



## SCALE TO MEASURE “ATTITUDE TOWARDS FINANCIAL INCLUSION

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### **ABSTRACT**

*Attitudes are not innate but are the result of the amount of direct experience an individual has had with the attitude object. The attitude does not refer to any specific response, but is an abstraction of a large number of responses of an individual. The undifferentiated view defines attitude as being more or less an evaluation of disposition i.e. past experience, information and influences, reinforcements and motivational pressures – all contribute to the attitude at the same time they occur. The resulting attitude is the cumulative accretion of those past events. Keeping this premise in view, this study aims at developing an attitude scale to measure the attitude of an individual towards financial inclusion.*

### **INTRODUCTION**

Attitude is the mental disposition of an individual towards a subject / an object under study and financial inclusion is a not an exception to this norm. If the financially excluded understands and accepts the basics of financial inclusion, his mental disposition will make him/her to understand otherwise reject and without his/her acceptance, it will be nothing less than impossible to implement Government’s concern for the poor – financial Exclusion, Financial Inclusion and inclusive Growth.

### **REVIEW OF LITERATURE**

#### **CONCEPT OF ATTITUDE**

Psychologists define attitudes as a learned tendency to evaluate things in a certain way. This can include evaluations of people, issues, objects or events. Such evaluations are often positive or negative, but they can also be uncertain at times where mixed feeling emerge about a particular person or issue. Researchers suggest that there are three components that make attitudes viz., (i) How the object, person, issue or event makes you feel (Emotional Component); (ii) One’s thoughts and beliefs about the subject (Cognitive Component) and (iii) How the attitude influences your behavior (Behavioral Component). Further it is revealed that attitudes can also be explicit and implicit. Explicit attitudes are those that one is consciously aware of and that clearly influence our behaviors and beliefs while the implicit attitudes are unconscious, but still have an effect on our beliefs and behaviors. It is also brought by experiences that attitudes form directly as a result of experience. They may emerge due to direct personal experience, or as a result of observation (Hockenbury & Hockenbury, 2007).

Social roles and social norms can have a strong influence on attitudes. Social roles relate to how people are expected to behave in a particular role or context. Social norms involve society’s rules for what behaviors are considered appropriate (Smith & Mackie, 2007). Skinner (2007) observed that classical conditioning (giving a positive relationship between an object and a person who uses the same) influences attitudes while operant conditioning (looking at causes of an action and its consequences). According to Skinner, positive reinforcement strengthens a behavior by providing a consequence an individual finds rewarding. People also learn attitudes by observing the people around them. When someone follow a particular idea / practice that gives positive signal, people surrounding them develop the same belief.

Generally it is assumed that people behave in accordance with their attitudes. Researchers have discovered that people are more likely to behave according to their attitudes under certain conditions viz., (i) When one’s attitude is the result of personal experience; (ii) When one expects a favorable outcome and (iii) When the attitudes are repeatedly expressed and (iv) When one stands to win or lose something due to the issue. In some cases, people may actually alter their attitudes in order to better align them with their behavior. Cognitive dissonance is a phenomenon in which a person experiences psychological distress due to conflicting thoughts or beliefs. In order to reduce this tension, people may change their attitudes to reflect their other beliefs or actual behaviors.

While attitudes can have a powerful effect on behavior, they are not set in stone. The same influences that lead to attitude formation can also create attitude change. Classical conditioning, operant conditioning and observational learning can be used to bring about attitudinal changes. Classical conditioning can be used to create positive emotional reactions to an object, person or event by associating positive feelings with the target object. Operant conditioning can be used to strengthen desirable attitudes and weaken undesirable ones. People can also change their attitudes after observing the behavior of others.

