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Understanding the Utilization of Indigenous Institutions: The Case of Wonosobo, Central Java, Indonesia

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Abstract: Indigenous institutions may play a vital role in sustainable development at the local level by serving the people's interests and supporting their livelihood. By distributing structured questionnaires to the households in our research area, this research aimed to find the determining factor of the utilization of community institutions, especially indigenous institutions. Per household, 26 features, including demographic, psycho-social, economic, and location variables, were collected to study the predictability of the utilization of community institutions. The results show that the location variables are the most crucial for explaining the utilization of community institutions in times of need.

Keywords: indigenous institution *jimpitan*; sustainable development; demographics; psycho-social; economic; location; random forests

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1. Introduction

Sustainable development requires the current generation to use resources without sacrificing the needs of future generations [1]. Sustainable development is crucial for nations striving to balance economic growth with the preservation of natural resources, environmental protection, and social objectives. It requires long-term investments in economic, human, and environment capital [2,3]. To be able to achieve such a condition, a strategy is needed that involves all possible effective activities. Such a strategy should be accepted and supported by as many parts of society as possible and should also overcome various differences in institutional power. For that, a local level of knowledge and skills based on culture and social traditions is needed [4]. At the local level of society, sustainable development is often supported by traditional, or indigenous, institutions. These institutions harness indigenous knowledge to efficiently and sustainably manage resources for productive activities [5]. Their utilization reflects the community's participation in enhancing its livelihood, thus promoting community development.

Historically, the knowledge embedded in indigenous institutions has been dismissed by scientists and policymakers due to colonial and imperial biases and their associations with "non-Western" knowledge systems. Furthermore, indigenous institutions often emerge from marginalized people, being distinct from dominant governance and knowledge structures [6,7]. Nevertheless, indigenous institutions are invaluable for formulating empowerment policies, fostering local participation in decision-making and program implementation, and alleviating poverty [8].

In Asia, kinship and personal relationships significantly influence commercial activities by fostering trust and collective responsibility [9]. In Indonesia particularly, there is a deeply rooted, long-standing tradition of mutual support and collaboration manifested through labor and voluntary efforts, known as *tolong menolong*, or more specifically *gotong royong*. It serves as a cultural adhesive in the social fabric [10]. However, its function has sometimes been co-opted for political motives. Historical instances of this include its usage by Dutch and Japanese colonizers and later during different Indonesian political eras for various objectives. In the Old Order/Soekarno era prior to 1964, it was employed for his political view as "*active cooperation and struggle of horizontally aligned groups and factions and it referred to a goal of political action*" [11]. During the New Order/Soeharto regime from 1965 to 1998, *gotong royong* was used for supporting top-down development, which involved coercing farmers to plant high-yielding rice varieties and demanding a debt for the inputs. It was even used to obtain free collective labor from the villagers in rural development programs. The government used local institutions based on *gotong royong* as instruments to extend their power at the village level, rather than as a controlling force of government policy. Consequently, there was no empowerment of the lower levels of society but the co-optation of local institutions in authoritarian state corporatism [7,12]. Despite these instances of co-optation, in local realities, at the community level, *gotong royong* remains a foundation for balanced and generalized reciprocity in farming and for events such as ceremonies related to stages of life, i.e., birth, marriage, and death [7].

The principle of *gotong royong* is expressed differently across Indonesia's diverse ethnic landscape. In Central Java, *jimpitan* exemplifies a local mutual aid/indigenous institution, drawing from the ethos of *gotong royong.* It has evolved to primarily aid the economically vulnerable [13]. Amidst the global economic strain induced by the COVID-19 pandemic, the Central Java government endorsed the tradition of *jimpitan* as a form of community sustenance, with local initiatives like *jogo tonggo* (*jogo* literally means to keep/to guard, and *tonggo* means neighbor) also emerging in response. In Tegal, Central Java, in the Tegalsari village (Tegal Barat sub-district), the local people implement it by growing vegetable crops and other food plants, cultivating fish in the pond, and growing kale plants and greens. They also have food barns to store resources from outside the neighborhood or from *jimpitan* within the neighborhood. The food barn is used to help people outside the neighborhood who are affected by COVID-19 [14,15].

Jimpitan typically involves rice contribution activities conducted by women who bring an amount of rice to the monthly meeting and by men who take rice from a small tray hung in front of each house while checking around to ensure safety in the neighborhood [16]. Rice, as the main medium in *jimpitan*, is a staple food for most people in Indonesia. In the context of the International Year of Rice launched by FAO (2004), it was stated that having sufficient rice determines food security and livelihood [17]. Other regions in Indonesia and other countries have analogous institutions, showcasing the universal nature of such community-based solutions, i.e., *Perelek* [18] and *Gintingan* in West Java [19] and *Bareh Saganggam* in West Sumatera [20], *Ajo* in Nigeria [21], *Iddir* in Ethiopia [22], *Bayanihan* in the Philippines [23,24], and *Kuu* in Liberia [25]. The active engagement of local populations through these institutions can significantly advance poverty alleviation efforts, leading to sustainable community development.

Diverse institutions, with their unique capabilities to harness and administer resources, jointly contribute to sustainable development. Often, informal institutions offer services distinct from the formal ones, necessitating their coexistence for comprehensive societal service, termed market differentiation [26,27]. Only half of the Indonesian population utilizes formal banking services, with the remainder either opting for informal services or not using any services at all [28]. In East Indonesia, barriers to formal services drive people

towards informal alternatives [29]. Therefore, this study chose three types of institutions observed in communities where the local people participate in one out of three: (i) the indigenous institution *jimpitan*, a community-based institution that is informal and based on *gotong royong*; (ii) transitional institutions, which are characterized as being in between informal and formal institutions, which in this study are represented by the cooperatives and PNPM-UPK (a national community empowerment program, with a subdistrict activity management unit); or (iii) modern institutions, which are formal and rule-based institutions, which in this study are represented by the bank.

