

Sociodemographic characteristics and differences in Machiavellianism and perceived justice among graduate students in the Business field

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Abstract

Objective: This study aimed to compare differences in the perception of Academic Justice and Machiavellianism among graduate students in the Business field according to their sociodemographic characteristics.

Method: A survey was conducted, and 334 valid responses were collected from Brazilian graduate students. The Portuguese-translated and validated versions of the Revised Classroom Justice Scale (RCJS) and Machiavellian Personality Scale (MPS) were applied. Data analysis included descriptive statistics, analysis of reliability, and analysis to verify whether data were normally distributed, and later, Kruskal-Wallis of Independent Samples.

Results: Significant differences were found between genders regarding the perception of Academic Justice, indicating that women more frequently perceive lower levels of justice. Analysis of the region where the educational institution is located showed that students from the Northeast, North, and Midwest also perceive lower levels of justice. Regarding Machiavellian traits, younger students tend to present more prominent Machiavellian traits, while Accounting students are more suspicious of others than the remaining students in the Business field.

Contributions: This study adds to the literature on accounting education, indicating that personal and sociodemographic characteristics can be considered in the students' individual and behavioral analyses. Additionally, it shows potential specificities in policies and actions to be implemented among different students when dealing with injustice in a graduate environment.

Keywords: Academic Justice. Machiavellianism. Sociodemographic Characteristics. Graduate Programs. Business field.

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1. Introduction

The perception of justice in different spheres is a complex and not objective value, as it involves several factors that explain why something is perceived as fair or unfair (Tyler, Boeckmann, Smith & Huo, 1997). Choory-Assad (2002) applied the theoretical basis of the organizational environment to study how the perception of justice is aligned in the academic setting. Although justice in a university and organizational environment is classified into different dimensions, it is essential to remember that people's perceptions also differ, which leads to different perspectives of social justice (Törnroos et al., 2019).

Different conditions influence the idea of justice, including situational and personal issues, such as personal and social dispositions (Major & Deaux, 1982; Greenberg, 2001). In this sense, current literature shows the existence of a relationship between perceptions of organizational justice and personality traits, holding that personality traits can help in understanding how the perception of justice develops (Shi et al., 2010; Törnroos et al., 2019; Wang, Hackett, Zhang & Cui, 2019).

Considering prior adherence to the objectives and structures expected from the Business field, this study essentially deals with the Machiavellian personality trait. The reason is that Machiavellianism highlights essential characteristics for developing valuable skills in the Business field, such as the willingness to develop strategies, an inclination to use political procedures, and behaviors aimed at power and control (Dahling, Whitaker & Levy, 2009).

When related to an academic setting (classroom), Machiavellian elements may lead to distorted perceptions of social injustice. It occurs due to the relationship in the literature between a high degree of justice perception with the fulfillment of class rules and satisfaction with grades (Colquitt, 2001).

Therefore, studying sociodemographic characteristics related to Academic Justice in the Business field and the Machiavellian trait among graduate students is important to understand central issues regarding these individuals' professional and academic performance. Machiavellianism is associated with skills related to political engagement and strategy making, which are important factors in the business field. Investigating these students' perception of justice is essential to consider how to use the academic experience of these individuals efficiently.

Contextual and sociodemographic factors must be considered to understand the characteristics mentioned above when investigating Academic Justice and Machiavellianism among Business students. Such factors include gender identification, ethnicity, age, and information about the graduate program, such as the type of educational institution, the region where the program is located, and the graduate program field. These variables are important for a psychological analysis of human behavior and are included in this study as potential predictors (Hambrick & Mason, 1984).

Hence we consider the questions previously described from the perspective in which two constructs intersect and how characteristics can enhance the typical behaviors of graduate students. Aware that individual issues and human sociability are latent signs in the understanding of what can be considered Academic Justice perception and Machiavellianism, we ask the following question: *what are the differences between perceived Academic Justice and the Machiavellian Trait among graduate students in the Business field, considering their sociodemographic characteristics?*

The question above proposes a comparison between the differences in the perception of Academic Justice and the Machiavellianism trait among graduate students in the Business field, according to their sociodemographic characteristics.

This study contributes to the current literature by providing empirical content to support understanding of individual differences related to practical and behavioral aspects and their different personal and social characteristics in the graduate environment, considering that personality can help explain individual differences in the perception of justice (Törnroos et al., 2012).

Considering the previous discussion, studying the perception of justice and how it is distributed among different university groups can support the managerial practices of coordinators of programs in the Business field. The reason is the possibility of implementing actions that support good relationships between students and professors, promoting effective learning and academic performance.

The Machiavellian traits are addressed in this study because it is a construct with important implications for organizational and academic criteria, using elements focused on power, strategy, and political dispositions (Dahling, Whitaker & Levy, 2009). Note that these strategic dispositions in interpersonal relationships can be applied following the same personality predispositions in different organized environments with social interaction, such as organizations and the academic milieu.

When the study of individual characteristics, such as personality traits and the perception of Academic Justice, is linked to the differences between the characterizing groups, it leads to the possibility of decision-making focused on equity and diversity policies in the educational environment, considering the differences among graduate student groups. Hence, this study also seeks to add to the literature issues related to the particularities of each group, indicating how different students see graduate studies, in addition to identifying what could change this view.

Considering sociodemographic elements in graduate university policies is important because such aspects affect diversity and inclusion in the academic environment. Such aspects may encompass factors such as the needs of students from ethnic and socioeconomic minorities, as well as students with special needs. In addition, it is important to consider sociodemographic elements that can ensure that university policies are equitable and fair for all students, including those with different personality dispositions and behaviors (Darnell & Darnell, 2019).

Regarding the study setting, another difference concerns understanding how the student-professor relationship was readapted during the pandemic, what was necessary to adapt for the continuity of the graduate programs, and how these reflected in the professors' performance and, consequently, the students' perception of fairness.

In the academic environment, it is relevant to understand the factors involving professors and educational institutions and the behaviors that lead to feelings of fairness or unfairness. The latter may lead to several responses, such as aggressiveness, frustration, lack of motivation, loss of confidence in faculty members, poor academic performance, aggressive behavior toward professors, and dishonesty (Santos et al., 2020).

