Adaptive Leadership Scale (Skala Kepemimpinan Adaptif) Construction for Leaders in Indonesia

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Abstract: The workforce is becoming more diversified, with four to five different generations working together. Indonesia's workforce nowadays contains 16 to 69 years old. There will be new challenges brought on by this variety, notably in terms of leadership skills. Leaders must be able to adapt and change their leadership style based on employee characteristics. However, no currently available leadership scale can identify an adaptive and flexible leader. Thus, an adaptive leadership scale is needed to address this issue. Adaptive Leadership Scale consists of 8 dimensions with 66 items using a Likert scale of 1 (totally different from me,) to 5 (very much like me). It was tested on 124 participants aged 22 to 54 years consisting of 63 male participants (M-age=30.3) and 61 female participants (M-age=29.5) who are leaders at various leadership levels and occupations. This paper described the preliminary validity and reliability test results of this scale. The results show that the Skala Kepemimpinan Adaptif is reliable ($a = 0.955$) and valid (CrIT = 0.203 - 0.613). In conclusion, the Skala Kepemimpinan Adaptif can be used to assess the adaptability of Indonesian leaders in their leadership. Discussion, implications, and suggestions are included.

1 INTRODUCTION

Studies by Linkedin showed that as many as 89% of recruiters believe that a multi-generational work environment is needed to achieve success in business (Linkedin, 2022). This was reflected in the Indonesian workforce, which consists of 16 to 69 years old workers (Badan Pusat Statistik, 2019; OECD, 2017; Oliver, 2017; Setiawan & Oktavianti, 2019). In accordance with this, the current work environment consists of four to five generations of different ages (Danley, 2020; Eldridge & Stevens, 2017; Kogan, 2007; Stanley, 2010), which can present new challenges given that each generation has different views, ambitions, beliefs, work styles, communication, and work attitudes (Bennett, Pitt, & Price, 2012; Danley, 2020; Coulter & Faulkner, 2014). Furthermore, misunderstandings between generation groups can lead to conflict, disagreement, and a counterproductive work environment (Stanley, 2010; Yadav et al., 2022). Therefore, an adaptation to each age generation's unique characteristics is needed and can be accommodated through a flexible and adaptive leadership attitude (Danley, 2020; Yadav et al., 2022).

Leadership is a deliberate process of social influence committed by an individual on other parties through the allocation of assistance and support to achieve the group's objective (Chemers, 1997 in Solaja & Ogunola, 2016; Daniëls, Hondeghem, & Dochy, 2019). There are various leadership styles, each with its focus and function, such as transactional and transformational leadership styles, which have been linked to employee well-being (Jensen et al., 2019). In transformational leadership, the leader will communicate the goals and values the group adopted, as well as the behaviors that were expected of each member as a group (Bass, 1985; Gemeda & Lee, 2020; Lai et al., 2020; Vincent-Höper, 2012). On the other hand, transactional leadership is based on rewards for members with good performance and punishment for members with undesirable performance (Jensen et al., 2019). Consequently, transformational and transactional leadership styles did not explain how flexible and adaptive leaders are.

Flexible leaders are those who have a sense of belonging and can adapt to change, including changing techniques, approaches, and leadership styles to suit the environmental context (Hoch & Bentolila, 2021). Furthermore, flexible leaders must understand contextual antecedents before applying specific leadership techniques to achieve common goals (Hoch & Bentolila, 2021; Hantoosh, 2021).

There are several scales measuring leadership in Indonesia, one of which is the Prophetic Leadership Scale by Tazkiyah, Ihsan, and Mustofa (2022). Prophetic leaders are honest, trustworthy, intelligent, and transparent (Tazkiyah, Ihsan, & Mustofa, 2022). However, the construct validity of the Prophetic Leadership Scale was questionable as indicated by confirmatory factor analysis, and it also has a high social desirability value (Tazkiyah, Ihsan, & Mustofa, 2022). The second is The Emotional Leadership Questionnaire by Anjani, Triwahyuni, and Kadiyono (2021). Just like the Prophetic Leadership Scale, The Emotional Leadership Questionnaire also does not meet construct validity requirements as measured with confirmatory factor analysis. Also, it was tested in a minimal number of participants which becomes one of the reasons behind its low validity (Anjani, Triwahyuni, & Kadiyono, 2021). Finally, there is the Servant Leadership Behavior Scale (SLBS) which contains 35 items. However, the Servant Leadership Behavior Scale was tested on leaders in the academic field only. Therefore, it was incapable of describing leaders in other areas (Melinda,

METHODS

2.1 Participants

A total of 150 participants filled out the online survey containing a questionnaire of SKA. After cleaning the data based on the inclusion criteria and completeness of answers, only 124 participants' data was further investigated. Participants were 22 to 54 years of age (M_{age} = 29.9), with 63 male participants (M_{age} = 30.3) and 61 female participants (M_{age} = 29.5). A total of 46 participants (37.09%) came from Jakarta, 21 participants (16.93%) from Surabaya, and 10 participants from Tangerang (8.06%). Teams led by participants ranged from a team with one member (0.80%) to 50 members (1.16%), with a majority of 22 participants (17.74%) leading teams of six members. A total of 73 participants (58.87%) were first-level management, 10 participants

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Antonio, & Christina, 2020). The three leadership instruments listed above were based on various definitions and theories that attempt to explain leadership from various definitions. Even so, they are not adequate to measure leadership, specifically flexible and adaptive leadership.