Jimpitan, an indigenous institution, has played a significant role in fostering community participation. Historically, it was a practice observed in different settings, often linked to social customs, and it had distinct methods depending on the time of day and the participants. During the night patrol (*ronda*), men would walk around the neighborhood to ensure security and safeguard the community. As part of their routine, they would collect *jimpitan*, which consisted of rice or money placed in a plastic cup or a bamboo container (Figure 1) hung in front of each house. Meanwhile, women often carried out the *jimpitan* practice during their daytime meetings for rotating credit and savings (*arisan*). Both the practices of *ronda* and *arisan*, in which *jimpitan* rice or money is managed, served as vital forms of community participation. The practice of *jimpitan* provides valuable insight into how local people in Java engage with their social institutions and perceive their relationships with the surrounding environment. This practice reflects key aspects of the Javanese way of life, including community cooperation, mutual aid, and the balance between tradition and social responsibility.

Figure 1. A man during the night patrol and a bamboo container filled with rice.

The two basic principles of *rukun* (harmony) and *hormat* (respect) influence the social interaction of the local Javanese people [30,31]. The *rukun* condition is achieved when all parties are in a state of peace with one another, willing to cooperate, and accepting of each other in an atmosphere of unanimity and tranquility. This concept emphasizes the importance of peaceful and collaborative relationships within the community, where individuals work together for mutual benefit while respecting each other's needs and roles. *Hormat*, which emphasizes respect, dictates that individuals should always show respect to others in both their speech and behavior [32,33]. This principle is integral to maintaining harmony within social and economic interactions, especially in rural Javanese settings [34]. In the context of rural Javanese economics, economic practices are deeply intertwined with cultural values. The cultural norms of *rukun* and *hormat* directly influence

how economic activities are conducted, promoting cooperation, mutual respect, and a focus on the collective well-being of the community. This reflects the broader principle that economic actions are not solely driven by individual gain, but by the desire to maintain social harmony and collective prosperity.

The PNPM-UPK, as a transitional institution, is a profit-oriented association financed by the government, but managed by the local people. The Government of Indonesia, with support from the World Bank, has been implementing the *Kecamatan Development Project* (KDP), which was initially piloted in 25 villages. In 2007, this initiative was scaled up nationwide to become the PNPM, *Program Nasional Pemberdayaan Masyarakat* (National Program for Community Empowerment) [35]. Since then, the government has adopted the terms "community-driven development" and "community empowerment" [36]. Co-operatives, business entities based on cooperative principles, play an essential role in broader social reform. They are designed to bring together individuals or legal entities with economic goals, operating on the basis of a family-based economic movement [37]. Cooperatives serve two key functions in the economy. The first is collective bargaining power. They unite economic actors (e.g., producers) to sell their products directly to consumers, enhancing their bargaining power and ensuring better prices. The second is supply chain integration. They organize the purchase of goods needed by local economic actors in the modern sector, again securing better bargaining power for the community. These dual functions help strengthen local economies and improve the social and economic standing of the communities involved [38].

Modern institutions are the very opposite of indigenous institutions, as they operate with a top-down approach. Modern banking institutions are financed by the government or privately, managed by the government or privately, and heavily regulated by written laws. In the research area, the bank is called the village bank and is the smallest branch of the bank.

The participation of the community in these community institutions can be used as an instrument which helps to make interventions more relevant to local needs. People's preference for using community institutions is subject to the influences of several variables. Therefore, the aim of this study is to describe which factors are considered important in the utilization of institutions available in a community. The emphasis is on the indigenous institution *jimpitan*, because it is focused on a culture of mutual support, the exchange of gifts, and sharing. In other words, it was built on trust and a great deal of social capital.

2. Materials and Methods

2.1. Materials

To capture what factors play a key role in the utilization of community institutions, we gathered data through household surveys by distributing structured questionnaires in four villages during our field research in 2017 [39]. The households were asked to reflect on their economic and financial activity in the year before. The questionnaires documented various features considered as potential determinants of socio-economic behavior of the local people in the research area. In the following section, they are called variables. The study area covered the geographical location of Wonosobo District (Figure 2), which is divided into a mountainous area in the northern part and a lowland area in the middle section. It also included a rural and an urban area. From these areas, four villages were selected after taking an initial trip to the area and talking to a number of local experts. The respondents were selected randomly from villages whose inhabitants were still practicing *jimpitan*. The inhabitants were approached with a request asking whether they were willing to be respondents. They were chosen and interviewed based on their willingness and

availability. The number of households surveyed was 199. The surveys were distributed across the four villages considering geographical and area type (Table 1).

Figure 2. Wonosobo District. www.wonosobo.go.id (accessed on 23 January 2025).

Table 1. Distribution of households according to the geographical area.

Name of the Village	Type of Area	Geographic Area of Wonosobo	Number of Households
Kejajar	Highland/Rural	Northern area	51
Kalibeber	Lowland/Sub-urban	Central area	50
Wonosobo Barat	Lowland/Urban	Central area	46
Sojokerto	Lowland/Rural	Western area	52
	Total number of households		199

We collected information on 26 variables from the questions in the questionnaires, which were divided into four categories. The first category included socio-demographic variables, which consisted of age (AGE), gender (GENDER), education (EDU), occupation (OCCU), household size (NOHHMEM), marital status (MARSTAT), ethnicity (ETHNIC), religion (RELIGI), and place of birth (POBIRTH). The second category included psycho-social variables: knowledge about *jimpitan* (KNOWJIMP), belief in *jimpitan* (BELJIMP), opinion on *jimpitan* (OPJIMP), knowledge about transitional organizations (KNOWTRANS), belief in transitional organizations (BELTRANS), opinion on transitional organizations (OPTRANS), knowledge about the bank (KNOWBANK), belief in the bank (BELBANK), opinion on the bank (OPBANK), and perceived needs (PERCNEED). The third category included economic variables: total income (TOTINC), total expenditure (TOTEXP), social-economic status (SES), and increasing price impact (PRICEIMP). The fourth category included location variables: the nearest location of institutions (NEARINST), the location of

the community (LOCCOMM), and the location of the house (LOCHOUSE). The dependent variable in our analysis was the utilization of community institutions. Figure 3 below shows the model used to hypothesize the interaction between the independent and dependent variables. The four downward-pointing arrows illustrate the hypothetical influence of each independent variable on the utilization of community institutions. The two-way arrows between the boxes indicate the hypothetical interaction between independent variables.