2. Theoretical framework

2.1 Academic Justice

Education has a distinct sphere of justice, as there are constant processes in which rewards are distributed, assessments are implemented, and relationships are established, and these can be considered fair or unfair (Res & Sabbagh, 2016). Thus, an opportunity arises for specific research that considers the academic environment to a different line of research, Academic Justice. Academic Justice, initially addressed as classroom justice, can be defined as "perceptions of fairness regarding outcomes or processes that occur in the instructional context" (Chory-Assad & Paulsel, 2004, p. 254).

The first studies involving justice perceptions, based on the theory of organizational justice, addressed a single dimension of justice to understand phenomena concerning how people judge different situations, responding according to what is considered fair or unfair, which concerns the distributive dimension of justice (Sanches, 2016). These studies were based on the Social Exchange Theory proposed by Homans (1961), in which the author defends that proportionality between rewards and investments is expected in an exchange relationship between individuals; there is a perception of Distributive Justice when such proportionality is achieved.

Distributive justice concerns what results are distributed; procedural justice concerns how results are distributed; and interactional justice conceptualizes justice in terms of how individuals are treated (respect and politeness) and how they receive information (appropriateness and truthfulness). These dimensions combined provide a more comprehensive description of the perception of fairness or unfairness (Rasooli, Zandi & DeLuca, 2019).

Distributive justice is centered on the perception that the distribution of conditions and goods that affect an individual's, group's, or community's well-being, including psychological, physical, physiological, economic, and social well-being, is considered fair (Deutsch, 1985; Chory & Paulsel, 2004). Distributive justice matters arise in the academic environment, for example, when a teacher assigns grades to discipline (Chory & Paulsel, 2004).

While distributive justice is linked with perceptions of how fair is the distribution of results, the procedural dimension concerns how fair the procedures are adopted when distributing resources (Cropanzano & Greenberg, 1997). Procedural justice concerns the process components of the social system that regulate the distribution of resources, and it focuses on the evaluation of individuals and the events that precede such distribution (Leventhal, 1980).

When the procedural justice dimension is analyzed in the academic environment, it refers to the perception of how fair the processes adopted in the classroom to attribute results are. The students may consider fair or unfair the procedures and criteria chosen to evaluate students and assign grades, considering that, in the instructional environment, the assessment criteria can be previously presented to the students (Berti, Molinari & Speltini, 2010).

Note that when procedural fairness is high, the distribution of results, even if unfair, is considered unimportant because the distribution will be reasonably reconfigured in the long run. In contrast, when this dimension is considered low, the individuals' immediate self-esteem and self-identity needs are frustrated, suggesting that future interactions will also be unsatisfactory (Chory, 2004).

Finally, interactional justice concerns what is considered fair or unfair in interpersonal relationships, which initially concerned relationships in business organizations (Bies & Moag, 1986). In this dimension of justice, there is a need to discuss aspects concerning the treatment dispensed in the interpersonal relationships between agents (Tyler & Blader, 2003). Interactional justice within a classroom plays a leading role, considering that the way teachers and students interact significantly shapes the learning environment and promotes positive behavior and student motivation (Wubbels & Brekelmans, 2005).

In summary, the dimensions are separated considering interpersonal relationships as an integral element of the perception of justice; hence, they are not separated into opposite dimensions, as they share a similar origin. This model also considers the quality of treatment people receive during academic and organizational processes at educational institutions (Simil, 2016). In short, the dimensions of academic justice addressed here are distributive, procedural, and interactional.

An analysis of the students' sociodemographic characteristics in light of academic justice shows that students' perceptions of Justice differ significantly according to gender, type of graduate program, and education. For example, younger university students start with a fairer perception of the learning environment, but their perceptions of fairness decrease as they stay longer and change ties. Thus, justice perception seems to differ between groups of students. Regarding gender, there is a more significant perception of male gender justice, showing that female relationships are seen as more unfair compared to male perceptions (Çaglar, 2013).

Still, on the graduate students' sociodemographic characteristics, female students perceive a lower level of justice compared to male students (Berti, Molinari & Speltini, 2010; Simil, 2016; Sabino, Cunha, Colauto & Francisco, 2019). As for age, there is a positive relationship between this variable and other dependent variables; i.e., the older the student, the greater his/her perception of distributive, procedural, and interactional justice. For example, Chory (2007) verified that younger students – under 21 – tend to have lower perceptions of distributive and procedural justice. The investigation of similar relationships will contribute to an overview of the perception of justice according to individual characteristics.

In addition to the issues raised and defended here, we must consider that female students from a given country or region tend to perceive justice to a lesser extent. On the other hand, students from another region may have the opposite perception. Therefore, it is necessary to relativize the analyses and potential generalizations (Simil, 2016). Thus, aiming to contribute to the literature, this study highlights academic issues in a graduate context with different interrelationships and manners in which the agents connect to identify whether temporal changes and educational modalities significantly change graduate students' perception of justice.

2.2 Machiavellianism

Personality traits are influenced by human concerns toward occupational, educational, relationship, personal, and antisocial behavior. In this sense, educational behavior is included as one of the aspects linked to personality characteristics (Furnham et al., 2013).

An important personality trait pioneered by the literature is Machiavellianism, characterized as a non-pathological trait, as a personality disposition or social conduct strategy referring to the manipulation of individuals for personal gain (Christie & Geis, 1970). Machiavellianism originates from the political ideas of Niccolò Machiavelli (1469-1527).

When applied at moderate levels, Machiavellianism considers that the individual can be a good leader, presenting better behavior results in terms of rights and duties in an organizational sphere due to cost and benefit analysis. Hence, a leader will try to control and coordinate his/her employees as best as possible, always observing his/her interests (Zettler & Solga, 2013).

Like other constructs addressed in the literature, Machiavellianism has a multidimensional structure, encompassing underlying motivations (desire for control and desire for status) and behavioral factors (distrust of others and amoral manipulation) (Dahling et al., 2009). Consequently, Machiavellianism usually has four dimensions: (i) distrust in others; (ii) amoral manipulation; (iii) desire for control; and (iv) desire for status (Dahling, Whitaker & Levy, 2009; Grohmann & Battistella, 2012).

The Machiavellian profile may be associated with strategic calculation, leadership, desire for status, amoral manipulation, and dishonesty (Alves, Costa, Nascimento & Cunha, 2019). The typical traits of Machiavellianism can be confused with psychopathy traits. The use of strategic planning is something that differentiates between these profiles. While Machiavellians plan, build alliances and do their best to maintain a positive reputation, psychopaths act impulsively, abandon friends and family, and pay little attention to their reputations (Jones & Paulhus, 2011).

