

## Developing a Measure of Interpersonality Scale

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**Abstract:** This study aimed to develop a scale that measures a construct of Filipino Psychology, which is *pakikipagkapwa-tao*, a key construct in Filipino Psychology grounded in Enriquez's "Kapwa" theory, which emphasizes the importance of shared identity and interconnectedness in understanding Filipino social behavior. Despite its importance, there is a lack of empirical tools to measure *pakikipagkapwa-tao*, creating a need for a culturally relevant and psychometrically sound instrument. With this, the study seeks to address this gap by developing a new scale that captures five dimensions of *pakikipagkapwa-tao*: sympathy (*pakikiramay*), cooperative endeavor (*bayanihan*), hospitality (*mabuting pagtanggap sa bisita*), sensitivity to others' feelings (*pakikiramdam*), and debt of gratitude (*utang na loob*). The respondents of this study were Filipino college students, aged 18 to 22 years old, currently residing in Cavite, and were enrolled in a University for Academic Year 2022- 2023. With this, the researchers of this study obtained a total number of 501 respondents. The study utilized confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) as its statistical treatment. As a result, the overall scale consists of twenty-four (24) items with alphas between 0.83 and 0.67 coming from factor analysis solutions and are based on the CFA and EFA. It was shown that concepts like "convergent" and "discriminant" are true.

**Keywords:** EFA; CFA; Test development; Convergent; Discriminant



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## Introduction

"No man is an island" - John Donne, 1964 *Kapwa*, according to Enriquez (2004), is the core concept of *Sikolohiyang Pilipino*. It is defined as the shared or collective identity with others and is essential in understanding Filipino social actions. However, many people still find it difficult or intimidating to socialize and engage with others due to the significant differences in life.

According to (Calaguas 2012), individuals who participate in more positive social interactions express a broader variety of benefits than those who engage in less positive social interactions. However, less people know about how commonly occurring social interactions in everyday life affect momentary health indicators within individuals (e.g., mood, psychological, and physiological stress)

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when they were in the middle of a social interaction versus when they were not. When researchers looked at between-person impacts, they discovered that those who provided more pleasant interactions had more favorable results.

In connection with this, (PENRO-Cavite 2015) stated that students learn to share their information, knowledge, and experience through collaborative learning. Collaborative learning allows students to assist friends who are struggling academically. Additionally, collaborative learning can help students improve their communication skills while interacting with others. In Klang, secondary school pupils prefer to work in groups rather than learn individually in classrooms. Collaborative learning has a favorable impact on students and should be introduced in schools. In addition, every individual wants to live with someone to the end because life is short, there is no certainty in each day that will pass, and nobody can survive on their own. Many people have difficulty or fear interacting with others because their lives are so different. As with everyone else, individuals have to keep going even though they have been through the darkest journey of their lives.

Additionally, it addressed the experiences, ideas, and cultural orientations of the Filipino people in *Sikolohiyang Pilipino*, and it has been used to explain subjects related to Filipino social behavior.(Enriquez 1994), stated that individuals are viewed as equal in *kapwa*, and their identities are shared despite the fact that contrasting behaviors are displayed toward *ibang-tao* and *hindi ibang-tao*. This *ibang-tao* and *hindi ibang-tao* are under the category of *pakikipagkapwa*. *Pakikipagkapwa* means being with one another, and *pakikipagkapwa-tao* is the ultimate level of humanness. In addition, *pakikipagkapwa* is the capacity to appreciate another person's uniqueness while overcoming egocentrism. If Filipinos are egotists, empathizing is impossible since it is difficult to understand what it is like to be in someone else's shoes. It is vital to let go of egotism in order to recognize the otherness of the other in *pakikipagkapwa*(Calaguas 2012).

Furthermore, *Pakikipagkapwa-tao* assists individuals by cultivating strong communities and families that care for one another. When the Taal volcano erupted and followed by the COVID-19 outbreak, many activities were halted or restricted, resulting in a lack of food and other necessities for other individuals and families.