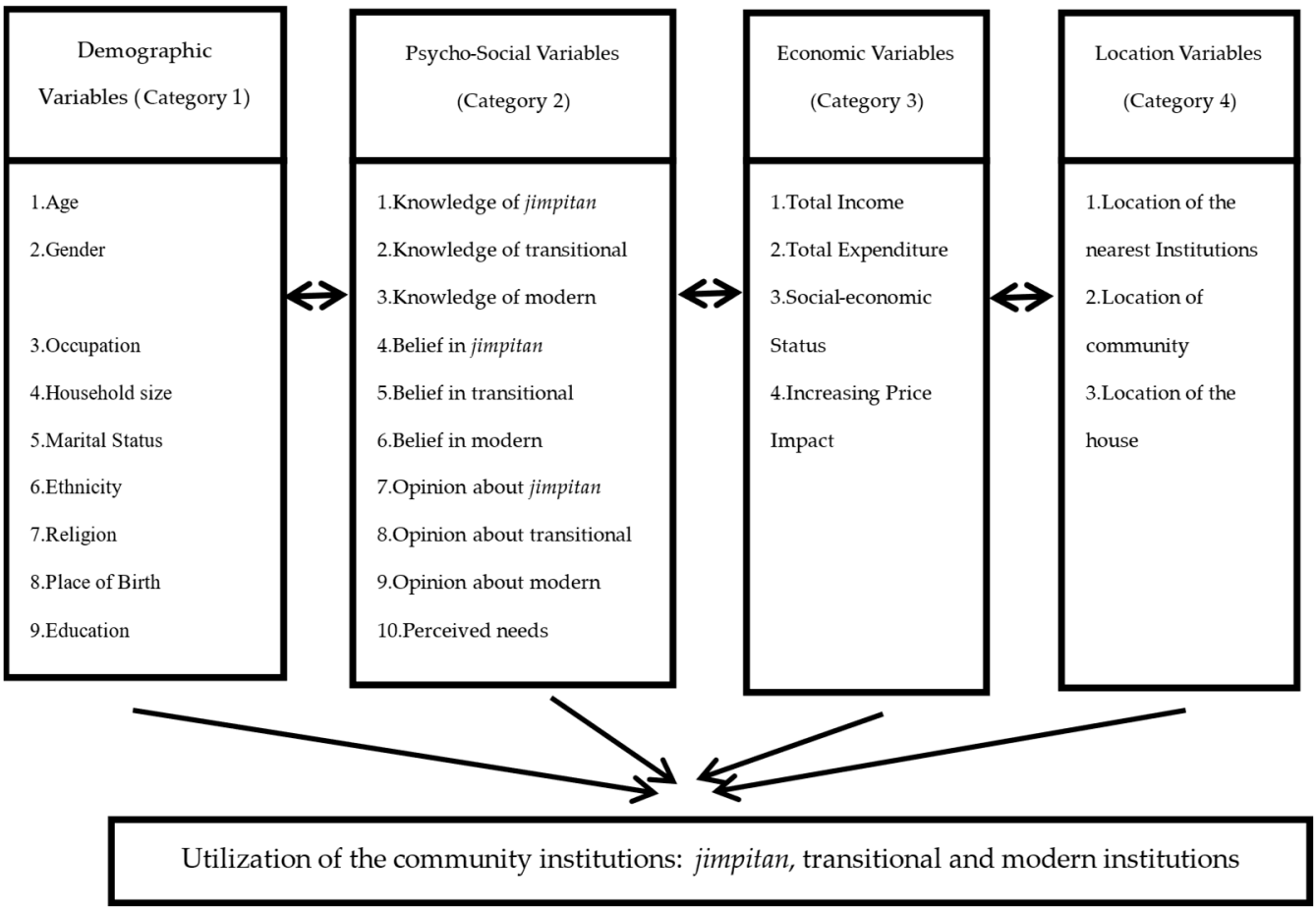

Figure 3. Analytical framework. Source: Adapted from Slikkerveer [40].

The variables were grouped in the same category (in the box) due to having similar characteristics. The variables gender, occupation, marital status, ethnicity, religion, place of birth, social-economic status, perceived needs, location of the community, and location of the house were nominal. The other independent variables were ordinal. The dependent variable was nominal with the utilization classes: (1) the indigenous or traditional institution of *jimpitan*; (2) transitional institutions; and (3) modern institutions.

2.2. Method

The analysis in this study followed the Random Forest approach [41]. Random Forest uses a large number, with a default of 500, of decision trees that are trained to predict the dependent variable, also called the response variable, based on the independent variables, also called the predictive variables. Each decision tree is trained with a random sample of cases and a random sample of predictive variables. The prediction of the Random Forest approach as a whole is based on the combined decisions of all the separate trees. The Random Forest approach was chosen for several reasons: (i) it can be used for the classification of categorical variables [42–44], (ii) it can deal with the independent and

dependent variables that are ordinal as well as nominal [42,43], and (iii) it can tell us which independent variables explain the dependent variables best, because the importance of each independent variable in predicting the dependent variable can be estimated.

For any statistical analysis, one needs to know the interdependency of the independent variables. When the variables are highly correlated, they are unfit to be included in an analysis together, because in that case, they actually contain the same information. Including them both in the same analysis leads to singularity. Therefore, we employed the χ^2 test and carried out Cramer's V tests to assess the interdependency of the independent variables. Cramer's V shows the correlation between two variables on a scale of 0 to 1, and the χ^2 test gives the statistical significance of the correlation as a *p*-value. If the *p*-value from the χ^2 test and the value of Cramer's V display a strong correlation between two variables, then we dropped one of the two variables from the analysis. The consequence of excluding highly correlated variables in the analysis is that the separate influence of those two variables on the dependent variables could not be assessed. Our Random Forest approach focused on two kinds of analysis:

1. The importance of independent variables individually for predicting institutions' utilization. The difference in accuracy between the prediction of the complete Random Forest and that of the Random Forest minus the variable of concern is called the importance value. The variable importance value was calculated ten times in order to assess the variability of the importance due to the random steps in the Random Forest approach. The higher the importance value, the larger the predictive power of the variable.
2. The average importance per variable category was used to capture which category best explained the utilization of institutions. By averaging the importance value of variables in each category and checking test whether it was significantly higher than the average of a random sample of the variables with a permutation, we would know which category significantly influenced the utilization of institutions. The permutation test was conducted by randomly taking a fixed number of variables equal to the number in that category out of all variables (i.e., for category one, 9 out of 26 variables; for category two, 10 out of 26 variables; for category three, 4 out of 26 variables; and for category four, 3 out of 26 variables), calculating the average, and repeating this 1000 times to obtain the distribution of the random average. When the actual average of the importance of the variables in the category was higher than the 95 per-centile of that distribution, the average was considered significantly higher than the random average. The permutation test, in this form, is an exact one-sided test.