To establish the main differences between groups and the Machiavellian personality trait, Collison, South, Vize, Miller, and Lynam (2019) verified that male individuals present a more prominent Machiavellian trait. Their study's findings support the notion that moderate differences in Machiavellianism between genders are not artifacts of measurement bias.

From the same perspective, D'Souza and Lima (2018) found evidence of Machiavellianism and the sociodemographic characteristics of undergraduate Accounting students, concluding that men have a more prominent Machiavellian personality trait than women. Additionally, the Machiavellianism traits differed according to age, being more predominant among younger students with a greater predisposition for manipulation and strategy.

Regarding the sociodemographic variables of Machiavellianism, D'Souza (2020) noted that age is a potential predictor of the Machiavellianism trait. In her research, the author highlights that respondents between 18 and 25 years old are more prone to Machiavellian traits, which is in line with D'Souza and Lima (2018), suggesting that students aged 17 to 25 present a greater predisposition to manipulation and strategy.

In the educational context, Machiavellianism stood out when it was related to cultural values among Accounting students, indicating greater student agreement with the assertions "it is not wise to tell my secrets" and "there are things that I hide from other people because they do not need to know." The study showed a preponderance of Machiavellianism-related characteristics and a greater inclination of students toward individualism (D'Souza & Lima, 2019).

Alves et al. (2019) sought to relate Machiavellianism to counterproductive activities among Accounting students, and they mainly found that there is no empirical evidence supporting the claim that Machiavellianism is related to counterproductive behavior. Additionally, relating this trait with the students' gender revealed that it became more evident among those identified with the male gender.

The theoretical and empirical evidence presented here suggests that sociodemographic features such as gender, age, aspects related to one's region, and the graduate program field imply statistically significant differences between individuals. Additionally, the graduate academic experience of individuals with different Machiavellianism traits may be influenced by their perception of fairness or unfairness during graduate studies. Moreover, their professional performance may change depending on whether Machiavellian behaviors are expected in academic and professional activities, such as political predisposition and developing strategies.

3. Methodological procedures

This descriptive study (Sampieri, Collado & Lucio, 2013) has a primarily quantitative approach, and data were collected with a structured questionnaire (Cooper & Schindler, 2016). This questionnaire was developed using the Survey Monkey online platform. It was sent via e-mail between November and December 2021 to the coordinators of Brazilian graduate programs in Business Administration, Accounting, and Economics, to help distribute the questionnaire to the students.

This study addressed the population of students enrolled in graduate programs in Administration, Accounting, and Economics, including academic and professional masters and doctoral degrees registered with the Coordination for the Improvement of Higher Education Personnel (Capes). The Business field comprises 257 graduate programs, including 65 academic master's and three academic doctoral programs and 93 programs with both modalities. Additionally, there are nine professional master's and doctoral programs and 93 programs containing only one professional master's degree. Overall, there are 158 Brazilian academic master's programs, 96 academic doctoral courses, 96 professional master's programs, and nine professional doctoral programs.

A non-probabilistic sample (convenience sampling) was used; i.e., the probability of a specific graduate student being included in the sample is not the same for all other students. Therefore, the results cannot be generalized beyond this study's participants, as we did not address the entire population (Fávero & Belfiore, 2017).

The questionnaire consists of four blocks. The first block addresses the respondents' educational level, filtering whether the individuals meet the study's criterion, i.e., graduate students in the Business field. The survey was closed whenever the individuals reported an undergraduate, specialization, MBA, or postdoctoral program because these spheres did not belong to this study's scope.

The second block includes the translation of the Revised Classroom Justice Scale (RCJS), a 34-item questionnaire rated on a 5-point Likert scale, in which 1 represents a perception of Extreme Injustice, and 5 represents Extreme Academic Justice. This questionnaire was first developed by Chory-Assad (2002), updated by Chory (2007), and later Simil (2016) translated it into Portuguese, addressing a graduate program. It includes Distributive, Procedural, and Interactional Justice factors.

Next, questions from the Machiavellian Personality Scale - MPS (Dahling, Whitaker & Levy, 2009) were added. This scale is composed of 18 statements intended to rate Machiavellianism on a 5-point Likert scale (1="Strongly Disagree" and 5="I totally agree"). The MPS was first developed by Dahling, Whitaker, and Levy (2009), and later Grohmann and Battistella (2011) translated and adapted it to Portuguese. It is organized into Amoral Manipulation, Distrust in Others, Desire for Control, and Desire for Status.

The last block in the questionnaire addressed the participants' personal characteristics and information about their graduate programs, where the objective was to outline the respondents' sociodemographic profile. According to the current literature, the primary characteristics were age, gender identification, race or ethnicity, type of educational institution, and graduate program.

The data obtained through the Survey Monkey platform were organized in the Microsoft Office Excel software and analyzed using the Software Statistical Package for the Social Sciences (SPSS), version 22. Figure 1 presents the data analysis steps.

Steps	Procedure	Measures	Objective	Criteria
1	Descriptive Statistics	Frequency	Describe the data set	-
2	Scale's reliability analysis	Cronbach's alpha	Verify the scale's internal consistency	The acceptable range is above 0.70
3	Normality	Kolmogorov-Smirnov	Verify whether the dataset is normally distributed	p-value > 0.05
4	Kruskal-Wallis test (Independent samples)	Kruskal-Wallis Chi-square test	Verify whether there are statistically significant differences between the respondents' sociodemographic characteristics	Significant differences P-value < 0.05

Figure 1. Data Analysis Protocol

Source: Hair et al. (2009).

Frequency techniques were adopted to organize, describe, and synthesize the quantitative dataset's main characteristics, enabling a better understanding of the sample (Fávero & Belfiore, 2017). The Cronbach's alpha coefficient was used to verify the scales' reliability and consistency (Fávero & Belfiore, 2017). According to Hair Jr. et al. (2009), Cronbach's Alpha measures a construct's reliability on a scale from 0 to 1; 0.7 is the minimum value acceptable to validate a questionnaire.