Flexible and adaptive leadership, on the other hand, possesses characteristics that previous leadership instruments failed to measure. While other leadership instruments seek to categorize a leader into a certain typology of leadership styles, the construct of flexible and adaptive leadership seeks to capture a leader's ability to adapt. This is because flexible and adaptive leaders can use various leadership styles according to their needs and the background antecedents.

Based on an increasingly diverse work environment, flexible and adaptive leaders are urgently needed. Meanwhile, no previous instruments can measure the flexible and adaptive leaders well. Therefore, there is a need for this instrument to identify flexible and adaptive leaders. This study aims to create this measure as a scale named Skala Kepemimpinan Adaptif (SKA/Adaptive Leadership Scale) for Indonesia's work context. In this study, we will test the scale validity and reliability to be used for measuring how flexible and adaptive a leader is.

(8.06%) were intermediate level, 26 participants (20.96%) were middle level, and 15 participants (12.09%) were top/top executive management level (12.09%).

2.2 Instruments

SKA is a leadership scale that can be administered by Human Resources or other related parties, without requiring special training. It consists of 66 items in 8 dimensions, namely (1) leading, (2) adaptive & flexible, (3) generational characteristic understanding, (4) team & commitment building, (5) choosing a collective interest, (6) fostering shared sense of pride & purpose, (7) delivering support & aid, and (8) meeting organizational objective. Participants were asked to respond to the items given in the form of a Likert scale, with 1 = totally different from me, 2 = not very much like me, 3 = undecided, 4 = much like me, and 5 = very much like me, which

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best describes the participants' work habits on each item. SKA is a unidimensional construct, so each item' score will be added up into a single score. An explanation of the definitions of the eight dimensions can be seen in **Table 1**.

Table 1: Description of Skala Kepemimpinan Adaptif 's Dimensions.

No.	Name (*Nama*)	Definition	Code
1.	Leading (*Memimpin*)	Believe in the competence of team members while being actively involved in team performance with the expertise and personal values they have, so that they are respected, and valued and inspire team members to achieve team goals.	L
2.	Adaptive & Flexible (*Adaptif dan fleksibel*)	Able to analyze a situation and task demands wholly, and recognize each individual team members so they can creatively choose the best way for teamwork based on logical considerations	AF
3.	Generational characteristic understanding (*Pemahaman karakteristik tiap generasi*)	Ability to recognize the character of team members, listen to feedback from group members, and draw insights from varied input	GC
4.	Team & commitment building *(Membangun tim dan komitmen)*	Build and maintain team commitment by accommodating the needs of each member to increase team productivity	TC
5.	Choosing collective interest (*Mengutamakan kepentingan bersama*)	Helping team members resolve interpersonal conflicts to be able to achieve team goals	CI
6.	Fostering shared sense of pride & purpose (*Membangun rasa kebanggaan dan tujuan bersama*)	Building shared values and goals, as well as members' pride in being the team member	PP
7.	Delivering support & idea (*Memberikan dukungan dan bantuan*)	Support the best performance of each team member through the strategic application of various insights and appropriate strategies	SA
8.	Meeting organizational objective (*Mencapai tujuan organisasi*)	Able to plan, organize, and communicate team tasks to members, as well as direct, delegate, and control team performance to achieve common goals	MO

2.3 Procedure

The researcher followed the instrument construction stage according to Cohen, Swerdlik, & Sturman (2013). Initially, researchers conceptualized the instruments by reviewing previous sources regarding leadership and existing challenges. Later, the researcher qualitatively recorded the words that often

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emerge from the definition of leadership in previous studies and categorized them into several keywords (Table 2).

Table 2: Keyword table example.

No	Category	Keyword	Reference
1.	Fostering shared sense of pride & purpose	Communication	Hantoosh (2021) Hoch & Bentolila (2021) Solaja & Ogunola (2016) Yadav et al. (2022)
2.	Adapt & Flexible	Adaptive and flexible	Burns (2003) Charbonnier-Voirin & Roussel (2012) Gursory et al. (2008) Hoch & Bentolila (2021) Kaiser & Overfield (2010) McNally (2017) Yadav et al. (2022)

After a synthesis was made to look at the characteristics of the leader, each keyword was then triangulated and categorized into dimensions. Each dimension was further operationalized into behavioral indicators based on the theories it is derived from to suit the daily life of a leader (Table 3.). It is through this indicator that items begin to be created and qualitative testing was carried out utilizing a readability test, by college students, and expert judgement, by a psychologist.

