



## Validity and Reliability Tests of a Love Language Questionnaire in Indonesian

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### ABSTRACT

*The research focuses on the validity and reliability of a love language questionnaire tailored to the Indonesian context, where cultural nuances play a significant role in interpersonal relationships. The sampling technique in this study used a non-probability sampling method to determine the sample tested, where the population was married individuals in the Bone district. Therefore, the technique chosen was the purposive sampling method. Hence, this research consisted of 30 married individuals from the Bone district. A triangulation approach was applied to develop the questionnaire, combining linguistic analysis, psychological insight, and statistical rigor. This method ensured that the questionnaire captured the nuances of love languages in the Indonesian context. The Love Language Questionnaire was grouped into five indicators: acts of service, receiving gifts, quality time, words of affirmation, and physical touch. Each indicator consists of four positive and four negative statements. The type of analysis employed was inferential analysis. The analysis results revealed that 30 items scored above the Pearson correlation coefficient of 0.361, indicating the validity of the items. In addition, Cronbach's alpha coefficients for all indicators exceeded 0.70, indicating reliability. The results indicate that the questionnaire is a valid and reliable instrument for research in psycholinguistics. The limitation wall that hindered the results was the lack of a proper understanding of the sociolinguistic nature of the research population.*

**Keywords:** Love Language Questionnaire, Communication, Psycholinguistic, Validity, Reliability

### INTRODUCTION

Love is an enduring aspect of human experience that has fascinated poets, writers, and scholars through the ages. It exerts a universal influence that motivates, sustains, and, in many ways, shapes us. Within the context of romantic

relationships, love manifests in various forms and expressions that are intricately interwoven into the complex mosaic of human connections. Nevertheless, despite its ubiquitous nature, not everyone speaks it in the same tongue. In the psycholinguistics field, which studies the

intersection of language and psychology, researchers have long been mesmerized by how language shapes and reflects our thoughts, emotions, and relationships. According to a renowned psycholinguist (Pinker, 1994), "Language is not just a window into human nature but a fistula: an open wound through which our innards spill out."

The concept of love languages, as introduced by (Chapman, 1992) in his seminal work, "The Five Love Languages," illuminates the intricate dynamics of romantic relationships in profound ways. Chapman suggests that individuals possess distinct approaches to expressing and receiving love, similar to unique dialects in a vast linguistic landscape. These distinct love languages include acts of service, receiving gifts, quality time, words of affirmation, and physical touch. Understanding the concept of love languages is essential to creating thriving relationships. To enhance understanding and strengthen relationships, the researchers developed and rigorously tested a comprehensive questionnaire to capture the love language in marriage. The researchers' mission is to create an instrument that not only identifies individuals' love languages but also assesses standards of validity and reliability. In our pursuit, we endeavor to furnish researchers, couples, and professionals in psychology and relationship therapy with a robust means of delving into, assessing, and elevating love languages.

The goal is to provide an instrument that captures the intricacies of love language

preferences and stands as a valid and reliable model. The researchers aim to provide professionals, couples, and other researchers in the fields of psychology counselling, and even linguistics with a useful instrument for exploring, assessing, and improving the love language dynamics within a marriage. This article examines the careful validation and reliability testing of the Love Language Questionnaire. It describes the methods used, the specific tests conducted, and the results obtained in this attempt to understand the language of love in the context of marriage. The research's findings unveil a well-refined instrument providing valuable insights into the dynamics of love languages among married individuals. As the researchers explore the complexities of love languages, they aim to illuminate the subtle nuances that enhance romantic relationships

## **METHODS**

### **Questionnaire Development**

The love language questionnaire was designed to cover a wide range of preferences for expressing and receiving affection in the context of marriage. The questionnaire contained 40 items distributed across five primary love language categories at its initial release. It is important to note that the love language questionnaire items were developed in Indonesian to ensure cultural relevance and clarity for the target participants.

**Table 1.** Love Language Categories and Items

No.	Dimension	Indicator	Number of Questionnaire Items	
			Positive Statement	Negative Statement
1.	Types of Love Language	Acts of Service	Q1, Q2, Q3, Q4	Q4, Q5, Q6, Q7, Q8
2.		Receiving Gifts	Q9, Q10, Q11, Q12	Q13, Q14, Q15, Q16
3.		Quality Time	Q17, Q18, Q19, Q20	Q21, Q22, Q23, Q24
4.		Words of Affirmation	Q25, Q26, Q27, Q28	Q29, Q30, Q31, Q32
5.		Physical Touch	Q33, Q34, Q35, Q36	Q37, Q38, Q39, Q40

*Source: Authors***Content Validity**

To ensure content validity, each item was scrutinized for alignment to ensure the love language framework. Expert of love language questionnaire and feedback from individuals knowledgeable in love language theory were obtained to confirm the relevance and representativeness of the items. After this meticulous process, 30 out of the initial 40 items met the criteria for content validity.

