



The Impact of Direct and Indirect Compensation on Employee Commitment: Evidence from Kena Woreda Health Organizations, Ethiopia



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Abstract

This study investigated the impact of direct and indirect compensation on employee commitment in Kena Woreda Health Organizations, Ethiopia. Grounded in Adams' Equity Theory (1963), the research explored how perceptions of fairness and equity in rewards influence organizational loyalty. A cross-sectional research design was employed, utilizing a structured Likert-scale questionnaire to collect data from a sample of 128 employees selected via stratified random sampling, achieving a 96.09% response rate. Data analysis was conducted using SPSS version 25, utilizing Pearson Product Moment Correlation, regression analysis, and MANOVA tests. The findings revealed that the interaction of both direct and indirect compensation significantly influences combined employee commitment, with regression analysis showing a 28.4% and 17.9% significant positive relationship for each, respectively. Notably, their interaction yielded a stronger 36.1% positive relationship. However, MANOVA results indicated that direct compensation only significantly affected affective commitment, while continuance and normative commitments remained insignificant when tested separately against both compensation types. Consequently, the researcher recommends that organizations develop transparent, well-formulated compensation plans. Clearly communicating these policies to all staff is essential for ensuring a clear understanding of the system, ultimately fostering a more committed healthcare workforce.

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1 Introduction

In the contemporary globalized economy, the strategic management of human resources has shifted from administrative oversight to a pivotal driver of organizational sustainability. Central to this transformation is compensation management, which encompasses the design and implementation of strategies and policies intended to remunerate employees fairly, equitably, and consistently in alignment with their contributions (Armstrong, 2005; Nguyen et al., 2020; Vizano et al., 2020). Compensation is no longer viewed merely as a transactional exchange of labor for wages; rather, it is a sophisticated mechanism for fostering positive working relationships and psychological empowerment. As one of the critical pillars of Human Resource Management (HRM), compensation systems serve as essential tools for boosting individual, team, and organizational performance.

Ezeh (2014), characterizes compensation as a multidimensional construct involving the regulation of both direct and indirect payments. Direct compensation includes base pay, merit increases, and incentives, while indirect compensation—often referred to as fringe benefits—comprises insurance coverage, pension schemes, and paid leave. For organizations, particularly those in the public health sector, maintaining an efficient workforce necessitates a compensation structure that ensures equitable pay and compliance with regulatory standards, thereby mitigating dissatisfaction and enhancing productivity.

The relationship between compensation and employee behavior is deeply rooted in Equity Theory (Adams, 1963). According to this framework, an employee's motivation and subsequent commitment are contingent upon their perception of fairness regarding the effort-reward balance compared to their peers (Calvin, 2017; Hameed et al., 2014; Hermanto et al., 2024; Redmond, 2010; Wei & Yazdanifard, 2014). When employees perceive "individual equity"—where their specific potential and contributions are recognized—their psychological attachment to the organization strengthens (Hameed et al., 2014; Lai, 2011; Wei & Yazdanifard, 2014).

Employee commitment represents a psychological force that binds an individual to an organization and a specific course of action (Meyer & Herscovitch, 2001). This commitment manifests in three primary dimensions: affective (emotional attachment), continuance (perceived cost of leaving), and normative (moral obligation). High levels of commitment are empirically linked to "organizational citizenship behaviors," reduced turnover intentions, and a willingness to exert extra effort to achieve institutional goals (Ira, 2010; Pertiwi & Supartha, 2021; Nguyen et al., 2020; Pare, 2007; Vizano et al., 2020).

Global evidence suggests that competitive compensation is a primary determinant of talent attraction and retention (Armstrong, 2010). In Malaysia, studies have demonstrated significant correlations between strategic compensation practices, such as pay-for-performance, and affective organizational commitment (Anvari et al., 2011). Similarly, research in Kenya indicates that robust compensation policies enhance employee trust in management and staff performance (Koitalek, 2016).

