Validity of the Structural Empowerment Scale for Cooperative Members

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ABSTRACT
In the industrial revolution 1.0, cooperative was established to allow its members to work together when dealing with a common problem, namely, the presence of industrial machines to replace human labor. In the industrial revolution 4.0, the similar problem also occurs when human resources will potentially be replaced by robots. In such situation, the cooperative members’ perception of the cooperative structure should be re-explored. Is the cooperative still considered as a structure that can empower its members? Therefore, this study aimed to test the validity of the structural empowerment scale of cooperative members by adapting to the structural empowerment scale developed by Laschinger (2012) on cooperative members using the confirmatory factor analysis (CFA) method. The number of participants was 302 cooperative members. Based on the accuracy index of the CFA analysis results, the six factors model of structural empowerment is extremely similar with the data (Goodness of Fit Index: 0.912; CFI: 0.961, RMSEA: 0.051) with a factor load of 0.521–0.875. All subscales correlated (p <0.001). Based on the results of this study, it can be concluded that the scale of structural empowerment of cooperative members is valid. The scale can be used to evaluate the cooperative empowerment from the perception of cooperative members so it can complete the form of cooperative evaluation that has been prioritizing on increasing the number of members, capital, and assets.

Keywords: structural empowerment, cooperative members, validity, confirmatory factor analysis, cooperative evaluation tools, industrial revolution 4.0.

1. INTRODUCTION
Cooperative consists of people-centered enterprises, democratically owned and managed (one person one vote) by members with profits returned from the company or members (International Cooperative alliance, 2019). The cooperative system allows members to control their own operations so that the gained economic and social benefits are felt by members and community. The purpose of cooperatives is not just to obtain profits but to spread the principles and values of cooperatives to many people in order to build a better world (International Cooperative alliance, 2019). This understanding contains the essence of cooperatives as movements, namely, efforts to change social situations preceded by changes in ways of thinking (Curl, 2009; William, 2007). The principles and values of cooperatives become a benchmark for changes in ways of thinking, attitudes, and behaviors that bring social change, which the
International Cooperative Alliance (2019) known as “a better world.”

Historically, 28 weavers from the small town of Rochadale founded an association with the name “The equitable pioneers of Rochadale.” The cooperative is considered as the first cooperative movement. The Rochadale Cooperative is a form of adaptation for poor weavers to low wages obtained as a result of the presence of industrial machines that replaced their energy in the 1.0 revolution. A difficult situation caused by clutches of the capital owners made the group aspire to create a home colony that has the power to regulate production, distribution, and government based on four basic characteristics, namely, courage, common sense, patience, and strong belief in self-ability (self-help) (Thompson, 1994).

Frederic Wilhelm Raiffeisen (1818–1888), one of the cooperative pioneers, developed the Credit Union cooperative model aiming to empower the poor. The most prominent characteristic of the Raiffeisen cooperative model is the orientation of the cooperative, an immaterial, i.e., not for profit but for the self-development of the poor who are powerless of self-help through the grass-root movement (William, 2007). Raiffeisen designed the cooperative structure and established self-help, self-governance, and self-responsibility principles as the basis for cooperatives to function or to change a person or group of people from helpless situations to helpful (Prinz, 2002). This historical background shows that cooperatives aim to empower their members.

The concept of empowerment itself has been widely investigated in the context of cooperatives from various perspectives. Rahman and Khanam (2016) chose four dimensions of empowerment, namely, participating in family decision-making processes, access to family assets, security, and dignity as key dimensions of empowerment in the cooperative context. Saha and Sangwan (2019) used the empowerment definition from Kabeer (1999) and created an index of cooperative empowerment. Kabeer (1999) defined “empowerment as the expansion of people’s ability to make strategic life choices in a context where this ability was previously denied to them.” This ability is explained by Kabeer (1999) in three interrelated dimensions: resources, agency, and achievements. Resources mean access to and claim over material, human, and social resources. An agency described the decision-making process and achievements as well-being outcomes. Based on this concept, Saha and Sangwan (2019) described empowerment in cooperatives in four dimensions: economic, social, interpersonal, and political dimensions.