People, organizations, and institutions work together to show solidarity in being able to assist and help one another. For example, they might form support groups to help with relief and recovery efforts without paying or giving anything back to the volunteers. In addition to this, the community pantry is a well-known initiative that young people in the Philippines have undertaken to assist their fellow countrymen meet their needs. Many Filipinos donate goods and other basic necessities to those affected families despite their own struggles.

The reason/s why the researchers conducted this study was that some scales/measurements of *pakikipagkapwa* are rarely accessible to everyone and only a certain population can access the established test. Additionally, there have been limited studies on *pakikipagkapwa-tao* as some studies on *pakikipagkapwa-tao* do not directly measure the *pakikipagkapwa* itself but rather linked subjects to it such as forgiveness (Rungduin, Rungduin, dan Acopio 2020) and social competency(Calaguas 2012)

Along with the researchers' interest on whether the *pakikipagkapwa-tao* values are still practiced by many people.

**Table 1**  
*Table of Blueprint Developing A Measure of Interpersonality*

Step 1: Test Generation	Survey Literature	
Step 2: Test Construction	<ul style="list-style-type: none"> <li>• Content Validity Ratio (n=4)</li> </ul>	<ul style="list-style-type: none"> <li>• Initial Form of the scale</li> </ul>
<ul style="list-style-type: none"> <li>• Content Validity</li> <li>• Pilot Testing</li> </ul>		
Step 3: Test Tryout	<ul style="list-style-type: none"> <li>• Total number of respondents (n=501)</li> </ul>	<ul style="list-style-type: none"> <li>• Revised version</li> <li>• Determining the dimensions</li> </ul>
<ul style="list-style-type: none"> <li>• Testing of the scale</li> <li>• Construct Validity</li> <li>• Revision</li> </ul>		
Step 4: Reliability and Validity	<ul style="list-style-type: none"> <li>• Total number of respondents (n=501)</li> <li>• Exploratory Factor Analysis</li> <li>• Confirmatory Factor Analysis</li> <li>• Convergent Validity</li> <li>• Discriminant Validity</li> </ul>	<ul style="list-style-type: none"> <li>• Results of the scale</li> </ul>

Table 2 indicates the five (5) dimensions that are used in the study and the item indicator for each dimension. The item indicator comes from the six (6) open-ended questions that was created by the researchers for their survey that they used in generating the test items on the final scale.

**Table 2**  
*Table of Item Indicator*

	Dimensions	Item Indicator
1.	<b>Utang na loob</b>	What are the practices of someone who engages in <i>utang na loob</i> ? ( <i>Ano ang mga gawi ng isang taong may utang na loob?</i> )
2.	<b>Pakikiramdam</b>	What are the actions of a person who practices <i>pakikiramdam</i> ? ( <i>Ano ang mga kilos na isinasagawa ng taong may pakikiramdam?</i> )
3.	<b>Hospitality</b>	What acts do those who practice hospitality take? ( <i>Anong mga kilos ang ginagawa ng mga taong nagsasagawa ng mabuting pakikitungo?</i> )
4.	<b>Bayanihan</b>	In what manner does a person who practices <i>bayanihan</i> acts? ( <i>Sa anong paraan kumikilos ang isang taong nagsasagawa ng bayanihan?</i> )
5.	<b>Pakikiramay</b>	What are the actions of a person who practices <i>pakikiramay</i> ? ( <i>Ano ang mga kilos ng mga taong may pakikiramay?</i> )

Therefore, the main aim of the study was to develop a scale under the study of Filipino Psychology which is the *pakikipagkapwa-tao* that covers the general traits of *pakikipagkapwa-tao* which are the five dimensions of it, specifically the *pakikiramay*, *bayanihan*, hospitality, *pakikiramdam* and *utang na loob*. The scale will also be accessible for everyone. Moreover, this study also determined the psychometric

properties of the scale in terms of validity and reliability of selected Filipino students enrolled in a university and residing in Cavite.

