Assessing Justice: Exploring the Role of Values in Defining Fairness

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ABSTRACT
Assessments of justice can vary due to its dual objective and subjective dimensions. Objectively, justice can be achieved through the establishment of a distribution system that follows predetermined standards. However, subjective evaluations of justice can be influenced by psychological factors that differ among individuals. Many psychological factors influence an individual’s assessment of a particular distribution system. This research aims to explore subjective assessments of justice by involving an individual’s inherent factors, namely the value variable, while also examining the values inherent in each individual. As a result, personally-oriented values such as achievement, power, and hedonism have a correlation with procedural justice assessments and distributive justice assessments that are fair. Furthermore, collectively-oriented values such as virtue, universalism, and conformity also have a correlation with procedural justice assessments and distributive justice assessments that are fairly distributed.

Keywords: Justice Assessment; Role of Value; Fair

1. Introduction
Studies on the issue of justice in the past three decades have shown remarkable progress and development (Hailes et al., 2021). The issue of justice has become important because in daily life, people are faced with more issues of injustice. On the other hand, justice is one of the indicators of the success of a development, in addition to other indicators such as environmental sustainability, quality of life, equality, and gross domestic product (Thrift & Sugarman, 2019).

Vasquez (2012) stated that injustice in the glaring gap between the rich and the poor will lead to social and political vulnerability. The poor will try to change the status quo in order to improve their condition, and if the political configuration allows it, political unrest that threatens development outcomes may occur.

The concept of justice in Indonesia is still a utopia, and the reality is an increasing sense of injustice. Injustice occurs from the micro level within organizations to the macro level in society. In an organization or company, issues of injustice are often related to procedures and resource distribution systems. The comparison between an employee’s contribution to the company and the compensation (salary and other benefits) received by the employee often does not match the expectations of one or both parties. This problem often triggers employee dissatisfaction, leading to protests and unrest.
In theory, differences in this assessment are common and likely to occur. This is because the concept of justice has two dimensions, namely objective and subjective dimensions (Schulze et al., 2017). Objectively, if a particular distribution system has been established based on certain standards, then the distribution is considered fair. However, subjectively, it may not be considered fair.

Many psychological factors influence an individual's assessment of a particular distribution system. This research will attempt to examine subjective assessments of justice by involving an individual's inherent factors, namely the value variable.

At the macro or broader level, such as a country, injustice also occurs. Development during the past New Order era only produced a handful of people with an unreasonable amount of wealth and caused suffering to the majority of the population. This inequality is caused by an unfair distribution of resources (Faturochman, 2002).

The study on the importance of justice issues in organizations has been extensively conducted in recent years, especially in developed countries (Farida et al., 2020). Research on justice in Indonesia is relatively rare. This can be seen from the scarcity of studies on justice that appear in psychology journals or other scientific articles. This situation is quite surprising considering the importance of justice issues for the Indonesian nation.

The research found that individuals will evaluate what and how much they receive, and how the distribution system works (Rosenthal, 2016). Individual evaluations of outcomes are called distributive justice, while evaluations of processes are called procedural justice. These studies will also be conducted this time with an emphasis on the subjective dimension of justice assessment. This is because variations in assessments of a distribution decision always occur in the assessment process and not in the decision itself (the objective dimension).

Both procedural justice and distributive justice are important elements in the functioning of an organization. Individuals who feel treated unfairly tend to have weak commitment to the organization, high levels of conflict, weakened helping behaviour towards colleagues, and low performance (Colquitt, 2012).

Other studies conducted by Schulte-Braucks et al. (2019) found that fair procedures increase self-esteem while unfair procedures decrease self-esteem. Low self-esteem has an impact on job satisfaction and productivity. Individuals with low self-esteem are easily influenced, often experience stress, and more frequently reduce their effort or performance compared to those with high self-esteem.

Other studies related to procedural and distributive justice in organizations include those conducted by Osgood (2017) on the effects of fair selection systems, the relationship between justice and revenge in companies, organizational justice assessment and work control, and job tension (Ganster & Rosen, 2013), assessment of justice and organizational citizenship (Chan & Lai, 2017), and others.

This study reveals the influence of individual character in determining the fairness of a particular distribution decision. The evaluator's character is closely related to the values embraced by the person. This is because values are the energy that guides a person's behaviour and attitude (Lefkowitz, 2017). Values will also determine which way is preferred over another and which goals are preferred over others. In other words, a rule or distribution decision and procedure that objectively meets fairness standards can be considered unfair by certain parties due to differences in the values embraced (Greenberg & Colquitt, 2005). These value differences are usually reflected in cultural differences, which Shao, Rupp, and Jones (2011) classify broadly into two categories: collectivist and individualistic cultures.

Shao, Rupp, and Jones (2011) divided the characteristics of collectivist and individualistic cultures based on several criteria. The first criterion is the power distance index (PDI), which emphasizes the level of equality or difference in the distribution of power among members of society. A high PDI score indicates that the society is composed of different levels that are very distinct (caste-based) and vice versa. The PDI score for Indonesia is 78 (range 0-100), the average score for Asia is 71, and the world is 65. A higher PDI score indicates that the society in that country has a more collectivist culture.