In the Ethiopian context, the challenge of employee commitment is increasingly pronounced. Despite institutional interests in providing incentive systems to inspire the workforce, many public servants report disappointment with current compensation packages (Omotayo et al., 2014). This dissatisfaction often translates into high turnover rates and a decline in service quality, which is particularly detrimental in the health sector where personnel stability is synonymous with patient care quality.

While previous literature has extensively explored the impacts of compensation on productivity and job satisfaction, there remains a critical research gap regarding the specific interaction between compensation dimensions and employee commitment within the Ethiopian public health sector. Specifically, the Konso Zone health organizations (KWHOs) face unique socio-economic and infrastructural challenges that may influence how compensation is perceived and how it impacts staff loyalty.

To date, no empirical study has specifically examined the relationship between direct/indirect compensation systems and the three dimensions of employee commitment in the Kena Woreda Health Organizations (KWHOs). This study seeks to fill this void by providing a localized, empirical assessment of how compensation management can be utilized as a tool to remedy dissatisfaction and foster a committed, high-performing healthcare workforce in rural Ethiopia.

Statement of the Problem

Compensation management serves as a cornerstone of organizational strategy, fundamentally influencing employee commitment and retention (Armstrong, 2007). However, recent empirical evidence suggests that public sector

organizations in developing economies often struggle with "decent compensation processes." In the Kena Woreda Health Organizations (KWHOs), systemic failures—including promotion delays, untimely benefit disbursements, and stagnant salary structures—have precipitated a decline in workforce morale. Such administrative inefficiencies typically result in diminished productivity, heightened absenteeism, and a palpable lack of organizational dedication, ultimately compromising the quality of healthcare delivery.

While established theories posit that employees are driven by the fulfillment of basic needs through direct and indirect financial payments (Dessler, 2008), modern work environments demand a more nuanced approach. Recent literature highlights that "variable compensation" and "nontraditional benefits" are increasingly vital for empowering employees in high-uncertainty environments (Pertiwi & Supartha, 2021; Nelson & Spitzer, 2003; Rahmawati & Rahman, 2022). While previous studies in Ethiopia have explored the links between compensation and job performance or satisfaction (Abebe, 2018; Dingama, 2018), they have largely overlooked the multidimensional nature of Employee Commitment. Specifically, there is a lack of clarity on whether compensation drives commitment through emotional attachment (affective), a lack of alternatives (continuance), or moral obligation (normative).

The urgency of this study is underscored by critical turnover data within KWHOs. HRM reports indicate an escalating turnover rate, rising from 18.5% in 2022 to 22.5% in 2023, with acute instability noted in centers such as Gesergio Yela and Kemele. This trend far exceeds the turnover rates of other local sectors, signaling a crisis in talent retention directly linked to perceived inequities in the compensation system. Given the absence of empirical research addressing these multidimensional commitment gaps in the Konso Zone, this study aims to investigate the impact of direct and indirect compensation on the three dimensions of employee commitment within KWHOs.

Research Hypotheses

Based on the objectives, the following null (H_0) and alternative (H_1) hypotheses are formulated for testing:

Hypothesis 1

- ✚ **H_0 :** Direct compensation has no significant effect on employee commitment in KWHOs.
- ✚ **H_1 :** Direct compensation has a significant effect on employee commitment in KWHOs.

Hypothesis 2

- ✚ **H_0 :** Indirect compensation has no significant effect on employee commitment in KWHOs.
- ✚ **H_1 :** Indirect compensation has a significant effect on employee commitment in KWHOs.

Hypothesis 3

- ✚ **H_0 :** The interaction of direct and indirect compensation has no significant effect on employee commitment.
- ✚ **H_1 :** The interaction of direct and indirect compensation has a significant effect on employee commitment.

Hypothesis 4

- ✚ **H_0 :** Direct and indirect compensation systems have no significant effect on the specific dimensions (affective, continuance, and normative) of commitment.
- ✚ **H_1 :** Direct and indirect compensation systems have a significant effect on the specific dimensions of commitment.

