

# Efficacy of Management and Employees' Involvement in HRD Initiatives: The Case of PNG Power Limited

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**Abstract:** *Organizational investment in human resource development (HRD) has risen rapidly over the years. The rise in HRD investment is undoubtedly triggered by the belief that HRD is the key to strengthening personal and organizational performance. Yet despite heavy investment in this area, the outcomes achieved are often mixed with varied results. A key issue is the choice of HRD initiatives adopted and how they are implemented to achieve the desired HRD outcomes. Poor initiatives that do not realistically target HRD gaps, combined with poor implementation measures, are most likely to fail. Regular measurement of such is significant not only to determine the impact on key outcomes but is also essential to learn, accumulate evidence, and then use such evidence for improving HRD investment and/or policy. The study's main objective is to analyse the training and development activities in PNG Power Limited (PPL) from the lenses of management and employees. This research highlights management and employees' involvement in HRD initiatives which is paramount for organisational development. The study employed a mixed method of analysis and used surveys and interviews to collect data and information. The findings revealed that PPL has organised training programs to develop management skills of non-technical staff and competency-based training for technical employees. However, these training and development activities are perceived to be moderately effective regarding how management and employees are involved. This research concludes that the effectiveness of HRD initiatives through training and development activities is significantly determined by the degree of management and employee involvement. This study contributes to the knowledge of HRD in developing countries, particularly in the Pacific Region. It is hoped that this study will be helpful to improve specific areas requiring change identified in this study and may well serve as inspiration for organisational and policy change across other service organisations in PNG.*

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# Efficacy of Management and Employees' Involvement in HRD Initiatives: The Case of PNG Power Limited

## 1. Introduction

The aim of this study is about business organisation and how it has invested in Human Resource Development (HRD) and the impact it has achieved consequent to its HRD investment efforts. Overall, the study is set against the context of the global rising trend and demand for HRD investment and the benefits it brings. More specifically, the study is set against the context of the need to understand how organisations, especially commercial state-owned entities (SOEs), fare in terms of HRD investment and impact and where possible, how that might be improved where weaknesses are found. The company's human resource development program comes in the form of training tailored to employees' needs. Kosali (2021) argues that human resource development programs are recognised to impact employee character and personality development positively. So, development programs carried out by other companies or institutions will be an excellent opportunity for an employee to add insight and competence in their field.

HRD integrates training, performance management, and career development, combined with organizational-cultural changes, to enable employees to develop their competencies and achieve organizational effectiveness. Indeed, creating more robust HRD strategies and their implementation has become an ever-increasing challenge for many organizations. Precipitated by changing local and international conditions that usher in need for important changes to the way skills and competencies are developed, organizations are being forced to employ better strategies for HRD. On the international front, the globalization of business and the use of information technology across borders have brought paradigm shifts in how things are done in business and industry (Garavan, 2007). In that regard, there has been deeper integration across and within borders in business transactions, improvement in global technology, and in case of human resources, the scaling-up of strengthening the overall productive capacity of people to respond to and work in an era of globalization.

Arguably, the challenge is more acute in developing countries where HRD has often lagged behind developed countries due to their development conditions. Even when attempts are made, these are often piecemeal, lacking a coherent HRD strategy. Organizations continue to face management problems and need proper monitoring and evaluation to determine what has worked and/or not, why, and whether new HRD initiatives can be developed from the lessons learnt. In the case of PNG, the literature is sparse but limited studies have emerged, and anecdotal evidence confirms this. For example, James (2016) reported in "Business Advantage PNG" that one of the human resources-related challenges was searching for a skilled and committed workforce in PNG to do business. Unavailable or limited skill-set and competency of people continue to be a problem in counties such as PNG, which has important implications on organizational productivity and performance.

Perceptions like the one held by James (2016) can be problematic. Though welcomed, they are often generalized and do not provide an in-depth analysis of the HRM and HRD development, thus contributing to the existing knowledge gap. Suggesting propositions for reform at the generic and specific organizational levels can also be difficult without the aid of an in-depth study on the HRD issues in PNG. This study, therefore, is mounted against this concern. Specifically, this study attempts to unravel what is going on in a particular organization, in this case, the PPL, in its HRD initiatives and how pursuing such initiatives has led to the anticipated changes in the outcomes sought. By doing so, it is hoped a more specific and in-depth understanding can be acquired of the HRD climate in PNG.

