CHANGE CYNICISM SCALE: DEVELOPMENT, VALIDITY AND RELIABILITY

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Abstract:
The purpose of this study is to develop a valid and reliable measure of change cynicism. In the development of the scale, literature regarding cynicism was examined and item pool was composed. For the content validation of the scale, draft of change cynicism scale was given to five experts. Having received feedback from the experts, the scale was ready for the plot practice with a sample group of 206 teachers and administrators in total. Following that, exploratory factor analysis was practised for construct validity and reliability analysis was conducted. Lastly, confirmatory factor analysis was conducted to assess the three-factor structure of the change cynicism with a different sample consisting of 434 teachers and 119 administrators. Change Cynicism Scale consisting of 17 items, each rated on five-point likert type scale was developed. Cronbach alpha reliability coefficient of the total scale was calculated as .94; and .90, 93, .84 for the sub-dimensions respectively. Total variance explained by change cynicism was 69%. All factor loadings were upper than 44. This showed that the scale was valid and reliable. The three-factor structure of scale was confirmed with confirmatory factor analysis. The model fit indices yielded a good fit to the three-factor structured model.

Keywords: organizational change cynicism scale, validity, reliability, exploratory factor analysis, confirmatory factor analysis

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1. Introduction

Since the information age, organizations have been undergoing rapid and pervasive changes. Employees are always asked to bear the brunt of the constant change and deal with it efficiently and effectively (Weick & Quinn, 1999). However, most of the organizational change attempts result in failure (Pasmore, 2011). There are many potential reasons for these failures, but one that has received increased attention recently is employee cynicism (e.g., Feldman, 2000; Abraham, 2000; Reichers, Wanous, & Austin, 1997; Wanous, Reichers, & Austin, 2000; Vance, Brooks, & Tesluk, 1996). Cynicism is widespread among organization employees. Organizational change and quality improvement attempts particularly seem to engender cynicism (Shapiro, 1996). The fact that cynicism is present in organizations around the world makes it a very important phenomenon worldwide.

Educational organizations can be considered as structures cynicism can be observed. A school administrator or a teacher who experiences organizational cynicism may have such a feeling that school development efforts are ignored by other stakeholders, and may tend to be reluctant to strive for creating a more effective school. Cynic individuals at schools may think that their suggestions to improve the quality of their institution are generally ignored, underestimated or found to be ‘not attributable’ by others. They prefer to refrain from expressing their suggestions, keep them and choose to share their feelings about how s/he feels while working at school with others out of school context. As a result of ‘inappropriate’ applications and practice in the organizations, these people may believe that every individual is not treated fairly. Thus, they may think that employees who do not deserve something will be promoted. Cynic people develop a ‘pessimistic and hopeless look’ about the schools’ future, and such a perspective decreases the belief that better days are ahead (Korkut and Aslan, 2016). Changes in education reflect in training programs, students, teachers and administrators. Teacher’s and administrator’s role is great for conducting change in a healthy way in organizations. It is not possible to switch to a new society painlessly and untroubled in company with the teachers who do not comprehend change and are not aware of their importance and function against change (Doğan, 1998). Knowing how these changes in educational organizations are to be practiced by teachers and administrators is so important that change efforts can be effective, otherwise, it causes obscurity and employees to be mostly unwilling and resistant to change (Polat and Güngör, 2014).