Secondly, there is the individualism index (IDV), which emphasizes the extent to which a society rewards or punishes individuals or groups for achievement and social relationships. A high IDV indicates a high regard for individual rights and individuality, as well as looser social relationships. Indonesia's IDV score is 14, while the Asian average is 23 and the global average is 43. Hofstede categorizes Indonesia as a country with the lowest
level of individualism, or in other words, a country with a high collectivist culture. America is the most individualistic country (with an IDV score of 91, the highest in the world). Both of these indicators provide a strong basis for placing Indonesian society in the group of collectivist cultures with all the consequences that come with it, and PDI and IDV will have an impact on the character of both society and individuals.

In collective societies (with high PDI scores), the prominent characteristics are respect for authority, placing individuals in specific positions, centralized power, and individual positions emphasizing power. In individualistic societies (with low PDI scores), the society tends to minimize class or social structure, value individualism, and decentralization.

The character of a society with a low IDV score includes high loyalty to the group, decisions made for the good of the group, and a “we” mentality. Societies with a high IDV score have individuals who take care of themselves, decisions are made based on individual needs, and a “me” mentality.

The cultural differences also result in differences in the assessment of fairness in a particular distribution system. Sampson (1983) stated that individualistic cultures view a proportional distribution system as fair, whereas collectivist cultures view an equal distribution system as fair.

Jun (2018) shares a similar opinion and found that both Hong Kong and Indonesia, which were categorized as collectivist societies by Shao, Rupp, and Jones (2011), view a need-based distribution system as fairer than an equity-based proportional distribution system. On the other hand, American society, which is categorized as an individualist society, views a proportional distribution system as fairer than a need-based distribution system.

The two opinions above indicate that a particular distribution system is judged as fair in a certain culture as well. Proportional distribution is considered fair in individualistic cultures, while distribution based on needs and equal distribution are considered fair in collective cultures. The cause of this difference can be traced to the differences in values held by the community. In collective societies, the values that are considered important and upheld are interpersonal relationships, social recognition, social harmony, acceptance of circumstances, simplicity, and self-image maintenance. Conversely, in individualistic societies, the values considered important are freedom, life variations, enjoyment of life, personal achievement, and equality (Tyler et al., 1997).

Schneider et al. (2017) state that differences in values not only occur across different cultures (across culture) but also across individuals within the same culture (across individuals/monocultural). This means that not all members of a particular culture hold the same values, but there is always variation both in the type and in the order of importance of these values. Therefore, Schneider et al. (2017) recommend that research on differences in fairness judgments based on differences in values should not only be conducted cross-culturally but also within a specific culture (monocultural).

Research on values has always been associated with predicting certain behaviours or attitudes directly (Banks, 2017). Some studies that have attempted to link values with attitudes include research on attitudes towards black people and the poor in America linked to instrumental and terminal values, values with attitudes towards communism, values with attitudes towards student protests, values with attitudes towards the Vietnam War, and so on (Skrentny, 1996).

The research linking values to behaviour is also abundant, as demonstrated by studies such as Chin, Hambrick, and Treviño (2013) who linked values to political ideology. Rochon (1988) wrote about the relationship between values and anti-nuclear political activities, as well as the relationship between values and participation in civil rights demonstrations, attendance at church, and so on.

Research that attempts to examine the role of values as principles that determine the form of individual perception of an event, behaviour, and situation is still rarely found. This study tries to link values with perceptions or assessments of one social reality, namely justice.

2. Theoretical Framework

Individuals are the subject of organizational decisions. Some of these decisions involve issues related to salary, individual performance, and social issues within which the individual is situated. These decisions have economic and socio-emotional consequences, which often form the basis of why individuals become members or work for the organization.
The consequences of a decision will prompt individuals to make judgments. The first question that typically arises in decisions regarding salary and other organizational issues is "is it fair?" (Colquitt, Greenberg, & Zapata-Phelan, 2005).

The study of justice has received philosophical attention since the time of Plato and Socrates (Ohana, 2014). In everyday language, justice is often connotated as what ought to be or righteousness. Greenberg and Colquitt (2005) state that the term justice does not have a single meaning. Nevertheless, the term is most often used in the context of organizational activities to explain the way resources and rewards are distributed. Justice is often associated with fairness, rightness, deservingness, and other concepts that are frequently used to determine the distribution of rewards or resources. The concept of justice with its multiple meanings often leads to conflicts, especially in the process of determining the distribution of resources.

Strom, Sears, and Kelly (2014) state that in organizational studies, justice is often viewed as a social construction, meaning that an action is defined as fair if many individuals perceive it as such based on empirical research. Thus, "what is fair" originates from the connection between the objective side of decision-making and the subjective perception of justice. In other words, individuals' evaluation of whether a decision is fair or not is a psychological process at the individual level. Furthermore, Shao, Rupp, and Jones (2013) state that in psychology, the evaluation process briefly involves encoding, organizing, and enacting. Information or stimuli in the form of specific decisions that individuals receive will first be given certain codes, then organized in a particular arrangement, and finally translated into a response to assess the stimuli.

Whitman et al. (2012) state that justice is essentially a part of morality, but on the other hand, justice has been formulated in strict and standard rules. Generally, justice is described as a social situation when norms about rights and deservingness have been fulfilled. This description emphasizes distributive justice and has not yet touched on the procedure for determining the distribution system (procedural justice). This is what drives further research that examines procedural justice issues.

The assessment of justice is basically a special form of social assessment, so before understanding the assessment of justice, the issue of social assessment will be discussed first. He, Zhu, and Zheng (2014) state that social assessment in a broad sense is defined as the process of forming assessments about objects, people, or events from a social context to produce results that have certain qualities or degrees. In a narrow sense, social assessment is limited to the study of assessments related to psychological processes for social issues.

