Job Analysis in A Psychologycal Safety Perspective: Roles, Data Collection Techniques, and Assessment Bias

Nadia Maharani Santosa[1]

[1]Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, 202210515076@mhs.ubharajaya.ac.id

Corresponding Author: 202210515076@mhs.ubharajaya.ac.id

Abstract: The progress and success of a company are generally influenced by the quality of its human resources. One effective approach is to place individuals in positions that match their qualifications, allowing human resources within the organization to function optimally and support the achievement of organizational goals. The creation of a sense of security in the work environment is also influenced by the extent to which the organization is able to establish clear roles and expectations for each employee. Clarity regarding tasks, responsibilities, and performance standards makes individuals feel more capable of controlling their work and understanding their contribution to the team. This study employs a descriptive analysis method and a literature review, using research published between 2020-2025. The results indicate that job analysis plays an important role, job analysis utilizes several data collection techniques. Furthermore, job analysis also faces challenges related to bias.

Keywords: Job Analysis, Psychological Safety Perspective

Introduction

Human resources are the most important asset in an organization because they drive and control various resource elements. The success of a company is greatly influenced by the quality of its human resources, so certain abilities and strengths are needed for the organization to function effectively. Even if the number of workers is adequate, without the right competencies, the organization cannot maximize the potential of its human resources (Febriyanti & Sampe, 2024). In addition, a work environment with a high level of psychological safety can encourage employees to be more innovative because they feel safe to be proactive, ask questions, seek feedback, and ask for help without worrying about negative judgments (Uguy et al., 2024). This sense of security arises when individuals are confident that their participation does not pose a threat, and it is further reinforced by a supportive management system in which leaders help members adapt, create a supportive atmosphere, and encourage openness so that employees feel more comfortable and

protected within the organization (Baswara, 2023). The creation of a sense of security in the work environment is also influenced by the extent to which the organization is able to establish clear roles and expectations for each employee. Clarity regarding tasks, responsibilities, and performance standards makes individuals feel more capable of controlling their work and understanding their contribution to the team. When the work structure is well organized and information about roles is communicated transparently, the risk of miscommunication can be minimized so that employees can work with more confidence and focus (Syam & Ahmadi, 2025). This condition also strengthens the foundation of psychological safety in the workplace. Therefore, companies need to have effective and efficient recruitment plans to obtain quality workers who are in line with the organization's strategies and objectives (Sardi & Galinging, 2024).

This effort can be done through job analysis to ensure that individuals are placed in positions that match the required qualifications, competencies, and characteristics (Hildani & Kamaruddin, 2024). According to Levine (in Khtatbeh et al., 2020), job analysis is defined as the process of collecting, analyzing, and compiling information about a job from various aspects, including its components, characteristics, and requirements. The results of job analysis form the basis for decision-making in recruitment, selection, training, promotion, and compensation. In addition to being beneficial for the organization, job analysis also provides benefits for employees through placement that matches their qualifications. Job analysis serves as an important method for identifying and assessing the requirements needed in a job, which is useful for obtaining clear job descriptions and specifications. This information is used as a basis for placing employees in the most suitable positions (Hildani & Kamaruddin, 2024). Job analysis is carried out to design the organization and determine job descriptions, job specifications, and job evaluations (Asrin & Supendi, 2024).

According to Rivai (in Ariyanti et al., 2024), job analysis aims to assess the influence of the work environment on individual performance, update regulations that support organizational goals, and ensure that employees are placed according to their qualifications and competencies. In addition, job analysis also assists in planning human resource needs, developing employee potential, preparing training programs, setting performance standards, and providing fair compensation. Job analysis can also help organizations conduct more accurate and objective performance appraisals. By setting clear performance standards based on the job descriptions in the job analysis, management can assess employee performance more accurately and fairly. A clear understanding of the job can help management provide input on the extent to which employees can achieve the targets set by the organization. In addition, job analysis plays a role in determining positions that require performance improvement and serves as the basis for developing plans tailored to job requirements. This makes job analysis a clear guide for continuous performance development and supports the effective evaluation of employee performance (Mardiyah et al., 2025).