Economic empowerment means individuals can control economic resources, such as loans, income, and savings (Saha & Sangwan, 2019). Social empowerment means that individuals can freely carry out social activities both social activities related to economic behavior, religion, or public participation and are free to create relationships or networking (Saha & Sangwan, 2019). Interpersonal empowerment means an individual’s internal process, showing that he can make his own decisions (Saha & Sangwan, 2019) and political empowerment means that individuals can make their own political decisions without being influenced by other parties (Saha & Sangwan, 2019). These four dimensions are divided into twelve empowerment index indicators: economic status/security, control over loans, control over income and savings, purchasing capacity, decision-making, mobility, participation in
public life, political awareness, attitude toward domestic violence, family planning, media exposure, and health self-evaluation (Saha & Sangwan, 2019). The concept of empowerment by Rahman and Khanam (2016) and the concept and index of empowerment by Saha and Sangwan (2019) cannot be widely applied but only to measure the empowerment of women in the patriarchal culture context in India and Bangladesh. In addition, the process of assessing indicators is decided by the researcher himself and is not an individual’s perception; therefore, it cannot explain the perception of cooperative members to the extent that empowers the cooperative. The responses described in two studies are not access to cooperative resources but access family resources; therefore, these two studies cannot explain the extent of accessing cooperative resources makes them powerless. Based on this background, studies that can explain the perceptions of cooperative members about the cooperative’s ability to empower its members are required.

Kanter’s structural empowerment theory (1993) can be used as a reference. Structural empowerment is one of the two important empowerment perspectives in the organizational context (Francescato & Aber, 2015). Structural perspectives (sometimes known as relational or mechanistic perspectives) emphasize individual external factors (environment) such as structure, policy, and practice of distributing authority and responsibility in the organizational hierarchy as conditions that empowers individuals in organizations (Kanter, 1993). This perspective ensures that organizations can be designed or modified to empower employees or members (Francescato & Aber, 2015). Conversely, psychological perspective (sometimes known as organic or bottom-up perspective) views empowerment as the psychological state of individuals born from perceptions of power and control in organizations. Spreitzer (1995) understood empowerment as individual dynamics originating from individuals themselves, whereas Kanter (1993) believed empowerment as a process that occurs through an external structure.

Spreitzer (1996a) placed support, access to information, and resources as sociostructural factors that impact on organizational empowerment. Spreitzer (1996b) developed a measuring tool from the Kanter’s (1993) concept in organizations using the following terms: social political support, access to information, and access to resources. Social and political support is defined as endorsement or legitimacy based on established rules and recognition of other members (Spreitzer, 1996b). Access to information is defined as all forms of information both general and specific useful for a member of the organization (Spreitzer, 1996b). By obtaining information, individuals have a broad picture of their role to achieve organizational goals, and have a sense of decision-making (Spreitzer, 1996b). Access to resources means the certainty to fulfill individual requires an effort to complete the work or the role given to him to achieve organizational goals. These three concepts were developed into a measuring tool to measure sociostructural (external) factors that contribute to the formation of psychological empowerment (internal individuals) (Spreitzer, 1996b).

Based on Kanter’s (1993) theory, Laschinger (2012) created a structural empowerment measurement tool known as Condition Work Effectiveness Questionnaire (CWEQ) I and II, which contained six dimensions: opportunity, important information, support from
colleagues, time and material resources, and formal and informal power. Kanter’s theory and CWEQ II measuring instruments have been used in various research contexts, such as nursing (Aggarwal, Dhaliwal. & Nobi, 2018), banking (Jaffery & Farooq, 2015), education (Ahadi & Suandi, 2014) but have never been investigated in the cooperative context. Structural empowerment is the extent to which an employee can access opportunities, important information, support from colleagues, and time and material resources, as well as formal and informal power from the organization in order to complete the work for which he or she is responsible for (Laschinger, 2012). In the context of cooperatives, this understanding can be developed based on the extent of members’ high accessibility to opportunity, important information, support from fellow members, and time and material resources, as well as formal and informal power from cooperatives to empower their members.