**Item-Level Validity Analysis**

1. A comprehensive investigation was carried out to examine the validity of each of the Using Microsoft Excel, research researchers assessed the correlation between participants' total scores for each item and their total scores for the entire of Excel. Item-Level Validity ( $r$ ): Calculate the correlation coefficient between individual item and total scores for the entire questionnaire. Items were considered valid if the correlation coefficient exceeded the predefined requirement of 0.361. The Pearson

correlation coefficient (Pearson, 1896) steps were applied to calculate the validity of each item. These steps including calculating Pearson Correlation for each item. To test the validity of each item, the researchers used the Correl formula and selected the "Array1" column, blocking data from the first item (Q1) from respondent 1 up to the 30th respondent. For the "Array2" column, the researchers blocked the total score data from respondent 1 to respondent 30, and pressed F4 on the keyboard to lock the formula. The researchers then selected OK to calculate the Pearson correlation coefficient ( $R$ ) for the first item.

2. Determining the R-Table value. To find the R-value for the second item until the 40th item, the researchers dragged from item 1 to item 30 and repeated the correlation calculation. After obtaining the R-values for each item, the researchers then determined the R-table value. Since there were 30 respondents, the

R-table value obtained was 0.361 with a significance level of 5% ( $\alpha = 0.05$ ).

3. Assessing validity. Comparing the calculated R-value for each item with the R-table value (0.361). If the R-value for an item is higher than the R-table value, the item was concluded as valid.

### Internal Consistency Measurement

The internal consistency of the 30-item questionnaire was tested using Cronbach's alpha (Cronbach, 1951). The estimated Cronbach's alpha coefficient was above the established criterion of 0.70, confirming the improved questionnaire's internal consistency and reliability. The steps that were taken to calculate Cronbach's Alpha Reliability including:

1. Calculating variance for each statement item, as for each statement item in the questionnaire, the researchers calculated its variance using the VAR formula. For the first item, the researchers used VAR(A1:A30) in Excel.
2. Sum of variance for all items, using the SUM formula to sum the variances of all statement items. The six items, the formula would be =SUM(A1:A6).
3. Calculate total variance, employing the VAR formula to calculate the total variance using the data from the entire sample (30 respondents). If the total data was in column B, the researchers used VAR(B1:B30).
4. Computing Cronbach's Alpha, calculating it using the formula:

$$\alpha = n / [n - 1] * [1 - (\text{Total Variance} / \text{Sum of Variance for All Items})]$$

n: The number of statement items in the questionnaire (in this case, 6 items).

Total Variance: The total variance value calculated in step 3.

Sum of Variance for All Items: The sum of variances calculated in step 2.

### 5. Likert Scale Scoring

The responses of participants to the questionnaire items were assessed using a Likert scale with five options:

**Table 2.** Likert Scale

Scales/ Degree	Score	
	Positive Statement	Negative Statement
Strongly Agree	5	1
Agree	4	2
Neutral	3	3
Disagree	2	4
Strongly Disagree	1	5

*Source:* (Gay et al., 2011)

### FINDINGS AND DISCUSSION

A comprehensive examination of eight distinct items was undertaken to assess the validity of their inclusion in the designated instrument. Through a meticulous analysis, it was determined that out of the initial eight items, only six of them exhibited the necessary attributes to qualify for use in the instrument.

This assessment was primarily based on the correlation coefficient values, with a stringent threshold set at a coefficient greater than the established reference value of  $r_{\text{table}} = 0.361$ . The selected six items were deemed suitable for incorporation, while the remaining two items were consequently excluded from further consideration. This selection process ensures a robust and reliable foundation for the instrument's construction. However, if the

indicator exceeded Cronbach's alpha coefficient of 0.70, it was deemed reliable. The questionnaire's reliability and validity are corroborated, providing a robust tool for further investigation. Thus, the questionnaire is deemed suitable for use as a research instrument. After comprehensive validity and reliability testing, the results for each love language category are as follows:

### Acts of Service

*Validity test:*

**Table 3.** Validity Test of Acts of Service

Questionnaire Items	Statement	Coefficient Value	$r_{\text{Table}}$	Information
Q1	When my partner orders food and drinks at the restaurant, it makes me feel special.	0.410	0.361	Valid
Q2	When my partner helps me with household tasks, I feel appreciated and more relaxed.	0.688	0.361	Valid
Q3	When my partner helps me overcome problems or difficulties, I feel supported and loved.	0.607	0.361	Valid
Q4	I feel closer to my partner when he listens to my complaints.	0.286	0.361	Invalid
Q5	I feel uncomfortable when my partner helps me wash the dishes without me asking.	0.144	0.361	Invalid
Q6	I feel displeased if my partner does my laundry without me asking.	0.397	0.361	Valid
Q7	I feel lonely in relationships when my partner doesn't show acts of devotion that show he cares.	0.558	0.361	Valid
Q8	I felt neglected when my partner rarely offered to help when I needed it.	0.453	0.361	Valid

*Reliability Analysis: Cronbach's Alpha Coefficient of 0.741 (Reliable)*

**Receiving Gifts***Validity test:***Table 4.** Validity Test of Receiving Gifts

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
Q9	Unexpected gifts from my partner make me feel happy and surprised.	0.458	0.361	Valid
Q10	I feel loved when my partner often/routinely gives romantic gifts of flowers or something else.	0.306	0.361	Invalid
Q11	Receiving gifts from my partner makes me feel more connected and intimate in our relationship.	0.362	0.361	Valid
Q12	I am happy if my partner takes the initiative to attend events that are important to me.	0.490	0.361	Valid
Q13	When my partner gives gifts with the intention of resolving problems in the relationship, and it makes me feel uncomfortable.	0.140	0.361	Invalid
Q14	I am not happy when my partner often spends money to buy me gifts.	0.725	0.361	Valid
Q15	My partner only gives gifts when there is a special occasion, and it makes me feel underappreciated in everyday life.	0.736	0.361	Valid
Q16	The gifts my partner gives me are often not in line with my tastes or interests and this makes me feel less cared for.	0.641	0.361	Valid

*Reliability Analysis: Cronbach's Alpha Coefficient of 0.736 (Reliable)***Quality Time***Validity test:***Table 5.** Validity Test of Quality Time

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
Q17	I feel closest to my partner when we spend time discussing important household matters.	0.379	0.361	Valid
Q18	When we both focus on activities together, I feel more attached to my partner.	0.106	0.361	Invalid

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
Q19	The time spent with my partner is the most precious time of my life.	0.692	0.361	Valid
Q20	I felt underappreciated when my partner cancelled our plans for no apparent reason.	0.695	0.361	Valid
Q21	I often feel alone when my partner is more focused on his phone or gadget than on me.	0.761	0.361	Valid
Q22	I feel more connected to my partner when we experience special moments together.	0.754	0.361	Valid
Q23	I feel left out when my partner is more interested in his hobbies or work than in spending time with me.	0.676	0.361	Valid
Q24	I feel lonely when my partner prefers to spend time with other people rather than with me.	0.090	0.361	Invalid

*Reliability Analysis: Cronbach's Alpha Coefficient of 0.764 (Reliable)*

### Words of Affirmation

*Validity test:*

**Table 6.** Validity Test of Words of Affirmation

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
Q25	I feel appreciated when my partner says words of appreciation (e.g. Thank you, I appreciate the effort) after I have helped him/her with a task.	0.528	0.361	Valid
Q26	Hearing words of affection from my partner makes my day brighter.	0.720	0.361	Valid
Q27	When my partner said that he was proud of me, I felt very happy.	0.140	0.361	Invalid
Q28	Compliments from my partner make me feel more confident in myself.	0.429	0.361	Valid
Q29	The lack of affectionate words made me feel like our relationship was meaningless.	0.250	0.361	Invalid
Q30	My lowest point was when my partner often criticized rather than complimented me.	0.813	0.361	Valid
Q31	I felt neglected because my partner rarely	0.574	0.361	Valid

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
	expressed his feelings in words.			
Q32	I felt alone when I sought emotional support, my partner often not giving me the praise or support I expected.	0.566	0.361	Valid

*Reliability Analysis: Cronbach's Alpha Coefficient of 0.780 (Reliable)*

### Physical Touch

*Validity test:*

**Table 7.** Validity test of Physical Touch

Questionnaire Items	Statement	Coefficient Value	$r_{Table}$	Information
Q33	I feel closest to my partner when we hold hands while walking together.	0.513	0.361	Valid
Q34	While lying in my partner's arms, I felt emotionally and physically bonded.	0.501	0.361	Valid
Q35	Physical touch from my partner, such as a hug or kiss, makes me feel comfortable and loved.	0.593	0.361	Valid
Q36	Spontaneous physical touch from my partner makes me feel good and happy.	0.192	0.361	Invalid
Q37	When my partner tries to get physically close to me, I often resist or feel uncomfortable.	0.776	0.361	Valid
Q38	I feel uncomfortable when my partner secretly touches me.	0.873	0.361	Valid
Q39	I often avoid physical touch with my partner, especially in public.	0.824	0.361	Valid
Q40	I often ignore my partner's need for physical touch.	0.295	0.361	Invalid