Job analysis also has a very important purpose for an organization. According to Hanggraeni (in Nurwahida et al., 2025), job analysis has various strategic objectives in human resource management. These objectives are to understand the environmental challenges that affect employee performance, remove irrelevant or discriminatory job requirements, and identify aspects of work that can improve work quality. In addition, job analysis also plays a role in future workforce planning, matching applicants with available positions, and supporting the formulation of HR policies such as training and career development. Through job analysis, it is also possible to set objective performance

standards, facilitate the placement of employees according to their competencies, regulate the pattern of interaction between superiors and subordinates, and assist in the process of redesigning the organizational structure when changes occur.

Proper decision-making is one of the key factors used to determine the direction and success of an organization. Management is required to make quick and accurate decisions when the organization faces uncertain conditions. Decision-making usually relies on available information, experience, and personal judgment. However, in difficult situations, bias can be an important factor that can impact strategic decisions, from planning to risk analysis. Research shows that cognitive bias, which is an unconscious mental tendency that can cause errors in thinking, often influences the decision-making process (Alifya et al., 2024). When selecting job candidates, managers who have to make decisions may use stereotypes to inform their decisions. In addition, people from minority and oppressed groups often receive poor treatment, face prejudice, and encounter stigma related to their identity. This poor treatment can come from clients, coworkers, or managers. This bias can negatively impact the extent to which employees are able to present their true selves in the work environment and can also affect their psychological and physical well-being, including various other aspects of work performance (Cunningham & Cunningham, 2022).

Several studies have discussed the importance of job analysis as a strategic technique in human resource management. For example, research by Jamilah et al. (2025) states that job analysis supports organizational structure design and employee evaluation. Another study by Komalasari et al. (2022) states that job analysis helps determine tasks, responsibilities, and job specifications to suit organizational goals.

Literature Review

Job analysis is a systematic process for identifying the duties, responsibilities, competencies, and working conditions required for a specific position. From a psychological safety perspective, the job analysis process focuses not only on technical job descriptions but also on how the social and emotional environment in the workplace supports employees' sense of security in speaking up, asking questions, and expressing ideas without fear of negative consequences. Previous studies have emphasized that psychological safety is a crucial factor in improving the quality of job analysis data, as participants feel more comfortable providing honest information about job demands, obstacles, and required competencies. The primary role of job analysis in this context is not only to produce job descriptions but also to serve as a basis for developing organizational interventions that are more humane and responsive to employee psychological dynamics, including training development, job design, and fairer performance evaluations.

Data collection techniques in job analysis, such as interviews, observations, questionnaires, and the critical incident technique, are also influenced by the level of psychological safety in the workplace. For example, in-depth interviews are more effective when respondents feel psychologically safe, allowing them to share their true work experiences, including the emotional challenges they experience. Similarly, the critical incident method, which requires openness to disclose both positive and negative events at work, relies heavily on supportive psychological conditions. The literature also shows that low psychological safety can reduce the accuracy of job analysis data, as employees tend to provide normative or defensive answers.

Furthermore, a psychological safety perspective provides new insights into the potential for bias in the job analysis assessment process. Bias can arise from assessor bias,

employee perception bias, or systemic bias reflecting a non-inclusive organizational culture. When psychological safety is low, assessment bias tends to increase, for example through self-enhancement bias or fear-induced distortion, where employees modify information to appear more competent or meet superior expectations. Previous research suggests that ensuring psychological safety during the job analysis process can minimize these biases and produce more objective data. Thus, integrating psychological safety principles into job analysis not only improves the quality of the information collected but also encourages a more transparent, fair, and congruent assessment process that aligns with employees' psychological well-being.