We did not need to confirm the structure between specific variables of the Brazilian versions of the Revised Organizational Justice Scale (RCJS) (Simil, 2016) and the Machiavellian Personality Scale (MPS), as they had already been respectively developed and reviewed by Chorry-Assad (2002), Chory and Paulsel (2004), Chory (2007) and Dahling, Whitaker, and Levy (2009). These studies verified the factors developed by the literature thus far, which include perceptions of Distributive, Procedural, and Interactional Academic Justice as factors of Academic Justice and Amoral Manipulation, Distrust in Others, Desire for Control, and Desire for Status as factors of Machiavellianism. Considering ethical issues inherent to research addressing human subjects, this study was submitted to and approved by the Institutional Review Board at the Federal University of Paraná and registered under No. 51403221.0.0000.0102 without any restrictions.

4. Analysis and discussion of results

4.1 Respondents' characterization

A total of 551 individuals completed the data collection instrument. Twenty-three questionnaires were discarded because their respondents indicated they were not enrolled in a graduate program. Of the 528 remaining responses, 194 were incomplete and excluded from the sample. The remaining 334 responses were considered valid for analysis and represented 60.62% of the responses collected.

The students' characteristics are listed in Table 1 and are used to outline the respondents' profiles.

Table 1

Respondents' profile – Personal characteristics

Age group*	Men		Women		Others**	
	Frequency	%	Frequency	%	Frequency	%
22 to 28 y/o	44	27.33%	53	31.18%	0	0.00%
29 to 32 y/o	33	20.50%	43	25.29%	1	33.33%
33 to 40 y/o	42	26.09%	37	21.76%	0	0.00%
41 to 65 y/o	42	26.09%	37	21.76%	2	66.67%

Race/ Ethnicity	Men		Women		Others**	
	Frequency	%	Frequency	%	Frequency	%
Asian-descendant	3	1.86%	3	1.76%	0	0.00%
Caucasian	92	57.14%	123	72.35%	2	66.67%
Indigenous	1	0.62%	1	0.59%	0	0.00%
Mixed race	56	34.78%	33	19.41%	1	33.33%
African-descendant	9	5.59%	10	5.88%	0	0.00%
Total	161	170	100.0%	100%	3	100%

Note: *Parts calculated by inclusive quartile. **Respondents identified as Non-binary or who chose not to report gender.

Source: developed by the author based on the study's data.

Table 1 shows that 50.9% of the 334 students in the final sample identify themselves with the female gender. Note that the students are distributed according to age groups comprising the interval between 22 and 65. The group comprising those between 22 and 28 concentrates the largest proportion of students (29.04%); approximately half of these (52.10%) were aged between 22 and 32. Regarding race or ethnicity, most of the sample declared themselves Caucasians (65.0%), followed by mixed race (26.9%), Afro-descendant (5.7%), Asian-descendant (1.8%), or indigenous (0.6%). The respondents' academic characteristics are shown in Table 2.

Table 2

Respondents' profile – Academic characteristics

Graduate Program filed	Men		Women		Others*	
	Frequency	%	Frequency	%	Frequency	%
Business administration	64	39,75%	72	42,35%	1	33,33%
Accounting	56	34,78%	83	48,82%	2	66,67%
Economics	41	25,47%	15	8,82%	0	0,00%
Program's modality	Men		Women		Others	
	Frequency	%	Frequency	%	Frequency	%
Academic Master's degree	87	54,04%	86	50,59%	3	100,00%
Academic doctoral degree	58	36,02%	65	38,24%	0	0,00%
Professional Master's degree	14	8,70%	17	10,00%	0	0,00%
Professional doctoral degree	2	1,24%	2	1,18%	0	0,00%
HEI region	Men		Women		Others	
	Frequency	%	Frequency	%	Frequency	%
Midwest	14	8,70%	16	9,41%	0	0,00%
Northeast	37	22,98%	32	18,82%	0	0,00%
North	4	2,48%	1	0,59%	0	0,00%
Southeast	43	26,71%	27	15,88%	2	66,67%
South	63	39,13%	94	55,29%	1	33,33%
Total	161	170	100,0%	100%	3	100%

Note. HEI: Higher Educational Institution. *Respondents identified as Non-binary or who chose not to report gender.

Source: developed by the author based on the study's data.

Regarding the respondents' academic characteristics, there is an equal participation of graduate students attending the Accounting (42.2%) and Business Administration (41.0%) programs; most pursuing an academic Master's degree (52.7%), followed by an academic doctoral degree (36.8%). Most participants attended educational institutions located in the South (47.3%), followed by the Southeast (21.6%) and Northeast (20.7%). Additionally, 84% of the respondents attended a public university.

4.2 Descriptive statistics

After characterizing the sample, which enabled identifying the participants' profiles, the responses to the scales measuring the perceptions of Academic Justice and Machiavellianism traits were statistically described. Hence, Cronbach's alpha was used to measure the constructs' reliability, which verifies the correlation between the responses to a questionnaire through response analysis. Cronbach's alpha coefficient ranges from 0 to 1; parameters above 0.7 are acceptable (Hair Jr. et al., 2009). A Cronbach's Alpha equal to 0.914 was found in this study, confirming the constructs' reliability.

The RCJS was analyzed to detail the respondents' perceptions regarding the statements concerning Distributive Justice. Thus, Table 3 presents the statements with the highest levels of disagreement and agreement (scores 1 and 5) and an analysis of the percentage of the main items. As determined by the instrument regarding the students' opinion, score 1 represents a perception of Extreme Injustice in the Classroom, and 5 represents Extreme Academic Justice.

Table 3

Revised Classroom Justice Scale – Descriptive Statistics

RCJS Item – Distributive Justice	1	2	3	4	5	Total
In general, your grades on the tests and assessments you have already taken during your current program...						
... compared to other students' grades, were: (Q1)	0.9	3	14.7	46.4	35.0	100
... compared to your effort to study for the assessments, were (Q4)	4.2	6.9	18.6	43.7	26.6	100
RCJS Item – Procedural Justice	1	2	3	4	5	Total
According to your experience in the graduate program, rate the following statements from 1 to 5, considering that 1=Extremely unfair and 5=Extremely fair						
Attendance policies are: (Q11)	1.8	8.7	16.8	39.2	33.5	100
The amount of time you need to dedicate to the program to obtain good grades is: (Q25)	12.9	18.9	24.3	26.6	17.4	100
RCJS Item – Interactional Justice	1	2	3	4	5	Total
According to your experience in the graduate program, rate the following statements from 1 to 5, considering that 1=Extremely unfair and 5=Extremely fair						
The way the professors treat the students is: (Q27)	5.4	10.5	21	30.2	32.9	100
How the professors deal with students who disagree with them is: (Q34)	10.8	12.9	29.6	25.1	21.6	100

Notes: Percentages; 1: Extremely unfair; 5: Extremely fair.