Colquitt, Greenberg, and Zapata-Phelan (2005) state that in social judgment theory, social judgment allows individuals to accept or reject messages or stimuli based on cognitive maps. This theory is very useful for individuals to understand messages from the outside world so that they can make decisions to reject or accept those messages. There are five important principles in social judgment theory, namely: First, individuals categorize judgments by evaluating the position of the message or persuasion. Individuals who are faced with stimuli in the form of persuasion will categorize them into three positions reflected in a latitude, namely the latitude of acceptance, non-commitment, and the latitude of rejection.

Second, when individuals receive persuasive information, they will place it in their evaluative category. Individuals will determine a certain category that is appropriate. For example, when an individual reads a newspaper article reporting on efforts to raise lecturer salaries, the individual will immediately determine their latitude position.

Third, an individual's ego involvement will affect the size of the individual's latitude of acceptance. Ego involvement here refers to determining how important the issue or information is to the individual's identity. For example, an individual who considers environmental quality to be an important issue will view anything that affects environmental sustainability as important. If there is news or information related to environmental destruction, the individual will quickly place it in the latitude of rejection.

Fourth, individuals tend to distort incoming information to fit their evaluation categories. Individuals always have anchor positions regarding various issues or problems. When receiving information about a problem, individuals tend to distort it so that the information fits with their anchor position or at least approaches it. If the persuasive information falls within the latitude of acceptance and is close to the anchor position, individuals will assimilate the new position. Thus, individuals will pull the new position closer to themselves and make it more acceptable. Conversely, if the persuasive information
falls outside the latitude of acceptance, individuals will contrast the new position. Then, individuals will push the new position further away from themselves and reject it.

Fifth, discrepancies. Small to moderate discrepancies between an individual's anchor position and another person's anchor position will cause a change in the individual, while large discrepancies will not. Changing an individual's anchor position is very difficult. This is because first, persuasion cannot occur if new information falls within the latitude of rejection, second, an individual's ego involvement in a particular issue makes the latitude of rejection larger than usual, making persuasion more difficult. Third, individuals tend to distort new information through assimilation and contrast, which will erase the persuasive potential of new information. These three factors show how difficult it is to change an individual's judgment. To achieve a change, several conditions must be met: the new information must fall within the latitude of acceptance, the new information must be different from the anchor position, and the new information cannot be assimilated or contrasted with the anchor position.

The above explanations show the significant influence of social factors in shaping judgments of fairness. Therefore, although judgment is a process that occurs at the individual level, social factors play an important role. Judgment is a combination of objective facts of social reality and individual subjectivity. Policies or rules regarding the distribution system in an organization are social realities. Procedures and distributions that are objectively fair, which have met applicable norms, may not necessarily be considered fair by individuals. This is because judgment is always subjective and dependent on many factors.

3. Method

This research uses a quantitative correlational approach. Data collection is done using psychological scales. To reveal the variables of procedural and distributive justice assessment, a scale developed by Gau (2014) and Collquit (2012) was used. The population of this study is the educational staff at the State Islamic University of Imam Bonjol Padang, amounting to 169 people with a sample of 90 people. Out of the 90 scales distributed, only 86 were returned for analysis. The justice assessment material is about the rules of providing performance allowances for civil servants in the Ministry of Religious Affairs of the Republic of Indonesia. The sampling technique used in this research is proportional random sampling, which is a system of randomly sampling existing sub-populations. The analysis technique used is canonical correlation analysis to test major hypotheses and partial correlation analysis to test minor hypotheses.

4. Results

The results of the normality test indicate that both the procedural justice assessment variable and the distributive justice assessment variable have data distributions that follow a normal curve. This is evidenced by the values of p (probability of error) which are greater than 0.05.

<table>
<thead>
<tr>
<th>Table 1. Normality Test of Variable Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Y1</td>
</tr>
<tr>
<td>Y2</td>
</tr>
</tbody>
</table>

There are two major hypotheses in this study. The first is that the values of power, hedonism, and achievement are related to procedural and distributive justice evaluations. The second is that the values of benevolence, conformity, and universalism are related to procedural and distributive justice evaluations. These two major hypotheses will be tested one by one using the statistical technique of canonical correlation analysis. This analysis will test two sets of variables, each set consisting of more than two variables. The minor hypotheses will be tested using partial correlation analysis technique.

4.1. Values of Power, Hedonism, And Achievement

The first major hypothesis testing using canonical correlation analysis involves two sets of variables. Set 1 contains the variables of achievement values (X1), power (X2), and hedonism values (X3). Set 2 contains the variables of procedural justice assessment (Y1) and distributive justice assessment (Y2). The prerequisites for canonical correlation analysis are the partial correlations between independent variables in set 1, the partial correlations...
between dependent variables in set 2, and the partial correlations between variables in set 1 and variables in set 2. The results of the partial correlation calculations for each pair can be seen in the following table.

**Table 2. Partial Correlation between Variables X in Set 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000</td>
<td>0.481</td>
<td>0.217</td>
</tr>
<tr>
<td>X2</td>
<td>0.415</td>
<td>1.000</td>
<td>0.481</td>
</tr>
<tr>
<td>X3</td>
<td>0.126</td>
<td>0.472</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The correlation table above shows that the partial correlation coefficient between variables in set 1, there is a pair of variables with low and insignificant partial correlation, namely between the variable of achievement value and hedonism value. The other two pairs of variables are quite strongly and significantly correlated (p <0.00). The next partial correlation is the correlation between the dependent variables (Y) in set 2. The results of the analysis are as follows.