Research Methods

This study uses a descriptive analysis method on the collected data and presents the results of job analysis using a literature review, which involves collecting, reading, and recording data, then systematically processing the research data. Snyder (in Nurislaminingsih et al., 2020) explains that a literature review is a research method that aims to collect, summarize, and examine the essence of previous studies, including analyzing the views of experts in various scientific texts. The researchers identified and analyzed a number of accredited journals discussing job analysis with a publication range of 2020-2025 that were considered relevant to the topic of this study. The academic databases used were Lens.org, Publish or Perish, and Google Scholar.

Result and Discussion

Based on a review of various recent journal articles, it was found that job analysis has a role, various data collection techniques, and challenges of bias in job analysis.

The Role of Job Analysis

From a collection of previous studies, several roles of job analysis in the context of human resources were obtained, including:

1. As the basis for preparing job profiles

Research by Anwar et al. (2023) shows that job analysis is the basis for developing job profiles that can add to the understanding of job descriptions, qualifications, competencies, and employee performance standards. The results of developing these job profiles ultimately enable companies to adjust the workload to the available employees through the Full Time Equivalent (FTE) method, thereby increasing performance and productivity. This is in line with research conducted by Fajrianti et al. (2023), which states that through the results of job analysis, organizations can determine the characteristics that prospective employees must have before filling certain positions, which then become the basis for developing job profiles. Job profiles serve as the main source of information for recruiters in the process of recruiting new employees.

2. As a basis for creating a new organizational design (restructuring)

Dewiyani et al. (2024) found that job analysis plays a role in creating a new organizational design (restructuring) that aims to make work more effective and efficient. To carry out restructuring, job analysis, job evaluation, and job mapping are conducted. In line with the research by Manurung & Nasution (2022), the results show that if the position of staff and job analysis do not meet the company's strategy, restructuring is carried out.

3. As a Basis for Strategic Management Decision Making

Research conducted by Taamneh et al. (2022) states that job analysis has a positive relationship with strategic human resource management decision making. The relationship

between job analysis and strategic human resource management decisions is due to two main factors. The first factor is the existence of a centralized recruitment and selection system, and the second factor is the application of a rational approach in the recruitment process and human resource management decisions that are oriented towards productivity and profit. In line with the research conducted by Setiawan et al. (2022), there is a positive relationship between job analysis and the effectiveness of the employee recruitment process. With job analysis, the selection process can be carried out by adjusting the qualifications of candidates to the specified job specifications, thereby potentially improving employee performance and business productivity.

4. As a Basis for Developing a Performance Appraisal System

Research conducted by Nastriana & Budiarta (2025) states that job analysis plays an important role in building a fair and objective performance appraisal system. Each job position has clear performance indicators that serve as measurements in employee performance appraisals. In addition, job analysis also provides data that can be processed into important information as a basis for formulating career development policies. Through the implementation of accurate job analysis, organizations can identify the competencies needed and design appropriate development programs to improve employee performance and effectiveness.

Job Analysis Data Collection

In general, job analysis is the process of identifying and determining in detail the tasks and requirements of a particular job, including aspects related to the performance of tasks in that position. Information about job analysis can be obtained through various data collection methods or techniques (Ariyanti et al., 2024).

5. Interview and Observation Methods

The studies by Anwar et al. (2023) and Dewiyani et al. (2024) used interviews with job holders and immediate supervisors to obtain accurate data on the tasks, responsibilities, and competencies required. Interviews are considered effective for eliciting information about the actual situation. In line with the research by Asrin & Supendi (2024), through the interview process with position holders, both individually and in groups, data and information related to the relationship between job requirements and employee performance or behavior can be obtained.

6. Observation Method

Research by Asrin & Supendi (2024) Observation was carried out by observing employee behavior and work activities, both directly and indirectly. In direct observation, the study was conducted by carefully observing the position holders, while in indirect observation, data was obtained through notes or work records. Furthermore, research by Komalasari et al. (2022) conducted observations by observing the situation in the organizational environment and its employees, which could be done directly in the field through physical observation.

