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Tama Ba Ang Landas? Job Mismatch and Employees' Work Performance in Baguio City, Philippines

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ABSTRACT

This study examined the relationship between perceived job mismatch and work performance among 191 full-time employees in Baguio City, Philippines. Using a quantitative, cross-sectional, descriptive-predictive research design, data were collected through a researcher-developed questionnaire and analyzed using descriptive statistics and simple linear regression. Findings revealed that respondents reported a very high level of perceived work performance (M = 3.33) and a high level of perceived job mismatch (M = 3.15). Regression analysis showed that perceived job mismatch significantly and positively predicted perceived work performance ($\beta = .651$, $p < .001$), explaining 42.4% of its variance. These findings suggest that employees experiencing job mismatch may still maintain high levels of perceived work performance despite differences between their qualifications, skills, and job requirements. The study concludes that job mismatch does not necessarily correspond to lower perceived work performance and highlights the importance of effective employee placement, skills utilization, and professional development. However, the findings establish statistical association rather than causation.

Keywords: *education-job mismatch, horizontal mismatch, vertical mismatch, employee outcomes, self-reported performance, simple linear regression, underemployment, labor market, Individual Work Performance Questionnaire*

INTRODUCTION

The Philippine labor market continues to face structural challenges related to the alignment of workers' qualifications with available jobs. According to the Philippine Statistics Authority (PSA, 2024), the national unemployment rate stood at 4.3%, while the underemployment rate reached 12.3%, representing approximately 2.19 million unemployed and 5.95 million underemployed individuals. These figures highlight the critical need to examine how effectively workers' qualifications, skills, and educational backgrounds correspond to the demands of their positions.

One primary manifestation of labor market misalignment is education-job mismatch, which occurs when an employee's educational qualifications do not align with the entry requirements or duties of their job. The literature generally categorizes this into horizontal and vertical mismatch. Horizontal mismatch occurs when an employee works in an occupation unrelated to their field of study despite holding an appropriate level of qualification (Salas-Velasco, 2021). Conversely, vertical mismatch occurs when an employee's formal attainment level diverges from the position's requirements, resulting in overqualification or underqualification.

Empirical studies have demonstrated that the consequences of job mismatch may vary according to the type of mismatch and the characteristics of the labor market. Schweri et al. (2020), for example, examined horizontal mismatch within the Swiss vocational education system and found that the relationship between field-of-study mismatch and wages was influenced by individual characteristics and the transferability of vocational skills. Similarly, Morejón Cabrera and Mariel (2024) examined horizontal and vertical mismatch among university graduates in Spain and found that postgraduate education was associated with a lower likelihood of vertical mismatch, whereas its relationship with horizontal mismatch varied across fields of study. These findings suggest that the consequences of job mismatch are not uniform and may depend on educational background, occupational characteristics, and the extent to which workers' skills are transferable across occupations.

Research on vertical mismatch has likewise documented consequences for workers' economic outcomes. In the United States, Lu and Li (2021) investigated education-occupation mismatch among highly educated workers and reported that mismatch was associated with wage penalties and differences in wage inequality across racial and immigrant groups. In the Philippine context, Melchor (2022) observed that 39% of employed Filipinos were overeducated for their roles, receiving only a 5% wage premium for each surplus year of schooling compared with 7%–19% returns for required years of schooling. These findings demonstrate that mismatch is not merely a matter of whether an employee's

field or educational attainment corresponds to a job; it may also have measurable consequences for employees' economic outcomes.

Mismatch has also been examined in relation to employee productivity. De Castro et al. (2015) investigated the relationship among education mismatch, skill mismatch, job satisfaction, and work productivity among 228 call center agents employed in four business process outsourcing companies in Makati and Quezon City. Using structural equation modeling, the researchers found that education mismatch was positively associated with skill mismatch, while both forms of mismatch were negatively associated with job satisfaction. Job satisfaction, in turn, was positively associated with productivity. The findings highlight the importance of organizational interventions, including training and development programs, in addressing mismatches between employees' competencies and job requirements.

Employee work performance is another important outcome to consider when examining the consequences of job mismatch. Work performance generally refers to the extent to which employees effectively accomplish the duties and responsibilities associated with their positions, encompassing the behaviors and outcomes through which employees contribute to organizational objectives. Previous research has linked employee performance with factors such as organizational commitment, workplace conditions, and employees' ability and willingness to fulfill their assigned responsibilities. For example, Zhenjing et al. (2022) found that employee commitment and achievement-striving ability were positively associated with employee performance. These findings indicate that work performance is influenced by both individual and organizational factors and may therefore also be examined in relation to the degree to which employees' qualifications and competencies correspond to their work roles.