Before carrying out data collection, researchers conducted expert judgment and readability tests to increase content validity. In addition, construct validity is trying to be improved by conducting an in-depth exploration of flexible and adaptive leadership constructs during the conceptualization test, and internal consistency testing during the test analysis stage. Based on the results of the readability test and expert judgement, the researcher changed several items. For example, the researcher received feedback to insert more information so that readers would understand it more. Thus, "My actions and decisions at work are by my principles" (*Tindakan dan keputusan saya di dalam bekerja sesuai dengan prinsip pribadi yang saya pegang*) changed to "My daily actions and decisions reflect my personal beliefs and values" (*Tindakan dan keputusan saya di keseharian mencerminkan kepercayaan dan nilai personal yang saya anut*). Further, the psychometric testing was conducted to test the SKA's validity and reliability.

Table 3: Skala Kepemimpinan Adaptif's dimensions, indicators, and items example.

Dimension	Indicators	Definition	Items

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Multigenerational characteristic understanding: Ability to recognize the character of team members, listen to feedback from group members, and draw insights from varied input	Know audience	Recognize each team member's characteristics	I recognize the strengths and weaknesses of my team members.
			I understand that there are differences in how team members work of different ages and generations.
	Good listener	Be a good listener to team members	I prefer to talk than listen to others.
			I like being a person that team members feel comfortable talking to.
	Approachable	Able to receive feedback from team members	I am open to various kinds of feedback.
			I don't like it when colleagues criticize me.
	Openness to learn	Using feedback as a opportunity to better themselves	I learn and evaluate myself based on feedback.
			The quality of my work has improved because of feedback I received before.

2.4 Data Analysis

Descriptive testing was carried out to determine the characteristics of the sample participants. Then, reliability testing using Cronbach Alpha was carried out for the overall items in the instrument. Item analysis was also carried out for the measuring instrument as a whole and each dimension. Items that do not meet a CrIT score above 0.2 (Dancey & Reidy, 2007) will be eliminated. Data analysis was carried out using software SPSS ver. 26.

2 RESULT

Reliability testing using Cronbach Alpha was carried out on the items in the measuring instrument. Cronbach alpha > 0.70 ($\alpha = 0.955$) indicates that all items and measurement tools reliably measure the adaptivity and flexibility of leaders (Anastasia & Urbina, 1997). This result indicates that 95.5% variance on the observed score is the true score and 0.5% is the error variance. Thus, the SKA is internally consistent and measures the same attributes. Furthermore, using CrIT analysis also yields a satisfactory item validity which shows that the SKA items in each of its dimensions are valid for measuring the adaptability and flexibility of leaders. The lowest CrIT score was obtained on the leading dimension, namely 0.203 - 0.613. The CrIT score of each dimension can be seen in Table 4.

Table 4: Psychometric Test Result with Corrected Item-Total Correlation.

No.	Dimension	CrIT
1.	Leading	0.203 - 0.613
2.	Adapt & Flexible	0.403 - 0.618
3.	Generational characteristic understanding	0.257 - 0.535
4.	Team & commitment building	0.391 - 0.654
5.	Choosing collective	0.368 - 0.568

	interest				aid	
6.	Fostering shared sense of pride & purpose	0.466 - 0.634		8.	Meeting organizational objective	0.399 - 0.619
7.	Delivering support &	0.378 - 0.577				

3   DISCUSSION

As the workforce becomes more diverse, with various generational age groups working together, conflicts will be inevitable. On the other hand, a good leader can be the solution to this issue, specifically an adaptive and flexible leader. Different from other leadership styles, adaptive and flexible leaders will not only use one way to deal with numerous employees. Adaptive and flexible leaders will use various ways depending on the situation or employee characteristics. However, no leadership scale in Indonesia can identify adaptive and flexible leaders. Consequently, the researcher felt the need to construct the Skala Kepemimpinan Adaptif (SKA/Adaptive Leadership Scale).

Based on the results we gathered, SKA proved to be reliable and valid for measuring adaptive and flexible leadership skills. SKA can be used by Human Resources and other related parties to identify prospective leaders in terms of adaptive and flexible leadership attributes. This scale is significant because of the increasingly diverse work environment from year to year, where various generations work together in one team. The diversity that exists can lead to misunderstandings and disputes that end up in conflict (Stanley, 2010; Yadav et al., 2022). Therefore, leaders who can change their leadership styles depending on the needs of the situation and the interlocutor are needed.

Even so, there are several limitations in this scale construction. As this was the preliminary study of the scale construction, this scale was only tested on a limited number of participants. Thus, a further analysis using confirmatory factor analysis procedure was needed to check each item's factor-loading. Finally, this study only used validity testing using an internal consistency approach. With this limitation, further research with more diverse participants using another analytical approach need to be carried out.

4   CONCLUSION

The items in the Skala Kepemimpinan Adaptif (SKA/Adaptive Leadership Scale) are proven to measure the flexible and adaptive leadership behavior with reliable results. This scale also has the capacity to distinguish between leaders who are adaptive and flexible in their leadership versus those who are not.

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