dimension increased, the interaction between machiavellian tendency and intention to whistleblowing turned out to be positive. According to the results of the analysis, the strength of the negative effect of the machiavelist tendency on the intention to whistleblowing turned into the positive effect by the "opposite" moderator effect of 'Law and Code' ethical climate perception. H_{2b} hypothesis was supported.

'Rules' Sub-Dimension

The results of the hierarchical regression analysis for the machiavellian tendency, the intention to whistleblowing, and the 'Rules' sub-dimension are shown in Tables 14, 15 and 16.

Table 14: Machiavellianism-Whistleblowing-Rules Sub-Dimension Regression Model Summary

| Model | R | R2 | Adjusted R2 | Std. Error of Estimate | R2 Change | F Change | p |
|-------|-------|------|-------------|------------------------|-----------|----------|------|
| 1 | ,169a | ,028 | ,025 | ,68644 | ,028 | 8,580 | ,000 |
| 2 | ,179b | ,032 | ,027 | ,68576 | ,032 | 6,451 | ,000 |

a= Constant, Zscore-Machiavellianism, Zscore-Rules

b= Constant, Zscore-Machiavellianism, Zscore-Rules, Interaction Term

Table 15: Machiavellianism-Whistleblowing-Rules Sub-Dimension-ANOVA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | p |
|-------|------------|----------------|-----|-------------|-------|-------|
| 1 | Regression | 8,086 | 2 | 4,043 | 8,580 | ,000b |
| | Residual | 276,593 | 587 | ,471 | | |
| | Total | 284,679 | 589 | | | |
| 2 | Regression | 9,101 | 3 | 3,034 | 6,451 | ,000c |
| | Residual | 275,579 | 586 | ,470 | | |
| | Total | 284,679 | 589 | | | |

a= Dependent Variable: Intention to Whistleblowing

b= Constant, Zscore-Machiavellianism, Zscore-Law and Code

c= Constant, Zscore-Machiavellianism, Zscore-Law and Code, Interaction Term

Table 16: Machiavellianism-Whistleblowing-Rules Sub-Dimension Coefficients

Coefficients^a

| Model | B | Unstandardized Coefficients | | Standardized Coefficients | t | p |
|-------|-------------------------|-----------------------------|------------|---------------------------|---------|------|
| | | B | Std. Error | | | |
| | Constant | 3,766 | ,028 | | 133,258 | ,000 |
| 1 | Zscore-Machiavellianism | -,072 | ,028 | -,104 | -2,547 | ,011 |
| | Zscore-Rules | ,087 | ,028 | ,126 | 3,084 | ,002 |

| | | | | | | |
|---|--------------------------|-------|------|-------|---------|------|
| | Constant | 4,172 | ,028 | | 133,265 | ,000 |
| 2 | Zscore- Machiavellianism | -,032 | ,029 | -,096 | -2,348 | ,019 |
| | Zscore-Rules | -,047 | ,028 | ,121 | 2,951 | ,003 |
| | Interaction Term | ,065 | ,023 | ,060 | 1,469 | ,142 |

a= Dependent Variable: Intention to Whistleblowing

As shown in Table 14, when the adjusted R^2 value in the first model is compared with the adjusted R^2 values in the second model, it is seen that the rate of explaining the dependent variable of the first model is 2.5% and the rate of explaining the dependent variable of the second model including the interaction term is 2.7%. Both models were statistically significant ($p < .05$). Therefore, in the model including the interaction term, the rate of explaining the dependent variable significance increased by 0.2%.

When looking at the interaction coefficients in Table 16, it's clear that the p values in model 1 are significant in 95% confidence interval. However, it was determined that the interaction term ($p < .05$) in model 2 was not statistically significant. This means that the interaction term - the standardized version of the mean scores of the machiavellian tendency and the standardized version of the 'Rules' sub-dimension mean scores- does not significantly effect the dependent variable. When the unstandardized coefficients column is examined, it is seen that the interaction term effects the dependent variable at the level of $p = .142$ and positively ($B = .065$). In short, the moderator effect of the sub-dimension of rules could not be found.