All analyses were performed in R (R Core Team 2021). The Random Forest analysis was conducted using the function *cforest()*, and the function *varimp()* was used for estimating the variable importance of the package *party*, using the default settings for unbiased partitioning [45,46]. This ensured that the importance we used was the conditional importance—the importance of an independent variable assuming that all other independent variables are constant [34]. The χ2 test was performed with the function *chsqr test()*, and Cramer's V test was conducted with the *cramer v()* function of the package *rstatix* [47].

3. Results

The utilization rates of the institutions in the research area were 32.2% (*n* = 64), 30.6% (*n* = 61), and 37.2% (*n* = 74) for the traditional/indigenous institution *jimpitan*, transitional institutions, and modern institutions, respectively. The number did not significantly differ between the institutions (chi-sq = 1.397, *p*-value = 0.532), which means that there was a balanced distribution of the utilization of the community institutions in the study area. Table 2 shows the distribution of institution utilization across the four villages.

The respondents from Kejajar Village, a rural area located high up in the mountains, preferred to use the indigenous institution *jimpitan*. This is in contrast with the respondents from Sojokerto, a rural area located in the lowlands. They tended to utilize the modern institutions, just like the respondents from Wonosobo Barat, an urban area located in the lowlands, while for the respondents from Kalibeber, an urban area located in the lowlands, most people preferred to use the transitional institutions. Depending on their village, the respondents chose different institutions when they needed help (chi-sq test; $p \leq 0.001$, Cramer's V = 0.5123).

Table 2. Utilization of the community institutions in the four villages.

Village	Utilization of the Community Institutions						
Village Name	Indigenous		Transitional		Modern		Total
	N	%	N	%	N	%	N
Kejajar	41	80.4	2	3.9	8	15.7	51
Kalibeber	9	18.0	31	62.0	10	20.0	50
Wonosobo Barat	1	2.2	16	34.8	29	63.0	46
Sojokerto	13	25.0	12	23.1	27	51.9	52
Total	64	32.2	61	30.6	74	37.2	199

3.1. The Correlation Test (Cramer's V and Chi-Square)

The results from Cramer's V and chi-square tests show that there were five pairs of variables that indicated a highly significant correlation value (V > 0.60): age and ethnicity (V = 0.62); religion and ethnicity (V = 0.65); belief in *jimpitan* and knowledge about *jimpitan* (V = 0.60); opinion on transitional institutions and belief in transitional institutions (V = 0.62); and nearest institutions and location of the community (V = 0.68). Overall, according to the results of Cramer's V test, there were no pairs of variables that had a Cramer's V score that indicated a very high correlation (V > 0.8). Therefore, all 26 independent variables were included in the Random Forest.

3.2. The Importance of Variables for Predicting Institutions' Utilization

The Random Forest, to predict the utilization of institutions, was performed ten times. The predictive power of the Random Forest turned out to be 77% on average, i.e., 77% of the respondents were classified correctly according to their utilization of institutions. The importance of the independent variables is provided in Figure 4. Of the 26 variables, 22 variables had an importance higher than zero. The eight variables with the highest importance value were, in descending order, the location of the community (LOCCOM), the location of the house (LOCHOUSE), the belief in transitional institutions (BELTRANS), the belief in modern institutions (BELBANK), the opinion on modern institutions (OPBANK), the total income (TOTINC), the increasing price impact (PRICEIMP), and perceived needs (PERCNEED). Of those eight variables, two variables were in the location category, four in the psycho-social category, and two in the economic category. We chose to explain the top eight variables due to their high value compared to the average.

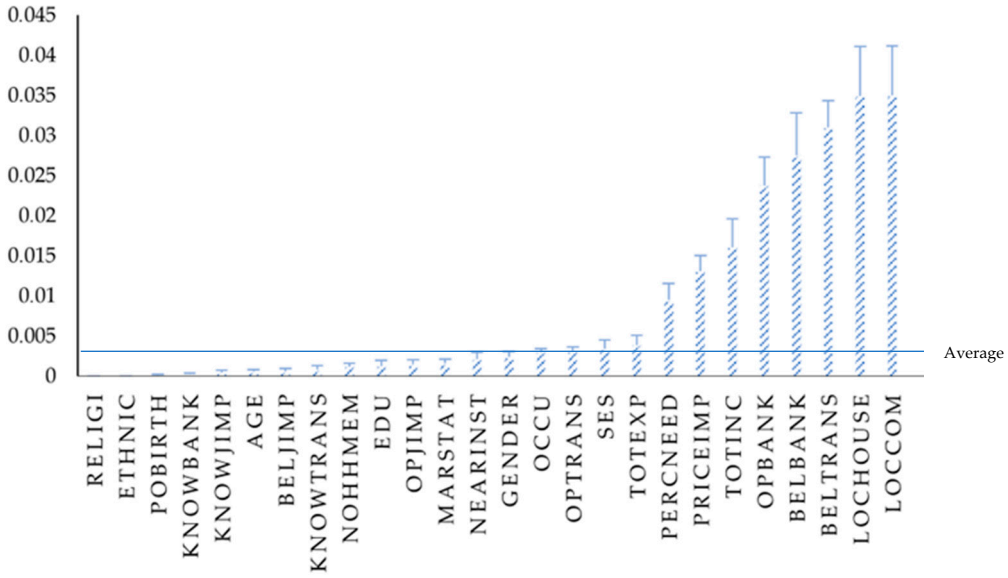

Figure 4. The importance value of 26 variables.