Source: developed by the author based on the study's data.

An analysis of each statement representing the students' perception regarding distributive justice in graduate school shows that the statement most frequently rated as "Extremely fair" is "Q1 - In general, your grades in the tests and assessments you have already taken during your current program, compared to the grades of other students, were:", showing that students tend to believe that the level of justice concerning the results distributed by professors does not differ among students, i.e., the results are similarly distributed among peers.

On the other hand, the statement most frequently rated as Extremely Unfair concerns "Q4 – Compared to your efforts to study for the tests, were:" This result shows evidence of whether the students perceive that their effort to study for the tests is recognized, revealing their dissatisfaction with their results, considering their effort to do well in the assessments.

According to Chorry-Assad (2002), the students' dissatisfaction with the results concerns the evaluation processes and policies adopted by the professors and teaching institutions. Procedural Justice, which refers to the processes adopted by professors, is perceived as the least fair in the academic environment, corroborating previous studies (Chorry-Assad, 2002; Paulsel & Chory, 2004).

Statement Q11 in Procedural Justice, which concerns attendance policies, is perceived by students as very fair (score 5), indicating that professors are concerned with establishing fair rules regarding student attendance. The results show that students tend to compare their grades and processes adopted by the professors with their effort and time dedicated to the program, leading them to expect better results (Distributive Justice) and becoming dissatisfied with the amount of time required by the graduate program (Justice Procedural).

Connections with the existing literature were established when interpreting the Interactional Justice results, revealing the professors' tendency to treat students well, being cordial and respectful during academic activities. Nevertheless, the students tended to perceive the non-acceptance of disagreements and difficulty in opening up to the students' new ideas as unfair; such a perception is associated with professors' lack of disposition to listen to students (Chory, 2007; Simil, 2016).

The next portion of this section presents the descriptive results of the Machiavellian Personality Scale (MPS). Following, we present the most frequent ratings of each statement. A detailed analysis in Table 4 revealed the statements with the highest levels of disagreement and agreement (scores 1 and 5). Additionally, descriptive statistics are provided of the students' responses to the MPS according to the dimension, showing the level of agreement among the graduate students in the Business program with Machiavellian traits.

Note that the statements "Q1 – There is no excuse for deceiving another person", "Q8 – I like to share my plans and ideas with other people," and "Q18 – Personal development is one of my most important goals" were inverted in the data analysis, as these are statements purposefully opposed to the construct.

Table 4

Machiavellian Personality Scale – Descriptive Statistics

		MPS Item	1	2	3	4	5	Total
Rate the statements from 1 to 5 according to your level of agreement: 1 Totally disagree e 5 and 5 Totally agree	Amoral Manipulation							
		There is no excuse for deceiving another person (Q1)	56.9	25.1	9.0	4.8	4.2	100.0
		I am willing to be unethical if I believe it will help me succeed (Q4)	78.4	12.0	3.3	3.6	2.7	100.0
	Distrust of Others							
		People are only motivated by personal gain (Q6)	1.2	6.0	19.8	42.5	30.5	100.0
		If I show any weakness at work, other people will take advantage of it (Q10)	24.3	26.6	24.3	17.1	7.8	100.0
	Desire for Control							
		I think that fear and threats are sometimes necessary to motivate people to do what I want (Q11)	68.3	15.9	9.6	4.2	2.1	100.0
		I enjoy being able to control the situation (Q14)	4.8	10.2	24.3	40.7	20.1	100.0
	Desire for Status							
		I assume that most people are out for their success (Q16)	2.7	8.1	20.7	42.5	26.0	100.0
		Personal development is one of my most important goals (Q18)	29.6	36.2	21.0	9.9	3.3	100.0

Notes: Percentage; 1: Totally disagree; 5: Totally agree.

Source: developed by the author based on the study's data.

Table 4 describes a greater willingness of students to disagree with the Machiavellian personality trait compared to perceived academic justice during graduate school. Such a Machiavellian personality trait at a moderate level in Business students is in line with previous studies, which concluded that students tend to have Machiavellian characteristics at a moderate level (Jones & Paulhus, 2014; D'Souza et al., 2018; Mendonça, Silva, & Silva Filho, 2018; Alves et al., 2019).

Furthermore, it is noteworthy that when the characteristics of a Machiavellian personality are moderate, the individual tends to be a good leader, presenting better behavior results in terms of rights and duties in the corporate sphere, considering a cost and benefit analysis. A leader will try to control and coordinate his/her employees as best as possible, always focusing on their interests (Zettler & Solga, 2013).

The different dimensions of Machiavellianism also provide separate conclusions concerning the behavioral elements that make up this personality trait, and a lower level of agreement was found with statements concerning amoral behaviors. At the same time, the Desire for status appears as the most frequent characteristic of Machiavellianism. This study's results align with the results reported by Spurr et al. (2016) among industry executives, in which status was positively related to Machiavellianism.

Among the MPS' statements, low levels of agreement were found regarding the Amoral manipulation dimension. The statements most frequently disagreed with include "Q4 – I am willing to be unethical if I believe it will help me succeed". Such disagreement among students regarding the statements related to the Amoral manipulation dimension corroborates previous studies (Alves et al., 2019; Raifur-Kos & Raifur-Kos, 2021), showing that graduate students recognize other benefits from interpersonal relationships rather than exclusively valuing beneficial information.

The other Machiavellianism-related statement that obtained the lowest agreement among the students (Q4 – I am willing to be unethical if I believe it will help me succeed) shows that even though they agreed with Machiavellianism characteristics, the graduate students in the Business field tend to be ethical when seeking results that involve academic performance. These results are aligned with previous research results, indicating highly ethical behavior among accounting professionals (D'Souza, 2020) and a predisposition of Accounting students to civilized behavior (Alves et al., 2019).

