# Attitude towards Child Marriage: Scale Development and Validation

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#### **Abstract**

Child marriage refers to any formal marriage or informal union between a child under the age of 18 and an adult or another child. The cause of child marriage is deeply rooted in the structure and culture of the society. The aim of this study is to develop and validate an instrument to assess the attitude of Tamil youth towards child marriage. The draft scale consisted of 25 items measuring four different aspects such as sexual belief, economic benefits, social structure and culture. The items were subjected to expert opinion for content validity and modified accordingly with three dimensions. The study was carried out among college students (N=108) through an online survey. KMO sampling adequacy was found to be 0.879 and Bartlett's Test was significant (chi-square = 744.583, df=136, p<0.001) and exploratory factor analysis was conducted to examine the construct validity of the scale. The results of the principal component analysis using varimax rotation indicated that three factors explained 55.96% of the total variance with factor loading values ranging between 0.426 and 0.856. Cronbach coefficient for the total of the 17-item scale under three factors was calculated with Cronbach α as 0.901.

**Keywords**: Child marriage, attitude, content and construct validity.

#### INTRODUCTION

Child marriage is prevalent in most of the developing countries and the reasons for the same may differ among countries. The problem of child marriage in India remains rooted in a complex matrix of religious traditions (Roy, 1888; Paul, 2019), social practices, economic factors and deeply rooted prejudices (Kapur, 2020). Irrespective of its roots, child marriage constitutes a gross violation of human rights (Raj, Jackson & Dunham, 2018; Raj (2010); Nour, 2009), leaving physical (Hampton, 2010), scars and impacted mental well being (Parsons et al., 2015) of individuals. Sexual activity starts soon after marriage, and pregnancy and childbirth at an early age lead to maternal as well as infant mortality (Mahato, 2016). Women marry at a younger age witnessed a lot of domestic violence within the home (Lal, 2015). According to the Census Report (2011), "8.69

per cent of the girls are married under the marriageable age, below 18 years in Tamil Nadu. Dharmapuri and Salem are two main districts in Tamil Nadu with the greatest number of child marriage 11.9 per cent and 10.9 percent respectively" (Sivakumar, 2021). The UNICEF report on Child marriage in India based on the available data-2012 revealed that about 43.2% of Child marriages occurred in Dharmapuri District. Due to Covid-19 pandemic and consequential financial crisis, girls under the marriageable age are being married off in the state. There is a spike in number of child marriages in Tamil Nadu due Covid-induced lockdown. A study by CRY reported that "Salem recorded 60 instances of child marriages in the month of May 2019, which rose to 98 in May 2020. Dharmapuri, which saw around 150 cases in 2019 recorded 192 cases in May 2020" (as cited in Edexlive, May, 2021).

From the literature, it has been found that there are a few studies with socio-demographic details and there is dearth of studies from psychological perspective. So far, none of the studies were conducted, with an objective of understanding the causes of this highly prevalent child marriage and its psychological impact. Thus, the present study aims at developing a tool measure attitude of youth towards child marriage, which could help the researchers to have an idea about this phenomenon with psychological perspective.

#### Item generation

Based on the review of literature reflecting the nature of the child marriages in India, items were generated in the domains of sexual purity (Dyson & Moore, 1983; Gangoli, McCarry & Razak, 2009; LeeRife et al., 2012; Bicchieri, Jiang & Lindemans, 2014; Wahhaj, 2015) economic benefits, social structure (Çakmak, Özhavzalı, Şahin & Erdem, 2020) and culture. A total of 25 items were generated and subjected to expert opinion.

#### Content validity

The items were circulated to fifty experts in social work, education, women studies and psychology for their opinion. Based on their feedback, social structure and culture were merged as perceived norms and items were modified accordingly. The draft scale consisted of three dimensions with 21 items.

# Rating scale format

Each item was rated on a 5-point Likert-type scale ranging from "Strongly Disagree", "Disagree", "Neutral", "Agree" and "Strongly Agree". The positive items were scored from 1 to 5 starting with "Strongly Disagree"; and the negative statements were scored from 5 to 1 starting with "Strongly Disagree". The lowest positive score is 21 and the highest is 105. The higher score indicates that an individual had extreme negative attitudes towards child marriage.

#### **Data Collection**

The questionnaire was designed in Google Form and sent to 10 different college students in Dharmapuri District through their mentors. The

sample consisted of 94 females and 14 males. The majority of the students were from the Faculty of Arts (46.3%), Science (42.6%) and Technical courses (11.1%). 43.5% of the participants were from rural area, 31.5% of them were from semi-urban and 25% of them were from urban area. The age of the participants ranged from 17years to 22 years. Students were informed about the purpose of the study and the participation was voluntary; anonymity of the participation was assured. Out of the 137 data collected, 108 were retained for final analysis after removing incomplete data.