**Table 3. Partial Correlation between Variables X in Set 1 and Variable Y in Set 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y1</th>
<th>Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.391</td>
<td>-0.172</td>
</tr>
<tr>
<td>X2</td>
<td>-0.371</td>
<td>-0.102</td>
</tr>
<tr>
<td>X3</td>
<td>-0.195</td>
<td>0.281</td>
</tr>
</tbody>
</table>

The table above shows that there is only one significant correlation, namely between the value of achievement (X1) and procedural justice assessment (Y1) with a correlation coefficient of 0.17 and p=0.005 (p<0.05). The other five partial correlations do not show strong and significant correlation coefficients (p>0.05).

The conclusion of the three correlation tests above is that the partial correlation between the independent variables in set 1 is strong and significant. The partial correlation of the dependent variables in set 2 is also strong and significant. However, the partial correlation between the independent variables in set 1 and the dependent variables in set 2 does not show a strong and significant correlation. Nevertheless, considering that there is still one pair of correlations between variables in set 1 and variables in set 2 that are strong and significant, the requirements for testing canonical correlation are met. Canonical correlation analysis resulted in the following correlation coefficients.

**Table 4. Canonical Correlation Coefficients between Variables X in Set 1 and Variables Y in Set 2**

<table>
<thead>
<tr>
<th>Canonical Correlation Coefficient</th>
<th>Set 1</th>
<th>0.381</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Set 2</td>
<td>0.181</td>
</tr>
</tbody>
</table>

Hypothesis testing is conducted by examining the two canonical correlation coefficients above using the greatest characteristic root test principle, which states that if the first correlation from the canonical correlation is not significant, then the subsequent correlation is also not significant. Conversely, if the first correlation is significant, then the second correlation does not need to be considered. Therefore, testing to determine the significance of canonical correlation can be done by examining only the first canonical correlation coefficient.

The table above also shows that the magnitude of the first canonical correlation coefficient is 0.390. The magnitude of the canonical correlation indicates a fairly strong correlation between the independent variables in set 1 and the dependent variables in set 2. The magnitude of the coefficient cannot be used to determine the significance of the correlation. The significance test of the correlation is conducted by examining the result of the Wilk’s Lambda test by looking at the goodness of fit of the distribution in chi-square. The test results can be seen in the following table.

**Table 5. Wilk’s Lambda Significance Test**

<table>
<thead>
<tr>
<th>Canonical Coefficient</th>
<th>Chi-square</th>
<th>df</th>
<th>Lambda</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.381</td>
<td>15</td>
<td>0.862</td>
<td>0.0273</td>
</tr>
<tr>
<td>1</td>
<td>0.181</td>
<td>2</td>
<td>0.695</td>
<td>0.2741</td>
</tr>
</tbody>
</table>
The significance test table using Wilk's Lambda test above shows that the probability of error is 0.0273 (p<0.05), which means that the null hypothesis stating that the two sets of variables cannot be linked with canonical correlation is rejected. Conversely, the alternative hypothesis stating that the two sets of variables can be linked with canonical correlation is accepted. This is in line with what was stated by Fidel and Tabachnick (2001), that if the p-value on the Wilk's Lambda test is less than 0.05, then it means that the correlation between the two sets of variables is significant, or in other words, there is an overlap between the variables in set one and the variables in set two. The first major hypothesis stating that the values of power, hedonism, and achievement are related to the assessment of procedural justice and distributive justice is accepted.

The magnitude of the overlapping is equal to the square of the canonical correlation coefficient (R²) or equivalently 15.21%, which means that variables in set 1 contribute 15.21% to the magnitude of variables in set 2. The summary of the analysis can be seen in the following model.

Figure 1. Canonical Analysis Model between Set 1 and 2

The first minor hypothesis test was conducted to determine the correlation between variables within sets, namely between variables in set 1 and variables in set 2 by controlling one or more independent and/or dependent variables. The independent variables in set 1 are the variables of achievement value (X₁), power value (X₂), and hedonism value (X₃), while the dependent variables in set 2 are the procedural justice assessment (Y₁) and distributive justice assessment (Y₂). The results of the partial correlation test are as follows.

4.1.1. The partial correlation between X₁ and Y₁ while controlling for X₂, X₃, and Y₂

The partial correlation between the variable of performance value and the variable of procedural justice evaluation while controlling for the variables of power value, hedonism value, and distributive justice evaluation yielded a correlation coefficient of rₓᵧ = 0.3168 (p = 0.005). This means that the correlation between performance value and procedural justice evaluation is positive and significant, indicating that individuals who value performance judge the procedure used in the preparation of performance incentive rules to be fair. The higher an individual's orientation toward performance value, the fairer their evaluation of the procedure used in preparing those rules. The contribution of the performance value variable to determining the amount of procedural justice evaluation (coefficient of determination) is 10.03%. Hypothesis minor 1a, which states that, while controlling for hedonism value, performance value, and distributive justice evaluation, power value has a negative and significant correlation with procedural justice evaluation, was rejected.