3.3. The Average Importance per Variable Category Value

The summary of the results for the average importance of the variable categories is shown in Figure 5 below.

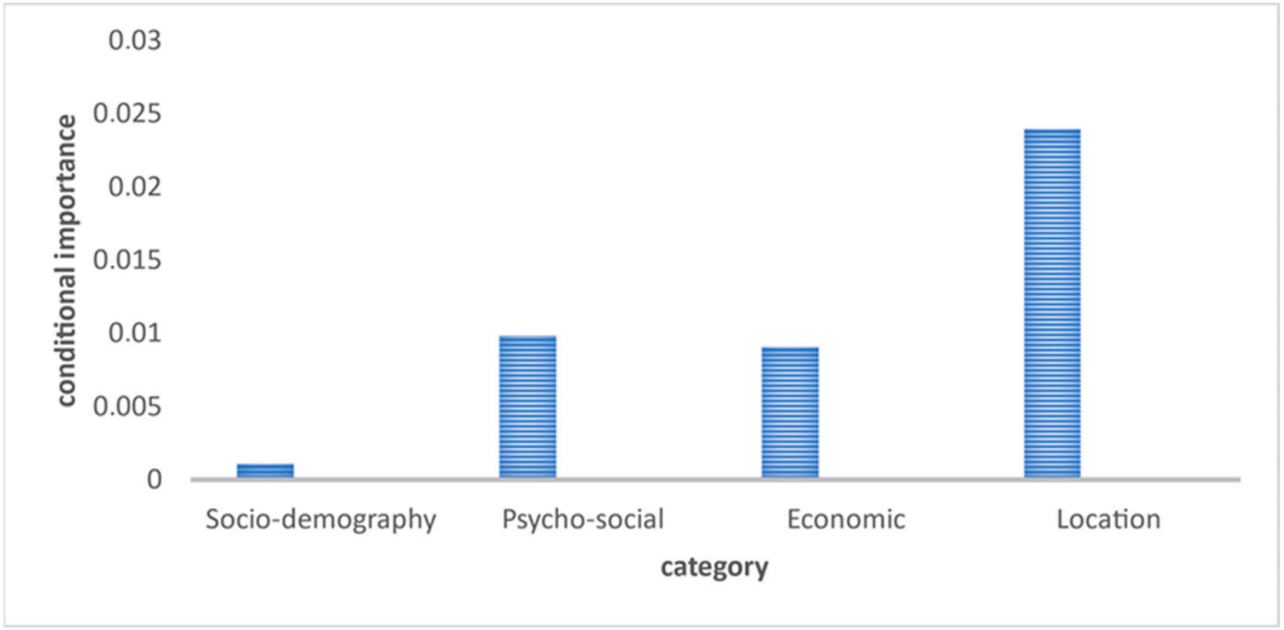

Figure 5. Average importance value per category of variables.

The average was considered significantly different from the random average; that is, it lies above 95% of the distribution of the random average. Table 3 shows the results of the permutation test. The category that has the asterisk sign showed an average importance above 95% of the random distribution of the average. It was only the location category which significantly influenced the utilization of community institutions.

Table 3. The permutation results of four categories.

Category	95 Percent	*n*	Mean	Sign
Socio-Demography	0.013497	9	0.001094	
Psycho-Social	0.012797	10	0.009814	
Economic	0.017877	4	0.009062	
Location	0.020554	3	0.023986	*

4. Discussion

4.1. General Results

In times of need, 64 out of 199 respondents preferred the traditional/indigenous institution *jimpitan*, 61 made use of transitional institutions, and the other 74 chose modern institutions. Most of the respondents who were interviewed resided in the rural area, and most of them preferred the indigenous institution *jimpitan*. In urban areas, the number of banks available is higher than in rural areas, which enables the people who live in an urban area to make more use of modern institutions (Figure 6A). Regarding the location of the house, most of the respondents who lived in the plains area chose modern institutions. The respondents who lived in mountainous areas mostly chose the indigenous institution *jimpitan* (Figure 6B).