## Data Analysis

The data was analyzed using SPSS software to establish construct validity through factor analysis and Cronbach's Alpha was calculated as co-efficient of reliability. Kaiser-Mayer-Olkin and Bartlett's test were used to determine the sample adequacy and suitability of the data for factor analysis.

#### **Results and Discussion**

**Exploratory Factor Analysis** 

Factor analysis was carried out to establish the construct validity of the tool. Kaiser-Mayer-Olkin measure of sampling adequacy showed 0.890, indicating goodness of fit of the dataset. Bartlett's test of sphericity (chi-square 1125.169, df=210, p<0.001) indicated that the dataset was suitable for factor analysis.

In the first iteration, three factors emerged with Eigen value greater than 1 explaining 55.86% of variance. Due to cross loading, item7, item10, item12 and item 17 were removed and second iteration of principal component analysis with varimax rotation was carried out. Absolute values less than 0.4 were suppressed. KMO value 0.879 was adequate and Bartlett's test of sphericity and it was (744.583, df 136, sig p<.001) was significant. The findings are tabulated in table 1. From the table, it can be observed that three factors had Eigen value greater than 1 explaining 55.96% of variance. After the rotation the percentage of variance explained by the Factor 1 is reduced from 39.58 to 21.42 and increased for the Factor 2 (9.05 to 18.42) as well as Factor 3 (7.32 to 16.12).

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Factor		Initial Eigen va	lue	Loadings after Rotation			
	Total Percentage of		Cumulative	Total	Percentage of	Cumulative	
		variance	Percentage of		variance	Percentage of	
			variance			variance	
1	6.73	39.58	39.58	3.64	21.42	21.42	
2	1.53	9.05	48.64	3.13	18.42	39.84	
3	1.244	7.32	55.96	2.74	16.12	55.96	

Table 1: showing results of factor analysis before and after the rotation

Table 2 shows the factor loading value greater than 0.4. Based on the value, it is concluded

these items had sufficient load values to be included in the final scale.

Table 2: showing results of factor loading for each construct

Perceived Norms		Sexual Purity		Economic Benefits	
Item	Factor Loading	Item	Factor Loading	Item	Factor Loading
Item18	0.766	Item2	0.796	Item14	0.856
Item9	0.728	Item1	0.761	Item15	0.803
Item20	0.712	Item4	0.682	Item13	0.629
Item19	0.676	Item3	0.627	Item16	0.502
Item6	0.619	Item5	0.578		
Item21	0.524	Item8	0.426		
Item11	0.507				

## Reliability

Cronbach's Alpha coefficients were calculated for each factor and the overall scale to establish the internal consistency of the tool. If the alpha value is greater than 0.80, it is considered as highly reliable. From table 3, it was noticed that the alpha value for the overall scale was 0.901 indicated that the scale is highly reliable. Dimensions such as perceived norms ( $\alpha$ =0.853) and sexual purity ( $\alpha$ =0.806) had internal consistency greater than 0.8 indicated higher reliability where as the third factor economic benefits had internal consistency of  $\alpha$ =0.759 indicating very reliable.

Table 3 showing the internal consistency of the Scale

	Perceived Norms	Sexual Purity	Economic Benefits	Total
Item Number	7	6	4	17
Cronbach's Alpha	0.853	0.806	0.759	0.901

## **Item-Total Correlation**

Table 4 showing the item-total correlation

Perceived Norms		Sexual Purity		Economic Benefits	
Item	r	Item	r	Item	R
Item18	0.615	Item2	0.567	Item14	0.417
Item9	0.515	Item1	0.477	Item15	0.514
Item20	0.647	Item4	0.606	Item13	0.624
Item19	0.654	Item3	0.542	Item16	0.494
Item6	0.665	Item5	0.588		
Item21	0.525	Item8	0.518		
Item11	0.612				

From table 4, it can be observed that item-total correlation value ranged between r=0.417 and r=0.665 significant at p<0.001. It can be inferred that each item measures the same characteristics measured by the overall scale. Hence, it is concluded that all items care suitable for this scale and can be included in the scale.

#### **Conclusion**

The purpose of this study was to develop a scale to measure attitude towards child marriage among youth. Based on the review of literature and expert opinion 21 items were framed on a 5-point Likert type format. Exploratory factor analysis was to establish construct validity. 17 items under three dimensions viz perceived norms, sexual purity and economic benefits had high factor loading. Cronbach Alpha coefficient value ( $\alpha$ =0.901) indicated that the scale was highly reliable. Hence it is concluded that this tool is reliable and valid measure to examine the attitude towards child marriage among Tamil youth.

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