4.1.2. Partial correlation between X₁ and Y₂ by controlling X₂, X₃, and Y₁

Partial correlation between the variable of achievement value and distributive justice assessment by controlling the variable of power value, hedonism value, and procedural justice assessment obtained a correlation coefficient of rₓᵧ = -0.0571 (p = 0.619). This result indicates that the correlation between achievement value and distributive justice assessment is negative and not significant. The direction of this correlation is in line with the first hypothesis, although the correlation coefficient is not significant, so minor hypothesis 1b is rejected.
4.1.3. **Partial correlation between X2 and Y1 by controlling X1, X3, and Y2**

Partial correlation between the variable of power value and the assessment of procedural justice by controlling the variables of achievement value and hedonism value as well as the variable of distributive justice assessment resulted in a correlation coefficient of $r_{xy} = -0.0036$ ($p = 0.975$). The correlation result shows that the relationship between the variable of power value and the assessment of procedural justice is negative and not significant. The direction of correlation between these variables is the same as the direction of correlation between the variable of achievement value and the assessment of distributive justice, and is also consistent with the direction of the first hypothesis proposed, but the correlation coefficient is not significant, so the minor hypothesis 1c, which states that by controlling the variables of achievement value, hedonism value, and distributive justice assessment, the variable of power value has a negative and significant correlation with the assessment of procedural justice, is rejected.

4.1.4. **Partial correlation between X2 and Y2 controlling for X1, X3, and Y1**

Partial correlation between the variable of power value and the variable of distributive justice assessment controlling for the variables of performance value, hedonism value, and procedural justice assessment obtained a correlation coefficient of $r_{xy} = -0.0934$ ($p=0.416$).

This result is relatively similar to the previous two results, indicating that the correlation between the variable of power value and the variable of distributive justice assessment is negative and not significant, so the minor hypothesis 1d stating that, by controlling the variables of performance value, hedonism value, and procedural justice assessment, the power value has a significant negative correlation with distributive justice assessment, is rejected.

4.1.5. **The partial correlation between X3 and Y1 controlling for X1, X2, and Y2**

The partial correlation between the variable of hedonism and the variable of distributive justice assessment controlling for the variables of performance value, power value, and the variable of procedural justice assessment resulted in a correlation coefficient of $r_{xy} = -0.2372$ ($p = 0.037$). The correlation results indicate that the correlation between the variable of hedonism and the assessment of procedural justice is negative and significant. This is in line with the minor hypothesis 1e proposed in the study which states that by controlling the variables of performance value, power value, and distributive justice assessment, the value of hedonism has a significant negative correlation with procedural justice assessment. The fifth minor hypothesis proposed is accepted. This means that hedonism is a value embraced by individuals, so their assessment of the procedure for setting equal performance allowances is increasingly unfair, and conversely, the lower an individual’s orientation towards hedonistic values, the fairer their assessment of the procedure for setting performance allowances.

4.1.6. **Partial correlation between X3 and Y2 while controlling for X1, X2, and Y1**

Partial correlation between the variable of hedonism value and the variable of distributive justice assessment while controlling for the variables of performance value and power value as well as the variable of procedural justice assessment resulted in a correlation coefficient of $r_{xy} = 0.2078$ ($p=0.068$). The result shows that the correlation or relationship between the variable of hedonism value and the variable of distributive justice assessment is positive and not significant, thus rejecting the minor hypothesis 1f which stated that by controlling for the variables of performance value, power value, and procedural justice assessment, the value of performance has a negative and significant correlation with distributive justice assessment.

Hypothesis testing using canonical correlation analysis involves two sets of variables. The first set contains the variables of virtue values ($X_1$), conformity ($X_2$), and universalism values ($X_3$). The second set contains the variables of procedural ($Y_1$) and distributive ($Y_2$) justice assessments. Prerequisites for canonical correlation analysis include partial correlations between the independent variables in set 1, partial correlations between the dependent variables in set 2, and partial correlations between variables in set 1 and variables in set 2. The results of the partial correlation calculations for each pair can be seen in the following table.
Table 6. Partial Correlation among Variables X in Set 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>X₁</th>
<th>X₂</th>
<th>X₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>1.000</td>
<td>0.613</td>
<td>0.583</td>
</tr>
<tr>
<td>X₂</td>
<td>0.613</td>
<td>1.000</td>
<td>0.152</td>
</tr>
<tr>
<td>X₃</td>
<td>0.583</td>
<td>0.152</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The correlation table above shows that the magnitude of the partial correlation coefficient between variables in set 1, there is one pair of variables that have very low correlation, namely between the virtue value variable and the universalism value variable (p>0.05). Furthermore, the partial correlation between variables in set 2 can be seen in the table below.

Table 7. Partial Correlation among Variables Y in Set 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y₁</th>
<th>Y₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y₁</td>
<td>1.000</td>
<td>0.7532</td>
</tr>
<tr>
<td>Y₂</td>
<td>0.7532</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The table of partial correlations among dependent variables in set 2 shows that the correlation between distributive justice and procedural justice assessments is 0.7532 (p<0.000), indicating a significant correlation.

Next, the partial correlations between variables in set 1 and variables in set 2 are shown in the following table.