The relationship between job mismatch and employee outcomes has also been examined in relation to job satisfaction, training, and employee retention. Wen et al. (2023) investigated educational job mismatch, job satisfaction, on-the-job training, and employee quit behavior using longitudinal data. Their findings indicated that overeducation, particularly when accompanied by skill underutilization and lower job satisfaction, was associated with a higher incidence of employee quitting, while opportunities for training facilitated the retention of initially mismatched workers. The study therefore provides evidence that the consequences of mismatch extend beyond wages and may involve employees' attitudes and employment decisions. However, its primary focus was on job satisfaction, training, and quit behavior rather than on work performance.

Research Problem

Although previous studies have established important relationships between job mismatch and outcomes such as wages, job satisfaction, productivity, and employee retention, the contexts, populations, and outcomes examined differ, and findings on job performance in particular are not uniform (Alzubaidi, 2020; Kim & Choi, 2018). In the Philippine setting, the available evidence linking education and skill mismatch with productivity comes from a specific industry and occupational group (De Castro et al., 2015), while other studies have primarily examined mismatch in relation to wages, educational outcomes, job satisfaction, or employee turnover.

The problem addressed by this study is therefore the limited evidence on whether employees who perceive a misalignment between their qualifications, skills, and job requirements also perceive their work performance to be lower, similar, or higher, particularly among workers drawn from broader employment contexts in local settings such as Baguio City. Addressing this gap contributes empirical evidence to the growing literature on education-job mismatch and employee outcomes and may provide information useful to organizations in developing recruitment, placement, training, and employee-development strategies. The study is limited to the perceptions of 191 full-time employees in Baguio City, Philippines, and examines statistical prediction rather than causation.

Assumptions of the Study

The study was conducted on the following assumptions: (a) respondents understood the questionnaire items and answered honestly and to the best of their knowledge, based on their own work experience; (b) employees are able to judge the extent to which their educational qualifications and skills correspond to their job requirements and to rate their own work performance; (c) perceived job mismatch and perceived work performance can be meaningfully measured through four-point Likert-type items; and (d) the relationship between the two variables can be adequately represented by a linear model.

Objectives of the Study

The general objective of the study was to examine the relationship between perceived job mismatch and perceived work performance among employees in Baguio City, Philippines. Specifically, the study sought to:

1. determine the perceived level of employees' work performance;
2. determine the perceived level of job mismatch among the respondents; and
3. determine whether perceived job mismatch significantly predicts employees' perceived work performance.

Conceptual Framework

The study draws on the conceptualization of education-job mismatch as a misalignment between employees' educational qualifications, skills, and job requirements, which may be horizontal or vertical in form (Robst, 2008; Salas-Velasco, 2021), and on the conceptualization of individual work performance as a multidimensional construct encompassing task performance, contextual performance, and counterproductive work behavior (Koopmans et al., 2013, 2014). As shown in Figure No. 1, perceived job mismatch served as the predictor variable and perceived work performance as the outcome variable.

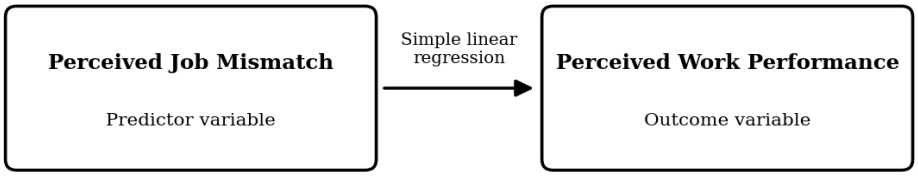


Figure No. 1. Conceptual framework of the study

Prior studies suggest that mismatch may be associated with less favorable outcomes (Kim & Choi, 2018), with no significant difference in job performance (Alzubaidi, 2020), or with positive outcomes when employees adapt to their work (Kampelmann & Rycx, 2013; Wardani et al., 2024). Because the evidence is mixed, the study did not presuppose a direction for the relationship and instead tested whether perceived job mismatch statistically predicts perceived work performance.

The rest of this article describes the methodology, presents the results and discussion according to the specific objectives, and closes with a general discussion that integrates the findings and outlines implications, limitations, and recommendations for future research.

