Leadership diagnostic survey among Indonesian students using a passive bias quiz: Guaranteeing leadership sustainability

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Abstract. This research aimed to show the leadership diagnostic survey in students by using a bias quiz. A true leader was the highest level of leadership that was able to bring the company to achieve its goals by optimizing all available resources. In reality, leaders were difficult to avoid cognitive bias, which would affect the quality of leadership and decision making. This research was conducted in survey research by collecting data through giving questions or statements to respondents in written form using Google Form and shared through social media, specifically Line, WhatsApp, and Instagram. This research population was randomly selected, with a total number of respondents initially targeted at 100 respondents. It is found that by conducting a diagnostic survey of students, an illustration of the bias in the implementation of leadership will be obtained, gain awareness, and correct the bias.

Keywords: true leader, cognitive bias, correct the bias

1. Introduction
1.1. Significance role of leader

The leader's role in the decision-making process is central and strategic because it can determine the direction of the organization and make decisions, especially in certain situations that require superior leadership qualities. An effective leader is a leader who is able to create situations that can inspire his followers to achieve goals that are better and higher than existing conditions by reading situations, addressing problems, being responsible, and being able to develop followers [10]. This is based on the capability, integrity, and high sense of ownership of the institution they lead [8]. Effective leadership is leadership, able to unite perceptions or perspectives of employees and company leaders in giving a clear direction to achieve company goals, among others through the formation of good mental work, providing work motivation, guidance, direction and good coordination in working by a leader to his subordinates [3].

Although there are different views, whether leaders are born or made, there is an agreement among experts that a leader must have the ability to influence others to accomplish objectives or goals by guiding them to ensure a cohesive and coherent condition [9]. It is because leadership is not a position or title, but birth from a long process of change in a person [7]. Moreover, although it is not easy to carry
out genetic research to identify genes that have traits pre-programmed in DNA, the ability to lead later on [9].

It is believed that future leaders are not only leaders who can face the challenges of change and future developments, but also (a) leaders who have the agility to think comprehensively, think strategically, and have high adaptability to change; (b) leaders who have mental models (paradigms, mindsets, visions, views on global developments) that are flexible and have a high sensitivity to environmental change and development; (c) an instinctive leader (maker instinct), have clarity about what they make but are very flexible about how they get it (clarity), able to turn ‘dilemmas’ into profits and opportunities, have the ability to learn in-depth and others [8]. Also, future leaders are not only leaders who have the character of honesty, loyalty, sincerity, discipline, commitment, and high dedication; not also a leader who is only able to face the challenges of changing times, but a leader who also has: (a) agility to develop self-mind and ability, or ‘learn’, to have more comprehensive thinking, capable strategic thinking to develop the organization; (b) mental models (paradigm, mindset, vision, outlook) that are flexible, adaptive, sensitive, and instinctive towards various forms of environmental change and development; and (c) being able to turn ‘dilemmas’ into opportunities. In short, it can be said that organizations in Indonesia need leaders who are capable of ‘acrobatic’ in a nimble, strategic, and professional manner in the future [8] citing Hannah & Avolio, 2010; Lawrence, 2013; Leonard, 2016.

The above mentioned ideal future leaders’ qualifications are difficult to fulfill. It is feared that most organizational leaders in Indonesia are not all capable or slightly capable of facing rapid, uncertain, and complex environmental changes. Consequently, efforts to prepare future leaders should be made early [6]. These needs are expected to be obtained from students, as young intellectuals, who are prepared to play an important role in the governance of social life. They need to improve their leadership readiness, especially in facing future challenges that are increasingly sharp and with directions that are difficult to predict. However, in general, there are still many doubts about the leadership abilities of students. As leaders of tomorrow; it is imperative they grasp the understanding of the many leadership styles, know the leadership models, and are exposed to leadership development programs that enable them to increase their knowledge, competence, skills, and capabilities as leaders.

1.2. Leadership readiness
This research is based on in-depth surveys and interviews with students from one of the leading private universities in Indonesia. Although leadership readiness is a very old concept, research on it is still rarely done. It is especially in carrying out leadership readiness diagnostics as part of the preparation of prospective leaders to face an increasingly uncertain future with ever-changing environmental conditions, even change quickly and difficult to predict its direction [6] [8].