Organizational change cynicism and change are two intertwined phenomena. Organizational change is considered one of the main causes of organizational cynicism. It is necessary for managers to consider the impact of organizational change on
employees (Rainey, 2003). Reichers, Wanous and Austin (1997) describe organizational change cynicism saying that it involves a real loss of trust in leaders of change and is a reaction to a history of change attempts that are not entirely or clearly successful. Wanous, Reichers and Austin (2000) say that organizational change cynicism consists of pessimism about the likelihood of successful change and blame of those responsible for change, naming them as incompetent, lazy or both. Wanous, Reichers and Austin (1994) assert that people become cynical as they see many attempted changes but few successes. They think that anyone can be cynic if confronted with repeated failures and provided with no credible explanations. Wanous, et al. (2000) emphasize that if there is widespread organizational change cynicism in an organization, it is unlikely that even the most sincere and skillful attempts at organizational change will be obstructed by prevailing cynicism. They also emphasize that organization’s past history of change attempts resulting in failures may limit or even doom attempts at organizational change. Similarly, Mishra & Spreitzer (1998) express that if employees are cynical about a change initiative from the start, which is likely to result in unsuccessful changes, they become more cynical and believe in ways that further undermine the change initiatives, generating a vicious cycle. It can be concluded that organizational change cynicism is an important topic for change agents and practitioners because of its influence on an organization’s capability to implement a new initiative. They should take existing levels of cynicism into consideration when they try new change initiatives. In the literature, different factors cause cynicism in the organizations. Mismanaged change effort, excessive stress and role overload, unmet personal and organizational expectations, inadequate social support, insufficient promotion and encouragement despite competition, low participation in decision making process, communication problems and psychological contract violations are some of the reasons for cynicism (Baz, Kaya, & Savaş, 2011). Polatcan and Titrek (2013) emphasize that it is necessary for organizations to keep pace with the developing and changing world conditions. However, they claim that organizational cynicism is an important factor that decreases employees’ motivation levels and job satisfaction and their organizational commitments. Within this context, they assert that leadership behavior should be defined as a person who transfers his knowledge and skills to his subordinates and the role that a leader acts in his organization. Organizational change cynicism is an important topic for researchers and practitioners because of its influence on an organization’s capability to implement a new initiative. It can be said that it is crucial to develop a change cynicism scale to minimize the change cynicism levels and conduct the change programs successfully.

As a result of extensive literature search about the cynicism, a few scales are found such as ‘Organizational Change Cynicism Scale’ by Brandes (1997); ‘Cynicism Scale’ by Wrightsman (1991); Scale by Kanter and Mirvis (1989); Cynicism Scale about
Organizational Change’ by Wanous, Reichers and Austin (1994, 1997, 2000). There are few studies regarding to change cynicism in Turkish literature. Polat and Güngör (2014) conducted a research on teachers to determine the effects of the organizational change cynicism on job satisfaction, intention of quitting job and alienation variables. They found positive and meaningful relationship between cynicism perceptions and intention of quitting job and alienation levels but negative and meaningful relationship between organizational change cynicism and job satisfaction. Tolay, Sürgevil and Sezgin (2015) developed an organizational change cynicism scale and presented structural validity of the scale through exploratory factor analysis however, the confirmatory factor analysis of the scale was not performed. Sezgin, Tolay and Sürgevil (2016) focused on the phenomenon of organizational change cynicism and designed a descriptive and subjective qualitative research. They found basic dimensions of organizational change cynicism identified as experiential, administrative and acquiring. Since there are few studies about the organizational change cynicism in Turkey and the results of change cynicism impede the development of change programs, there is a need of studying the levels of teachers’ and administrators’ change cynicism levels to take precaution and minimize the change cynicism levels and conduct the change programs successfully.

It can be concluded that there is a need of a valid, reliable and confirmed change cynicism scale. In this context, the aim of this study is to develop an organizational change cynicism scale.

2. Methodology

A descriptive study based on general survey model was designed to gather data on administrators’ and teachers’ change cynicism levels during ongoing changes. Owing to the facts that this study strives to analyze the current situation, the descriptive research model is appropriate. Because survey models are useful for research aiming to describe situations as they are (Karasar, 2009).