This study is about PNG Power Limited (PPL) and how it has invested in Human Resource Development (HRD) and the impact it has achieved consequent to its HRD investment efforts. Overall, the study is set against the context of the global rising trend and demand for HRD investment and the benefits it brings. More specifically, the study is set against the context of the need to understand how organizations, especially commercial state-owned entities (SOEs), in Papua New Guinea (PNG) fare in terms of HRD investment and impact and where possible, how that might be improved where weaknesses are found. In this regard, PPL is used as a study case.

PPL is a public energy company responsible for generating, transmitting, distributing, and retailing electricity throughout PNG. Given its public ownership and government control, the government has

determined that PPL is socially obliged to provide electricity to all where possible. The operation of PPL is governed by a Regulatory Contract signed between the Independent Consumer and Competition Commission (ICCC) and PPL in August 2002. ICCC is responsible for regulating competition, controlling prices, and protecting consumers across some industries in PNG. PPL's total number of customers is about 116,242. PPL employs around 2,050 employees nationwide. These staffs operate under thirteen (13) business units within the organisation.

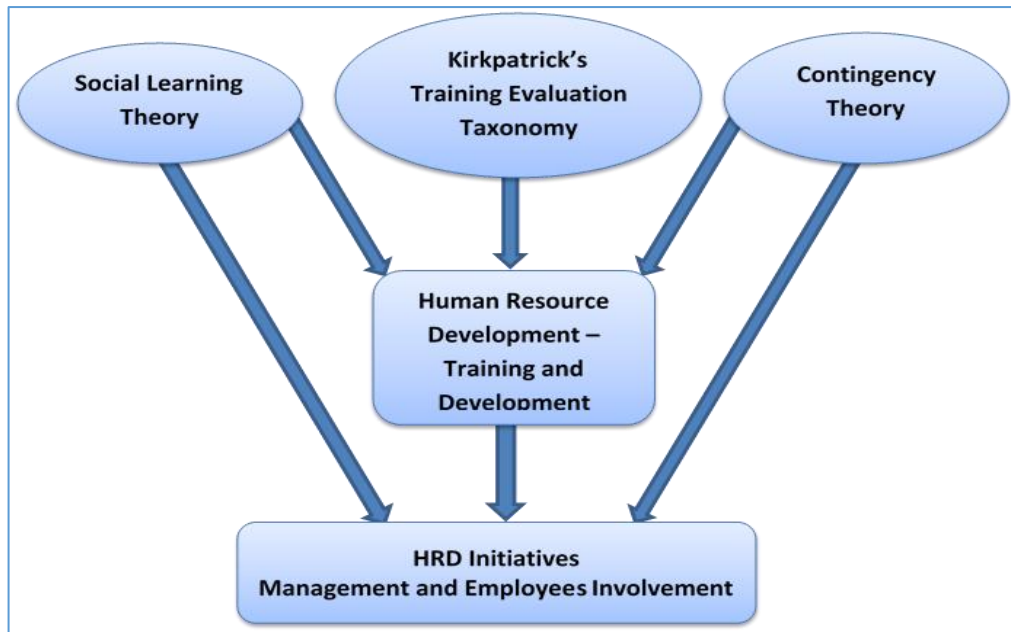
According to Alnaqbi (2011), organizations with competent human resources are known to be dynamic and, thus, can grow reasonably faster. Debatably, the most critical organizations that significantly impact the economic development of a country are power generation and distribution firms. They are economic drivers through their power utilities to every household, business firm, and establishment. In the case of PNG, PPL is unquestionably a strategic asset, given its pre-eminent and unrivalled role in the energy sector. This role becomes more significant, therefore, critical given PPL's monopoly in energy production, supply and distribution. Although plans are on foot to introduce alternative energy producers such as ExxonMobil supply to the PPL transmission grid (using ExxonMobil's LNG), PPL's role and place in the production and supply of electricity remains unchallenged.

The interest in mounting this study has been spurred by several key considerations: some more general relative to HRD trends around the globe, while others more specific to HRD in PNG and the PPL. The more general reasons are attributed to the prominent role of HRD in terms of its exposition of the need for ongoing training, improving skill-set, and competency, being responses to the global challenges in doing business; while the specific reasons are attributed to the need to understand HRD issues in PNG, as well as the need to know how HRD is tackled in an organizational setting, in this case in the PPL.