7. Questionnaire Method

Dewiyani et al. (2024) also used questionnaires and recording techniques to complement their observations. This approach facilitated comparisons between the perceptions of position holders and the needs of the organization. Research by Asrin & Supendi (2024) Questionnaires are also used as data collection tools that can be specific or general in nature. In specific questionnaires, respondents are usually asked to explain how often they perform certain tasks, the importance of these tasks in achieving work results,

the level of difficulty, and when they learned them. Meanwhile, general questionnaires focus on broader questions regarding job requirements. Komalasari et al. (2022) used questionnaires or scales to collect data by asking employees to directly write down the activities they perform every day in the organization, including the time of implementation and the type of activities carried out.

B. Bias in Job Analysis

In conducting job analysis, there are several biases that pose challenges in assessment, including:

1. Cognitive Bias

Job analysis can give rise to bias at various stages, such as recruitment, promotion, and performance evaluation. Cognitive bias can also influence the implementation of job analysis, as revealed by research by Thomas & Reimann (2023), which found that various forms of bias in the interview process, such as confirmation bias, halo effect, in-group bias, order effect, peak-end rule, status quo bias, and stereotyping bias, have a significant influence on decision- making during the recruitment process. There are also differences in blind spot bias tendencies between male and female HR employees. Male HR employees tend to have greater blind spot bias when making recruitment decisions compared to female HR employees. In line with research conducted by Lv et al. (2023), the halo effect has a strong influence on the selection process carried out by HR managers. In recruitment activities, companies conduct interviews as the most frequently used method for selecting employees. Various factors such as the candidate's level of education, the reputation of the candidate's educational institution, appearance, and speaking ability are often considered indicators of ability and competence. The halo effect causes HR managers to tend to make inaccurate overall assessments based on a candidate's strengths in one particular aspect.

Ramazanpour's (2023) research identified three causes of bias: systemic bias, individual experience, and organizational response. Systemic bias includes organizational policies, formal procedures, and assessment criteria that can reinforce bias in the system. In addition, systemic bias includes cultural norms that reflect the influence of social and psychological factors, such as the formation of stereotypes that unconsciously create inequality, while individual experience shows employees' perceptions of injustice towards HR practices.

2. Gender Bias

Kanij et al. (2024) found that gender bias in job advertisements, where the language and structure of the advertisement often lean toward male candidates, indicates that a job analysis process that does not understand diversity aspects has the potential to reinforce gender inequality and reduce the interest of female candidates.

In line with research conducted by Heilman et al. (2024), which states that gender bias arises due to a mismatch between stereotypes about women and the requirements of jobs or fields

that are considered masculine. The characteristics commonly associated with women are not in line with the way masculine jobs and fields are carried out. This leads to the assumption that women lack the ability to succeed in these fields, which in turn triggers negative expectations of their performance.

Cconclusion

Human resources are the most important asset in an organization or company because they are the main driver and controller of all existing resource elements. The progress and success of a company are generally influenced by the quality of its human resources. One way to achieve this is by placing individuals in appropriate positions and roles so that human resources within the organization can function optimally and support the achievement of organizational goals. This process can be carried out through job analysis, which helps identify the qualifications, competencies, and characteristics of individuals who are suitable for certain positions. Job analysis is carried out to design the organization and determine job descriptions, job specifications, and job evaluations. Based on a review of various recent journal articles, it was found that job analysis has several roles, namely as the basis for compiling job profiles, as a reference for organizational restructuring, as a strategic decision-making tool for human resource management, and as a means of developing a fair and objective performance appraisal system. Data collection techniques in job analysis include interviews, observations, and questionnaires. There are also challenges of bias in job analysis, such as systemic bias, gender bias, and cognitive bias.

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