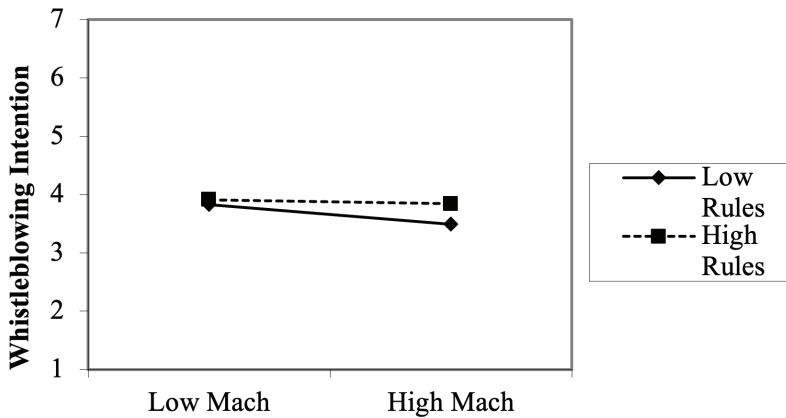


Figure 7: Moderator Role of ‘Rules’ Sub-Dimension

As can be seen in Figure 7, as the perception of the ‘Rules’ subdimension increases, the strength of the negative effect between the machiavellian tendency and the intention to whistleblowing decreases. However, there was no statistically significant effect of the ‘Rules’ sub-dimension on the reduction of this strength. H_{2c} hypothesis was rejected.

‘Instrumental’ Sub-Dimension

The results of the hierarchical regression analysis for the machiavellian tendency, the intention to whistleblowing, and the ‘Instrumental’ sub-dimension are shown in Tables 17, 18 and 19.

Table 17: Machiavellianism-Whistleblowing-Instrumental Sub-Dimension Regression Model Summary

| Model | R | R2 | Adjusted R2 | Std. Error of Estimate | R2 Change | F Change | p |
|-------|-------|------|-------------|------------------------|-----------|----------|------|
| 1 | ,207a | ,043 | ,040 | ,68133 | ,043 | 13,129 | ,000 |
| 2 | ,208b | ,043 | ,039 | ,68175 | ,043 | 8,834 | ,000 |

a= Constant, Zscore-Machiavellianism, Zscore-Rules

b= Constant, Zscore-Machiavellianism, Zscore-Rules, Interaction Term

Table 18: Machiavellianism-Whistleblowing-Instrumental Sub-Dimension -ANOVA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | p |
|-------|------------|----------------|-----|-------------|--------|-------|
| 1 | Regression | 12,189 | 2 | 6,095 | 13,129 | ,000b |
| | Residual | 272,490 | 587 | ,464 | | |
| | Total | 284,679 | 589 | | | |
| 2 | Regression | 12,318 | 3 | 4,106 | 8,834 | ,000c |
| | Residual | 272,362 | 586 | ,465 | | |
| | Total | 284,679 | 589 | | | |

a= Dependent Variable: Intention to Whistleblowing

b= Constant, Zscore-Machiavellianism, Zscore-Law and Code

c= Constant, Zscore-Machiavellianism, Zscore-Law and Code, Interaction Term

Table 19: Machiavellianism-Whistleblowing-Instrumental Sub-Dimension Coefficients

| Model | | Unstandardized | | Standardized | t | p |
|-------|-------------------------------|----------------|------------|--------------|---------|------|
| | | Coefficients | | | | |
| B | | B | Std. Error | Coefficients | | |
| 1 | Constant | 3,766 | ,028 | | 134,257 | ,000 |
| | Zscore-Machiavellianism | -,110 | ,029 | -,158 | -3,788 | ,000 |
| | Zscore-Instrumental | ,125 | ,029 | ,180 | 4,300 | ,000 |
| 2 | Constant | 3,762 | ,029 | | 130,510 | ,000 |
| | Zscore-Machiavellianism | -,111 | ,029 | -,160 | -3,817 | ,000 |
| | Zscore-Instrumental | ,127 | ,029 | ,183 | 4,326 | ,000 |
| | Interaction Term ^b | ,014 | ,026 | ,022 | ,525 | ,600 |

a= Dependent Variable: Intention to Whistleblowing

As shown in Table 17, adjusted R² value in model 1 and adjusted R² values in model 2 were determined as 4%. According to the results of the analysis, the moderator effect of the 'Instrumental' sub-dimension does not have a statistically significant effect on the explanation of the dependent variable.

According to the hierarchical regression coefficients in Table 19, the significance level of the interaction term in model 2 was determined as p = .600. In other words, there was no statistically significant moderator effect of the 'Instrumental' sub-dimension on the dependent variable.