Given the challenge of globalisation, contemporary business environments are increasingly required to be dynamic, ensuring that organisational culture and practice are regularly transformed in response to such challenges. According to Schneider, Ehrhart and Macey (2011), organisational culture and climate focus on how organisational participants observe, experience, and make sense of their work environment. These are fundamental building blocks for describing and analysing organisational phenomena (Schein, 2000). Organisational culture is a system of shared assumptions, values, and beliefs that govern employees' behaviour. The culture of an organisation has a strong influence on the employee in the organisational climate. Organisations must improve their organisational culture and climate and invest more in training to maintain a competitive advantage over better service delivery and customer service.

Developing and strengthening human capital is essential to ensure long-term success in today's business. PNG's business organisations are no longer isolated from global competition, and the rapid technological changes require a competent and multi-skilled workforce. In the case of PPL, properly positioning itself through an effective HRD strategy and implementation would be critical in meeting such technological changes. So, while the sparseness in the literature is one reason for mounting this study, there is minimal emphasis on HRD in PNG. This problem is compounded by the general references that often exist wherein broad generalisations are made in scholarly studies about HRM or HRD in PNG. This study is, therefore, a response to this concern. Examining PPL in detail will hopefully avoid overt generalisation and provide a deeper and more comprehensive understanding of HRM and HRD-related issues in PNG.

**1.1. Theoretical Foundation of the Study.** In the present study, three theories form the basis for understanding and analysing PPL's HRD initiatives and their impact on HRD outcomes. These are: Kirkpatrick's training evaluation taxonomy, Contingency Theory and the Social Learning theory (refer Figure 1.1). Using the insights from these theories and/or models, analyses will be made on PPL's HRD initiatives and their related impact on key outcomes. By way of introduction, these models are briefly discussed here. Kirkpatrick's (1959) model provides an evaluation framework of HRD practices within an organisation and then suggests how improvement might be considered to improve related outcomes. Contingency theory provides insight into environmental conditions affecting HRD and how organisations can adjust to or meet environmental conditions to improve HRD outcomes. Bandura's Social Learning theory holds important implications for HRD, especially in how people learn. The theory posits that people learn from each other through observation and socialisation in the organisation over time, which can consequently impact knowledge, skill set and competencies. Such learning may not necessarily be formal and can occur outside the confines of formal training events and activities. In this context, activities such as watching, listening and learning from others are essentially part of training in the workplace (Felstead et al., 2005; Fuller & Unwin, 2009).



**Figure. 1.1. Simple Theoretical Framework of Interaction of the Theories and the HRD Initiatives and Outcomes**

Source: Compiled by the authors

Within the context of the study, the Kirkpatrick theory will be used as an analytical tool for evaluating the success of training and development, and the social learning theory will be used to analyse the influence of the gradual process of learning both in the formal and informal settings and its related effects on HRD. Regarding the contingency theory, PPL management has adopted different HRD approaches based on the changing environment. The study will analyse these changes and how HRD initiatives can be reorganised based on environmental influences.

In analysing PPL's HRD initiatives and their impact on key outcomes, it is pertinent to point out that management and employees' collective involvement and participation in strengthening HRD is paramount to achieving the desired HRD outcomes. Studies have revealed that management involvement does play an important role in encouraging employees in training and development activities (McCracken & Wallace, 2000). Further, such studies have shown that the involvement of employees in training and development activities are greatly aided when management invests time and other resources on employee participation. In the context of PPL, the collective involvement of management and employees in strengthening HRD is important; indeed, the present study will show that the participation by both parties is ongoing.

There have been studies conducted in the field of HRD such as employees' performance, commitment, motivation and other factors in the global context (Abraham, 1989; Cohen, 1991; Kaifeng et al., 2012; Park & Jacobs, 2011; Tett & Meyer, 1993). A thematic literature review suggested a direct relationship between HRD initiatives and HRD outcomes, and it impacts organisational results, but the degree of the relationship is not significantly visible. It is also noticed that existing employee engagement is inadequate for effective employee involvement in business activities. According to the literature review, there exists a significant gap in the literature associated with management, employees' involvement in HRD initiatives and HRD outcomes in Papua New Guinea PNG context. These factors reflected in training evaluation taxonomy, contingency theory and social learning theories are explored in the present study. Moreover, research on management and employee involvement in HRD may help further understand the organisational HRD climate and culture in the corporate context.