Román and Bratones (2013) adapted the CWEQ-II scale into Spanish by recruiting 164 students who have worked for at least >1 year in the company. The results showed that the CWEQ-II scale can be adapted in the Spanish language and context with four factors: opportunity, important information, support, and resources. Havaei and Dahinten (2017) tested the ability of CWEQ II to measure structural empowerment for nurses and concluded that CWEQ II can effectively measure structural empowerment and depend on the conditions of targeted work arrangements. These two studies do not measure structural empowerment in the context of cooperatives. Therefore, this study aimed to adapt CWEQ II to the context of cooperatives to see the members’ perceptions of cooperative capabilities to empower them based on Laschinger’s six sub scale CWEQ II. The scale adaptation uses six subscales because in the context of formal power and informal power, cooperatives are very dynamic and affect the existence of its members. This research is important because cooperatives aims to empower their members, yet there has no research showing how the members’ perceptions on the ability of cooperatives to empower their members been conducted so far.

2. METHODS

2.1. Study Design

This research used a quantitative approach with a survey method.

2.2. Procedure

The CWEQ-II scale was translated into Bahasa and then written items were adapted to the cooperative context. Results of writing the items were then discussed with experts. The original items comprised sixteen out of the six subscales. In discussions with experts, several suggestions were considered. The first suggestion was to separate items that were in the original language in one item. For example, the item “Tasks that use all of your own skills and knowledge” was divided into two items: “Activity to conduct new skills” and “Activity to learn new knowledge” in order to prevent bias. The second suggestion was to add new items from translated ones that indicate the same subscales. For example, adding the items “The vision of the cooperative” and “The mission of the cooperative” on the information subscale. The third suggestion was to choose the right words according to the cooperative context in writing the item.
All items written were then assessed whether they met the cooperative context by expert judgment and by five cooperative members. The items were translated back into English to see if the items written have the same meaning as the items originally written in English. The results were then discussed again with experts, demonstrating the translated items have the same meaning as the original ones.

Next, the scale was validated by nine experts using Aiken’s V method to assess compatibility between items and aspects. The scale was then distributed to five cooperative’s members with low educational background in the study area; however, no changes were made because all 28 items were understood by them. The scale consists of 28 items using a Likert scale with five points. Each subscale has a different question. a). Opportunity subscale; How much of each kind of opportunity do you have in your cooperative? Response answers: 1. None, 2. Between None and Some, 3. Some, 4. Between Some and A lot 5. A lot. b). Information sub scale; How much access to information do you have in your cooperative? Response answers: 1. No knowledge, 2. Between No knowledge and Some knowledge, 3. Some knowledge, 4. Between Some and Know A lot 5. Know A lot. c) Support sub scale; How much access to support do you have in your cooperative? Response answers: 1. None, 2. Between None and Some, 3. Some, 4. Between Some and A lot 5. A lot. d) Resources sub scale; How much access to resources do you have in your cooperative? Response answers: 1. None, 2. Between None and Some, 3. Some, 4. Between Some and A lot 5. A lot. e) Formal Power uses Job Activities Scale; What is the situation with my current cooperative? Response answers: 1. None, 2. Between None and Some, 3. Some, 4. Between Some and A lot 5. A lot. f) Informal Power uses Organizational Relationships Scale; How many opportunities do you have for these activities in your cooperative? Response answers: 1. None, 2. Between None and Some, 3. Some, 4. Between Some and A lot 5. A lot.

The scale was distributed to 45 participants to measure the validity and reliability of the scale using the corrected item-total correlation and Cronbach’s alpha. Results showed that the total item correlation point ranges from 0.384 to 0.747 with a reliability point of 0.962. The scale was then distributed to 350 participants from June to August 2019. Only 302 subjects returned the scale and then be processed. The construct validation process was then carried out by performing the confirmatory factor analysis (CFA) procedure with analysis of moment structures (AMOS) 24.

2.3. Participants

The study participants were 302 members of the Credit Union cooperative living in Sikka Regency, East Nusa Tenggara Province, Indonesia. Participants must have been a member of the cooperative for >1 year to be able to fill out the questionnaire.