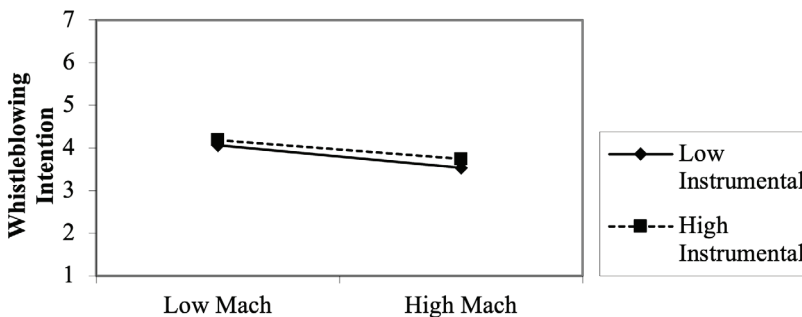


Figure 8: Moderator Role of 'Instrumental' Sub-Dimension

When the perception of 'Instrumental' sub-dimension is low or high, the im-

fact of the machavellian propensity on whistleblowing intention is not statistically important, as shown in figure 8. The H_{2d} hypothesis was rejected.

'Independence' Sub- Dimension

In the last analysis conducted within the scope of the study, it was investigated whether the 'Independence' sub-dimension had a moderator effect. The analysis results are shown in Table 20, 21 and 22.

Table 20: Machiavellianism-Whistleblowing-Independence Sub-Dimension Regression Model Summary

Table 20: Machiavellianism-Whistleblowing-Independence Sub-Dimension Regression Model Summary

| Model | R | R2 | Adjusted R2 | Std. Error of Estimate | R2 Change | F Change | p |
|-------|-------|------|-------------|------------------------|-----------|----------|------|
| 1 | ,147a | ,022 | ,018 | ,68879 | ,022 | 6,517 | ,002 |
| 2 | ,168b | ,028 | ,023 | ,68711 | ,028 | 5,659 | ,001 |

a= Constant, Zscore-Machiavellianism, Zscore-Rules

b= Constant, Zscore-Machiavellianism, Zscore-Rules, Interaction Term

Table 21: Machiavellianism-Whistleblowing-Independence Sub-Dimension-ANOVA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | p |
|-------|------------|----------------|-----|-------------|-------|-------|
| 1 | Regression | 6,184 | 2 | 3,092 | 6,517 | ,002b |
| | Residual | 278,495 | 587 | ,474 | | |
| | Total | 284,679 | 589 | | | |
| 2 | Regression | 8,015 | 3 | 2,672 | 5,659 | ,001c |
| | Residual | 276,664 | 586 | ,472 | | |
| | Total | 284,679 | 589 | | | |

a= Dependent Variable: Intention to Whistleblowing

b= Constant, Zscore-Machiavellianism, Zscore-Law and Code

c= Constant, Zscore-Machiavellianism, Zscore-Law and Code, Interaction Term

Table 22: Machiavellianism-Whistleblowing-Independence Sub-Dimension Coefficients

| Coefficients ^a | | | | | | |
|---------------------------|-------------------------|-----------------------------|------------|---------------------------|---------|------|
| Model | B | Unstandardized Coefficients | | Standardized Coefficients | t | p |
| | | B | Std. Error | | | |
| 1 | Constant | 3,766 | ,028 | | 132,802 | ,000 |
| | Zscore-Machiavellianism | -,083 | ,028 | -,119 | -2,917 | ,004 |
| | Zscore-Independence | ,066 | ,028 | ,095 | 2,331 | ,020 |
| 2 | Constant | 3,762 | ,028 | | 132,754 | ,000 |
| | Zscore-Machiavellianism | -,088 | ,029 | -,127 | -3,090 | ,002 |
| | Zscore-Independence | ,064 | ,028 | ,093 | 2,266 | ,024 |
| | Interaction Term | ,048 | ,024 | ,081 | 1,969 | ,049 |

a= Dependent Variable: Intention to Whistleblowing

As shown in Table 20, when the adjusted R² value in the first model is compared with the adjusted R² values in the second model, it is seen that the rate of the dependent variable of the first model is 1.8% and the rate of the dependent variable of the second model including the interaction term is 2.3%. Both models were statistically significant ($p < .05$). Therefore, in the model including the interaction term, the rate of explaining the dependent variable significance increased by 0.5%.