METHODOLOGY

Research Design

This study employed a quantitative, cross-sectional, non-experimental, descriptive-predictive research design. The quantitative approach was used to obtain numerical measures of employees' perceived job mismatch and work performance and to examine statistically whether job mismatch predicts work performance. A cross-sectional design was adopted because data were collected from respondents at a single point in time, with the variables measured as they naturally occurred and without experimental manipulation.

The descriptive component determined the perceived levels of job mismatch and work performance, while the predictive component examined whether perceived job mismatch significantly predicted perceived work performance.

Simple linear regression was employed because the study involved one predictor variable (perceived job mismatch) and one continuous outcome variable (perceived work performance). This technique estimates the linear relationship between a predictor and an outcome; the regression coefficient indicates the direction and magnitude of the relationship, while the coefficient of determination (R^2) indicates the proportion of variation in the outcome explained by the predictor (Sainani, 2013). Because the design was cross-sectional and non-experimental, findings were interpreted in terms of statistical prediction and association rather than causation.

Research Locale or Study Setting

The study was conducted in Baguio City, Philippines. The city was selected because it provides a relevant employment setting in which employees from different occupational backgrounds and levels of educational and job-skill alignment can be found, making it an appropriate context for examining perceived job mismatch and its relationship with work performance. The findings are interpreted within the context of the selected participants and locale and should not be generalized to all employees in the Philippines.

Participants or Data Sources

The participants were 191 full-time employees working in Baguio City. Inclusion criteria were: (a) currently employed full-time, (b) employed in the current position for at least six months, and (c) meeting the study's criteria for perceived job mismatch Respondents who took part in the pilot test were excluded from the main sample to avoid prior exposure to the instrument influencing data collection. The inclusion of employees with varying degrees of alignment between their educational qualifications, skills, and job requirements was intended to provide sufficient variability in perceived job mismatch and work performance.

Participants were recruited through purposive sampling, a non-probability technique in which participants are deliberately selected based on characteristics relevant to the objectives and eligibility requirements of a study. Campbell et al. (2020) noted that purposive sampling allows researchers to match participant characteristics with study aims and emphasized the importance of clearly specifying the sampling approach and selection criteria. Accordingly, only employees who satisfied the inclusion criteria were recruited. Sample-size guidelines for correlation analysis (Bujang & Baharum, 2016) indicate that a

sample of this size is sufficient to detect moderate correlations, which supports the adequacy of 191 respondents for a regression with a single predictor.

Research Instruments or Materials

Data were collected using a researcher-developed survey questionnaire administered in printed format. The instrument was developed from concepts and items drawn from previously validated measures of individual work performance and from the literature on job mismatch. For perceived work performance, item development was informed by the Individual Work Performance Questionnaire (IWPQ), a generic measure of individual work performance across occupational settings developed from a framework encompassing task performance, contextual performance, and counterproductive work behavior (Koopmans et al., 2013, 2014). For perceived job mismatch, item development was informed by the literature on educational and skill mismatch, particularly measures of the alignment between workers' educational qualifications, skills, and job requirements (Robst, 2008).

The questionnaire consisted of 30 items organized into two subscales of 15 items each. Part I measured perceived work performance (outcome variable), and Part II measured perceived job mismatch (predictor variable). Items were reviewed and modified to ensure relevance to the study population and context while remaining consistent with the underlying constructs. Items were rated on a four-point Likert-type scale from 1 (Strongly Disagree) to 4 (Strongly Agree).

Content and face validity were assessed by a four-member expert panel composed of two licensed psychometricians, one Human Resource Management Office (HRMO) specialist, and one senior Human Resource Officer (HRO), who evaluated the items for relevance, clarity, appropriateness, and alignment with the intended constructs. Their recommendations were incorporated into the final questionnaire. A pilot test with 30 respondents assessed the clarity and preliminary reliability of the instrument. Internal consistency, evaluated using Cronbach's alpha, was good for the perceived work performance subscale ($\alpha = .825$), acceptable for the perceived job mismatch subscale ($\alpha = .751$), and good for the overall 30-item instrument ($\alpha = .864$), indicating that the items within each subscale were sufficiently consistent for use in the study.

Data Gathering Procedure

Pilot testing is commonly used to identify problems in item clarity and administration before full implementation (Kovach et al., 2022). Accordingly, the questionnaire was first pilot-tested with 30 respondents who were not part of the main sample, and the results were used

to identify items requiring revision. Prior to the main data collection, formal administrative approval was obtained from the heads of the participating institutions, the school principal, and the school director. Participants were then given an informed consent form explaining the purpose of the study, the procedures involved, the voluntary nature of participation, and their right to decline or withdraw without penalty.