Table 8. Partial Correlation between Variables in Set 1 and Variables in Set 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y₁</th>
<th>Y₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>0.182</td>
<td>-0.272</td>
</tr>
<tr>
<td>X₂</td>
<td>0.252</td>
<td>-0.172</td>
</tr>
<tr>
<td>X₃</td>
<td>-0.071</td>
<td>0.091</td>
</tr>
</tbody>
</table>

The table above shows that there are two weak correlation coefficients, namely between the variable of universalism and procedural justice assessment or $r_{x3y1}$ at 0.091 and the correlation between universalism value and distributive justice assessment or $r_{x3y2}$ at 0.214 (p>0.05). There are also two negative correlation coefficients, namely the correlation between the virtue value and distributive justice assessment or $r_{x1y2}$ at -0.396 (p<0.00) and the correlation between conformity value and distributive justice assessment or $r_{x2y2}$ at -0.339 (p<0.00). Meanwhile, the other partial correlations, namely between the virtue value and procedural justice assessment at 0.224 (p<0.05) and the correlation between conformity value and procedural justice assessment at 0.247 (p<0.05) are significant.

Canonical correlation analysis produced the following correlation coefficients.

Table 9. Canonical Correlation Coefficient between Variable X in Set 1 and Variable Y in Set 2

<table>
<thead>
<tr>
<th>Root Removal</th>
<th>Canonical Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set 1</td>
<td>0.483</td>
</tr>
<tr>
<td>Set 2</td>
<td>0.261</td>
</tr>
</tbody>
</table>

Hypothesis testing is performed by examining the two canonical correlation coefficients above using the greatest characteristic root test principle, which states that of the two correlation coefficients, if the first correlation of the canonical correlation is not significant, then the subsequent correlation is also not significant. Conversely, if the first correlation is significant, then the second correlation does not need to be considered. Therefore, testing to determine the significance of the canonical correlation can be done by examining only the first canonical correlation coefficient.

Table 9 shows that the magnitude of the first canonical correlation coefficient is 0.483. The magnitude of the canonical correlation indicates a fairly strong correlation between the independent variables in set 1 and the dependent variables in set 2. The magnitude of the correlation coefficient cannot be used to determine the significance of the correlation yet. The significance of the correlation is tested by examining the results of the Wilk's Lambda test by checking the adequacy of the distribution in chi square. The test results can be seen in the following table.
Table 10. Wilk’s Lambda Significance Test

<table>
<thead>
<tr>
<th>Canonical Coefficient</th>
<th>Chi-square</th>
<th>df</th>
<th>Lambda</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.483</td>
<td>17,582</td>
<td>7</td>
<td>0.832</td>
</tr>
<tr>
<td>1</td>
<td>0.261</td>
<td>4,941</td>
<td>3</td>
<td>0.862</td>
</tr>
</tbody>
</table>

The significance test table using the Wilk’s Lambda test above shows that the probability of error is 0.0052 (p < 0.05), which means that the null hypothesis stating that the two sets of variables cannot be connected by canonical correlation is rejected. Conversely, the alternative hypothesis stating that the two sets of variables can be connected by canonical correlation is accepted. In other words, the second hypothesis of the study, which states that there is a relationship between the values of benevolence, conformity, and universalism with procedural justice assessment and distributive justice assessment, is accepted. The magnitude of the overlap is equal to the square of the canonical correlation coefficient ($R^2$) or equal to 17.38%, which means that the variables in set 1 contribute 17.38% to the magnitude of the variables in set 2. The summary of the analysis results can be seen in the following model.

Figure 2. Canonical Analysis Model between Set 1 and 2

4.2. Values of Benevolence, Conformity, and Universalism

The second minor hypothesis test is conducted by partial correlation analysis between variables in a set, namely between variables in set 1 and variables in set 2 by controlling one or more independent and/or dependent variables. The independent variables in set 1 are the variables of benevolence value ($X_1$), conformity value ($X_2$), and universalism value ($X_3$), while the dependent variable in set 2 is the assessment of procedural justice ($Y_1$) and distributive justice assessment ($Y_2$). The results of the partial correlation test are as follows.

4.2.1. Partial correlation between $X_1$ and $Y_1$ while controlling for $X_2$, $X_3$, and $Y_2$

Partial correlation between the virtue value variable and procedural justice assessment variable while controlling for the conformity and universalism value variables as well as the distributive justice assessment variable resulted in a correlation coefficient of $r_{xy} = 0.119$ (p = 0.229). This means that the correlation between virtue values and procedural justice assessment is positive but not significant. This indicates that there is a relationship between virtue values and procedural justice assessment, but it is not significant. The direction of this correlation is consistent with the second hypothesis proposed in this study, although the correlation coefficient is not significant. Therefore, the minor hypothesis 2a stating that, by controlling for conformity values, universalism values, and distributive justice assessment, virtue values have a positive and significant correlation with procedural justice assessment is rejected.

4.2.2. Partial correlation between $X_1$ and $Y_2$ while controlling for $X_2$, $X_3$, and $Y_1$

Partial correlation between virtue value variable and distributive justice assessment variable while controlling for conformity and universalism value variables as well as procedural justice assessment variable resulted in a correlation coefficient of $r_{xy} = -0.243$ (p = 0.032). This result indicates that the correlation between virtue values and distributive justice assessment is negative and significant. This result contradicts the minor hypothesis 2b in this study which states that, by controlling for conformity values, universalism values, and
procedural justice assessment, universalism values have a positive and significant correlation with distributive justice assessment. Therefore, minor hypothesis 2b is rejected.