### **FINANCIAL INCLUSION AND ATTITUDINAL CHANGE**

Financial Inclusion is a means to improve the quality of life of the poor. This would need Banks to act as facilitators and promote Development Banking and at the same time the rural / urban poor to accept it as a means for their betterment. For bankers, attitude change is required to explore new avenues of bankable projects which suit the poor and for the financial illiterates; it brings in new avenues of savings their little hard earned income by working as labourers. Having a favourable attitude also transforms them from borrowing from money lenders at a higher rate of interest besides making them borrow from formal sources of credit viz., banks / Cooperatives at a cheaper rate of interest. For illiterate / less educated poor, seeing believes. Unless they are motivated to listen and think about financial inclusion from a dependable source (formal / informal) and are persuaded to alter their attitude (Elaboration Likelihood Model (ELM) of persuasion by Petty & Cacioppo) and experience the happiness of saving implementing the dream of “reaching the unreached who are at the Bottom of Pyramid “ will be a mirage. Attitudes and preferences are considered to be an important element of financial literacy. If people have rather a negative attitude towards saving for their future, they may be less inclined to approach formal financial institutions for such behaviour.

Financial Literacy, which is the forerunner for financial inclusion is defined as a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing. (Atkinson & Messy, 2012). For financial literacy, attitude formation is a prerequisite. According to a study on financial knowledge and attitudes of youth in United States (Mitchell & Curto, 2010) and in Ghana (Gina, Despard & Osei-Akoto, 2012), observed that a better understanding of youth’s financial knowledge and attitudes has a bearing on offering youth financial education. Which has a relation with their financial behaviors?

### **CONSTRUCTION OF ATTITUDE SCALE RESEARCH METHODOLOGY**

Keeping the above in view, this study also aims at developing an attitude scale on a scientific basis that would measure the attitude of individuals (both financially excluded and financially included) towards financial inclusion. Financial inclusion is defined as “Financial Inclusion is the process of ensuring **access** to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at affordable cost in a fair and transparent manner by mainstream institutional players.”

#### **Step 1: Deciding the type of psychological scale**

A rich flora of measuring techniques has evolved since Thurstone advanced his theories in 1929. Among the techniques available for scale construction, like Method of paired Comparisons, Equal Appearing Interval Scale, Method of Successive intervals, Likert’s Summated Ratings etc., the method of Equal Appearing Interval Scale developed by Thurstone and Chave and Likert’s summated Ratings are quite well known. And have been tested by many researchers. in Indian waters. Hence in this study too, the same have been followed - the scale developed in Equal Appearing Interval type and administered through Likert Type as is explained at a later stage of this paper.

#### **Step 2: Formation of statements**

Attitudes are regarded as latent variables. A latent variable is any variable that might be considered to underlie or produce certain behaviour or response. The behaviour or response observed is then considered to be some

function of the latent variable. The probability of endorsing a given statement relating to some psychological object might be regarded as a function of the latent attitude variable toward the subject. In this study also, the statements have been framed in such a manner that would reflect the function of accessibility or affordability, the behaviour that is expected to be identified of the respondent (financially excluded or financially included).

Variations have been noticed by the earlier authors on attitude scale construction like Thurstone and Chave, Edwards and Kennedy, Edwards and Kilpatrick and Rosander on the no. of statements and the no. of judges for judging the validity of statements representing the attitude in question. Based on various studies, Edwards (1983) concluded that relatively small no. of judges can be used with slight modification in the style of administration to obtain reliable scale values for statements using the method of Equal Appearing interval Scale originally developed by Thurstone and Chave (1929) .

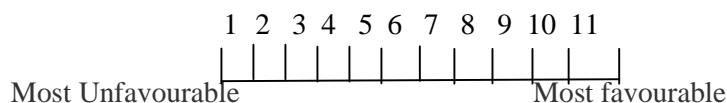
Maintaining the definition, the attitude scale statements were framed in a manner that would reflect the accessibility of the products and services offered by banks and affordability of the ultimate beneficiaries to avail the facility. Forty statements were prepared to start with. It was ensured that almost 50% of the statements represented positive side of the continuum while the rest the negative side. While forming the statements enough care was taken to observe simplicity and clarity of the statements from the ultimate user and easy reflection of behavior of an individual towards financial inclusion components.

### Step 3: Deciding the judges and Administration of statements

The judges selected for the study comprise the group of Branch Managers, Rural Development Officers, Faculty members of Indian Bank training system. While selecting the judges it was ensured that these judges have the first-hand experience of dealing with the financial inclusion projects operating in their branches and who had put in more than 2 decades of experience in dealing with rural people. These statements were administered to 150 judges with a request to sort them on a 11 point continuum with the left side of the continuum representing “unfavourableness” while the right side representing “favourableness”. The continuum starts with 1 on the extreme left indicating “Most unfavourable” attitude and the extreme right of the continuum ending with a value of 11 representing “Most Favourable” attitude. The judges were asked to place each of the statements on the 11 point scale based on their degree of favourableness or unfavourableness. They were directed not to express their agreement or disagreement on any of the statement. All that was needed is to find a typical value or an average value that can be taken as a Scale value for each statement.