Following institutional approval and informed consent, the researchers personally distributed the printed questionnaires to eligible participants, allowed sufficient time for completion, and collected the completed instruments. The questionnaires were checked for completeness before the responses were encoded into a digital database for statistical analysis. To protect privacy, identifying information was minimized, and access to the data was restricted to the researchers and authorized research personnel.

Data Analysis

Descriptive statistics, including the mean and standard deviation (*SD*), were calculated to summarize respondents' perceived levels of job mismatch and work performance (Objectives 1 and 2). Mean scores were interpreted using the following four-point scale: 3.26–4.00 = very high, 2.51–3.25 = high, 1.76–2.50 = low, and 1.00–1.75 = very low. To address Objective 3, simple linear regression was conducted with perceived job mismatch as the predictor variable and perceived work performance as the outcome variable, an approach appropriate when a continuous outcome is modeled as a function of a single predictor. The analysis evaluated the unstandardized regression coefficient (*B*), standard error (*SE*), standardized coefficient (β), coefficient of determination (R^2), *F* statistic, and corresponding *p* value; R^2 indicated the proportion of variance in perceived work performance accounted for by perceived job mismatch. Analyses were conducted using Jamovi, with significance evaluated at $\alpha = 5\%$.

Ethical Considerations

The study was conducted in accordance with the requirements of the participating institutions and applicable ethical and data-protection standards. Administrative approval was secured from the heads of the participating institutions, and all participants provided informed consent after being told the purpose and procedures of the study, that participation was voluntary, and that they could decline or withdraw without penalty. Participants' identities were protected by minimizing identifying information, and the data were used only for the purposes specified in the study.

RESULTS AND DISCUSSION

The results are presented according to the specific objectives of the study. For each objective, the findings are reported first, followed by their interpretation in relation to existing theory and previous studies. A general discussion then integrates the findings across objectives.

Perceived Level of Work Performance

Table No. 1 presents the descriptive statistics for perceived work performance. Employees experiencing job mismatch reported a very high level of perceived work performance (*M* = 3.33, *Mdn* = 3.31, *SD* = 0.385, *N* = 191). The mean and median were closely aligned, and the relatively small standard deviation indicates limited variability in respondents' ratings.

Variable	*N*	*M*	Median	*SD*	Minimum	Maximum
Perceived work performance	191	3.33	3.31	0.385	2.46	4.00

Table No. 1. Descriptive statistics for perceived work performance

The very high level of perceived work performance is consistent with the multidimensional conceptualization of individual work performance, which encompasses task-related and contextual aspects of performance rather than productivity alone (Koopmans et al., 2013, 2014). The finding is noteworthy given previous research indicating that job mismatch may be associated with adverse employment outcomes; for example, Kim and Choi (2018) reported a significant negative association between job mismatch and work-related outcomes among doctoral-level workers. The present finding, however, is descriptive and should not be interpreted as evidence that job mismatch has no adverse effect on work performance. Rather, it indicates that, despite experiencing job mismatch, respondents generally perceived themselves as capable of performing their responsibilities effectively. Employees may maintain relatively high levels of perceived performance despite some degree of mismatch, potentially through adaptation, experience, or the effective use of transferable skills. Because performance was self-reported, the findings reflect perceived rather than objectively assessed performance.

Perceived Level of Job Mismatch

Table No. 2 presents the descriptive statistics for perceived job mismatch. Respondents reported a high level of perceived job mismatch (*M* = 3.15, *Mdn* = 3.13, *SD* = 0.391, *N* = 191).

Thus, perceived work performance (*M* = 3.33, *SD* = 0.385) was rated at a very high level while perceived job mismatch was rated at a high level.

Variable	*N*	*M*	Median	*SD*	Minimum	Maximum
Perceived job mismatch	191	3.15	3.13	0.391	2.33	4.00

Table No. 2. Descriptive statistics for perceived job mismatch

The coexistence of a high level of perceived job mismatch and a very high level of perceived work performance indicates that respondents' perceptions of their performance were not low despite their reported experience of mismatch. One possible explanation is found in research suggesting that employees experiencing horizontal job-education mismatch can maintain positive work-related outcomes through adaptive mechanisms such as job crafting and psychological empowerment (Wardani et al., 2024). Such mechanisms may enable employees to adjust to mismatched work conditions by modifying aspects of their work, drawing on available resources, and developing strategies to manage job demands. The evidence on mismatch and performance, however, is not uniform: Alzubaidi (2020) found that although overeducation was associated with several unfavorable job-related outcomes, its relationship with job performance was not statistically significant. Descriptive statistics alone cannot establish whether perceived mismatch predicts perceived performance, which is addressed under Objective 3.