In Table 22, the interaction coefficients of the hierarchical regression analysis are given. Both models were found to be statistically significant at $p < .05$ level. This means that the interaction term - the standardized version of the machiavellian propensity and the standardized version of the mean scores of Independence - has a substantial impact on the dependent variable. When the unstandardized coefficients column is examined, it is seen that the interaction term affects the dependent variable positively ($B = .048$) at the level of $p = .049$. In short, it was found that the sub-dimension of 'Instrumental' has a moderator effect.

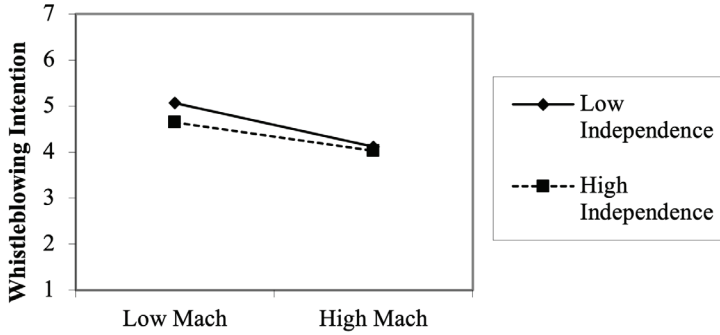


Figure 9: Moderator Role of 'Independence' Sub-Dimension

As can be seen from the graph above, there is a negative and steep sloping interaction between machiavellian tendencies and intention to whistleblowing when the perception of 'independence' sub-dimension is low. However, as the perception of the 'independence' sub-dimension increased, the intensity of the interaction between the machiavellian tendency and the intention to whistleblowing the slope decreased. Thus, as explained in the results of the analysis, it was found that the 'independence' sub-dimension had a 'reducing' moderator effect between machiavellianism and intention to whistleblowing. H_{2e} hypothesis was supported.

Conclusion

In business life, individuals sometimes have to decide on an action and its consequences. In particular, employees who experience a dilemma about ethical behavior, from time to time they share the negative situations about the organization with their managers and from time to time they prefer to remain silent. One of the factors affecting the decision-making mechanisms for individuals who prefer to remain silent is the machiavellian personality trait. Machiavellian people can exhibit manipulative behaviors in order to use the situation in their favor. In order to prevent such behaviors, it would be beneficial for organizations to create a common value or behavior guide by managers. Shared values or procedures will affect employees' perceptions and guide how they should behave in specific situations. The ethical climate of organizations is one of these guides. Thanks to the ethical climate, individuals will be less hesitant about ethical dilemmas and will be able to whistleblow about the unethical practices which they observe, with managers or other authorized institutions more safely.

Perhaps one of the most important meeting points for organizations with the society is the employees. With the vision of senior management, the behaviors of the employees have a share in the success or failure of the organizations. In business life, individuals who act around personal interests, do not act ethically, do not obey the rules of law and organize others to act in the same way, there are also employees who are willing to act ethically, to obey rules, procedures and norms and cultural themes. The news scandals about the organizations in the print and visual media is the intersection of the two different employee behaviors mentioned above. On the one hand individuals who have undesirable behaviors and on the other hand individuals who transfer the information to the competent authorities, because worrying that the continuation of undesired behavior will harm the institution and society. All organizations need employees who promote ethical behavior, regardless of the sector in which they operate. Especially for employees who are working in organizations operating in a very important sector such as health, being transparent, selfless, and acting for the benefit of society are very important motivations. Undoubtedly, the moral concerns caused by the lack of a service in the health sector are felt more intense than in other sectors.

While the individuals working in the health sector, operate in a very stressful and intense working pace, they try to meet the expectations of the organizations for themselves and deal with the patients and their relatives. It is an expected result that individuals working in these difficult conditions tend to lean towards unethical practices and try to manage their business lives as they wish by manipulating others. At this point, it is very important to understand the feelings and thoughts of the employees. Those who will do this are the managers. Conscious managers who want to succeed themselves and their organizations should create a sense of trust on all employees, along with the extra responsibility created by operating in the health sector. Individuals tend to turn to unethical practices less in the environments where a sense of trust occurs, and make the machiavellian features less prominent. One of the ways to create such environments is about creating an ethical climate. The ethical environment, which is viewed in general by managers and workers, what behaviors are tolerated by individuals, what behaviors are not expected, how rules and procedures are implemented, and so on, eliminates the doubts in their minds.