**1.2. Objectives of the Study.** The study focuses on analysing PPL's training and development activities from the lenses of management and employees. This research highlights management and employees' involvement in HRD initiatives which is paramount for organisational development. In meeting its objectives alluded to above, the study will attempt to answer the following research questions:

- What HRD initiatives have been carried out by PPL in terms of training and development of employees?
- How practical are these training and development activities as part of HRD initiatives, management involvement, and employees' participation?



In addition to the research question posed above, and to satisfy the research objectives, the following hypothesis is being tested in this study:

- There is no significant difference in the perception between management and employees' involvement as HRD initiatives regarding training and development activities.

## 2. Data and Method

The study employs a mixed research method utilising descriptive and correlational research designs to gather relevant data and information from various sources. Creswell (2003) highlighted that with the mixed methods approach to research, incorporating the methods of collecting or analysing data from the quantitative and qualitative research approaches in a single research study. In this mixed method approach, a sequential explanatory approach was used. This approach is a three-phase design that involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data and information, and then the integration and interpretation of findings (Flick, 2011 & Creswell, 1995). The purpose is to use the qualitative results obtained from the interviews with the PPL employees to further explain and interpret the findings from the quantitative phase of the research, where data was collected through a survey questionnaire.

Quantitative methodology gathers numerical data and uses statistical analysis to arrive at meaningful findings and conclusions. The respondents were given a structured questionnaire to collect data on perceptions of HRD initiatives and HRD outcomes from the selected employee-respondents. On the other hand, the qualitative methodology allows one to understand a person's views concerning the organisation or the behaviours of people in a social or professional setting. This methodology also helps to determine the attitudes, behaviours, and perspectives of the research subjects (Punch, 2005).

Employing a mixed-method approach, this study supports the triangulation process by using different data sets and methodologies to test hypotheses and establish consistency in findings. This study uses multiple methods of collecting qualitative data from respondents. These include documentary analysis of HRD files and documents collected from the HR office and interviews with selected PPL employees to extract their insights and experiences to support the quantitative data for better analysis. The survey questionnaire was designed to gather data from the managers, line supervisors and rank and file employees. It aimed at establishing the effectiveness of PPL's training and development activities as part of HRD initiatives along with management and employee involvement. The survey questionnaire is close-ended and catered to data collection on HRD initiatives and HRD outcomes at PPL.

A five-point Likert-type scale is employed with responses ranging from "Strongly agree" coded 5 to "strongly disagree" coded 1 to measure the responses. The five-level of the ordinal scale was 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree. A Likert-type scale represents an ordinal level of measurement. This type of scale is often used to measure the opinions and attitudes of individuals (Bryman, 2001), leading to firm conclusions about HRD's impact on related outcomes. The survey questionnaire was validated robustly to ensure its validity and reliability. In addition to the survey questionnaire, an interview guide was prepared to administer the interview process with top-level executive and line managers. A five-point Likert-type scale is employed with responses ranging from "Strongly agree" coded 5 to "strongly disagree" coded 1 to measure the responses. The five-level of the ordinal scale was 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree. A Likert-type scale represents an ordinal level of measurement. This type of scale is often used to measure the opinions and attitudes of individuals (Bryman, 2001), leading to firm conclusions about HRD's impact on related outcomes. The survey questionnaire was validated robustly to ensure its validity and reliability. In addition to the survey questionnaire, an interview guide was prepared to administer the interview process with top-level executive and line managers.

A stratified random sampling method was used to identify the respondents, who were mainly PPL employees and distribute the questionnaires accordingly. The stratification was based on appropriate managerial levels of PPL, and respondents were selected through a simple random sampling exercise within each stratum of the PNG Power Limited organisational levels. A stratified random sampling method was used to identify the respondents, who were mainly PPL employees and distribute the questionnaires accordingly. The stratification was based on appropriate managerial levels of PPL, and respondents were

selected through a simple random sampling exercise within each stratum of the PNG Power Limited organisational levels.