Another statement in the Machiavellian personality scale that stands out due to its low level of agreement among the graduate students in the Business field concerns "Q11 – I think that fear and threats are sometimes necessary to motivate people to do what I want". This finding corroborates elements previously addressed in the literature that involve the successful leadership of Machiavellians. It suggests that creating a Machiavellian success strategy comprises charisma and a search for support (Delunga, 2001). Additionally, the actions of individuals in the Business field, such as the ability to formulate strategies and flexibility, tend to positively impact the interactional environment (D'Souza & Jones, 2017).

Table 4 shows that the Desire for status is the characteristic of Machiavellianism with the highest level of agreement among graduate students in the Business field. The statement most frequently agreed with is "Q16 – I assume that most people are out for their own success". These findings align with a search for status arising from their choice of an academic career (Souza, Lopes, Costa & Colauto, 2021), a reference for graduate students, the object of this study.

Additionally, regarding data concerning the Machiavellianism personality trait, the statement with the highest level of agreement among the graduate students was "Q6 – People are only motivated by personal gain", which highlights their perceptions regarding other peoples' intentions. This perspective highlights a behavior focused on the Distrust of Others when one sees his/her personal characteristic as the goals of others, which is the main characteristic trait among graduate students in the Business field.

4.3 Differences between the Groups

A normality test was required to identify the most appropriate statistical technique to analyze the scores' differences according to the participants' sociodemographic variables. The Kolmogorov-Smirnov test indicated that data were not normally distributed; hence, the non-parametric Kruskal-Wallis test was adopted, as data were categorical and did not meet the parametric tests' assumptions.

The Kruskal-Wallis test was used to verify differences between the participants' scores concerning justice, Machiavellianism traits, and sociodemographic variables. Each dimension of Academic Justice and Machiavellianism was tested separately with sociodemographic variables, including gender, age, the region where the institution is located, and the graduate program field, according to the literature applicable to these constructs.

Table 5 presents the Kruskal-Wallis test's results to verify whether there were significant differences between the groups based on sociodemographic characteristics, such as gender and age group.

Table 5

Kruskal-Wallis Test – Personal Characteristics

Construct / Dimension		Gender				
		Sig. Kruskall-Wallis	Scores Masc.	Scores Fem.	Scores PNR	Scores NB
AJ	Academic Justice	0.000* – Yes	187.03	148.16	13.50	272.75
	Distributive Justice	0.083 – No	178.34	157.67	14.50	206.25
	Procedural Justice	0.006* – Yes	184.85	150.93	15.15	255.50
	Interactional Justice	0.001* – Yes	187.23	148.00	51.00	295.00
MACH	Machiavellianism	0.704 – No	167.58	168.00	28.25	187.25
	Amoral manipulation	0.251 – No	178.81	156.69	146.00	187.25
	Disbelief in Others	0.339 – No	163.91	172.41	58.50	93.75
	Desire for Control	0.329 – No	172.31	163.23	210.50	32.50
	Desire for Status	0.370 – No	162.86	171.30	255.25	92.00
Construct / Dimension		Age range				
		Sig. Kruskall-Wallis	Scores 22-28	Scores 29-32	Scores 33-40	Scores 41-65
AJ	Academic Justice	0.449- No	173.73	153.42	165.39	175.61
	Distributive Justice	0.650 – No	176.10	163.34	158.69	169.88
	Procedural Justice	0.355 – No	172.20	150.86	168.71	176.61
	Interactional Justice	0.563 – No	166.95	156.34	168.11	178.30
MACH	Machiavellianism	0.000* - Yes	187.24	182.18	171.33	125.61
	Amoral manipulation	0.009* – Yes	189.03	177.19	165.16	139.25
	Disbelief in Others	0.000* – Yes	186.51	184.92	156.29	126.99
	Desire for Control	0.768 – No	169.74	170.05	172.17	157.66
	Desire for Status	0.002* – Yes	178.99	185.08	170.96	133.18

Note. *p-value < 0e05; AJ: Belong to the Academic Justice Construct (RCJS); MACH: Belong to the Machiavelism Construct (MPS). Scores: scores obtained in the Kruskall-Wallis test by each of the variables.

Source: study's data.

The results presented in Table 5 show that both personal characteristics result in significant differences regarding one's perception of Academic Justice, considering the respondents' gender and differences in the Machiavellian trait and comparing the participants' age range.

A significant difference was found between the male and female genders when the differences regarding the students' perception of Academic Justice were disaggregated, in addition to the two dimensions in which significant differences were found: Procedural Justice and Interactional Justice. A comparison of the scores obtained by women and men in perceived justice showed that men have a higher perception of justice than women in Academic, Procedural, and Interactional justice.

This result aligns with previous studies addressing the academic milieu (Berti, Molinari & Speltini, 2010; Simil, 2016; Sabino, Cunha, Colauto & Francisco, 2019), showing that women more frequently perceive the academic environment to be unfair, especially regarding the policies and procedures the professors adopt and in the communication and provision of information. Hence, according to the results, graduate programs appear to be fairer for male students.

As for the differences between gender and Machiavellianism personality traits, this study diverges from previous findings. The reason is that no statistically significant differences were found between gender and this trait. According to this study's results, this divergence from the literature is possibly explained by the low frequency of Machiavellianism trait among graduate students in the Business field, corroborating previous studies on the topic (D'Souza, 2016; Alves et al., 2019).

Nevertheless, Machiavellianism showed significant differences between the students' age groups. The dimensions of Amoral manipulation, Distrust in Others, Desire for Status, and the general construct, showed significant differences between the groups. Respondents aged 22 and 28 showed a high level of Machiavellianism traits compared to those aged 41 to 65, who presented a lower prevalence of this trait. According to the literature, the age difference follows an expected trend of a more prevalent presence of Machiavellianism among younger individuals (D'Souza & Lima, 2018; D'Souza, 2021).

The differences between the age groups suggest the possibility of discussing the strategic characteristics of Machiavellianism and its vision of the future, which is more common among younger people. However, there was no significant difference regarding the Desire for control. Such a result may be explained by the fact that older people historically need to maintain control rather than seek future control.

In addition to the respondents' sociodemographic characteristics, this study aimed to identify differences in the respondents' academic information, which, as suggested in the literature, was represented by the graduate program field, program modality, the region in which the program is located, and the type of educational institution. This information was analyzed using the Kruskal-Wallis test and is presented in Table 6.