### For example

Because of opening a bank a/c my life has changed. (This is a favourable statement representing a highly favourable attitude of a person) This is to be placed tick ( ) in the following scale of 1-11.



### Step 4: Final selection of statements for Attitude Scale administration

As Thurstone & Chave puts in, errors do occur in the judgments in any scaling procedure and this attitude scale is construction is not an exception. Since the judgment has been a subjective one, the human error of carelessness, application with less interest, misunderstanding of the directions or their own agreement or disagreement for the statements might crop up. The criteria used by Thrustone & Chave for eliminating the subjects – carelessness and failing to respond to a statement - were used in this study too. After collecting the responses, 20 statements were rejected since more than 90% have put them in one slot of the continuum. By this the statement validity was checked. For the remaining 20 statements, judgments were seen and 11 judgment sheets were removed as they ticked more than 12 statements on any one value of the psychological continuum. Thus, finally, 139 judgment sheets were considered for preparing the attitude scale.

### Step 5: Calculation of Scale and Q Values

The data obtained from a large number of judges were arranged in the form of a table as given below:

Statements	Sorting Categories											Scale Value	Q Value	
	A	B	C	D	E	F	G	H	I	J	K			
	1	2	3	4	5	6	7	8	9	10	11			
1	<i>f</i>													
	<i>p</i>													
	<i>cp</i>													
2	<i>f</i>													
	<i>p</i>													
	<i>cp</i>													

Three rows were used for each statement. The first gives the frequency with which the statement is placed in each of the 11 categories. The second gives these frequencies as proportions. The proportions are obtained by dividing each frequency by *N*, the total number of judges or simply by multiplying each of the frequencies by the reciprocal of *N*. The third row gives the cumulative proportions *i.e* the proportion of judgments in a given category + the sum of all of the proportions below the category. If the median of the distributions of judgments for each statement is taken as the scale value of the statement, then the scale values can be found from the data arranged in the manner of the above table by means of the following formula,

$$\text{Median (Scale Value) } S = 1 + \left[ \frac{.50 - p_b}{p_w} \right] i$$

- where *l* = the lower limit of the interval in which the median falls
- p<sub>b</sub>* = the sum of the proportions below the interval in which the median falls
- p<sub>w</sub>* = the proportion within the interval in which the median falls
- I* = the width of the interval and is assumed to be equal to 1.0

As was used by Edwards (1983), the interquartile range or *Q* was used as a measure of variation of the distribution of judgments for a given statement. The interquartile range contains the middle 50% of the judgments. To determine the *Q* values, the 75<sup>th</sup> centile and the 25<sup>th</sup> centile were calculated by using the following formulae:

Interquartile Value (*Q*<sub>25</sub>):

$$Q_{25} = 1 + \left[ \frac{.25 - p_b}{p_w} \right] i$$

- where *l* = the lower limit of the interval in which the median falls
- p<sub>b</sub>* = the sum of the proportions below the interval in which the 25<sup>th</sup> centile falls
- p<sub>w</sub>* = the proportion within the interval in which the 25<sup>th</sup> centile falls
- I* = the width of the interval and is assumed to be equal to 1.0

Interquartile Value (*Q*<sub>75</sub>):

$$Q_{75} = 1 + \left[ \frac{.75 - p_b}{p_w} \right] i$$

- where *l* = the lower limit of the interval in which the median falls
- p<sub>b</sub>* = the sum of the proportions below the interval in which the 75<sup>th</sup> centile falls

$p_w$  = the proportion within the interval in which the 75<sup>th</sup> centile falls

$I$  = the width of the interval and is assumed to be equal to 1.0

Q Value =  $Q_{75} - Q_{25}$

The lesser Q value amongst the comparable statements indicates the good agreement amongst the judges in judging the degree of favorableness or unfavorableness. Applying this rule, finally 10 statements were chosen 5 each representing favourable side and 5 unfavorable side of the continuum. The judgments also clearly demarcated the degree of favourableness and unfavourableness. Care was taken to see that the statements have smaller Q values as far as possible; they should represent the universe of opinion or content with respect to financial inclusion and the statements should represent equal number of favourable and unfavorable statements. The Scale developed is given below with their Scale values & Q values. It could be observed that the statements are almost equi-spaced in the degree of favourableness or unfavourableness and when graphed, the slope of the cumulative proportion graph was more gradual. The Q values are also relatively small.