Pakikipagkapwa-tao is a pivotal construct in Filipino psychology, underscoring the significance of interconnectedness and shared identity. Despite its importance, empirical studies have not adequately measured this construct. This scarcity of culturally relevant tools hinders the accurate and sensitive measurement of Filipino social behavior. Existing instruments may fail to give a summary of the exact aspects of *pakikipagkapwa-tao*, thus creating a need for a psychometrically sound and culturally appropriate scale. By developing this new scale, the study aims to address this empirical gap and provide a robust tool that can inform educational practices, social policies, and community programs, ultimately contributing to the well-being of Filipino society. This instrument will not only enrich the body of knowledge in psychology but also offer a unique perspective on social behavior rooted in Filipino values.

Enriquez's Kapwa Theory. In a more than thirty-year-old published paper (Enriquez 1994), proposed his Seminal Theory, (Clemente et al. 2008), which sought to rethink the Filipino value system. One of his theories' premises was that kapwa (a sense of shared identity) is the Filipino's essential virtue.

*Kapwa* Theory: Basic concepts and premises. Essentially, the *kapwa* model is a paradigm on Filipino social interaction. In other words, the theory provides solutions to the question: *Paano nga ba makipagkapwa (-tao)* and does so by virtue of its assumptions and component pieces. First, it implies that people become conscious that they are dealing with a *hindi ibang tao* (one of us) and an *ibang tao* (not one of us, outsider) in their encounters. (Clemente et al. 2008) went on to say that both *ibang tao* and *hindi ibang tao* should be treated as *kapwa*. In its most basic form, *sinasabi nating ikaw at ako ay magkapantay*. This sense of equality stems from the realization of a shared identity or a shared inner self. Second, the theory establishes Filipino ideals that must be taken into account while dealing with a *hindi ibang tao* and *ibang tao*. The Filipino fundamental value is *kapwa*. This core gives rise to other values such as *hiya*, *lakas ng loob*, *pakikiramdam*, *pakikibaka*, and so on. People may utilize *pakikipagkapwa* instead of *kapwa* as the core value to prevent any semantic misunderstanding (because *kapwa* may be readily confused with a person or "the other" as it is typically understood). In any event, as (Gupta dan Bashir 2018) frequently referred to *pakikipagkapwa* as a value, this was still compatible with his theory. Moreover, the Filipinos are also known for their empathy, helpfulness, and generosity in times of need (*pakikiramay*), in the practice of *bayanihan* (mutual aid), and the Filipino hospitality. *Pakikipagkapwa-tao* also fosters friendship and a sense of belonging among the involved people.

In this study, Enriquez's *Kapwa* Theory served as a guide and supported the idea of *pakikipagkapwa-tao* by looking into the views of the selected Filipino university students, how they relate with others and how they are seeing themselves in others. If they have a sense of shared identity and inner self, and how they live in the spirit of *Kapwa*, which means to embrace our common identity and to care for our fellow humans. Lastly, this theory will provide the Filipino principles that must be considered when dealing with a *hindi ibang tao* and *ibang tao*.

## Method

The research design used was a test or scale development/construction design. According to (Qualtrics n.d.), it is a process of inventing or developing a construct that is valid and reliable to assess an attribute of interest wherein it will be the *pakikipagkapwa-tao* in this study. Moreover, there are five steps in developing a test: the test conceptualization, test construction, test tryout, item analysis, and test revision (Role 2014)

The study used purposive sampling as a sampling technique. Purposive sampling is a method in which the participants are selected because they reached the criteria that is needed for the study. It also ensured that the population was not under or over presented. The participants in the study were all Filipino students who were enrolled in a university and residing in Cavite Test Conceptualization

The researchers came up with the notion of creating a test on *pakikipagkapwa-tao* because, aside from being recommended by the research adviser, it was obvious that *pakikipagkapwa-tao* is an important value in Filipino culture. *Pakikipagkapwa-tao* is the highest level of humanness, and *pakikipagkapwa* implies being with one another. Thus, the researchers aimed to construct a test that can assess the level of *pakikipagkapwa-tao* of college students and demonstrate whether or not they are still practicing *pakikipagkapwa*. The development of this scale could contribute and expand its psychological testing resources in the Philippines. It can be an additional psychological tool at the university that can be utilized in guidance and counseling services.