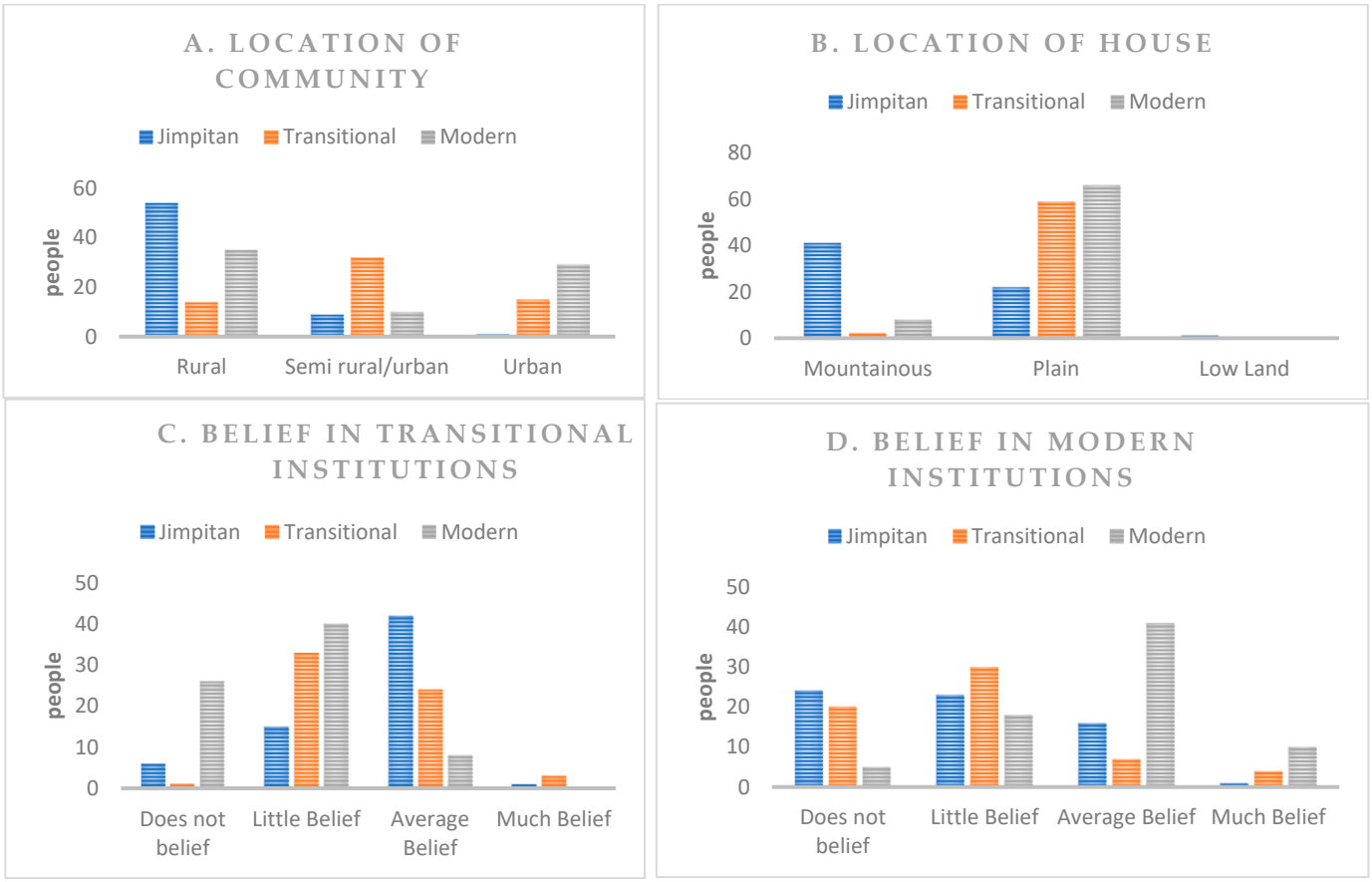

Figure 6. *Cont.*

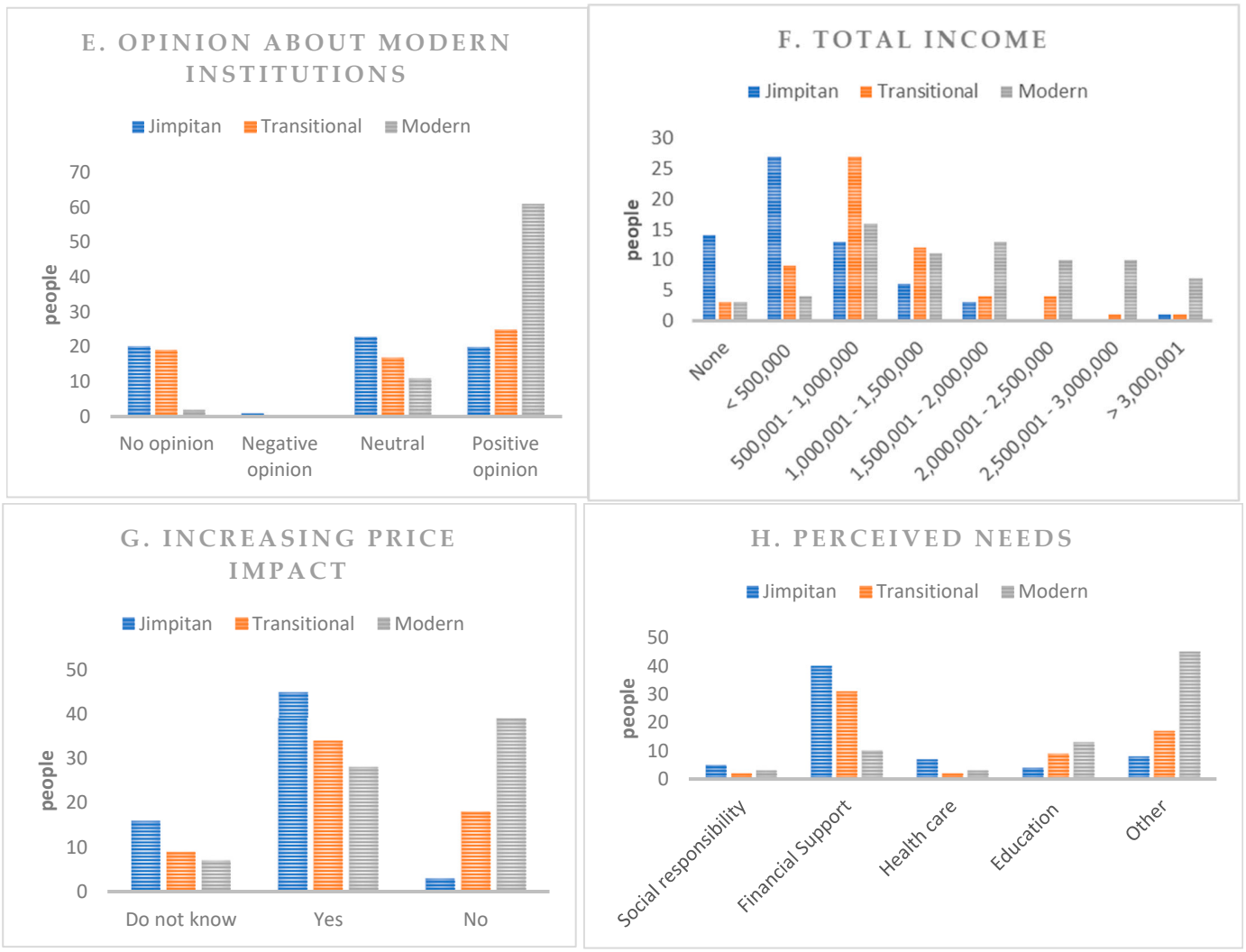

Figure 6. Top eight non-zero variables.

4.2. The Discussion of Importance of Variables for Predicting Institutions' Utilization

The Random Forest approach showed that 22 out of 26 variables had non-zero importance. This means that they greatly explain the utilization of community institutions. The top eight variables, i.e., the variables with an importance above the average, were location of the community, location of the house, belief in transitional institutions, belief in modern institutions, opinion about modern institutions, total income, increasing price impact, and perceived needs. The location of the community (LOCCOM) was divided into rural, semi-rural/urban, and urban (Figure 6A). The location of the house was classified into mountains, plains, and lowlands (Figure 6B). Location was an important variable for determining the choice made by the respondent about their utilization of community institutions; this might be due to the availability of the institutions in their area.