4.2.3. Partial correlation between X2 and Y1 while controlling for X1, X3, and Y2

Partial correlation between conformity value variable and procedural justice assessment variable while controlling for virtue and universalism value variables as well as distributive justice assessment variable resulted in a correlation coefficient of \( r_{xy} = 0.1473 \) (\( p = 0.198 \)). The correlation result shows that the relationship between conformity value variable and procedural justice assessment variable is positive but not significant. The direction of this correlation is consistent with the minor hypothesis 2c, but the correlation coefficient is not significant. Therefore, the minor hypothesis 2c stating that, by controlling for virtue values, universalism values, and distributive justice assessment, conformity values have a positive and significant correlation with procedural justice assessment is rejected.

4.2.4. Partial correlation between X2 and Y2 while controlling for X1, X3, and Y1

Partial correlation between conformity value variable and distributive justice assessment variable while controlling for virtue and universalism value variables as well as procedural justice assessment variable resulted in a correlation coefficient of \( r_{xy} = -0.1282 \) (\( p = 0.263 \)). This result indicates a negative and non-significant correlation. This result contradicts the minor hypothesis 2d proposed in this study, which states that, by controlling for virtue values, universalism values, and procedural justice assessment, conformity values have a significant and positive correlation with distributive justice assessment, and thus, it is rejected.

4.2.5. Partial correlation between X3 and Y1 controlling for X1, X2, and Y2

Partial correlation between the variable of universalism and the variable of distributive justice evaluation controlling for the variables of virtue and conformity values and the variable of procedural justice evaluation resulted in a correlation coefficient of \( r_{xy} = -0.0671 \) (\( p=0.559 \)). The correlation results indicate that the correlation between the variable of universalism and the evaluation of procedural justice is negative and not significant. This correlation is contrary to the direction of the hypothesis minor 2e in this study, which states that by controlling for the variables of virtue values, conformity values, and distributive justice evaluation, universalism values have a significant positive correlation with the evaluation of procedural justice, which is rejected.

4.2.6. Partial correlation between X3 and Y2 by controlling X1, X2, and Y1

Partial correlation between the variable of conformity value and distributive justice assessment variable by controlling the variables of virtue value and universalism as well as the variable of procedural justice assessment obtained a correlation coefficient of \( r_{xy} = 0.0597 \) (\( p = 0.603 \)). These results indicate that the correlation or relationship between the variable of universalism value and distributive justice assessment variable is positive and not significant. Thus, the minor hypothesis 2f that states that by controlling the variables of virtue value, conformity value, and procedural justice assessment, the universalism value has a significant positive correlation with distributive justice assessment is rejected.

5. Discussion

Based on the results of the canonical correlation analysis conducted, the first hypothesis stating that there is a relationship between the values of achievement, power, and hedonism with the connection between procedural justice assessment and distributive justice assessment is rejected. The analysis results show a positive relationship between variables in set 1 and variables in set 2.

The proposed model shows that the coefficient of canonical correlation is 0.390 and the significance test with Wilk’s Lambda obtained a p-value of <0.05, which means that the relationship between the two sets of variables is significant. The first major hypothesis is accepted.

The contribution of set 1 to set 2 is 15.21%. This means that the variables of achievement, power, and hedonism account for 15.21% of the variability in procedural and distributive justice evaluations. The canonical correlation coefficient of 0.390 is greater than all the partial correlations between variables in set 1 and variables in set 2.
The partial correlations between some variables may be negative and insignificant when correlated individually, but when correlated together they show the opposite result. This indicates the occurrence of addition or synergy between variables in each set.

The model also explains that for some aspects, the research results are consistent with existing theories. The partial correlation between power values (X3) and procedural justice assessment (Y1) is negative and not significant. Similarly, the partial correlation between power values (X2) and distributive justice assessment (Y2). Negative correlation also occurs between power value variable (X2) and procedural justice assessment variable (Y1), as well as the correlation between achievement value (X1) and distributive justice assessment (Y2). A positive but not significant partial correlation occurs between hedonism value variable (X3) and distributive justice assessment (Y2). The only significant positive partial correlation result is the correlation between achievement value variable (X1) and procedural justice assessment variable (Y1).

The results of this study also show that in general the relationship between independent variables in set 1 and dependent variables in set 2 is negative. Out of the six correlations, four of them are negative, one is positive but not significant, and the remaining one is positive and significant. The canonical correlation coefficient for both sets is positively significant, which is because in canonical correlation analysis, a negative correlation coefficient cannot be found as in regular product moment correlation analysis. The direction of the relationship can be explained by looking at the correlation between variables in set 1 and variables in set 2.

The results of the partial correlation analysis between variables in set 1 and variables in set 2 are actually consistent with existing theories. Pang and Zhang (2018) also stated that the influence of personal characteristics will dominate in determining fairness judgments when the situation is not strong enough to influence individual judgments.

Individuals who adhere to hedonism, the importance of power, achievement, and self-stimulation which are domains of values that prioritize personal interests, do not agree with the equal distribution system (equality) and prefer a proportional system. Conversely, those who adhere to conformity, prosocial, and spiritual values are more likely to choose an equal distribution system. Bye and Sandal (2016) concluded that subjects' reactions to distribution systems depend on various factors such as the situation, interpretation of information, social identity and membership in groups, as well as the beliefs and values held by individuals.

The mismatch between the minor hypotheses proposed and the results of this study indicate a conflict between personal motives and situational or environmental pressures. (Pang and Zhang, 2018). Individuals who adhere to personal-oriented values such as hedonism, power, and achievement cannot actualize these values in situations that require them to maintain harmonious relationships with others. Therefore, although the equal distribution system theoretically does not match the personal characteristics (values embraced), because the individual is in a strong collective character environment, the character of the environment will influence their assessment. In this study, environmental pressures override individual personal motives.

