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**INSTRUMENT DEVELOPMENT TO MEASURE MESSAGE  
STRATEGY**

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### Abstract

The aspect of development where message strategy plays a fundamental role in encouraging the society to participate in the development programs executed by the government. Past research has shown that instrument to measure message strategy is insufficient and applied content analysis method. The main purpose of this study is to validate an instrument to measure message strategy. The study collected 373 valid responses from Majlis Amanah Rakyat (MARA) trainers. In order to validate the instrument, researcher using content validity that can help in further improving the test value of items that emphasize specific test checks to consult panel experts. The role of panel consultants is to review and comment whether variable items include all the content tested and accurately measure a variable. To measures that determine whether an instrument can be adopted for the purpose of the study based on the Content Validity Index (CVI). The finding indicated that one item were deleted. The validity of the message strategy is also measured to determine which items are properly consolidated to measure a single construct. For the pilot test, the Cronbach's Alpha value is .876 while its real test scored .921. The initial amount for message strategy item was 27. However after the Confirmatory Factor Analysis (CFA) validation, it settled at 17 items.

## **1. Introduction**

The message strategy emphasized by a development agent usually encompasses an easy and concise information transfer for assisting the society's understanding of the information (Anthopoulos et al., 2007; Shatar, 2003). However, most development agents place lack of emphasis on message strategy that they need to utilize as one of the main initiatives that stimulates innovation adoption among people in the community (Nair & White, 1993) despite realizing the fact that message strategy is one of the essential elements which ensures that the information conveyed to the community will be a success (Bannister et al., 2001; Worrall, 1995 ).

The distribution of information by a development agent that is unclear and obscure leads to the information transferred being unable to be understood by the society (Markides, 1994; Ryan & Gross, 1943; Toth, 2000). This situation occurs as a result of lack of strategy arrangement in disseminating the information by the development agent even though the truth holds that message strategy can contribute to making the society active in participating in development programs held (Markides, 1998; Wright, 2006).

## **2. Problem Statement**

Taylor's model was applied in this research to describe the relationship between message strategy and the participation in training. Taylor's model was employed mostly in the past studies related to advertising (Taylor, 1999). This model was initially created to study communication that it concentrated on the function of message strategy in conveying a message in advertising (Golan & Zaidner, 2008; Hwang et al., 2003). However, Taylor's model is not massively utilized in the field of communication, generally in demonstrating that message strategy is able to influence the society's behavior towards accepting innovation. Therefore, Taylor (1999) and Hwang et al. (2003) suggest that the application of this model needs to be tested in the area of communication and other fields especially in identifying message strategy as the main element in changing the target group towards welcoming a new innovation.

The previous researchers such as Kimmerle et al. (2008) summarized that the studies on message strategy mostly focused on the heads or leaders' role in inspiring the employees' participation in the organizations. Nevertheless, in the development program context, it still revolves around a restrictive area and narrow scope (Worrall et al., 2004). As a consequence, Accenture (2001) and Worrall (2005) propose that the scope of the study of message strategy should be expanded particularly to the issue pertaining to generating the participation of the society and innovation adoption produced by the society where this indirectly justifies the feasibility of this study.

## **3. Research Questions**

- What is the items are standardized to measure message strategy?

## **4. Purpose of the Study**

The objective of this study is:

- To identify items are standardized to measure message strategy.

## 5. Research Methods

Before the actual data collection, 150 instruments was distributed to MARA Trainer in Alor Star, Kedah to testing the instrument. The finding shown that a variable of message strategy Cronbach's Alpha value for reliability is 0.876 (refer to table 01). According to Tavakol and Dennick (2011), Its mean the Cronbach's Alpha value for this variable is accepted for the reliability requirement.

**Table 1.** Composite Reliability of Message Strategy

Variable	Cronbach Alpha ( $\alpha$ )	No. of Item
Message strategy	0.876	27

The instrument are measure the message strategies consists of 28 items. All the items were adopted from Taylor (1999) and using five Point Likert scale with 1 (strongly disagree), 2 (disagree), 3 (slightly agree), 4 (agree), 5 (strongly agree).