Basically, leaders must act objectively in every manner so that it creates a fair and convincing leadership quality. We, including leaders, cannot avoid cognitive bias because they are so often unconscious that merely telling ourselves to do better will not solve the problem [9]. A cognitive bias, which is a form of a systematic error in thinking-part of our brains hardwiring-that, causes us to act repeatedly in an irrational way. It consists of several biases that will affect leadership, which can have an impact on how we lead our team and the decisions we make, as of (a) affinity bias, which relates to the predisposition we all have to favor people who remind us of ourselves; (b) confirmation bias as our human tendency to seek out or notice information that supports our existing beliefs; (c) conservatism bias, which sees us favor familiarity; and (d) fundamental attribution error, which refers to our tendency to believe that what people do reflects who they are [5].

1.3. The purpose of study and paper written
This research and paper were compiled and made to introduce and implement passive bias queries, namely a study to measure the perceptual bias of respondents (in this case, students) about leadership steps with bias content in them. It is expected that the findings will become a model for awareness
development and strategy formulation to minimize or control the possibility of bias occurring in the implementation of leadership.

2. Literature background

2.1. True leader

There are many definitions and understandings of leadership, and how their significant role brings the company to achieve its goals. These are both based on the demands of shareholders and their own vision, acting as inspirational, protectors and guides of the organization they lead, even as role models for all stakeholders. However, the very basic question is, how can a leader be called a true leader?

When someone finds his vision and mission, there is peace within inner peace and forms a solid building of character, every speech and action begins to exert influence on the environment, and its existence encourages change in its organization, that is when someone is born a true leader [11]. As a reflection of being a true leader, the leader is expected to be a wise figure [4], brave in making decisions authoritative, and able to lead his organization to achieve a common goal [1].

A fair and wise leader will only side with the truth. He is always proportional, does not distinguish people based on their descent, ethnicity, and class [3]. The function of a leader who bases on understanding Indonesia’s democratic leadership is that he is able to be fair and not embody one interest above other interests.

2.2. Leadership readiness

The basic understanding of leadership readiness is the degree to which one feels ready to lead or feels that leadership-oriented behavior will lead to success [5]. In fact, leadership readiness is an integral part of leadership capability, in which leadership capability includes three aspects referred to as possession of leadership self-efficacy ("ready"), the exhibition of motivation to lead ("willing"), and possession of leadership skills ("able") [8].

Some authors state that leadership readiness is a situation or condition related to (a) various efforts to prepare leaders for tomorrow which are carried out today, (b) explore and develop leadership talents for tomorrow in an innovative way, (c) the process of identifying and developing future generations of leaders, (d) developing the skills, abilities, and insights that are most needed by future leaders to ensure future performance, and (e) preparation for becoming leaders who are ready to emerge or 'present' to face various opportunities in the future, especially because environmental conditions will still change, even change quickly and difficult to predict its direction [8].

To be concluded, the average leadership readiness of students included in the category of slightly high. In other words, learning goal-oriented), development efficacy), leader complexity, and metacognitive ability of students when students must appear as future leaders in the less high category [8].

2.3. Thinking bias

Often, we consider the truth that is believed today to be absolute, without questioning the other possibilities and mistakes of our way of thinking. In some ways, our thoughts may not be complete. This is because it is influenced by intuition, experience, and knowledge of each individual. To overcome this is to think critically, which begins by realizing the possibility of mistakes in one's mindset [2].

Thinking biases are a brief review that generally in the form of a brief paragraph on research. It summarizes some of the main parts of a study to understand the basic points of the research. Overall there are more than 100 thinking biases, with nine of them seems particularly relevant to the world of both education and support [3] as of:

1. Confirmation bias, the tendency to search for, interpret, favor, and recall information in a way that confirms or strengthens one's prior personal beliefs or hypotheses.
2. The Halo Effect describes how the overall impression of someone is influenced by either one part of the character of their first opinion.
3. The Hawthorne Effect describes it as difficult to give someone feedback on how they are doing.
4. Negativity bias irrationally weighs the potential for a negative outcome as more important than a positive outcome.
5. The Bandwagon Effect describes how one is more likely to believe in an idea if lots of other people already believe it.
6. The Dunking Krugen Effect describes how unskilled people tend to overestimate their ability, whereas experts doubt themselves.
7. The Ikea Effect describes people as having a disproportionately high value on the things they personally create.
8. Outcome bias describes that people often judge the quality of decisions based on the eventual outcome.
9. The Planning Fallacy, which describes that people tent to under-estimate how long it will take them to complete a task.