The results of this study also show that in monocultural societies, differences in values can also emerge. This is as stated by Cheng (2017) that in Hong Kong and Indonesia, they are included in a group of collectivist societies that value distribution systems based on needs rather than proportional distribution systems. Nevertheless, the results of the study also indicate differences in value orientation, especially values related to achievement and power, where Hong Kong society is higher than Indonesian society. This also indicates that in collectivist societies, individuals can also adopt values that are self-oriented. According to Tyler, Goff, and MacCoun (2015), differences in values not only occur across cultures but also within individuals in the same culture (across individuals/monocultural).

The differences in values within the same culture may explain why individuals within a collective culture may have individualistic-oriented values and vice versa. As a result, there may be inconsistency in their judgments of distributive and procedural justice. In a collective society, the appropriate distribution model is an equal distribution, and the appropriate procedure is one that guarantees and respects the existence of its members.

The second major hypothesis, which states that there is a relationship between the values of benevolence, conformity, and universalism and the assessment of procedural justice and distributive justice, is accepted. The result of the canonical correlation analysis between set 1 variables and set 2 variables shows a significant positive relationship with a canonical correlation coefficient of 0.417. The significance test of the relationship using Wilk's Lambda test obtained a value that is smaller than 0.05, which means that the relationship between
the variables in set 1 and the variables in set 2 is significant. The contribution of the variables in set 1 to the magnitude of the variables in set 2 is 17.38%.

The model in figure 2 shows that the canonical correlation coefficient between set 1 and set 2 is larger than the partial correlation between variables in set 1 and variables in set 2. This indicates the occurrence of addition or synergy. When variables in each set are correlated separately, the results are relatively low, and some are negative, but when correlated together between the two sets, it produces a sufficiently large and significant canonical correlation coefficient.

The model in figure 2 also shows that the partial correlation between variables in set 1 and variables in set 2 is relatively small, and some of them are even negative. The correlation between the value of virtue (X1) and distributive justice assessment (Y2) is -0.396, and the partial correlation between the value of conformity (X2) and distributive justice assessment (Y2) is also negative at -0.339. Negative partial correlation also occurs between the value of universalism (X3) and distributive justice assessment (Y2). Positive partial correlations occur between the value of virtue (X1) and procedural justice assessment (Y1) at 0.256, the correlation between the value of conformity (X2) and procedural justice assessment (Y1) is 0.247, and the correlation between the value of universalism (X3) and procedural justice assessment (Y1) is 0.090. The results of partial correlation between variables in set 1 and set 2 are mostly not significant, however, the canonical correlation between the two sets is significantly positive. This indicates the synergy built by the independent variables in set 1 with the dependent variables in the second set so that the two sets are interrelated.

These findings are consistent with what Whitman et al. (2012) stated, which is that each distribution system is deemed appropriate and fair based on its situational characteristics. The proportional system is more suitable for situations that demand increased productivity. The equal distribution system is more appropriate if the goal of distribution is to improve social relations or interactions, while the needs-based distribution system is more suitable if the goal is to help an individual’s personal development. Several studies have subsequently supported the above opinions, which were then concluded by Rupp et al. (2013) that if values can influence the goals of the three distribution systems, then values will also influence the distribution system used. For example, if a particular value orientation encourages placing a higher value on harmonious interpersonal relationships in a particular distribution system, then the person would prefer the equal distribution system over the other two.

The above opinion is also in line with what Tyler and Smith (1999) stated that judgments of justice are influenced not only by situational characteristics but also by personal characteristics, in this case the values held. For example, judgments of justice regarding distribution systems will differ depending on whether someone is in a competitive or cooperative situation. It will also differ depending on the priority of values held by the person determining the distribution system, the recipient of the distribution, or the evaluator of the method of determining the distribution system.

The results of this study are generally consistent with what was stated by Blader and Chen (2012), who stated that the relationship between values and justice evaluations across cultures shows inconsistent results. Dammer and Albanese’s study (2014), which compared the justice system in America, France, and Germany (individualistic cultures), found consistent results, where procedures or systems that guarantee participant control over the process are considered fair. Lee et al.’s (2019) research on Chinese society in Hong Kong (collectivist) and American society (individualistic) found that the influence of participant input (voice effect) in decision making is relatively similar for these cultures.

Research on the influence of culture and/or personal characteristics (values) ideally should be conducted on two groups of subjects that have different cultures or values. This will clarify the influence of those values in affecting other variables or attributes. Research on values in a monocultural society can also be conducted, but the results may not be as optimal and tend to be less consistent.

6. Conclusion

Values and the assessment of justice are closely related because assessments of justice are based on values that are learned and understood by individuals or society. Values such as honesty, equality, and respect for others are examples of values often associated with justice. Individuals or society usually evaluate an action or decision by considering whether it aligns with their beliefs and values. For example, if honesty is considered important, then an action that is perceived as dishonest may be considered unjust. Similarly, an action that
disregards or violates the principle of equality may be considered unjust. Moreover, assessments of justice can vary among individuals or society, depending on the values they hold and have learned. For instance, a policy that is deemed fair in one society may be considered unfair in another society because of differences in the values they hold. Thus, values and assessments of justice are interrelated and can influence how individuals or society evaluate whether an action or decision is just or not.

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9. Conflicts of Interest

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References