#### Scale to measure the Attitude of individuals towards Financial Inclusion

S.No	Statement	Scale Value	Q Value
1	Giving financial literacy is a need rather than a compulsion	9.93	1.99
2	I need money every day and how can I save it for long term	2.798	0.93
3	Every common man should have a bank account	9.696	1.71
4	It is waste of time to go and wait in the bank as it eats my day's wage / earnings	2.557	1.87
5	Through financial inclusion only I came to know how to save	9.423	1.91
6	Opening a bank a/c and including everyone in a village will satisfy the Government rather than a common man	2.401	2.04
7	Small drops make an ocean. So everyone should save in a bank	9.136	2.03
8	Farther the distance from the branch, how do you expect a poor man to operate a bank account	2.219	1.82
9	When I go to bank, now a days the bankers tell me what we facilities are available to us from the bank	8.491	1.85
10	I tend to live for today and let tomorrow take care of itself	1.932	0.76

#### Step 6: Testing the Validity and Reliability of the Scale

**Content & Construct Validity:** The main criterion was to see the matching of the contents of the scale with the subject matter under consideration. This was ensured with the discussion with the experts in the field who had more than one decade field level experience with the concept of financial inclusion and inclusive growth. The statements also reflected the concept as defined by the original authors who developed the concept. Care was taken to include all forms of contents that the financially excluded as well as the financially included would be aware of. This ensured the content validity. The correlation between attitude towards financial inclusion and financial literacy for a sample of 100 was found to be 0.50 which was highly significant. This proved the construct validity of the scale.

#### Reliability of the Scale

In this study, following two types of procedures were used to find out the reliability of the scale

(i) **Test – Retest method:** The scale was administered to 50 financially included rural samples twice at 15 days' interval. Thus two sets of scores were obtained for the same set of respondents and the data were correlated and the correlation coefficient was found to be 0.822 indicating that the attitude was highly stable for measurement. (ii) **Split-Half method:** the scale was administered to another set of 50 financially included rural sample and the scale was divided into two parts based on odd and even numbers of statements. Two sets of scores were obtained on half forms of scales for the same sets of respondents and the scores were correlated, the

value of  $r$  was 0.773. The reliability coefficient thus obtained indicated that internal consistency of the attitude scale constructed for the study was quite high.

### (iii) Cronbach's Alpha Reliability Coefficient

Cronbach's Alpha is an index of reliability associated with the variation accounted for by the true score of an "underlying construct" (in the present study "Attitude towards Financial Inclusion"). The Cronbach's Alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. The ten statements developed in this attitude scale using a Likert – type of administration were administered to subject to 50 financially included rural sample and the procedure output has an overall raw alpha of 0.7529 which is good considering that 0.70 is the cut-off value for being acceptable.

### Step 7: Administration of the scale

The scale so developed was used in the schedule on Likert's 5 point continuum of strongly agree, agree, Neutral, Disagree and Strongly Disagree with 5 to 1 scores for favourable statements and the reverse for the unfavourable statements. The Scale values will be retained as their weightages. The final attitude score was arrived at by dividing the total score by number of statements.

### Limitations of the Scale

Like any other psychological measurement, the Scale, however, has the limitation of "end effect", as Thurstone and Chave indicate that the method does not necessarily yield intervals which appear equal to judges and the statements might tend to get distributed to the end of the continuum rather than spreading to the entire continuum. The other limitations are that people may respond to them in a manner which has been influenced by the investigator or to preserve their self-image in some way. People could also feel apprehensive about disclosing their true attitudes towards an issue. Some may adopt what is called a 'response set', that is, they may adopt a consistent tendency to agree or disagree with statements, regardless of their meaning.

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