Job Mismatch as a Predictor of Work Performance

Simple linear regression was conducted to determine whether perceived job mismatch predicts perceived work performance. As shown in Table No. 3, perceived job mismatch was a statistically significant predictor of perceived work performance, $F(1, 189) = 139.37$, $p < .001$, $R^2 = .424$. Perceived job mismatch accounted for 42.4% of the variance in perceived work performance. The unstandardized regression coefficient was positive ($B = 0.662$, $SE = 0.056$, $p < .001$), indicating that higher perceived job-mismatch scores were statistically associated with higher predicted work-performance scores.

Predictor	*B*	*SE*	β	*t*	*p*
Intercept	0.947	0.188	—	5.05	< .001
Perceived job mismatch	0.662	0.056	.651	11.81	< .001

Table No. 3. Simple linear regression analysis of perceived job mismatch predicting perceived work performance

Note. $R = .651$, $R^2 = .424$, $F(1, 189) = 139.37$, $p < .001$. *B* = unstandardized regression coefficient; *SE* = standard error; β = standardized regression coefficient.

Within the present sample, employees who reported higher levels of perceived job mismatch also tended to report higher levels of perceived work performance. This suggests that mismatch did not necessarily correspond to poorer performance. One possible explanation is that employees whose qualifications or skills exceed their job requirements may still apply their additional knowledge and competencies effectively, potentially supporting performance. This interpretation is consistent with Kampelmann and Rycx (2013), who found that overeducation was not uniformly associated with lower productivity. The positive relationship may also reflect adaptive responses to mismatch, such as greater effort or effective use of transferable skills.

Because the study employed a cross-sectional, non-experimental design and both variables were self-reported, the finding should be interpreted as a context-specific statistical association rather than as evidence of a causal effect or that job mismatch improves work performance. The observed association may also partly reflect shared perceptions between the two self-report scales.

General Discussion

Taken together, the findings show that employees reported a very high level of perceived work performance and a high level of perceived job mismatch, and that perceived mismatch was a significant positive statistical predictor of perceived performance, accounting for 42.4% of its variance. Within this sample, a perceived misalignment between qualifications, skills, and job requirements was therefore not accompanied by low self-reported performance. This suggests that the relationship between job mismatch and work performance may be more complex than a uniformly negative one. Under certain circumstances, employees experiencing mismatch may draw on transferable skills, adapt to their assigned roles, or use competencies beyond those directly required by their positions. These mechanisms were not measured in the present study and should be regarded as possible explanations rather than established findings. Likewise, the relatively large proportion of explained variance should be interpreted in light of the specific measures and sample used.

The study contributes to the literature on education-job mismatch by extending the examination of mismatch and performance to employees from broader employment contexts in a Philippine setting, where available evidence has centered on wages and on

specific industries. For practice, the findings caution organizations against assuming that employees who perceive a mismatch necessarily perform poorly, and they point to the value of considering employees' skills, qualifications, and workplace context in placement, training, and employee-development decisions.

Several limitations should be acknowledged. The cross-sectional design precludes conclusions about causal direction or change over time. All variables were self-reported, which may introduce shared-method bias and reflects perceived rather than objectively assessed performance. Participants were selected through purposive sampling from a single locale, which limits generalizability. The questionnaire was researcher-developed, and evidence of its validity was limited to expert review and pilot-test reliability. Finally, perceived job mismatch was measured as a single score, so horizontal and vertical mismatch could not be examined separately.

Future research should therefore examine job mismatch among employees with diverse educational and occupational backgrounds, including those with technical-vocational, short-term, and non-degree qualifications, to determine whether the observed association holds across groups. Longitudinal studies would help establish the direction and stability of the relationship over time, and mixed-methods and comparative designs could clarify how employees experience and respond to mismatch in different work settings. Studies should also investigate potential mechanisms and contextual factors, such as job satisfaction, organizational support, job crafting, employee adaptability, and skills utilization, and should distinguish clearly between horizontal and vertical mismatch. Researchers are further encouraged to use validated, construct-specific instruments with clear criteria for classifying mismatch, to ensure that measures of mismatch are conceptually distinct from measures of performance, and, where feasible, to incorporate objective or multi-source indicators of performance. Studies across different occupations, industries, and geographic contexts would help determine when job mismatch is associated with positive, neutral, or negative performance outcomes.

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