2.1 Participants

There are two sample groups of the study. One is for the exploratory factor analysis and the other is for the confirmatory factor analysis. In plot practice stage, the participants in total were 206 teachers and administrators working within the boundaries of Uşak City Government Primary and Secondary Schools during academic year of 2014-2015. In the second stage of the study, the sample group consisted of 434 teachers and 119 administrators working within the boundaries of Uşak City Government Primary and Secondary Schools during academic year of 2014-2015. The study group in total was 553
participants. Sample of the research consisted of 223 (40.3%) female, 330 (59.7%) male teachers and administrators. According to duty, 434 (78.5%) of participants were teachers and 119 (21.5%) of them were administrators. According to branch, 246 (44.5%) of participants were primary school teachers or administrators and 307 (55.5%) of them were infeld teachers or administrators. According to seniority, 126 (22.8%) of participants were 1-5 years; 122 (22.1%) were 6-10 years; 82 (14.8%) were 11-15 years; 77 (13.9%) were 16-20 years and 146 (26.4%) were 21 years and over.

2.2 Development Process of Change Cynicism Scale

In the development of the change cynicism scale, six stages were followed.

In the first stage, scales about cynicism, organizational cynicism and organizational change cynicism scales were examined (Kanter and Mirvis, 1989; Wrightsman, 1991; Wanous, Reichers and Austin, 1994, 1997, 2000; Tolay, Sürgevil and Sezgin, 2015). After examining literature profoundly it em pool consisting of 101 items was developed.

In the second stage, for the purpose of content validation, initial draft of change cynicism scale with 101 items on five-point rating scale was given to a group of five experts in educational management, educational measurement and cynicism for taking their opinions about whether the selected items were valid items for assessing teachers’ and administrators’ change cynicism levels during ongoing changes. The experts were asked to examine items with regard to their relevance, purpose, content coverage, understandability and consistency among one another. Having received feedback from experts thirty eight items were deleted because they were not suitable. As a result, change cynicism scale consisted of 63 items on five-point rating scale and it became ready for the plot practice stage.

In the third stage, that’s, plot practice stage, change cynicism scale with 63 items was administrated to 206 teachers and administrators in total working within the boundaries of Uşak City Government Primary and Secondary Schools during academic year of 2014-2015 for calculating validity and reliability of the change cynicism scale. The data was gathered with change cynicism scale developed by the researchers. It consisted of two parts, namely a demographic information section and change cynicism questionnaire that contained 63 items each rated on five-point likert type scale.

In the fourth stage, exploratory factor analysis is practised for construct validity. 46 items were excluded because of low factor loaded and these items were deleted. Following the results of exploratory factor analysis, organizational change cynicism scale consisted of 17 items including three dimensions, namely cognitive, affective and behavioral dimensions.
In the fifth stage, reliability analysis was performed and Cronbach alpha reliability coefficient was calculated. Scores of the scale showed that the scale was a valid and reliable measurement tool.

In the last stage, confirmatory factor analysis was performed to assess the three-factor structure of the change cynicism scale with a different sample group consisting of 434 teachers and 119 administrators working within the boundaries of Uşak City Government Primary and Secondary Schools during academic year of 2014-2015.

3. Findings

After change cynicism scale was administrated to teachers and administrators, the suitability of the current data for factor analysis was checked through Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett’s test. The Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy and Bartlett’s test were calculated to evaluate whether the sample was large enough to apply a satisfactory factor analysis and examine to determine appropriateness of factor analysis (Büyüköztürk, 2003). The KMO value varies between 0 and 1. A value close to 1 indicates that patterns of correlations are compact and factor analysis will yield reliable factors (Kline, 1994). KMO values of 60 or above are acceptable (akt. Metin, Kaleli Yılmaz, Coşkun, Birişçi, 2012). The KMO value of the initial analysis was .914, the Bartlett’ Test of Sphericity reached a significant value supporting the factorability of the correlation matrix obtained from the items [Approximate Chi-Square 2571.147 (p<0.01)]. According to results of Bartlett’s test of Sphericity Statistic was significant. Results of KMO and Bartlett’s test appear to support the validity of the factor analysis usage for this study.