To validate the instrument, researcher using content validity that can help in further improving the test value of items that emphasize specific test checks to consult panel experts. The role of panel consultants is to review and comment whether variable items include all the content tested and accurately measure a variable. Content validity is a systematic assessment conducted by the researcher based on the items of the contents of a variable. It is one of the determinants of the behavioral domain of a variable measured to represent the overall content of a variable domain studied (Anastasi & Urbina, 1997). i) This measurement tool can illustrate the real stand of the respondent. ii) Ensuring that the measurement tools used are indispensable, easy to understand and avoid multiple meanings.

In selecting a panel of consultants for the purposes of this content, there are several criteria to emphasize which includes expert panels referring to professionals who are active in producing academic scientific materials or work experience within eight years and above (Davis, 1992).

Evaluation of items in a study that applies the validity of this content requires some benchmarking panel that meets the necessary criteria. According to Lynn (1986) states that the minimum panel of consultants proposed is three persons. Gable and Wolf (1993) as well as Rubio et al. (2003) state that the number of panel is between two people up to 20 panels. Davis (1992) emphasized that the number of panel is not an issue because the most important issue is the background of a panel of consultants who prioritizes their knowledge of issues requiring their assessment.

For the purpose of this study, a total of 10 experts were selected to confirm the contents of the item within the variables studied. A total of five selected experts consisted of academics with eight years of experience and above in academic field and also have background in more than eight years of communication. At the same time, five MARA Officers were also selected to verify the items used in the questionnaire were understandable and clear. The selection of MARA Officers for this purpose was also selected based on work experience in the field of entrepreneurship more than eight years.

Measures that determine whether an instrument can be adopted for the purpose of the study based on the Content Validity Index (CVI). CVI refers to a description of the item describing the variable. According to Davis (1992), the CVI received to validate the items used should indicate between 0.70 and 1.00. However, new instruments used in a cultural context need to show a score greater than 0.80. CVI score shown, that have one item score less than 0.65. This indicates that out of 28 items, 27 items were used for pre-test stage (Table 02).

**Table 2.** Score CVI on Message Strategy

Item	Modified Items	Score CVI	Action
MS1	No	0.6	Deleted
MS 2	No	0.7	Acceptable for Pre Test
MS 3	Modified	1.0	Acceptable for Pre Test
MS 4	Modified	1.0	Acceptable for Pre Test
MS 5	No	0.7	Acceptable for Pre Test
MS 6	No	0.7	Acceptable for Pre Test
MS 7	Modified	1.0	Acceptable for Pre Test
MS 8	Modified	1.0	Acceptable for Pre Test
MS 9	No	0.7	Acceptable for Pre Test
MS 10	No	0.9	Acceptable for Pre Test
MS 11	Modified	1.0	Acceptable for Pre Test
MS 12	No	0.7	Acceptable for Pre Test
MS 13	Modified	1.0	Acceptable for Pre Test
MS 14	Modified	1.0	Acceptable for Pre Test
MS15	No	0.7	Acceptable for Pre Test
MS16	Modified	1.0	Acceptable for Pre Test
MS17	No	0.7	Acceptable for Pre Test
MS18	Modified	1.0	Acceptable for Pre Test
MS19	Modified	1.0	Acceptable for Pre Test
MS20	No	0.7	Acceptable for Pre Test
MS21	Modified	1.0	Acceptable for Pre Test
MS22	Modified	1.0	Acceptable for Pre Test
MS23	Modified	1.0	Acceptable for Pre Test
MS24	Modified	1.0	Acceptable for Pre Test

MS25	No	0.7	Acceptable for Pre Test
MS26	Modified	1.0	Acceptable for Pre Test
MS27	Modified	1.0	Acceptable for Pre Test
MS28	Modified	1.0	Acceptable for Pre Test