2.4. Diagnostic bias and diagnostic survey
Diagnostic bias (diagnostic suspicion or provider bias) is when the perception of the color is diagnostic. It can happen when the knowledge of exposure is used as a diagnostic criterion. It can also happen because personal biases, such as prejudice or subjective judgment, affect a diagnosis. While the diagnostic survey is a psychological procedure for workplace analysis, which is intended to determine the motivational potential. It results primarily form the work task and the other properties of a working system, and to indicate this as a point value. The diagnostic survey is also a brief review (generally in the form of a brief paragraph) on research that summarizes some of the main parts of a study so that readers can understand the basic points of the research.

3. Research method
3.1. Research design
This research was conducted in survey research by collecting data through giving questions or statements to respondents in written form using google form and shared through social media, specifically Line, WhatsApp, and Instagram.

3.2. Population and samples
This study population was randomly selected, with a total number of respondents initially targeted at 100 respondents. However, the implementation varied slightly depending on the number of respondents who answered the questionnaire had been shared.

3.3. Data collection techniques
- The data collection technique used in this study was Questionnaire Technique, in the form of a questionnaire distributed through social media (Line and Instagram) by using Google form.
- Passive Bias Quiz arranged in 12 questions to examine the perceptions of respondents to the steps to implement leadership, namely as follows:

| No | Question                                                                 | Answer |
|----|--------------------------------------------------------------------------|--------|
| 1  | What you notice first about people around you are the characteristics that make them different from you | Yes    |
| 2  | You make it a general rule never to discuss the subjects of race, ethnicity, politics, age, religion, gender, and sexuality when you are at work | Yes    |
| 3  | When others make bigoted remarks or jokes, you either laugh or say nothing because you don’t want to seem sensitive or self-righteous | Yes    |

Table 1. Passive Bias Quiz
| No | Question                                                                                                                                                                                                 | Answer |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 4  | When you see media that are targeted at an ethnic, gender, or religious group that you do not represent, you usually ignore them                                                                                 | Yes    |
| 5  | When you look for a mentor or protégé, you pick someone like yourself                                                                                                                                    | Yes    |
| 6  | If someone tells you about a cultural difference that you have never heard of, you rarely ask questions                                                                                                | Yes    |
| 7  | You are affiliated with organizations that practice subtle discrimination, but you say nothing because you did not create the rules                                                                 | Yes    |
| 8  | Before you hire someone for a position, you have a vague picture in mind of what the ideal candidate would look like                                                                                       | Yes    |
| 9  | Your conversations make use of phrases like “you people” or “our kind”                                                                                                                                     | Yes    |
| 10 | You avoid talking about cultural differences when dealing with people different for you because you are afraid of saying the wrong thing                                                                  | Yes    |
| 11 | When complimenting someone from a different background, you might tell them, “You are nothing like the others” or “I really don’t think of you as a………..”                                                    | Yes    |
| 12 | There are people in your organization whom you like and respect but whom you would feel uncomfortable introducing to your family or close friends                                                   | Yes    |

3.4. **Scoring**

There are five points for each answer in which the “Yes” percentage is greater.

3.5. **Interpretation**

Since the question in the questionnaire is to assess the extent of bias that underlies the decision making of the respondent, the best score is 0. It reflects no bias at all that shows the maturity or future of the respondent in making decisions.

A score between 1-20 is a warning sign to eliminate passive bias from the respondent's personalities. A score between 21-40 reflects a passive bias that should not exist in the organization and society. A score above 40 proves that there are difficult things in the organization, among others, intolerant attitudes towards diversity or a low level of sensitivity to culture. If not followed up properly, these conditions will potentially destroy the integrity of the organization, inequality of perception, and attitude to advance the organization.