3. RESULTS

The CFA was performed on 28 items, referred to as Model 1. CFA results from the six factor Model 1 of structural empowerment are indicated as follows: Goodness of Fit Index (GFI): 0.842;
Comparative Fit Index (CFI): 0.920; Root Mean Square Error of Approximation (RMSEA): 0.067 with a factor load of 0.468–0.701. All subscales were significantly correlated (p <0.001). The GFI indicator has not yet reached the model’s suitability for data analysis. Model 1 was then evaluated qualitatively by removing additional items and maintaining items made based on the original items translated and adapted to the cooperative context. Seven items were deleted, and the remaining 21 items were included in Model 2. CFA results on 21 items referred to as Model 2 were shown by the following indicators: GFI: 0.912; CFI: 0.961, RMSEA: 0.051 with a factor load of 0.521–0.875. All subscales correlate (p < 0.001). Model 2 shows that the model is in accordance with the obtained data.

4. DISCUSSION

This study showed that Model 2 was supported by data; thus, the structural empowerment of cooperative members consisting six factors and 21 items are valid. These results indicate that the CWEQ-II scale can be adapted to the cooperative context and used to measure the perception of cooperative members toward cooperative capabilities to empower cooperative members. Results are consistent with various empowerment measures in the context of cooperatives, such as the Saha and Sangwan empowerment index (2019) and Rahman and Khanam (2016). This measuring instrument does not measure many indicators, such as Saha and Sangwan (2019) but only focuses on the perception of cooperative members of the cooperative structure. However, this measuring instrument specifically measures the members’ perception of the cooperative structure, i.e., the added value of this measurement. This measurement tool can be used in a broader context, not limited by gender or specific cultural contexts.

Based on Laschinger’s perspective (2012), this measure uses six different factors by adapting CWEQ II by Román and Bratones (2013). Formal power and informal power factors are added on the grounds that cooperatives are organizations with dual nature: as profit organizations with the management system applied to for profit organizations as well as those jointly managed by members through democratic and egalitarian management structures. Thus, in the cooperative, there is formal power in the management. Management and members are specifically regulated through articles on association and by laws. Simultaneously, there is an informal power coming from relations between members and between members and management. Data support for formal and informal powers as factors of the structural empowerment scale of cooperatives, so that the structural empowerment measure in cooperatives does not only consist of four factors such as the adaptation made by Román and Bratones (2013), consisting of six factors.

This measuring instrument can have broad implications for cooperatives. So far, the success of cooperatives is based on increasing assets, capital, and number of members (Mayo, 2011; Harun & Mahmood, 2012; Ifenkwe, 2012). Assets, capital, and increased number of members are important indicators but only as indicators of successful cooperatives as profit-oriented business units. In fact, the cooperative aims to not focus on profit even though it requires profit. Profit is
only an absolute means to achieve cooperative goals, namely, member empowerment (Prinz, 2002). This adapted measurement instrument from CWEQ-II can be used as a tool to measure the success of cooperatives from the members’ perceptions so that they can complement other indicators used to measure the success of cooperatives.

All study participants were members of the Credit Union. Raiffeisen founded the Credit Union by creating a distinctive structure (Prinz, 2002). The aim of the Raiffeisen cooperative was to form a human or a group of empowered people, characterized by self-help, self-governance, and self-responsibility (Prinz, 2002). To form a group of empowered people, Raiffeisen designed a cooperative with the following characteristics: 1) Forming a credit cooperative with members in small groups based on village and religious communities. 2) The main objective of a cooperative is to help poor farmers, so that even the poorest people must remain united. 3) There is no division of residual results of operations, as far as possible without dividing profits to the business members but used for the common good. 4) The vulnerability of bad credit is high, although members live in small communities. 5) Administrative tasks are divided into two groups: those who run the business day to day and those who are supervisors. 6) Loans are divided into long- and short-term loans, just for one night. 7) The aim of the cooperative is very nuanced, i.e., “assistance” for vulnerable groups. 8) Business profits are used to donate for social activities (Prinz, 2002).

These eight characteristics show that the cooperative is a place where members get the opportunity to empower themselves when facing problems. In a cooperative, members have the opportunity to be transformed from being helpless to empowered individuals who can overcome their own difficulties. The transformation process from helpless individuals to being empowered in cooperatives is a process that occurs in a communal interaction (Peal, 1988). Individuals do not transform themselves but transform within groups arranged specifically through the statutes and by laws (Thompson, 1994; Prinz, 2002). Thus, this characteristic is in line with the concept of Kanter (1993) who understands organizations as entities that prepare opportunities for members to develop.