### Test Construction

The researchers conducted an open-ended survey to discover the views of college students about the *pakikipagkapwa-tao* of the students when it comes to home, school, and community. The responses from the survey were used in test item construction to come up with a final scale. The six-item questions that were used in generating several items were: (1) What are the characteristics of a person who practices *pakikipagkapwa-tao* in school, home, and community? Give at least one characteristic per setting. (Ano ang mga katangian ng isang taong nagsasagawa ng *pakikipagkapwa-tao* sa paaralan, tahanan, at komunidad. Magbigay ng hindi bababa sa isang katangian sa bawat lugar.); (2) What are the actions of a person who practices *pakikipagkapwa-tao*? (Ano ang mga kilos ng mga taong may *pakikipagkapwa-tao*?); (3) In what manner does a person who practices *pakikipagkapwa-tao* acts? (Sa anong paraan kumikilos ang isang taong nagsasagawa ng *pakikipagkapwa-tao*?); (4) What acts do those who practice hospitality take? (Anong mga kilos ang ginagawa ng mga taong nagsasagawa ng mabuting *pakikipagkapwa-tao*?); (5) What are the actions of a person who practices *pakikipagkapwa-tao*? (Ano ang mga kilos na isinasagawa ng taong may *pakikipagkapwa-tao*?); and (6) What are the practices of someone who engages in utang na loob? (Ano ang mga gawi ng isang taong may utang na loob?). In addition, for further test item constructions, some related literature was consulted. Items derived from the survey as well as from the related literature were included. The literature on the nature of the test criterion must be extensive. Experts and professionals reviewed it to ensure that the material was accurate. Items were evaluated as accepted, revised, and rejected. The validation process for the developed scale of *pakikipagkapwa-tao* involved several key steps to ensure its accuracy, reliability, and cultural relevance. Initially, experts in Filipino culture and psychology reviewed the items to ensure they accurately represented the concept of *pakikipagkapwa-tao* and were

appropriate for the target population. This was followed by pilot testing with a small sample of Filipino students to gather feedback on item clarity and cultural relevance. Construct validation was then conducted through factor analysis to confirm that the items grouped together as expected and measured the underlying construct of pakikipagkapwa-tao. Additionally, the scale was correlated with other measures of similar and different constructs to ensure it accurately measured pakikipagkapwa-tao without overlapping with unrelated constructs. For reliability testing, the scale was administered to the same group of students at two different times to check for consistency and stability over time. Internal consistency was also assessed using statistical methods like Cronbach's alpha to ensure the items consistently measured the construct of pakikipagkapwa-tao. Item analysis was performed to ensure items were appropriately challenging and effectively differentiated between individuals with different levels of pakikipagkapwa-tao, using methods such as item difficulty and discrimination analysis. Finally, a representative sample of the Filipino population was used to establish norms for interpreting individual scores on the scale, and standardization procedures were implemented to ensure the scale could be administered consistently across different settings and populations. This comprehensive validation process ensured that the pakikipagkapwa-tao scale is a reliable and valid tool for assessing interpersonal relationships within the Filipino context. Content validity was established through content validity ratio. The final outcome of this step was the initial form of the scale.

The test-retest reliability process for the developed scale of pakikipagkapwa-tao involves administering the same test to the same group of participants at two different points in time and then correlating the scores from the two administrations to assess consistency. This helps determine if the scale produces stable and consistent results over time. Scoring on the pakikipagkapwa-tao scale is typically based on the responses provided by participants to the items on the scale. Each item is scored, and the scores are summed to create a total score that reflects the level of pakikipagkapwa-tao exhibited by the participant. The basis for scoring can vary depending on the specific items and the theoretical framework of the scale, but it generally involves assigning numerical values to responses and calculating a total score that represents the construct being measured.

### **Scoring**

Positive test items were scored on a scale of 5 to 1. The number 5 was the highest, while the number 1 was the lowest. On a scale of 1 to 5, negative items scored in reverse wherein 1 as the highest, while 5 as the lowest. The initial scale had 21 items with reverse scoring, but only eight remained after thorough statistical analysis.