The high importance value of subjective elements of the psycho-social category (BELTRANS, BELBANK, OPBANK) shows that the utilization of community institutions by the local people can be explained by some psycho-social variables, but the psycho-social category as a whole is not very important. Two aspects of culture, according to Matsumoto [48], are (a) objective elements, the physical manifestations of culture, and (b) subjective elements, the intangible aspects, such as social norms, customs, attitudes, and values. The latter are differentiated in two ways: (i) by the domain, which refers to socio-psychological traits as products of culture, e.g., attitudes, values, beliefs, opinions, norms, customs, and rituals; and (ii) by the dimension, which refers to things that influence behavior and de-

scribes aspects of cultural variability. Most of the respondents who reported having little belief in transitional institutions chose modern institutions more often than transitional institutions (Figure 6C). This could be because when someone does not have trust in the institutions, she/he will tend not to choose these institutions. The respondents who have an average amount of belief in transitional institutions prefer the indigenous institution *jimpitan* over transitional institutions. Only 4 respondents out of 199 reported having much belief in transitional institutions, and 3 of them, indeed, chose the transitional institutions.

The belief in and opinion about modern banking institutions (BELBANK and OP-BANK) exhibited a coherent outcome where the respondents who had much belief in and a positive opinion about banks tended to utilize modern banking institutions. Those who reported having an average amount of belief in modern institutions chose modern institutions, and those who had much belief in modern institutions also utilized them. Out of those who had no belief in modern institutions, only five preferred modern institutions, and more than half preferred the indigenous institution *jimpitan* (Figure 6D). In terms of opinions on modern institutions, most respondents who had a positive opinion of modern banking institutions preferred using banks over the other two institutions. Those who reported having no opinion on modern institutions preferred to go to the indigenous institution *jimpitan* (Figure 6E). This behavior is the result of the norms, attitudes, beliefs, and opinion/values that constitute the cognitive part of social capital [49].

Total income explained the utilization of community institutions as well (Figure 6F). The respondents who reported having a monthly income of less than IDR 500,000 (more or less EUR 32, 2023) were the ones who said they prefer *jimpitan.* It is common that, in order to get a loan from the savings and loan program of *jimpitan*, the local people do not need a massive amount of money to pay the interest rate. Therefore, the respondents feel safer getting assistance from *jimpitan* rather than from another source of finance, i.e., the local banks, which have a higher interest rate. Moreover, the elderly and orphans are helped at no cost since it is given in the form of aid [30]. Of the respondents who reported having a monthly income between IDR 2,500,000 (more or less EUR 155, 2023) and IDR 3,000,000 (more or less EUR 186, 2023), none chose to go to the indigenous institution *jimpitan*. All of them chose modern banks.

Income (Figure 6F) and expenditure are two variables which measure the enabling variable, which allows someone to possess something or impedes their possession of it. As aptly put by Beard [50], most community development efforts acquire households to give out resources or accept goods and services. Therefore, their socio-economic status is usually based upon the participation of households. According to Marsh and Djankov et al. [51,52], the decision of going to a modern commercial bank to get a loan will not be made by the poor, since they possess inadequate material possessions to use as collateral; they are also reluctant to take risks. They consider that the costs of getting a loan exceed the benefits. These reasons are associated with the socio-economic status of a household, e.g., the higher the income, the more money or assets which can be used as collateral.

Regarding the impact of increasing price on the utilization of community institutions (Figure 6G), the respondents who utilized the indigenous institution *jimpitan* reported having been the ones most affected by it. This is plausible because the money they obtain from jimpitan is not as much as they would obtain from the other two types of institutions; therefore, if there is an increasing price, they are the ones who will be most affected.

The perceived need for satisfaction with financial services measures the cognitive aspects that relate to the systems of knowledge, belief, and opinion (Figure 6H). It is measured by five categories, i.e., social responsibility, financial support, health care, education, and other. Most of the respondents who reported utilizing *jimpitan* perceived their needs as financial needs, including their need both to buy staple food and to take out a loan

from *jimpitan*, but mostly to meet their daily needs (*pers. comm*) [39]. As a staple food and primary need, the need for rice should be immediately fulfilled. Therefore, at the beginning of the development of *jimpitan*, its purpose was to overcome the shortage of rice. It was mainly in place for disabled people, widows with many children, and those suffering long-lasting illnesses, although since then, the rice has mostly been replaced by money. This *jimpitan* was mainly organized by the PKK women's group (the government's family welfare program) [13].

Nowadays, *jimpitan* is collected and shared for loans. For example, in Sojokerto, people tend to take out loans to repair or renovate their homes or to pay the school fees of their children. Even in Ngedok, Wonosobo Barat Village, they use the money to buy uniforms for their small PKK women's group to be used whenever they have a regular meeting or to finance their vacation. Kendal et al. [53] state that most poor people do most of their saving through informal financial institutions, whose significant advantages, unlike formal ones, are the short distance people might have to go to reach them and the modest cost that will be charged. Four variables that had no predictive power for the utilization of available institutions/organizations were place of birth, ethnicity, religion, and knowledge about modern organizations (Figure 4). In this study, all respondents were homogenous in terms of ethnicity and religion. They were all Javanese and adhered to Islam. Therefore, those two variables explain nothing about the utilization of community institutions. Meanwhile, a quite unexpected result is the irrelevancy of knowledge about using modern institutions over community institutions.

4.3. The Discussion of Average Importance per Variable Category Value

4.3.1. Socio-Demographic Category

The socio-demographic category contains nine variables (household size, age, gender, education, place of birth, occupation, marital status, ethnic background, and religion). Seven out of ten variables had non-zero attributes under the average. The other three, which were place of birth, ethnicity, and religion, did not have non-zero attributes. Therefore, the socio-demographic category has no significant influence on the utilization of institutions.