3.1 Exploratory Factor Analysis of the Scale

Exploratory factor analysis allows researchers to determine if many variables can be described by few factors. It reduces attribute space from a larger number of variables to a smaller number of factors (Fraenkel & Wallen, 1996). The aim of exploratory factor analysis is to find the number of separate components that may exist for a group of items (Büyüköztürk, 2003). In this study, SPSS 18 packaged software is used for the analyses of the data. According to results of exploratory factor analysis, 46 items were excluded from 63 items because of low factor loaded and these items were deleted. Since their factor loadings were lower than .40 (Büyüköztürk, 2003). The principle components factor analysis was used to extract the appropriate number of factors. The result was that three factors had an eigenvalue greater than 1. These factors altogether explained 69.5% of variance of results. Change cynicism scale consisting of 17 items including three factors was developed.
Screeplot was used as an alternative approach to determine the appropriate number of factors.

Screeplot showed that three factors were in sharp descent. This was evidence that rotation was necessary for three factors. Each two methods of determining the number of factors revealed that change cynicism scale consists of three factors.

Table 1 presents eigenvalues, variances and total variances of the three factors.

Table 1: Eigenvalues, Percentages of Variances and Percentages of Total Variances of the Three Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Eigenvalues</th>
<th>Percentages of Variances</th>
<th>Percentages of Total Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>8.882</td>
<td>52.25</td>
<td>52.25</td>
</tr>
<tr>
<td>Factor 2</td>
<td>1.715</td>
<td>10.09</td>
<td>62.34</td>
</tr>
<tr>
<td>Factor 3</td>
<td>1.209</td>
<td>7.112</td>
<td>69.45</td>
</tr>
</tbody>
</table>

As seen in table 1, there are three factors in change cynicism scale. Eigenvalues of the factors are 8.882, 1.715 and 1.209. Factor 1 explained 52.25% of total variance, factor 2 explained 10.09% of total variance and factor 3 explained 7.112 of total variance. These three factors explained 69.45% of total variance and were named according to common characteristics of the items loaded on the same factor. According to results of item loading and eigenvalues of the factors, it is said that this change cynicism scale is appropriated to assess teachers’ and administrators’ change cynicism levels during
ongoing changes. Following the determination of the factor numbers, it was seen distribution of 17 items to three factors. Table 2 presents factor loading and factor structures of the items.

**Table 2: Factor Structures and Loading of the 17 Items**

<table>
<thead>
<tr>
<th>Number of Items</th>
<th>Number</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Opportunity to participate the change process in schools is not given to us.</td>
<td></td>
<td>-.882</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The people in Turkish Educational System who are responsible for change attempts do not get the cooperation they need from others.</td>
<td></td>
<td>-.922</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Interior and exterior powers that make change attempts compulsory are hidden from psychological objects working in schools on purpose.</td>
<td></td>
<td>-.832</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The people responsible for making things better during change process do not care enough about their jobs.</td>
<td></td>
<td>-.501</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Participating in decisions during planning change programmes is prevented by higher authority on purpose.</td>
<td></td>
<td>-.566</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Change programmes in schools are unexpectedly put into practice to detriment the change process.</td>
<td></td>
<td>-.436</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>It is annoying that the people responsible for implementing change initiatives pretend to support and care about the change initiatives.</td>
<td>.765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>It makes me anxious when I am not fully informed about the difficulties of every phase of change processes on purpose in schools.</td>
<td>.742</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>It makes me angry when the results of change initiatives are not researched and publicized on purpose.</td>
<td>.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>It makes me uneasy that change initiatives in Turkish Educational System are put into practice without considering the needs of educational programmes.</td>
<td>.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>It makes me anxious that instead of system-based change initiatives implemented in schools, profit and advantage-based change initiatives are implemented.</td>
<td>.802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I do not take seriously the change programmes prepared in schools.</td>
<td>.559</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Meaningful looks are observed during change process when any topic about school management is on agenda.</td>
<td>.441</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As seen in table 2, factor loading of items in the scale changes between .44-.92. Kline (1994) said that the value of factors load between .30 and .60 is medium and .60 and 1.0 is high quality. This situation indicated 17 of items are enough qualified in the scale. It is seen the distribution of 17 items to three factors. Factor 1 includes 7, 8, 9, 10, 11 and these items explicitly measure teachers’ and administrators’ affective dimension of change cynicism. Therefore, this factor was named affective dimension of change cynicism. Factor 2 includes 12, 13, 14, 15, 16, 17 items. These items explicitly measure behavioral dimension of change cynicism. Factor 3 includes 1, 2, 3, 4, 5, 6 items and these items explicitly measures cognitive dimension of change cynicism. Change cynicism scale consisting of 17 items including three dimensions, namely cognitive, affective and behavioral dimensions was developed.