Hypothesis 5

- ✚ **H_0 :** There is no significant relationship between demographic variables and employee commitment dimensions.
- ✚ **H_1 :** There is a significant relationship between demographic variables and employee commitment dimensions.

Conceptual Framework

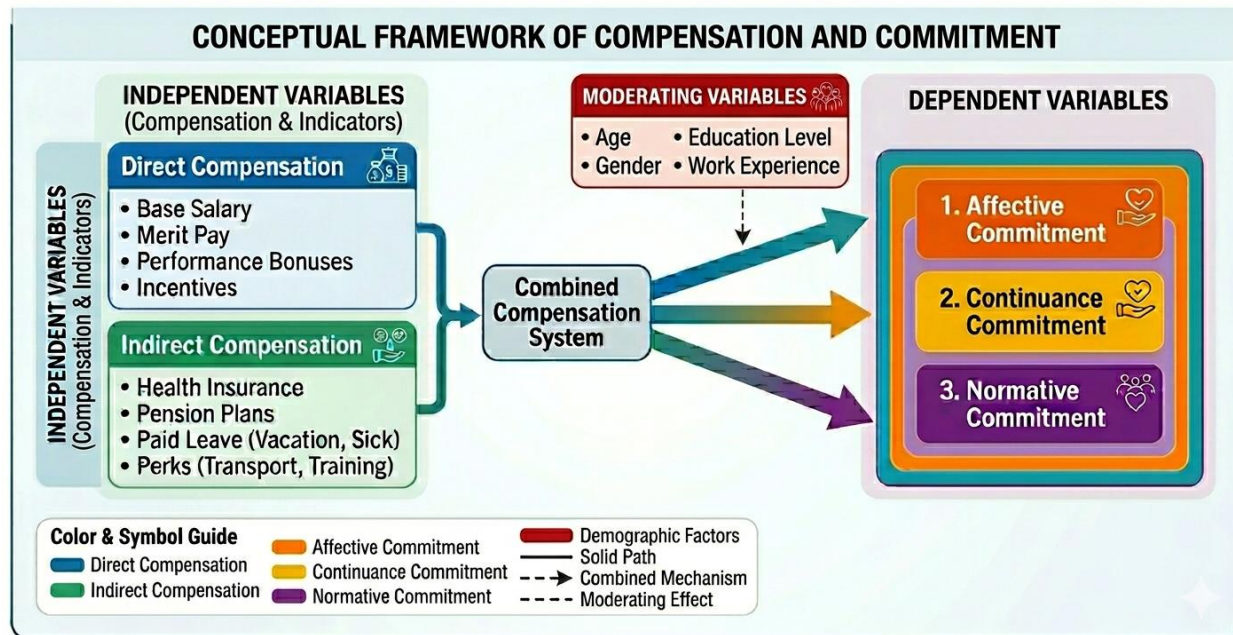


Figure 1. Conceptual Framework

Source: Adapted from (Soegandhi, 2013) with little modification, and created with the help of Gemini modification

2 Methodology

Study Area

The study was conducted in Kena Woreda, a newly established administrative district within the Konso Zone, Southern Ethiopia. The Konso Zone is located approximately 595 km from Addis Ababa and 361 km from Hawassa, bordering the Oromia region and several special woredas (Asnake et al., 2013). Covering an area of 2,354.3 km² with a population exceeding 421,000, the zone transitioned through various administrative structures before achieving its current status in 2011 E.C. (CSA, 2013). The specific research site, Kena Woreda, serves a population of approximately 82,462, with its administrative center in Fasha (Konso Zone Kena Woreda Plan Office, 2020). The district faces significant infrastructural challenges, particularly in remote border villages. This research targeted all four public health centers in the woreda: Fasha, Gera, Kamale, and Gesergio-Yela. These Kena Woreda Health Organizations (KWHOs) currently struggle with critical employee turnover and dissatisfaction. These issues are primarily linked to perceived inequities in compensation, which undermine workforce commitment. As no prior empirical studies of this nature have been conducted in these specific organizations, this study seeks to close the gap between unfair compensation systems and the resulting lack of employee commitment in the region.

