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

Sharma, M.; Mishra, S.; Thakur, A.;

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

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By

Meenu Sharma, Research Associate
Dr. Sanjaya Mishra, Director
Dr. Atul Thakur, Research Associate

Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi, India
Presentation Outline

- Context
- Review of Literature
- Rationale of the study
- Methodology for ATOER Scale
- Results and Analysis
- Implications
- Work in Progress
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)
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
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
CVR\textsubscript{E+U} was calculated combining CVR\textsubscript{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\textsubscript{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

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

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## 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

meenu@cemca.org.in
smishra@col.org
atul@cemca.org.in