3.2 Reliability of the Change Cynicism Scale
Reliability analysis was performed for each factor and Cronbach alpha reliability coefficients were used. Cronbach Alpha reliability coefficient of the total scale was calculated as .94; for the sub-dimensions, Cronbach alpha value of affective dimension is .93 and Cronbach alpha value of behavioral dimension is .84 and Cronbach alpha value of cognitive dimension is .90. According to these results, it can be said that change cynicism scale is a valid and reliable scale.

3.3 Confirmatory Factor Analysis of the Scale
Confirmatory factor analysis was performed to assess the three-factor structure of the change cynicism by means of LISREL packaged software. In order to test the adequacy of our model the Chi-square Fit Statistic, the Root Mean Square Error of Approximation (RMSEA), the Standardized Root Mean Square Residual (SRMR), Comparative Fit Index (CFI) and Incremental Fit Index (IFI) were calculated. According to Hu & Bentler (1999); Beauducel & Wittmann (2005) and Schreiber, Nora, Stage, Barlow & King, J. (2006), an excellent fit to data is indicated by IFI, CFI and GFI values ‘close to’ .95, Standardized Root Mean Square Residual (SRMR) value less than or equal to .08, and
RMSEA values ‘close to’ .08. Laursen, Little and Card (2012) express that ideally, the chi-square statistic is not significant at the .05 alpha level, but this Standard is seldom achieved in practice. The analysis showed that chi-square statistic=5.1, CFI=.96, IFI=.96, SRMR=.07, RMSEA=.09. The model fit indices yielded a good fit to the three-factor structured model. The results of the modification indexes showed that no important modification were required. As a result of confirmatory factor analysis, three-factor structured model was confirmed.

4. Discussions, Conclusions and Suggestions

Organizational change cynicism is considered an important factor that influences employee acceptance of change initiatives. Given the pervasive negative influence of change cynicism on employees, people responsible of change initiatives need to assess and manage employee change cynicism since change cynicism is an important barrier to change implementations. There are few scales of change cynicism that directly measure
the change cynicism in literature (Wanous, Reichers and Austin, 1994, 1997, 2000; Tolay, Sürgevil, Sezgin, 2015). The purpose of this study was to develop a reliable and valid measure of change cynicism. By means of the scale, it can be used as a prevention measurement scale to determine and minimize the levels of administrators’ and teachers’ change cynicism levels during ongoing changes.

In this study, change cynicism scale was developed through six stage model proposed. Subsequent to a review of literature, an item pool was composed and items were validated with feedback from experts. Initial draft of the measurement was constructed and administered to in total 206 administrators and teachers in primary and secondary schools. Then, validity and reliability of the change cynicism scale were calculated. Lastly, confirmatory factor analysis was practised with a sample of 119 administrators and 434 teachers working in primary and secondary schools. As a result, organizational change cynicism scale consisting of 17 items, including three dimensions, namely cognitive, affective and behavioral dimensions was developed. Cronbach alpha reliability coefficient of the total scale was calculated as .94; and was calculated as .90; .93; .84 for the sub-dimensions respectively. Total variance explained by organizational change cynicism was 69%. All factor loadings were upper than .44. The model fit indices yielded a good fit to the three-factor structured model (chi-square statistic=5.1, CFI=.96, IFI=.96, SRMR=.07, RMSEA=.09). These show that change cynicism scale is a reliable, valid and confirmed scale.

In subsequent studies, comprehensive information can be presented with different sample groups. Researching a wide sample of teachers and administrators or employees in different work areas working in different cities and regions should be a goal of future studies.

References


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