Research Design

According to Pride & Ferrell (2008), research design is a combined plan for obtaining the information needed to address a research problem. The research design appropriate for this study is an explanatory type of research design; an explanatory study explains the relationship between the variables of study to describe & explain the factors that affect employee commitment & the relationship between variables that correlate to estimate the integrated effects of compensation on employee commitment. Both (qualitative and quantitative) methods have been applied. According to Creswell et al. (2003), qualitative research helps in getting an in-depth analysis of the problem under investigation, and quantitative research has been applied in order to describe current conditions or to investigate relationships, including effect relationships under study.

Data Sources and Collection Instruments

To ensure a rigorous investigation, this study utilized a dual-approach data collection strategy incorporating both primary and secondary sources. Primary data were gathered through a structured questionnaire, synthesized from validated items in existing literature and researcher-developed scales tailored to the specific context of Kena Woreda Health Organizations. This source served as the primary evidence for evaluating direct and indirect compensation effects on the three dimensions of employee commitment. Complementing this, secondary data were extracted from official reports, internal manuals, and administrative documents to provide essential context regarding existing institutional policies and formal compensation structures. The integration of these sources allowed for a comprehensive analysis, aligning formal organizational frameworks with the empirical perceptions and experiences of the healthcare workforce (Triguero-Sánchez et al., 2022).

Study Population, Sampling Frame, and Sample Size

The target population for this study comprised all 189 employees currently working across the four health centers in Kena Woreda: Fasha, Gera, Gessergio/Yela, and Kamale. To ensure the findings were statistically representative of this population, the sample size was determined using Yamane's (1967) formula at a 95% confidence level:

$$n = \frac{N}{1 + N(e)^2}$$

Substituting the population (N = 189) and the margin of error (e = 0.05), the calculation resulted in a required sample size of 128 respondents. To enhance the precision of the results and account for variations across the different facilities, a proportionate stratified random sampling technique was employed. The population was divided into strata based on the specific health centers. The sample for each stratum (n_i) was then calculated using the ratio of the total sample size to the total population (n/N) multiplied by the stratum size (N_i). This method ensured that both gender and institutional representation remained proportional to the actual workforce distribution, as detailed in Table 1.

Table 1
Sample Distribution to Sample Health Centers

S/N	Health Centers	Total population (Target)			Total sample size		
		Male	Female	Total (N _i)	Male	Female	Total (n _i)
1	Fasha	44	42	86	30	28	58
2	Gerra	22	13	35	15	9	24
3	Gessergio/Yela	18	16	34	12	11	23
4	Kamale	24	10	34	16	7	23
Total		108	81	189(N)	73	55	128(n)

Source: Own Survey, 2024

Data Validity and Reliability

Reliability refers to the stability and consistency of the measures used to investigate the relationships between variables (Ghauri et al., 2020). To ensure the quality of the findings, the survey instrument for this study was designed in strict alignment with the research objectives, the identified problem statement, and existing theoretical frameworks. The draft questionnaire underwent a rigorous review process with research supervisors to refine the format, structure, grammar, and wording, thereby ensuring face and content validity. The internal reliability of the scales was evaluated using Cronbach's alpha. According to Bryman & Bell (2003), a Cronbach's alpha coefficient of 0.70 or higher indicates an acceptable level of internal consistency. In this study, all questionnaire items achieved coefficients exceeding the 0.70 threshold, demonstrating that the scales are internally consistent and reliable for measuring the intended constructs of compensation and employee commitment.