In addition, to minimize the sampling error, a list of managers from different departments was obtained from PPL's HR department. The employees were stratified based on the managerial levels, and the respondents were selected randomly within the strata using a computer. The sample size was calculated with the standard sample size calculation tool with a population of 2050 employees currently at PPL and a confidence interval of 95% with a margin of error of 5%. The present study expected a minimum sample size of 324 employees out of 2050 total employees. According to Saldivar (2012), response rates are often used to measure survey quality. 405 employees were selected out of the total number of 2050 employees in PPL to have a minimum of 80% response rate ( $324/80 \times 100$ ).

The balanced approach was also used to estimate the sample size of three managerial levels based on the total number of employees. Therefore, 306 respondents from the bottom level, 89 from the middle level, and ten from the top level were selected to participate in the survey questionnaire. Finally, 336 responded questionnaires were collected, with a response rate of 82.96% from 2050 employees. This approach satisfied the necessity of data triangulation as data collection from different sources of the same study. The stratified random sample selection profile used to select the participants in the survey is given in Table 2.1 below.

Table 2.1 Composition of Sample

PPL Employees	Total number of employees (N)	Selected number of employees with stratified random sampling method for survey	Actually responded	Response rate
Bottom level Rank and file	1550	306	253	82.67%
Middle level line managers and supervisors	450	89	75	84.26%
Top level Executive managers	50	10	8	80.00%
<b>Total</b>	<b>2050</b>	<b>405</b>	<b>336</b>	<b>82.96%</b>

Source: Compiled by the authors

The distribution of the questionnaire was organized in two ways. Firstly, the On-line Google survey questionnaire was distributed via email for data collection. Secondly, administering the distribution and retrieval of the questionnaires at the PPL office in Port Moresby, where most respondents were based. The interviews were scheduled through PPL's HR manager. The interviews were conducted with HR officials who possess experience and knowledge in their fields. Descriptive and correlational statistical analysis was used for quantitative data. The collected raw data was edited and coded in the SPSS statistical software for analysis in response to the research questions and hypotheses. Quantitative data analysis methods include descriptive method, correlation and regressions and t-test.

The composite Likert scale mean score value used to interpret the composite value of variables ranged from 1.0–1.49, corresponding to the responses of Strongly Disagree (SD), followed by 1.50–2.49 for Disagree (DA), 2.50–3.49 for Neutral (N), 3.50–4.49 for Agree (AG); and finally, 4.50–5.00 for Strongly Agree (SA). This range has 0.5 intervals in the head and tail part and 1 interval in the 3 middles score range because rating scales often follow a normal or close to a normal distribution (Nielsen & Levy, 1994).

Table 2.2 describes qualitative statements for each composite Likert mean score value based on frequency, importance and likelihood (Likert, R. 1932 & McLeod, 2008).

Table 2.2. Description of Qualitative Statements of Each Composite Likert Mean Score

Scale	Likert Scale Range	Adjective Description	Interpretation
5	4.50-5.00	Strongly Agree	Very effective
4	3.50-4.49	Agree	Effective
3	2.50-3.49	Neutral	Moderately effective
2	1.50-2.49	Disagree	Less effective
1	1.00-1.49	Strongly Disagree	No effective

Source: Compiled by the authors

The quantitative description of the strength of Pearson 'R' values adopted was based on Deborah (2016) classification being, –1 perfectly negative, (–1, <–0.75) strong negative, (–0.75, <–0.5) moderately negative, (–0.5, <–0.25) weak negative, (–0.25, 0.25) no linear association, (0.26, < 0.5) weak positive, (0.5, < 0.75) moderately positive, (0.75, < 1) strong positive and 1 perfect positive.

### 3. Results

The analysis and interpretation of the quantitative and qualitative data are presented to explain the responses provided by the 336 respondents involved in the training and development activities, including line managers, supervisors, and rank-and-file employees of PPL.

**3.1 HRD Initiatives of PPL.** As per the secondary data sourced from the HR documents within PPL, it has conducted different training and development activities undertaken and attended by senior managers, supervisors and clerical staff as part of PPL’s HRD initiatives. PPL organises in-house and external training programs for its employees. The training activities include short courses, in-house training, external off-the-job training and financial support for formal education programs in the universities to develop the next line managers. Annually, PPL allocates significant funding for HRD initiatives relating to training and development. PPL distributes an average of K7 million per annum to maintain a productive workforce.

