

# DEVELOPMENT AND VALIDATION OF A SCALE TO MEASURE FACULTY ATTITUDES TOWARD OPEN EDUCATIONAL RESOURCES

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# Development and Validation of a Scale to Measure Faculty Attitudes toward Open Educational Resources

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By

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# Presentation Outline

Context

Review of Literature

Rationale of the study

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# Context

- Open Educational Resources (OER) have emerged as most innovative teaching-learning practices
- It facilitates sharing of knowledge; provides access to global content; allows localization
- Teachers' play important role in creation and dissemination of OER
- Digitalization has helped teachers to share their work easily, however not all teacher share their work
- Hence, there is need to understand their psychological determinants that influence use of OER

# Review of Related Literature

## ATTITUDE

- Awareness** : Lack of awareness of the OER, copyright issues, ICT skills  
(Mtebe & Raisamo, 2014; Jameela, 2014; Karunanayaka, 2012)
- Sharing of Resources** : Belief in open education, altruism, reputation  
(Tuomi, 2013; Rolfe, 2012; Wang, & Noe, 2010)
- Adoption and Use of OER** : Free availability, ease of use, reuse, low cost  
(Borthwick et al. 2014, Hussain et al, 2013; Pegler, 2012)

# Rationale for ATOER Scale

- Dearth of empirical researches that follows sound methodological approaches in OER field
- Lack of scales to measure faculty attitude towards OER specifically for user and non-user; contributor and non-contributor
- Content domain specification are not explained in detail
- Therefore, ATOER scale was developed to identify positive and negative pre-dispositions towards OER amongst teachers

# Methodology

## **1. Domain Identification and Item Generation**

- 65 items were pooled from review of literature
- Classified in to three main constructs- Awareness, Sharing of resources and Adoption and use of OER
- 26 items were selected through sorting process based on discussion with in internal team
- Hence, 26 items were generated and subjected to content validity

## 2. Content Expert Validation

### First stage

- 30 experts were selected based on their experience and involvement in OER
- Three point scale was used to rate items by using online survey (1=Not necessary, 2= Useful, but not essential, and 3= Essential)
- Content Validity Ratio (CVR) was calculated (Lawshe ;1975)

### Second stage

- CVR was re-calculated combining both 'Essential' and 'Useful' ( $CVR_{E+U}$ ) (Kawachi; 2014)

### Third Stage

- 8 new items were added and divided into three construct
- Revised scale of 34 items subjected to judge by selected experts drawn from review



# Results and Analysis

## First stage

- A total of 19 experts out of 30 responded
- Calculated CVR = -0.18 which is very less than critical value of 0.49 at  $p < 0.05$  level for 15 experts ( Lawshe; 1975)

## Second stage

- The  $CVR_{E+U}$  of scale is calculated to be 0.62, which is more than critical value of 0.49 at  $p < 0.05$  level for 15 experts

## Third stage

- Only 4 out of 30 experts responded
- $CVR_{E+U}$  of revised scale was calculated to be 0.68, which is less than critical value of 0.99 at  $p < 0.05$  level for 4 experts

## Final Validation Stage

- $CVR_{E+U}$  was calculated combining  $CVR_{E+U}$  of second and third stage
- 8 items including negative (item no. 2, 3, 13, 20, 27, 28, 29 and 34) were omitted from third stage due to low CVR value
- Average value of  $CVR_{E+U}$  was calculated 0.88 which is more than critical value of 0.42 at  $p < 0.05$  level for 20 experts
- A final valid ATOER scale with 26 items was thus prepared

# ATOER Scale: Content Validity Ratio

<b>Construct</b>	<b>No. of Items</b>	<b>CVR (<math>E+U</math>)</b>
AWARENESS	6	0.78
SHARING OF RESOURCES	13	0.91
ADOPTION AND USE OF OER	7	0.93
FINAL VALIDATED ATOER SCALE	26	0.88

# Implications

- RESEARCH** : For further/future researches specifically related to attitude towards OER in different context
- INSTITUTIONAL** : Strengthen capacity building /development activities of teachers/ others
- POLICY** : Helps in development of appropriate policies for teachers

# Work in Progress

- Standardization of Research tools (reliability with other appropriate statistical analysis)
- Further Data collection
- Analysis of qualitative and quantitative data
- Writing research outcomes



Thank You

Its pleasure to get your response

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