Table 2
Cronbach's Alpha Test

No	Variables of the Study	No of Respondents	No of Items	Cronbach Alpha
1,	Determinations of employee compensation systems	123	9	0.822
2.	The effect of direct compensation on employee Commitment	123	10	0.849
3.	The effect of indirect compensation on employee Commitment	123	8	0.897
4.	Employee commitment	123	18	0.904
4.1.	Affective commitment	123	6	0.877
4.2.	Continuance commitment	123	6	0.801
4.3.	Normative commitment	123	6	0.752
	For all items	123	45	0.934

Source: SPSS Output, 2024

3 Methods of Data Analysis

To ensure data integrity, all primary data were meticulously screened for omissions and consistency prior to coding. The cleaned data were then organized and analyzed using SPSS version 25, employing a combination of descriptive and inferential statistical techniques. Descriptive statistics, including means, standard deviations, and frequency distributions, were used to summarize sample characteristics and compare categories of respondents. For inferential analysis, ANOVA was utilized to assess the impact of direct and indirect compensation on combined employee commitment, while MANOVA tests were applied to evaluate the separate effects of these compensation types across the three dimensions of commitment. Finally, quantitative findings were illustrated through tables, charts, and pie charts, while qualitative data were presented through thematic and conceptual analysis to provide a comprehensive overview of the research results.

Response Rate

A total of 128 questionnaires were distributed to the sampled employees of the Kena Woreda Health Organizations. Out of these, 123 respondents completed and returned the questionnaires, resulting in a 96.09% response rate. According to [Mugenda & Mugenda \(2003\)](#), a response rate of 50% to 60% is considered adequate, a rate of 60% to 70% is good, and any rate above 70% is categorized as very good. Consequently, the 96.09% return rate in this study is classified as excellent (Table 3), providing a highly representative and reliable data set for the subsequent analysis.

Table 3
Response Rate across Health Centers

S/N	Health Centers (HC)	Sample size	Response	Percentage
1	<i>Fasha</i>	58	55	94.83%
2	<i>Gerra</i>	24	24	100%
3	<i>Gessergio/Yela</i>	23	23	100%
4	<i>Kamale</i>	23	21	91.3%
	Total	128	123	96.09%

Source: Own Survey, 2024

Demographic Profile of Respondents

The initial section of the instrument gathered data on the personal and professional characteristics of the participants. This profiling is essential for understanding the background of the healthcare workforce within the Kena Woreda Health Organizations (KWHOs) and ensures that the data reflects a wide range of perspectives across different demographics and professional levels.

As shown in Table 4, the gender distribution of the 123 respondents was relatively balanced, with a slight majority of males at 57.7% (n=71) compared to females at 42.3% (n=52). Regarding age distribution (Table 4), the workforce is predominantly comprised of individuals in their early to mid-career stages. The majority of respondents (51.2%) fall within the 31–40 age bracket, while 38.2% are between 20–30 years old. Only 10.6% are aged 41 or older, suggesting a relatively young workforce. Furthermore, marital status data (Table 4) indicate that 68.3% of the respondents are married, 29.3% are single, and 2.4% are divorced or separated.

Table 4
Respondent's Gender, Age, and Marital Status

Variable	Category	Frequency	Percent (%)
Gender	Male	71	57.7
	Female	52	42.3
Age (Years)	20–30	47	38.2
	31–40	63	51.2
	41–50	13	10.6
Marital Status	Single	36	29.3
	Married	84	68.3
	Divorced/Separated	3	2.4
Total		123	100

Source: Own Survey, 2024

The educational profile (Table 5) demonstrates a qualified workforce, with the vast majority holding a professional qualification. Specifically, 64.2% of respondents hold a Diploma, and 22.0% possess a Bachelor's Degree. A smaller segment is comprised of those with secondary education (8.9%) or certificates (4.9%). In terms of organizational hierarchy (Table 5), 61.0% of the participants are general staff or lower-level workers, while 29.3% occupy middle-management roles and 9.8% serve in top-level management positions.