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**\*\*MS- Short form for Message Strategy**

## 6. Findings

For the actual data collection, the research collected 373 responses. Confirmatory Factor Analysis (CFA) applied for validity and reliability of message strategy instruments. Analysis Moment of Structure (AMOS) was using to validated message strategy construct. According to Hair et al. (2009) CFA is a one of technique was reliable to defining the essential structure of variables that are interrelated and represent the variable are was measured. Also, based on using that CFA also included model fit, convergent validity and construct reliability analysis. It means, item will be deleted if it failed to fill the requirements of the model fitness, validity and reliability criteria because the discarded item did not belong and represent the variable.

Table 03 shown that there is no items deleted for message strategy construct and it recommended rules as suggested (Bryne & Hair, 2010). Based on the analysis, the message strategy items showed factor loading value more than 0.5 but less than 1.0. The factor loading assessment showed the items in item of message strategy were is accepted based on criteria of the model fit requirement.

**Table 3.** Factor Loading Value of Message Strategy

No Item	Loading Factor	AVE	CR
MS1	.63	.612	.753
MS 2	.66		
MS 3	.60		
MS 4	.78		
MS 5	.69		
MS 6	.76		
MS 7	.80		
MS 8	.71		
MS 9	.74		
MS 10	.50		
MS 11	.50		
MS 12	.87		
MS 13	.77		
MS 14	.80		
MS 15	.72		
MS 16	.66		
MS 17	.51		
MS 18	.60		
MS 19	.58		
MS 20	.50		
MS 21	.73		

MS 22	.80
MS 20	.69
MS 21	.60
MS 22	.63
MS 23	.63
MS24	.66
MS 25	.54
MS 26	.74
MS 27	.65

In addition, the validity of the message strategy is also measured to determine which items are properly consolidated to measure a single construct. Refer to Hair et al. (2009) suggested that the Extract Variance Average (AVE) can be used to measure convergent validity and its value should be more than 0.5. Table 04 shows the AVE value is 0.612. Therefore, it meets the requirements of convergent validity. Additionally, construct reliability analysis was used to measure item reliability. Also, the convergence validity analysis shows that the confidence meets the criteria. Although the construct reliability is 0.753, it also meets the construct reliability requirement. Therefore, the trust is met with expansion and validity of the scale, and is ready for the second level (measurement model) of the validity and reliability of the construct using SEM. While table 4 shows the message strategy qualifies the appropriate model based on SEM analysis.

**Table 4.** Table fitness for the message strategy

Name of Category	Model Fit Indices	Recommended Value	Fit Indices Value
Absolute Fit	RMSEA	$\leq .08$	$\leq .08$
	GFI	$\geq .9$	$\geq .91$
Parsimonious Fit	$X^2/df$	$\leq .50$	$\leq .322$
	AGFI	$\geq .90$	$\geq .92$
Incremental Fit	CFI	$\geq .90$	$\geq .91$
	NFI	$\geq .90$	$\geq .91$
	TLI	$\geq .90$	$\geq .92$

## 7. Conclusion

Most previous studies used the Taylor Model in the context of advertising-based research. This study has applied this model in the field of communication and the findings of the study have shown that this model can be applied in the field of communication with the development of models that reflect the adoption of innovation among MARA participants. The element of message strategy is seen as a factor that also promotes the acceptance of ideas among participants. The findings of this study prove that the application of the Taylor model is not only used in advertising but also contributes to the field of communication studies. This finding is in line with findings from Hwang et al. (2003) and Taylor (1999) who propose that the application of this model should be tested in the context of communication especially in examining message strategies as a key element in changing target behavior in accepting new innovations.

Therefore, for recommendation for future research need to use this instrument in different contexts especially on communication field. Although the findings of this study have proven that instrument valid

on development communication, but it still requires extensive testing. This is to ensure that this instrument will continue to be studied and will be applied in various studies.

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