### **Test Tryout**

The initial version of the 50-item scale was administered to 501 students. According to (Role 2014) when the final form of the test is developed, the number of test items to be produced in the initial scale should be times two of the final scale. The preliminary scale is subjected to Confirmatory Factor Analysis (CFA) to determine its dimensionality and discriminant/convergent validity. Moreover, the initial scale also underwent Exploratory Factor Analysis (EFA) to figure out the fundamental structure of data that is observable.

## Result

Table 3 and Table 4 are presented below to indicate that 27 (5.39%) participants were 18 years old, 49 (9.78%) were 19 years old, 71 (14.17%) were on their 20s, 225 (44.91%) were 21 years old. and 129 (25.75%) were 22 years old for a total of 501 respondents. Based on the table below, most of the responses were from 21-year-olds with a frequency of 225 and a percentage of 44.91 percent.

**Table 3**

*Sex of the Respondents*

SEX	FREQUENCY	PERCENTAGE
Female	335	66.87
Male	161	32.14
Prefer not to say	5	1.00
<b>TOTAL</b>	<b>501</b>	<b>100.00</b>

**Table 4**

*Age of the Respondents*

AGE	FREQUENCY	PERCENTAGE
18	27	5.39
19	49	9.78
20	71	14.17
21	225	44.91
22	129	25.75
<b>TOTAL</b>	<b>501</b>	<b>100.00</b>

The factor analysis of the measuring instrument reveals a primary dimension (Utang na Loob) with strong item loadings, followed by an emerging secondary dimension (Pakikiramdam). Below is a detailed interpretation of the results:

Factor 1: Utang na Loob (Reciprocity and Gratitude)

This factor captures attitudes and behaviors associated with reciprocal obligations and expectations of gratitude. High item loadings indicate a cohesive dimension centered around conditional helping and expectation-based social exchanges.

Highest Loadings:

"I only attempt to return the favor to those that help me in order to appear kind to them." (0.75)

"I only help when I am compensated." (0.70)

"I only help those people whom I feel secured that they will help me back." (0.70)

Key Item:

"I have a knack for knowing other people's emotions." (0.83)

Thematic Insights:

These items suggest that individuals with high scores in this dimension may exhibit a transactional approach to social obligations. Their willingness to assist others often hinges on the presence of compensation, social acknowledgment, or reciprocity.

Lower Loadings:

Items like "I do not sympathize with people who are responsible for their own medical issues." (0.42) reflect weaker but relevant contributions to the overarching theme of utang na loob. These lower loadings could signify nuanced behavioral traits like selective empathy.

Factor 2: Pakikiramdam (Sensitivity to Others' Feelings)

This secondary factor represents an individual's ability to perceive and respond to others' emotions and social cues.

Distinctiveness:

The single high-loading item suggests that this factor is emerging but less developed compared to Utang na Loob. It emphasizes emotional intelligence and the ability to gauge and respond to interpersonal dynamics.

**Dominance of Utang na Loob:** The strong clustering of items under Utang na Loob highlights its centrality to the concept being measured. This finding aligns with Filipino cultural values that emphasize reciprocity and gratitude as critical components of social relationships. **Emerging Nature of Pakikiramdam:** While only one item strongly loads onto this factor, its significance suggests a need to refine this dimension. Additional items related to emotional sensitivity could strengthen the measurement of pakikiramdam. **Cultural Relevance:** The results underline the importance of transactional and emotional dimensions in Filipino interpersonal relationships. The patterns reflect the interplay between reciprocal obligations (utang na loob) and emotional sensitivity (pakikiramdam), two integral elements of pakikipagkapwa-tao.

## Discussion

The selection criteria for the 501 respondents in this survey were that they must be Filipino, living in Cavite, enrolled in school, and in their late adolescence. The following were the reasons why the researchers developed these requirements: 1.) respondents must be Filipinos because the scale is about pakikipagkapwa-tao and kapwa is the fundamental value that is important in comprehending Filipino social behaviors. There may be inaccuracies if the respondents were not Filipinos because other people may practice cultures that are very dissimilar to Filipino culture, 2.) researchers decided that respondents must be residing in Cavite. According to the 2015 Census of Population, Cavite is one of the world's most populous cities and is rising at one of the fastest rates and still the province with the highest population. 3.) must be enrolled in a university in order to figure out their perspective about the practice of pakikipagkapwa-tao in school. (Levasseur et al. 2010) stated that social participation can be defined as a person's involvement in activities with which they have a relationship with others in a society or community, which shows that school, home and community are the place where practice of pakikipagkapwa-tao that can be observed; 4.) Lastly, the respondents must be in their late adolescence