Thanks to the ethical climate created within the institution, individuals will be able to better understand how they should respond to the situations they face. Whistleblowing conduct is thought to be influenced by the ethical climate gener-

ated as one of the variables investigated within the framework of the research. Individuals that prefer to act unethically, such as Machiavellians, are thought to be more likely to whistleblow if they are affected by the ethical environment inside the company. The study's main goal is to investigate the relationships and experiences between Machiavellianism, ethical climate, and the aim to whistleblowing. According to the results of the research, similar to the results in other studies (Dalton and Radtke, 2013; Zarefar, Surya and Mela, 2018; Beigi et al., 2017) a significant and negative interaction was found between machiavellianism and intention to whistleblowing contrary to these studies (Stylianou et al., 2013; Basri et al., 2020), and similar to the results of other studies (Culiberg and Mihelič, 2017; Farooqi, Abid and Ahmed, 2017) a significant and positive interaction between ethical climate perception and the intention to whistleblowing. Unlike other studies (Malinowski, 2009; Dalton and Radtke, 2013), no significant interaction was found between machiavellianism and ethical climate like Sunani, Subroto and Prihatiningtias' (2014) study. In the analyses conducted within the scope of the main problem of the research, the moderator effect of the sub-dimensions of ethical climate on the interaction between machiavellianism and intention to whistleblowing was investigated. It has been found that, ethical climate's 'Caring', 'Law and Code' and 'Independence' sub-dimensions have moderator effect on the effect between machiavellianism and intention to whistleblowing. Similarly, Vryonides et al. (2018) found that exactly the same ethical climate sub-dimensions were related to the ethical behavior of nurses in health care.

'Caring' and 'Independence' sub-dimensions have a 'reducing' effect on the interaction between machiavellianism and intention to whistleblowing. On the other hand, 'Law and Code' sub-dimension has an 'opposite' effect on the same interaction. It seems that, the existence of bureaucratic structure in health institutions increases the importance of the 'law and code' sub-dimension of ethical climate. Similarly, in the study of Saygılı, Özer and Karakaya (2020), the dimension of principles, that is, compliant with law and codes, had the highest average.

When the findings are evaluated in detail, it is seen that the 'laws and codes' sub-dimension has the 'opposite' mediating effect as a natural result of the research for being conducted in a public institution. However, it is not just laws or rules that encourage individuals to act ethically. As mentioned in the study of Bolsin, Faunce and Oakley (2005: 614), besides the rules and procedures, especially in terms of virtue morality, features such as motivation, emotions, wisdom, conscience and friendship also encourage individuals to act ethically. Thanks to the combination

of rules and codes and all other components, healthcare professionals will positively approach the intention to whistleblowing, provided that it is in the public interest. As a result of the research, it was determined that the sub-dimension of 'Caring' also had a mediating effect. The basic motivation of healthcare professionals is based on helping other people. Under these circumstances, it will not be surprising to observe the mediating effect of the 'caring' sub-dimension. One of the most important problems detected in the research on healthcare professionals about the intention to whistleblowing is that individuals prefer to remain silent due to insufficient evidence or insecurity in the institution (Jones and Kelly, 2014: 989). When healthcare professionals care about and support their colleagues in the organization, it is seen that the employees within the organization increase their intention to whistleblowing. Finally, it is worth mentioning the sub-dimension of 'Independence'. As mentioned in the literature section, the act of whistleblowing is a largely individual choice, starting from the moment of observing various problems. For individuals engaged in a whistleblowing act, the results may be either good or bad. Life becomes very difficult for whistleblowers who are laid off, exposed to retaliation and threatened. However, for individuals who evaluate the action within the context of ethical behavior, performing the action independent from the results is the main concern (Mannion and Davies, 2015: 504). For this, a structure that supports independence within the institution is required. In parallel, as a result of the study, it was observed that the intention of whistleblowing increased when the 'independence' sub-dimension was high.