Table 6

Kruskal-Wallis Test – Academic Characteristics

Constructo / Dimensão	Field		Modality		Region		
	Kruskal-Wallis	Dif. Sig?	Kruskal-Wallis	Dif. Sig?	Kruskal-Wallis	Dif. Sig?	
AJ	Academic Justice	0.253	No	0.12	No	0.005*	Yes
	Distributive Justice	0.143	No	0.444	No	0.365	No
	Procedural Justice	0.446	No	0.279	No	0.026*	Yes
	Interactional Justice	0.710	No	0.007*	Yes	0.000*	Yes
MACH	Machiavellianism	0.292	No	0.140	No	0.357	No
	Amoral manipulation	0.594	No	0.35	No	0.390	No
	Disbelief in Others	0.010*	Yes	0.394	No	0.298	No
	Desire for Control	0.698	No	0.014*	Yes	0.941	No
	Desire for Status	0.919	No	0.11	No	0.136	No

Nota. *p-value < 0.05; AJ: Belonging to the Academic Justice Construct (RCJS); MACH: Belonging to the Machiavellism Construct (MPS). KW: significance obtained in the Kruskal-Wallis Test.

Source: study's data.

The first test compares the respondents' academic characteristics according to the groups organized by the type of higher education institution. The test showed no statistically significant differences. Therefore, according to this study's results, there are no differences between the perception of justice and the Machiavellian trait among students attending public, private, or community institutions.

No significant differences were found between Academic Justice and the Machiavellian trait when comparing the difference between the constructs based on the field of knowledge (Administration, Accounting, and Economics). Nonetheless, the Distrust in Others dimension showed a significant difference between the Accounting and Economics programs: Accounting students presented higher distrust in others, a typical characteristic of Machiavellianism. This finding stands out if we consider that Distrust in Others is an element of mistrust that mirrors one's attitudes (Dahling, Whitaker & Levy, 2009).

Another characteristic investigated in this study, when comparing sociodemographic characteristics, refers to the region where the graduate program is located. The test revealed significant differences linked to the perception of fairness among students from different regions. The main differences between the Southeast and Northeast, and between the Southeast and Midwest, concerned the policies, procedures, and treatment dispensed by professors to students. According to the data collected, respondents from the Northeast, North, and Midwest regions showed lower perceptions of academic justice, highlighting the differences between regions related to interactional justice.

These differences corroborate the observations of Simil (2016) that sociodemographic characteristics (such as the region where individuals are inserted) must be observed when analyzing classroom justice, as the differences listed above show.

5. Conclusions

This study aimed to compare the differences in the perception of Academic Justice and the Machiavellianism trait among graduate students in the Business field, considering their sociodemographic characteristics. After applying the questionnaire to master's and doctoral students, the 334 valid responses were analyzed using the Kruskal-Wallis test.

This study's results indicate that graduate students in the Business field present significant differences in the perception of justice and the Machiavellian trait when specific groups are analyzed according to their sociodemographic characteristics.

An analysis of the respondents' gender showed that women feel more wronged in the processes adopted by professors and their interactions with faculty members than men. The analysis according to age indicates that younger individuals are more prone to the Machiavellian personality traits than older people, except in the Desire for control dimension, which may be related to the strategy and future vision of the Machiavellian personality; therefore, they tend to be more latent among young people.

Regarding the graduate programs, a minor difference was verified between the various groups, indicating that the type of educational institution does not change one's perception of Academic Justice or the Machiavellian trait.

The program's field showed a significant difference exclusively regarding the students' Distrust of others, showing that Accounting students are more suspicious than those in Business Administration or Economics programs. Comparisons between the graduate modalities showed a greater Desire for Control and a lower perception of interactional academic justice among academic master's and doctoral students. Geographically, students from the Northeast, North, and Midwest feel more wronged in their academic relationships, mainly regarding the processes adopted by the professors and the interpersonal treatments they dispense.

These results align with other academic findings and highlight the need for professors and teaching institutions to consider the students' personal aspects when implementing policies. It is important to remember the need for differentiated treatment for women attending graduate programs in the Business field, also considering the particularities of each Brazilian region, such as the Northeast, North, and Midwest.

In addition to considering a tendency of personality bias in the perception of Academic Justice, this study highlights the personality aspects of younger students, who present a more prominent Machiavellian profile, and their search for individual benefit reflected in their perception of Justice. A tendency to distrust others, such as professors and peers, was found specifically in the Accounting graduate program; hence, this study presents a prominent element of this program.

Despite the results and considerations presented here, this study has some limitations concerning its approach, especially considering the unfeasibility of further deepening the quantitative research beyond the pandemic period when the questionnaire was applied.

The possibilities for future research include a growing opportunity to understand different factors that can influence justice perception in the academic environment, besides behaviors, attitudes in the classroom, and the strategic development in the performance of students in the Business field that can be promoted among students with a more prevalent Machiavellianism trait.