The self-governance and self-responsibility characteristics of cooperatives show democratic organizational governance from, by, and for members (Peal, 1988). Thus, transparency is a natural characteristic of cooperatives and allows all members to have open access to valuable information from cooperatives, including valuable information to transform themselves into self-help individuals (International Cooperative alliance, 2019). This is in line with the second factor, i.e., getting valuable information.

Based on the historical background in establishing the Credit Union, the cooperative is a support system that can gather individuals who have the same problem so that the support from fellow members can transform them from helpless to empowered individuals (Prinz, 2002). This is in line with the support factor of the organization by Kanter (1993). In Credit Union cooperatives, members must collect resources before they can access resources. Collected receipts are manifested in the form of deposits and access to resources manifested in the form of loans that can be accessed by cooperative members (Prinz, 2002). This characteristic is in line with
accessing resources according to Kanter (1993) in organizations. The compatibility between cooperative characteristics with structural empowerment factors determined by Kanter (1993) and developed by Laschinger (2012) shows that the theory is in line with basic cooperative characteristics as empowering organizations. Carrying out CFAs in the CWEQ-II adaptation process in the cooperative context shows that Kanter’s structural empowerment theory (1993) can be used, especially in Credit Union cooperatives.

5. CONCLUSION

These studies showed that the structural empowerment model adapted from CWEQ II fit with data so that it is valid and can be used in cooperative contexts to measure members’ perceptions of cooperative capabilities empowering cooperative members. Kanter’s theory (1993) is in line with characteristics of cooperative structures as organizations that empower members as developed by Raiffeisen (Prinz, 2002). Thus, this measurement tool can be used for Credit Union cooperatives; however, other types of cooperatives should be adapted to the cooperative context. Given the universal nature, principles, and values applied, this measurement tool can be used to measure the structural empowerment of other cooperative members. The limitation of this research lies in the number of homogeneous samples only taken from members of Credit Union cooperatives, although various other types of cooperatives exist, such as agricultural cooperatives, wholesalers, and multi-business cooperatives. Further studies are recommended on the use samples that are more varied and taken from various cooperative types. In addition, the limitation of this study is that the number of samples used remains small when compared to the population of cooperative members; therefore, in subsequent studies, the sizable sample size is recommended. Measuring instruments examined in this research can be used practically to evaluate the structural empowerment of cooperatives from the members’ perspective; however, this measurement can also be used to determine the relationship or predictive power of other variables that may exist in cooperatives such as psychological empowerment, cooperative members’ commitment, citizenship organizational behavior of cooperative members, motivation, and various other relevant variables.

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REFERENCES


[18] Saha, B., & Sangwan, N. (2019). Credit where credit’s due: The enabling effects of empowerment in...


Appendix

Opportunity
How much of each kind of opportunity do you have in your cooperative?
1. Challenging activity
2. The chance to obtain new skills
3. The chance to obtain new knowledge
4. Activity to conduct new skills
5. Activity for learning new knowledge

Information
How much access to information do you have in your cooperative?
6. The current state of the cooperative
7. The values of the cooperative
8. The goals of the cooperative
9. The vision of the cooperative*
10. The mission of the cooperative*

Support
How much access to support do you have in your cooperative?
11. Specific information about your business
12. Specific comments about things you could improve
13. Helpful hints*
14. Problem-solving advice

Resources
How much access to resources do you have in your cooperative?
15. Time available to accomplish obligation
16. Time available to carry out tasks of the cooperative
17. Acquiring temporary help when needed
18. Time available to fulfill the administrative matters required*

Formal power
Formal Power uses Job Activities Scale: What is the situation with my current cooperative?
19. The rewards for member achievements
20. The amount of flexibility
21. The amount of member participation in the training program*
22. The rewards for member contributions*
23. The amount of member participation in solving cooperative problems

Informal power
Informal Power uses Organizational Relationships Scale: How many opportunities do you have for these activities in your cooperative?
24. The amount of your cooperation with other cooperative members
25. The amount of your cooperation with the cooperative management*
26. Being sought out by other members for help with the problems
27. Being sought by the management/manager for help with problems
28. Seeking out ideas from professionals or other cooperative activists to develop cooperatives
*Deleted item