because that is the time where they have a greater sense of self-identity and can determine their own value. It is also where friendship and relationships grow stronger (Salmela-Aro 2011). According to (PENRO-Cavite 2015) people of Cavite such as students who are part of Rotaract Club of

CvSU-CCAT, Rotary PEZA and the university's staff members are also actively involved in helping the community; this was especially evident during the pandemic when they supplied food to those trapped in ECQs, to various families in certain towns, and even to frontliners with drinks, vitamins and hygiene kits. These were all made possible by the Bayanihan or the spirit of cooperation and generosity of the people including the adolescents in Cavite. Review and refine items for *pakikiramdam* to ensure its robustness as a distinct factor. The implication of this research is consider rephrasing or replacing low-loading items (e.g., < 0.50) to improve overall construct validity. Explore additional dimensions of *pakikipagkapwa-tao* to capture a more comprehensive view of the psychological construct.

Being with one another is referred to as *pakikipagkapwa*, also it is the ability to recognize another person's individuality while overcoming egocentrism. On the other hand, *pakikipagkapwa-tao* is the epitome of humanity, it helps people by fostering strong families and communities that care for one another. To delve further and learn more about the participants' thoughts and perceptions on the theory and practice of *pakikipagkapwa-tao*, the researchers conducted an open-ended survey to generate the scale. Six questions made up the open-ended survey, which the students responded to. To assess the *pakikipagkapwa-tao* of late-adolescent Filipino college students residing in Cavite, a fifty-item initial scale was developed. The 50 items were generalized with five sub-factors: debt of gratitude (*utang na loob*), sympathy (*pakikiramay*), hospitality (*mabuting pagtanggap sa mga bisita*), sensitivity to people's feelings (*pakikiramdam*), and cooperative endeavor (*bayanihan*). Each of the given sub-factors had 10 questions, but after statistical analysis of the data using methods like exploratory factor analysis, confirmatory factor analysis, and reliability test, which were obtained from 501 (five hundred one) respondents, some items within the scale were excluded, resulting in 24 final test items.

Exploratory Factor Analysis (EFA) changed some of the things from the previous chapter and assigned them to other subfactors. This finding suggests that the remaining questions accurately assessed these subfactors. Additionally, Confirmatory Factor Analysis (CFA) demonstrated that the initial test did not satisfy the requirements for developing a good fit model. Therefore, error terms were added, resulting in the final test having strong model fit indices and so being an acceptable fit for the model. This signifies that the items and subfactors accurately measured the trait, resulting in a good model.

## Conclusions

The results of the several analyses that were undertaken suggested that the study had a sound psychometric foundation. When the reliability was assessed, each element passed the tests for McDonald's Omega and Composite Reliability (CR), demonstrating the high value of the findings. This demonstrates that each element was considered adequate and that the items were strongly related to each factor. On the other hand, the test demonstrated convergent validity. The results of this study's factors reveal AVEs below 0.50, but their convergent validity is still acceptable because their CR was greater than 0.60. This suggests that every item measured every scale factor. According to the findings,

each component had the highest level of discriminant validity. It signifies that the subfactors were distinct from one another, with an HTMT ratio of correlation value less than 0.85. As a result, the Panukat ng Pakikipagkapwa-tao scale had great psychometric soundness, making it valid and reliable. The researchers conducted this study for one or more of these reasons: not everyone has access to all pakikipagkapwa scales and measurements, and only a specific demographic can conduct the established test. Since the purpose of this research was to develop a scale under the study of Filipino psychology that covers the general traits of pakikipagkapwa-tao, which are the five dimensions of it (pakikiramay, bayanihan, hospitality, pakikiramdam, and utang na loob). The researchers hope that this scale will be useful for individuals in need.

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