**3.2 Management Involvement in HRD Initiatives.** As reflected in Table 3.1, the overall average score attained is 2.93 (n=336, SD=0.63), which is interpreted as moderately effective. It means that the participants were not certain on the level of management involvement when it comes to HRD initiatives at PPL.

Table 3.1. Management Involvement in HRD Initiatives (n = 336)

SQ	Indicators	Mean score	Std. Dev. SD	Interpretation
Q1	Management believes that HR is an extremely important asset and to be treated more humanely.	3.93	1.071	Effective
Q2	Managers and supervisors see it as their responsibility to develop subordinates within the organisation.	3.58	1.125	Effective
Q3	HR policies and plans in this organisation facilitate employee development.	3.51	1.071	Effective
Q4	Managers and supervisors are willing to invest a considerable part of their time and resources to ensure the development of employees.	2.29	1.137	Less Effective
Q5	Senior officers take active interest in their juniors by making them know of organisation future plan and help them learn and improve their job for future.	2.71	1.034	Moderately Effective
Q6	Management helped people lacking competency in doing their jobs to acquire competency rather than being left unattended.	2.59	1.124	Moderately Effective
Q7	Managers believe that employee behaviour can be changed, and people can be developed at any stage of their life.	2.90	1.206	Moderately Effective
Q8	Organisational culture in regard to beliefs and values is conducive to any employee interested in developing by acquiring new knowledge and skills.	2.14	1.088	Less Effective
Q9	Psychological climate in regard to staff mindset is very conducive to acquire new knowledge and skills.	2.74	1.109	Moderately Effective
Overall mean score of management involvement		2.93	0.630	Moderately Effective

Source: Compiled by the authors

Among the indicators that garnered the highest mean score of 3.93 (n=336, SD=1.07) interpreted as effective is, “Management believes that HR is a significant asset and to be treated more humanely”. The participants perceived that the managers value and treat every employee with respect and compassion. However, among the indicators rated with the lowest mean score of 2.14 (n=336, SD=1.09) interpreted as less effective is, “Organisational culture in regard to beliefs and values is conducive to any employee interested in developing by acquiring new knowledge and skills”. According to Girdauskienė and Savanevičienė (2007), organisational culture is considered one of the most important factors affecting successful training, development and knowledge management.

Ensher et al. (2002) emphasise that mentoring builds confidence and motivation obtained through supervisory and managerial support. In the area of mentoring, the second lowest indicator rated with a mean score of 2.29 (n=336, SD=1.14) is, “Managers and supervisors are willing to invest a considerable part of their time and resources to ensure the development of employees”.

**3.3. Employees’ Involvement in HRD Initiatives.** As indicated in Table 3.2, the overall average mean score is 3.28 (n=336, SD=0.57), interpreted as moderately effective. It implies that respondents have undecided feelings and are uncertain on the level of employees’ involvement in training and development activities. It

could be attributed to the lack of knowledge on the training provided by the organisation, or a lack of meaningful participation and employee input in PPL's training and development plans. It can be further inferred that PPL's training and development campaigns and programs may have not been adequately disseminated to the staff for full implementation, signalling that communication is poor among managers and employees.

Table 3.2. Employees Involvement in HRD Initiatives (n = 336)

SQ	Indicators	Mean score	Std. Dev. SD	Interpretation
Q10	Training and development opportunities offered by my employer are beneficial to my day-to-day work and which makes me happy with my job.	3.65	1.071	Effective
Q11	Participation in training and development opportunities offered by employer is useful in performing my job.	3.81	1.064	Effective
Q12	When employees are sponsored for training, they take it seriously is a way to learn from the programs they attended.	2.91	1.274	Moderately Effective
Q13	After participation in training and development opportunity, I am successfully applying the new skills acquired.	3.17	1.264	Moderately Effective
Q14	I learn new information and skills through training and development opportunities offered by my employer.	3.65	1.090	Effective
Q15	Employees returning from training programs are given opportunities to try out what they have learnt.	2.88	1.223	Moderately Effective
Q16	Employees are sponsored for training programs based on genuine training needs.	3.45	1.072	Moderately Effective
Q17	Employees returning from training programs are performing well compared to non-trainers.	2.73	1.207	Moderately Effective
Overall mean score of employee involvement		3.28	0.656	Moderately Effective