4.3.2. Psycho-Social Category

The psycho-social category consists of 10 variables: knowledge of jimpitan, knowledge of transitional institutions, knowledge of modern institutions, belief in jimpitan, belief in transitional institutions, belief in modern institutions, opinion on jimpitan, opinion on transitional institutions, opinion on modern institutions, and perceived needs. Only 3 out of the 10 variables had non-zero attributes higher than the average: opinion on the modern banking institutions, belief in the modern banking institutions, and belief in transitional institutions. The remaining variables had non-zero attributes lower than the average; therefore, the psycho-social category has no significant influence over the utilization of institutions. These variables measure the cognitive aspects that relate to the systems of knowledge, beliefs, and opinion. Knowledge measures how much the respondents know about the place, utilization, and the management of the institutions. Belief depicts how much the respondents trust whether the institutions, in general, could provide assistance for the people in need based on their own or others' experience. Opinion shows their own experience after using the services of the institutions, or others' experiences with other institutions they did not choose to use. However, the psycho-social variable can sometimes be misinterpreted due to the ease of changes due to external factors.

4.3.3. Economic Category

The economic category contains four variables, i.e., total income, total expenditure, social-economic status, and increasing price impact. Total income and increasing price

impact had non-zero attributes higher than the average; however, total expenditure and social-economic status were lower than average. Therefore, this category insignificantly influences the utilization of institutions. Due to the Javanese characteristic of moderation in answering questions, their answers to the social-economic status question might been influenced by bias. However, this emphasizes the view of the participant instead of the interviewer. For future studies, we might consider including some other variables, such as variables that represent financial accessibility, like the transportation to and administration costs for all institutions. In addition, there are also variables that represent disturbance or enablers from outside the community, such as certain measures from the government, or temporary crises.

4.3.4. Location Category

Location was the only category of variables that had an average importance value that was significantly higher than expected under the randomization of the variables. The economic, socio-demographic, and psycho-social categories apparently do not significantly influence the decision of the local people to use the community institutions. The location category consists of three variables: the location of the community, the location of the house, and the nearest institutions. The former two had importance values above the average, unlike the last variable. As we can see from Figure 6A, respondents in rural areas mostly preferred the indigenous institution *jimpitan*, those who lived in semi-urban/rural areas preferred more transitional institutions, and those in urban areas mostly preferred modern banks. From Figure 6B, we can conclude that respondents who resided in mountainous areas most likely chose the indigenous institution *jimpitan*, and there were more respondents who lived in the plains area who preferred modern banks over transitional institutions or the indigenous institution *jimpitan*.

Based on field observation [39], the importance of location is supported by the availability of community institutions in the research area. Those who reported living in mountainous and rural areas tended to choose the indigenous institution *jimpitan*, while those who resided in urban areas preferred modern banking institutions. The number of banks available in urban areas is higher than in rural areas. Therefore, urban people have a greater preference for banks than the people who live in rural areas. Although some of the respondents who lived in urban areas chose *jimpitan*, they used it differently. In rural areas, most of the respondents used the funds they obtained from *jimpitan* to fulfill their basic needs. In urban areas, they used it for secondary needs. Nevertheless, in both urban and rural areas, the funds from *jimpitan* were used for helping the poor, especially orphans and widows, and to finance various social activities within the neighborhood, such as *the* commemoration of Independence Day, or the national religious day. At the outset of its development, *jimpitan* was meant as a social fund for helping the poor.

5. Conclusions

The spatial location of a community is the most important factor in the utilization of community institutions according to the respondents. The urban respondents tended to prefer modern or transitional institutions, while respondents who resided in the rural areas tended to prefer the indigenous institution *jimpitan*. Those who resided in a mountainous area had preferences for the indigenous institution *jimpitan* more than the other two types of institutions. Those who lived in the plains preferred to go to modern banks.

Jimpitan constitutes an activity of contributing and collecting a small portion of rice or money conducted routinely by each member of the community who resides in the same neighborhood. At its outset, *jimpitan* was used among low-income families for supporting orphans and the elderly by supplying free rice. Later on, its usage became varied, such

as supplying loans, accepting savings, providing funding for activities in the community, and preserving the tradition. In terms of savings and loans, it has supported the livelihood of members of a community. Field observation showed that loans offered by indigenous *jimpitan* institutions have been used by those who have rather unstable incomes in order to meet their daily needs, such as buying staple foods. These institutions empower and encourage local people to actively participate in decision-making regarding their life. It creates social cohesion and proof of the resourcefulness of local people in addressing their own problems. When the members of a community work together, this may stimulate local community development.

Development should take both material and non-material (cultural) aspects into account with respect to the well-being of people. Therefore, any social research discussion about community institutions should take not only the economic factors (e.g., income, expenditure), but also the non-economic factors (e.g., spatial location) into account. Development that has solely been focused on economic growth often disregards the non-economic aspect of human well-being. Welfare is only measured monetarily. Thus, a development program that does not take into account the culture of the local community may be ineffective in reducing poverty or inequality and reaching sustainable development. So, a positive and facilitating or stimulating attitude of governmental institutions towards traditional institutions like *jimpitan*, without taking over the relative responsibility or autonomy over indigenous institutions, is necessary.

This study focused on classifying 26 variables which influence the utilization of community institutions. It may assist policymakers in determining which group of variables influencing the behavior of the local people should be taken into consideration. While this research offers such valuable insights, it also has several limitations that should be taken into account, as follows. (i) The number of variables in each category was uneven. In the Discussion section, it is mentioned that we could add some variables to have a balanced number of variables in each group. (ii) This study was based on data gathered in 2017, and seven years have since passed, including those in which the dramatic COVID-19 pandemic took place. This means that it may not fully reflect the current social context or the evolving nature of local communities. Often, in times of crisis, mutual support at the local level is strengthened, by reinforcing old institutions. Whether this has been the case in this area remains to be seen. It is also possible that new initiatives have been developed. Therefore, this study calls for further research to be conducted to update the findings, ensuring the newer data are incorporated and changes in the social environment are accounted for. This would provide more accurate and actionable insights for policymakers. (iii) This study was conducted within a limited research area, focusing only on four village samples. Therefore, research in another area could be conducted both to verify whether the findings are consistent across different regions and to explore potential differences that could lead to different conclusions.

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