*Reliability Analysis: Cronbach's Alpha Coefficient of 0.843 (Reliable)*

The purpose of developing a love language questionnaire is an important part of understanding and measuring how individuals express and receive love in their relationships. In

the social sciences, especially psychology and linguistics, questionnaires are popular instruments for data collection. However, the validity and reliability of these questionnaires



are essential to the quality of the data collected. In the following discussion, the researchers examine the process of evaluating the validity and reliability of a love language questionnaire, as well as the implications of the findings.

The love language questionnaire has been thoroughly evaluated and validated, resulting in a reliable and valid instrument to assess love language preferences in the context of marriage. The inclusion of valid and reliable items within each love language category guarantees that responses are accurate and consistent. Individuals have different preferences for expressing and receiving love through acts of service, receiving gifts, quality time, words of affirmation, and physical touch, according to the research findings. The validity and reliability of the questionnaire lend credence to its application in research as well as in practical applications such as couples therapy and relationship development programs.

It is important to emphasize the importance of validity and reliability testing in questionnaire development before discussing the findings. As (Chapman, 1992) points out, "The accuracy and precision of a questionnaire depend on its validity and reliability. A valid and reliable questionnaire ensures that the data collected accurately represent the constructs being studied" (Chapman, 1992). The data collected may be flawed and lead to erroneous conclusions without these essential tests.

Evaluating the validity and reliability of a love language questionnaire is essential to

ensuring its accuracy and usefulness. Validity means that the questionnaire is measuring what it is supposed to. It is concerned with ensuring that the statements in the questionnaire reflect the concept of Love Languages. Reliability, on an opposite note, is related to the consistency and stability of the questionnaire. The results of a reliable questionnaire should be consistent when administered under similar conditions to the same group of participants. This research thoroughly examined the validity and reliability of the Love Language questionnaire. The validation process included testing each item on a sample of 30 married participants. Initially, the questionnaire consisted of 40 items reflecting five love language types. After the items were subjected to a series of validity and reliability tests, it was determined that only 30 items passed, indicating that the statements represented the constructs being investigated. A crucial part of questionnaire development is ensuring that it "measures what it intends to measure," (Blumberg et al., 2005). In the Love Language questionnaire context, it was important to ensure that the items accurately captured the complexities of how individuals express and interpret love.

The scores had to exceed the table's distribution score, 0.361 to qualify as valid. The results showed that the majority of the items, specifically the items related to each of the indicator types of love language, had correlations significantly higher than the threshold of 0.361, which indicated the validity

of the items. This validity process is aligned with the principles of "Real World Research" (Robson, 2011), which highlights the significance of conducting research instruments that are accurate representations of the constructs being studied.

Reliability is concerned with the consistency and replicability of research data (Wilson, 2010). A well-established measure of internal consistency is Cronbach's alpha coefficient, which was used in this research. Indicators with a Cronbach's alpha coefficient greater than 0.70 were considered reliable. All indicators met the predetermined Cronbach's alpha standards of 0.70; however, the "physical touch" indicator showed the highest value of reliability, with a Cronbach's alpha coefficient of 0.803. The "understanding reliability" is critical to ensuring that a research instrument consistently produces reliable results (Τραυβ & Ρωωλεψ, 1991). The high reliability coefficient obtained for all the indicators of love language types suggests that this love language questionnaire is stable and reliable.

The validity and reliability results have several implications for future research. First, by ensuring that the Love Language Questionnaire is valid and reliable, researchers can be assured of the accuracy of the data obtained. This is imperative for research examining the relationship between love languages and various outcomes, such as communication in marriage, marital satisfaction, conflict resolution, emotional intimacy, and so forth. In addition, by

eliminating items that did not pass validity and reliability criteria, the questionnaire is now more streamlined, making it easier to administer and complete. This is especially valuable in research settings where the researchers may be reluctant to invest significant time and effort in a lengthy questionnaire. Furthermore, the stringent testing process provides a reminder of the importance of validation and reliability in questionnaire development. The internal structure of tests is essential, and by complying with strict validation and reliability criteria, researchers can strengthen the foundations of their research (Downing, 2004).