Source: Compiled by the authors

“Participation in training and development opportunities offered by the employer is useful in performing my job” is the indicator with the highest mean score of 3.81 (n=336, SD=1.06) and is interpreted as effective. The respondents realized that upgrading their competencies is vital in performing current tasks and preparing for higher responsibilities. The positive outlook of staff on this aspect signals their interest and enthusiasm to participate in future training and development activities and serves as a good starting point for PPL to design programs related to these HRD initiatives. However, the indicator that recorded the lowest mean score of 2.73 (n=336, SD=1.21) is “Employees returning from training programs are performing well compared to non-trainers” interpreted as moderately effective.

**3.4. Hypothesis Testing.** The results showed no significant variances in employee and management involvement as reported in Table 3.3. *p*-value of 0.133 greater than the significance (0.133>0.05) level at 5%. This result suggested that there were no differences of opinion regarding the HRD initiatives by employee and management involvement.

Table 3.3. ‘T’ Test for Mean Score differences between Management and Employee involvement in HRD initiatives

Variables	N	Mean	SD	Mean difference	Df	T-Test	<i>p</i> value
Employees' Involvement	169	3.0494	0.573	-0.0946	334	-1.506	0.133
Management involvement	167	3.1441	0.578				

Note:  $p < 0.05$ , Df= Degree of freedom

Source: Compiled by the authors

Therefore, the null hypothesis that “there is no significant difference in the perceptions between the management involvement and employee involvement on HRD initiatives” is not rejected at a 5% significant level as statistical evidence concludes that management involvement and employee involvement have no significant differences in the implementation of training and development activities as part of HRD initiatives at PPL.



#### 4. Discussion

PPL has been implementing training and development programs internally and externally. The Human Resource Department has allocated an annual budget to carry out training plans and development programs to improve employee performance and organisational productivity. Although the allotted budget for training and development was not fully maximised, some PPL employees could upgrade their knowledge and skills through this avenue. A graduate development program provides on-the-job training for graduates who are assessed on their performance. Apprenticeship programs train apprentices in various fields, such as electrical, lines, machine fitting, mechanical, and power station operations. PPL also supports long-term educational programs for senior managers undertaking bachelor's and post-graduate degrees. Some of the training activities were terminated due to funding issues and the termination of contracts with external training providers. Instead, PPL plans to train employees in their current jobs and targeted development initiatives to prepare them for future skills and responsibilities, which could increase engagement and reduce turnover.

PPL allocates an average of K7 million per annum to maintain a productive workforce. Only an average of K3.5 million is spent on training and development annually. Falola<sup>1</sup> and Osibanjo (2014) state that training and development are indispensable strategic tools for enhancing employee performance; hence organisations allot increasing training budgets every year, believing that it will earn them a competitive advantage. According to Francesco (2010), HRD activities are developed to deal with people's learning and development needs in whatever area they are performing, therefore funding the utmost priority of training and development. Regarding management and employee involvement as effective HRD initiatives, the participants from the survey expressed uncertainty or neutrality in their responses. The level of management involvement and employees' involvement in HRD initiatives was attested on the overall score attained. This undecided feeling resonated from the lack of knowledge on the training provided by the organisation and the training participated by other employees. Training and development campaigns and programs of PPL may not have been properly disseminated to the staff.

According to Susan (2018), employee involvement is neither goal nor a tool as practised in many organisations. Instead, it is a management and leadership philosophy about how people are most enabled to contribute to continuous improvement and the ongoing success of their work in business organisations. An involved employee will help drive the organisation forward and add value to the business organisation (Kaplan, Dollar, Melian, Durme & Wong, 2016). Management and employee involvement in HRD activities is crucial to achieve positive outcomes of employees and organisational productivity. Freeman (2013) argues that an involved employee will take an active role in the business. They will implement new initiatives, take ownership of them, and actively drive change. An involved employee will help move the organisation forward and add value. Studies have shown that lack of commitment by management towards an organisation's workforce may lead to counter-productive behaviour, such as an increase in intent to leave, in turnover rate or poor performance, affecting organisational efficiency, among others (Becker, Billings, Eveleth, & Gilbert 1996).