References

- Allport, G. W. (1961). *Pattern and growth in personality*. Oxford, England: Holt.
- Alves, R. S., Puppim, L., Nascimento, E. M., & Da Cunha, J. V. A. (2019). Maquiavelismo e sua relação com atividades contraproducentes nos estudantes de Ciências Contábeis. *Revista de Educação e Pesquisa em Contabilidade (REPeC)*, 13(1), <https://doi.org/10.17524/repec.v13i1.2135>
- Berti, C., Molinari, L., & Speltini, G. (2010). Classroom justice and psychological engagement: Students' and teachers' representations. *Social Psychology Of Education*, 13(4), 541-556. doi:10.1007/s11218-010-9128-9
- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiation in organizations* (Vol. 1, pp. 43–55). Greenwich, CT: JAI Press.
- Caglar, C. (2013). The Relationship between the Perceptions of the Fairness of the Learning Environment and the Level of Alienation. *Eurasian Journal of Educational Research*, 50, 185-206.
- Christie, R., & Geis, F. L. (1970). *Studies in machiavellianism*. New York: Academic Press. Academic Press.
- Chory-Assad, R. M. (2002). Classroom justice: Perceptions of fairness as a predictor of student motivation, learning, and aggression. *Communication Quarterly*, 50(1), 58-77.
- Chory-Assad, R. M., & Paulsel, M. L. (2004a). Classroom justice: Student aggression and resistance as reactions to perceived unfairness. *Communication Education*, 53(3), 253-273.
- Cooper, D. R., & Schindler, P. S. (2016). *Métodos de Pesquisa em Administração-12ª edição*. McGraw Hill Brasil.
- Collison K. L., South S., Vize C. E., Joshua D. Miller & Donald R. Lynam (2021) Exploring Gender Differences in Machiavellianism Using a Measurement Invariance Approach, *Journal of Personality Assessment*, 103:2, 258-266, DOI: 10.1080/00223891.2020.1729773
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. *International review of industrial and organizational psychology*, 12, 317-372.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The development and validation of a new Machiavellianism scale. *Journal of management*, 35(2), 219-257.
- Darnell J.A., Darnell, J.M. (2019) The Importance of Considering Socio-Demographic Factors in University Postgraduate Policies. *Journal of Higher Education Policy and Management*.
- D'Souza, M. F. (2016). *Manobras financeiras e o dark triad: o despertar do lado sombrio na gestão* (Tese de Doutorado). São Paulo: Universidade de São Paulo.
- D'Souza, M. F., & Jones, D. N. (2017). Taxonomia da rede científica do Dark Triad: revelações no meio empresarial e contábil. *Revista de Educação e Pesquisa em Contabilidade*, 11(3), p. 296-313.
- D'Souza, M. F., & de Lima, G. A. S. F. (2018). Escolha de carreira: o Dark Triad revela interesses de estudantes de Contabilidade. *Revista de Contabilidade e Organizações*, 12.
- D'Souza, M. F. & Lima, G. A. S. F. (2019). Um olhar sobre os traços do Dark Triad e os valores culturais dos estudantes de contabilidade. *Advances in Scientific & Applied Accounting*, 12(1).
- D'Souza, M. F. (2020). RESPONSABILIDADE SOCIAL CORPORATIVA MODERA A RELAÇÃO ENTRE O TRAÇO MAQUIAVÉLICO E O GERENCIAMENTO DE RESULTADOS?. *Revista De Educação E Pesquisa Em Contabilidade (REPeC)*, 14(4). <https://doi.org/10.17524/repec.v14i4.2661>
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social issues*, 31(3), 137-149.

- Fávero, L. P., & Belfiore, P. (2017). *Manual de análise de dados: estatística e modelagem multivariada com Excel®, SPSS® e Stata®*. Elsevier Brasil.
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The Dark Triad of personality: A 10 year review. *Social and personality psychology compass*, 7(3), 199-216.
- Greenberg, J. (2001). Setting the justice agenda: Seven unanswered questions about “what, why, and how”. *Journal of Vocational Behavior*, 58(2), 210-219.
- Grohmann, M. Z., & Battistella, L. F. (2012). A Escala de Personalidade Maquiavélica (MPS): Tradução e validação no contexto brasileiro. *Psicologia Argumento*, 30(70).
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2), 193-206.
- Homans, G. C. (1961). The humanities and the social sciences. *American Behavioral Scientist*, 4(8), 3-6.
- Jones, D. N., & Paulhus, D. L. (2009). Machiavellianism. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 93-108). The Guilford Press.
- Jones, D. N., & Paulhus, D. L. (2011). Differentiating the dark triad within the interpersonal circumplex. In L. M. Horowitz, & S. Strack. *Handbook of interpersonal psychology* (pp. 249-269). New York: Wiley & Sons.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits. *Assessment*, 21(1), 28-41.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz E. Walster (Eds.), *Advances in experimental social psychology* (Vol. 9). New York: Academic Press.
- Major, B., & Deaux, K. (1982). Individual differences in justice behavior. In *Equity and justice in social behavior* (pp. 43-76). Academic Press.
- Rasooli, A., Zandi, H., & DeLuca, C. (2019). Conceptualising fairness in classroom assessment: exploring the value of organisational justice theory. *Assessment in Education: Principles, Policy & Practice*, 26(5), 584-611.
- Resh, N., & Sabbagh, C. (2016). Justice and education. In C. Sabbagh & M. Schmitt (Eds.), *Handbook of social justice theory and research* (pp. 349-368). Berlin: Springer.
- Sampieri, R. H., Collado, C. F., & Lucio, M. del P. B. (2013). *Metodologia de pesquisa* (5o). Porto Alegre: Penso.
- Sanches, A. C. P. (2016). *Experiências de (in) justiça com os professores e comportamentos de desvio na adolescência*. Tese de Programa Operacional Ciência e Inovação – Fundação para a Ciência e Tecnologia.
- Santos, D., Avelino, B. C., da Cunha, J. V. A., & Colauto, R. D. (2020). Justiça e desonestidade acadêmica: um estudo com estudantes do curso de ciências contábeis. *Revista Contemporânea de Contabilidade*, 17(44), 71-86.
- Shi, J., Lin, H., Wang, L., & Wang, M. (2009). Linking the big five personality constructs to organizational justice. *Social Behavior and Personality: an international journal*, 37(2), 209-222.
- Simil, A. S. (2016). *A confiança como fator de influência da percepção de justiça no ambiente de aprendizagem*. Dissertação. Centro de Pós-Graduação e Pesquisas em Contabilidade e Controladoria. Universidade Federal de Minas Gerais, Brasil.
- Törnroos, M., Elovainio, M., Hintsala, T., Hintsanen, M., Pulkki-Råback, L., Jokela, M., & Keltikangas-Järvinen, L. (2019). Personality traits and perceptions of organisational justice. *International journal of psychology*, 54(3), 414-422.

- Tyler, T. R., Boeckmann, R. J., Smith, H. & Huo, A.Y. J. (1997). *Social justice in a diverse society*. Colorado: Westview Press.
- Wang, Q., Hackett, R. D., Zhang, Y., & Cui, X. (2019). Personal characteristics and applicants' perceptions of procedural fairness in a selection context: The mediating role of procedural fairness expectations. *Management Decision*.
- Wubbels, T., & Brekelmans, M. (2005). Two decades of research on teacher–student relationships in class. *International journal of educational research*, 43(1-2), 6-24.
- Yilmaz, S. A. (2015). A new momentum: Gender justice in the women's movement. *Turkish Policy Quarterly*, 13(4), 107-115.
- Zettler, I., & Solga, M. (2013). Not enough of a 'dark' trait? Linking Machiavellianism to job performance. *European Journal of Personality*, 27(6), 545-554.