4. **Research results**

4.1. **Respondent’s profile**

4.1.1. **Job or work status**

As is shown in Figure 1, most of the respondents are students, as the main purpose of this study.
4.1.2. 

**Respondent’s profile based on gender**

As shown in Table 2, the composition of participants in this study was almost equally distributed between male and female.

### Table 2. Respondent’s Profile Based on Gender

| Gender   | Number of Respondents | Percentage |
|----------|-----------------------|------------|
| Female   | 53                    | 53.00      |
| Male     | 47                    | 47.00      |
| Total    | 100                   | 100.00     |

Source: Researcher

4.2. **Research’s result**

The tabulation of the results of filling in the questionnaire by the respondent is as listed in Table 3.

### Table 3. Tabulation of Results for Questionnaire Completion by Respondents

| No | Question                                                                                     | Yes (%) | No (%) | Scoring |
|----|-----------------------------------------------------------------------------------------------|---------|--------|---------|
| 1  | What you notice first about people around you are the characteristics that make them different from you | 85      | 15     | 5       |
| 2  | You make it a general rule never to discuss the subjects of race, ethnicity, politics, age, religion, gender, and sexuality when you are at work | 86      | 14     | 5       |
| 3  | When others make bigoted remarks or jokes, you either laugh or say nothing because you don’t want to seem sensitive or self-righteous | 76      | 24     | 5       |
| 4  | When you see media that are targeted at an ethnic, gender, or religious group that you do not represent, you usually ignore them | 66      | 34     | 5       |
| 5  | When you look for a mentor or protégé, you pick someone like yourself                        | 55      | 45     | 5       |
| 6  | If someone tells you about a cultural difference that you have never heard of, you rarely ask questions | 48      | 52     | 0       |
| No | Question                                                                 | Yes (%) | No (%) | Scoring |
|----|--------------------------------------------------------------------------|---------|--------|---------|
| 7  | You are affiliated with organizations that practice subtle discrimination, but you say nothing because you did not create the rules | 46      | 54     | 0       |
| 8  | Before you hire someone for a position, you have a vague picture in mind of what the ideal candidate would look like | 93      | 7      | 5       |
| 9  | Your conversations make use of phrases like “you people” or “our kind” | 69      | 31     | 5       |
| 10 | You avoid talking about cultural differences when dealing with people different for you because you are afraid of saying the wrong thing | 81      | 19     | 5       |
| 11 | When complimenting someone from a different background, you might tell them, “You are nothing like the others” or “I really don’t think of you as a...........” | 62  | 38     | 5       |
| 12 | There are people in your organization whom you like and respect but whom you would feel uncomfortable introducing to your family or close friends | 64      | 36     | 5       |

Total Scoring 50

Because the score obtained above 40 illustrates that the selected respondents have high passive bias and greatly affect the implementation of leadership functions. To overcome this, seriousness and high awareness from respondents are needed to accept diversity and a higher tolerance for differences in cultural, ethnic, religious, or racial backgrounds. True leadership should be multifaceted, stand above all differences, and diversity should be addressed as strengths and not becomes a further problem.

5. Conclusion
Although the results of the study illustrate the existence of a passive bias from respondents, which indicates a tendency towards not accepting differences, it is expected that these results will further develop. So that, the respondents (students) do not further implement discrimination in their leadership attitudes, in the form of intolerance towards ethnicity, religion, and race [3], both in the form of direct, indirect discrimination, association, perception, disregard, and victimization.

In addition, it is expected that respondents will develop leadership attitudes that are broad-minded and wise, especially in the form of assessments based only on competence after previously providing equal employment opportunities and self-development opportunities. This is based on the principle of Equal Employment Opportunity. In this employment practice, employers do not engage in employment activities prohibited by law. It is illegal for employers to discriminate against an application or employee based on race, age, color, sex, religion, and national origin. Moreover, with a competitive but conducive working atmosphere, diversity, and equality have become imperative for organizations or companies to achieve company-related goals [12].

5.1. Needs and advice for further research
Researchers deem it necessary to carry out further research using a broader range of measurement components based on the magnitude of the challenges faced in forming leaders, especially future leaders with increasingly dynamic and difficult challenges. Further research and the results of this study are expected to be able to become comprehensive guidance and minimize decisions with a high degree of bias.
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