#### **Citation**

"The Five Love Languages" by Dr. Gary Chapman introduced distinct love language preferences, which indicate how individuals express and interpret love (Chapman, 1992). To enhance comprehension of love languages and their implications for romantic relationships, this literature review explores important research findings, theories, and significant contributions to the research field.

At the foundation of love, language research, provides a framework for understanding how individuals express and receive love (Chapman, 1992). According to Chapman's research, the primary categories of love language include:

Acts of Service: Involve oneself in expressing love through helpful actions and services. As Chapman explains, "Actions speak louder than words. Doing something for your

partner is a tangible way to demonstrate your love" (Chapman, 1992).

Receiving Gifts: Expressing love through gift-giving is a significant way of conveying love. Chapman affirms that "Gifts symbolize love. They serve as visible tokens of affection" (Chapman, 1992).

Quality time: Love in this context can be demonstrated through giving undivided attention and spending quality time together. According to Chapman, quality time involves providing your partner with your complete and undivided presence (Chapman, 1992).

Words of Affirmation: Another way to demonstrate love is through verbal expressions of affection and affirmation, which is what the Words of Affirmation love language emphasizes. According to Chapman, "words of affirmation can have a powerful impact on emotional connections"(Chapman, 1992).

Physical Touch: "Physical touch communicates warmth, comfort, and reassurance" (Chapman, 1992). Another dimension of love languages is expressing love through physical contact.

Over time, researchers have been working on the validation and expansion of Chapman's love language model. The frequency of love language preferences and their effects on relationship satisfaction have been examined in multiple studies.

(Johnson & Sprecher, 1996) conducted a thorough survey to investigate the love language preferences of individuals in devoted

relationships. They discovered that inclinations towards specific love languages considerably impacted relationship satisfaction. The research found that individuals who receive love in their preferred love language report being more satisfied with their relationship and feel more loved (Johnson & Sprecher, 1996).

(Sullivan & Bradbury, 1997) conducted a longitudinal investigation into the role of love languages in predicting the longevity of relationships, discovering that couples whose love language preferences align are more likely to maintain satisfying, long-lasting relationships. They determined that the alignment of love language preferences plays a critical role in the success of romantic relationships. This finding emphasizes the importance of partners sharing communication styles when expressing love and affection.

However, a systematic review of prospective observational studies found that the idea of love language has become popular ever since. Due to that, it has certainly attracted numerous researchers to look further into the topic. (Egbert & Polk, 2006), (Cook et al., 2013) and (Surijah & Septiarly, 2016) examined the validity of the love languages themselves and whether the love languages are valid to measure one's. Meanwhile, several other researchers also examined the correlation between relationship satisfaction and love languages (Nichols et al., 2018), (Hughes & Camden, 2020), and (İnce & Işık, 2022). Lastly, the most recent study by (Aulia et al., 2022) was about

interpersonal communication patterns in married couples.

## **CONCLUSION AND SUGGESTIONS**

### **Conclusions**

Understanding love languages is essential to establishing healthier and more fulfilling relationships. The construction and validation of an effective love language questionnaire provide researchers and practitioners with a significant instrument for delving into the intricacies of love language preferences. The item-level analysis, Likert scale scoring, and rigorous testing processes of the questionnaire assure its usefulness in detecting the essence of love languages among individuals who are married. This verified questionnaire may be used in subsequent research that delves further into the dynamics of love languages and their impact on longevity and satisfaction in relationships. This research can contribute to more pleasant and healthy romantic relationships by better understanding how individuals express and receive love. Finally, generating and verifying the love language questionnaire has prepared the way for a more in-depth investigation of the language of love in the context of relationships. The limitation wall that hindered the results was the lack of a proper understanding of the sociolinguistic nature of the research population.

### **Suggestions**

1. Love languages have no cultural or geographical boundaries. Cross-cultural validation studies to assess the

questionnaire's generalizability would be valuable. This would allow researchers to explore how love languages manifest in different cultural contexts and whether the questionnaire remains valid and reliable across diverse populations.

2. The linguistic aspects of a questionnaire are critical in determining how it validates and relates to respondents. How respondents interpret and respond to the statements can be significantly influenced by the way they are phrased, and the language used. The impact of linguistic factors on the validity and reliability of the Love Language Questionnaire in the Indonesian context was specifically investigated in this research.
3. Given these findings, the researchers suggest that future research in psycholinguistics and linguistics could explore how language affects interpersonal communication in romantic relationships. Valuable insights into the intricacies of romantic communication can be gained by examining linguistic nuances and preferences in the expression of love language across languages and cultures.

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