When the results were evaluated in general, it can be seen that the findings obtained support the studies performed by Dalton and Radkte (2013), Singhapakdi (1993), Barnett, Bass and Brown (1994), Demirtaş and Biçkes (2014), Özen (2018). As stated by Shin (2012) and Pauly et al. (2009), it is very important to detail the effects that the components of ethical climate can have within the healthcare organizations. As mentioned in the study of Ray (2006:444), in the institutions with bureaucratic structure, there is a situation of directing the employees' intention of whistleblowing along with the ethical codes and ethical framework in line with the interests of the organization. Because the whistleblowing actions carried out without the knowledge of the management can bring many negative consequences for both organizations and employees. As a result of the research, it was determined that individuals are more inclined to initiate the whistleblowing action, firstly from the legal authorities within the organization where they are more influenced by laws and codes. In addition, machiavellian individuals should be directed to think of other people's interests rather than their own interests in the healthcare indus-

try with a high level of responsibility. According to the results of the study, in order to get rid of the negative effects of machiavellianism and to create a more effective and efficient working environment with machiavellian individuals, it is seen that managers should determine the procedures and norms clearly and they should do this with a participatory management approach rather than an authoritarian management approach. The reason why the autocratic management approach should not be preferred is that the studies about the higher machiavellian people in authoritarian structures can be shown as an example (Malloy and Agarwal, 2003: 241; Merrill et al., 1993: 287; Coker, Greenberg and Kosa, 1965).

The study has been put forward under a number of limitations. The first, and perhaps the most important of these limitations is that, as one of the limitations that dominate the social sciences, the instantaneous emotions and thoughts of the individuals participating in the research can change. Individuals participating in the study may evaluate expressions differently under the influence of different thoughts in another time period and therefore the results may be different. As a consequence, it is important that research findings reflect the entire population.

Employees filling in questionnaires during working hours can prevent rational behavior. As in most studies, this study assumes that the participants behave completely rationally under time limitation. Political fluctuations in countries can cause public personnel to approach the survey method negatively, and therefore, employees may give different answers under the influence of various political pressures, contrary to what they think.

With this work carried out in the health sector, managers were asked to learn more about the concepts of machiavellianism, ethical climate and intention to whistleblowing. The health sector is a very sensitive sector in terms of personal relations. It is very important to ensure an environment of harmony and trust between managers and their employees. At this point, determining and implementing the rules and ethical codes of healthcare managers in a way that will take the participation and support of all employees is one of their most important duties. Otherwise, whistleblowers will be considered traitors, individuals will be silent in the face of wrong doing, and this will make it easier for the machiavellian individuals to manipulate other people. Another point that managers should pay attention to is that they should find ways to get efficiency from the so-called whistleblowers and the machiavellian people. As long as people who intend to whistleblowing, share the problems and unethical behaviors within the organization with the managers, it will be possible to solve these problems more quickly. It is thought that a

rewarding practice that encourages the whistleblowing act may be beneficial for this. It will also be useful to organize projects and conferences that can raise awareness in a society on the benefits of the whistleblowing action.

It is recommended that other researchers working in these fields investigate the machiavellian tendencies in the health sector, ethical climate levels and the results of the whistleblowing act in different regions and on different samples. It is suggested to look at the mediating effects of variables such as psychological capital, wage satisfaction, and performance evaluation systems in order to reverse the negative perception of the machiavellian individuals towards their intention to whistleblowing. It is thought that the examination of the interaction of the sub-dimensions of machiavellianism with whistleblowing under the mediation of ethical climate is also important for future studies. Thus, under which conditions both machiavellianism and ethical climate will have an effect will be examined in more detail. More consideration should be given to the fact that 'rules' and 'instrumental' dimensions, which are sub-dimensions of ethical climate, do not yield meaningful results in interaction. Because the silence of individuals working in the health sector in the face of ethical violations can cause significant harm in terms of public health. For further studies, it is suggested to examine the joint effects of both ethical climate and variables such as ethical leadership, positive deviance behavior, narcissism and psychopathy on the interaction of machiavellianism and whistleblowing. Because the dark triad, including machiavellianism, is one of the personality traits that affect individual decision-making. In subsequent studies, it is thought that the literature can be expanded by conducting qualitative research with the participation of individuals who have performed the whistleblowing action in order to prevent the perception of machiavellianism and whistleblowing as a negative behavior in any case. Finally, it is thought that this study will contribute to other researchers operating in fields such as organizational behavior, sociology, psychology, and education management, and will be a source of inspiration for the interaction of variables such as Machiavellianism, ethical climate, and whistleblowing intentions in Turkish literature and will inspire future studies.

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