The perception of the respondents on management and employees' involvement in training and development activities as part of PPL's HRD initiatives has no significant difference. It suggested that the perception of the 336 respondents on the participation of the management is the same as the perception of the involvement of employees. Both management and employees have taken HRD initiatives to a level where training and development activities benefit the human resources of PPL to a certain level without any differences. It is also validated by the magnitude of the difference in the overall lower mean score of management and employee involvement, indicating neutrally, as stated earlier.

Training and development campaigns and programs of PPL may not have been properly disseminated to the staff. The participants felt that PPL needs to promote a healthy work environment conducive to safeguarding their health and harnessing employees' personal and professional development. The participants also expressed this sentiment in the interviews and focus group discussions. The test of the hypothesis shows that 'there is no significant difference in the perceptions between the management involvement and employee involvement on HRD initiatives'. This result suggested no differences of opinion about the HRD initiatives by employees and management involvement. According to (Addae, Parboteeah, & Velinor (2008), management involvement has a negative correlation with the intention to resign, and few studies noted the relationship between deficiency of management involvement and higher employee turnover (Lacity et al., 2008).

#### 4. Conclusion

The study has confirmed that HRD is held in high regard in PPL, as evidenced by the various emphasis on HRD investment. Without a doubt, HRD was seen (and continues to be seen) as the main catalyst for enhancing performance and productivity within PPL. To this end, various initiatives were developed to improve the competency of its workforce over that period. However, the impact or successes from those have been mixed, let alone minimal. As evidenced by the insights offered in the study, this mixed success is attributable to several factors working in concert to create this outcome. Perhaps of significant notation are those factors that have worked to inhibit the proper development of HRD in PPL. As this study suggests, understanding those “inhibitors” hold important implications for PPL and the wider SOE sector in prescribing organisational and policy changes for strengthening HRD. This study is limited by its approach and scope, and it is this limitation that offers opportunities for future research on HRM and HRD in PNG.

This study has used the analytical lenses of three theoretical frameworks to analyse and understand the impact of HRD initiatives on related outcomes in PPL. Kirkpatrick’s model describes the concept as an evaluation of HRD practices within an organisation that improves the organisation’s performance and increases the overall quality of the HRD environment. The findings indicated that PPL was achieving at least some learning and behaviour-level impact due to the HRD environments. Contingency theory suggests that an organisation must adapt to environmental conditions. The mean differences test supports this theory regarding improvements to have better HRD outcomes. Based on the management and employee involvement mean differences, it would be reasonable to expect significant differences between these groups. Social learning theory argues that employees learn from one another through observation and socialisation in the organisation. The thematic data analysis and findings reveal that observational and social learning has changed behaviour in many situations. Old practices simply influence them. These findings support social learning theory.

The insights and lessons from this study offer room to consider strengthening HRD in PPL and similar organisations, especially in PNG’s state-owned enterprises (SOE) sector. Propositions for change, especially for PPL, have been recommended for improving organisational practice and policy on HRD can be made. The HRD department of PPL may find the insights from this study practical to improve the specific areas requiring change identified in the study. In addition, leaders and HRD experts organisations similar to PPL may find the study findings useful in strengthening their own HRD systems. There are specific HRD lessons that may well serve as inspiration for organizational and policy change across other service organisations in PNG.

This study is limited by its approach and scope, and it is this limitation that offers opportunities for future research on HRM and HRD in PNG. The fact that it has concentrated on assessing the impact of HRD outcomes in PPL has meant that other areas of concern in the broader spectrum of HRM and HRD in PPL have been left out. So, there is room to venture into other areas of HRD, such as industrial relations and pay and contractual matters affecting employee performance. There is room also for a comparative study of similar manners across two or several organisations to determine the extent of HRD issues affecting these organisations. And of course, there is room to carry out studies on the SOE sector to determine what has been happening in the HRD landscape. Studies along this line can gauge valid comparative data that can tell us about what is happening across the sector, the divergence in HRD policies and practices, and why such divergences exist. The study’s scholarly contribution provides a fertile ground for studies of this kind as the literature specific to HRM generally and more specifically, HRD in PNG is sparse. This study was mounted against this backdrop and was aimed at, apart from its other objectives, enriching the relatively sparse literature on HRM and HRD. It is hoped that this study has done that.

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