Table 5
Respondent's Educational Attainment and Professional Position

Variable	Category	Frequency	Percent (%)
Educational Level	Secondary Level	11	8.9
	Certificate	6	4.9
	Diploma	79	64.2
	Bachelor's Degree	27	22
Management Level	Top-level Management	12	9.8
	Middle-level Management	36	29.3
	General Staff/Other	75	61
Total		123	100

Source: Own Survey, 2024

The respondents represent diverse functional areas within the health centers (Table 6). The largest departmental groups include Mother and Child Health (20.3%), Outpatient Services (19.5%), and Emergency (15.4%). Other participants were drawn from Healthcare Finance (13.8%), Pharmacy (7.3%), Laboratory (4.9%), and Inpatient Services (2.4%). Work experience data (Table 6) reveals a seasoned workforce; 62.5% of the respondents have served for more than five years, with the largest group (44.7%) possessing 6–10 years of experience. This level of tenure suggests that the respondents possess a deep understanding of the organizational compensation culture. Finally, monthly income data

(Table 6) show that 61.0% of the staff earn between 5,000 and 10,000 ETB, while 37.4% earn below 5,000 ETB, and a marginal 1.6% earn above 10,000 ETB.

Table 6
Respondent's Departmental Distribution, Experience, and Income

Variable	Category	Frequency	Percent (%)
Department	MCH	25	20.3
	Outpatient	24	19.5
	Emergency	19	15.4
	Healthcare Finance	17	13.8
	Others (Lab, Pharmacy, etc.)	38	31
Experience (Years)	1–5	46	37.4
	6–10	55	44.7
	11–20	22	17.8
Monthly Income (ETB)	Below 5,000	46	37.4
	5,000–10,000	75	61
	Above 10,000	2	1.6
Total		123	100

Source: Own Survey, 2024

Assessment of Employee Compensation Systems

This section evaluates the existing compensation mechanisms within the Kena Woreda Health Organizations (KWHOs). Respondents provided feedback on nine specific items regarding the formulation, fairness, and impact of the compensation plan. The results, summarized through descriptive statistics (mean and standard deviation), highlight significant gaps in employee satisfaction and perceived equity.

Perception of Compensation Policy and Formulation

As shown in Table 7, there is a prevalent dissatisfaction with the organizational compensation structure. Regarding the existence of a well-formulated compensation plan, a combined 70.8% of respondents expressed disagreement (40.7% strongly disagree; 30.1% disagree). The mean score of 2.02 (SD=1.063) confirms that the majority of the workforce feels the current plan is inadequate. Interestingly, when asked if the pay structure aligns with government policy, the response was more moderate. The mean score of 3.18 (SD=0.859) indicates that 37.4% of respondents agree the organization follows legal mandates, though a large portion (38.2%) remained neutral, suggesting a lack of transparency regarding policy compliance.

Internal and External Equity

Fairness remains a critical concern for the healthcare workforce. The study assessed two dimensions of equity: **Internal Equity**—Approximately 56.9% of employees disagreed that the pay structure is balanced for those doing the same job within the organization (Mean=2.25, SD=1.037). **External Equity**—The results were even more pronounced regarding external comparison, with 65.0% of respondents dissatisfied with their pay relative to similar roles in other organizations (Mean=2.08, SD=1.053). These findings suggest that a lack of perceived fairness—both internally and externally—may lead to reduced employee effort and commitment. The finding is consistent with (Hameed et al., 2014)

Fairness of Payment and Timeliness

A significant majority (64.2%) of respondents believe they are not paid a fair amount for the actual volume of work they perform (Mean=2.17, SD=1.099). Beyond the amount of pay, the timeliness of disbursements (salaries, bonuses,

and monetary benefits) is also a major issue. Nearly 59.3% of the workforce expressed disagreement regarding the punctuality of payments (Mean=2.11, SD=1.047), indicating a systemic gap in the administrative delivery of benefits.

Influence on Motivation and Encouragement

The study further explored the psychological impact of the compensation system. A significant 67.5% of respondents agreed that their interest in working is directly influenced by the compensation system (Mean=3.55, SD=0.951). This demonstrates that while the current system is underperforming, it remains a primary driver of employee behavior. Finally, 67.5% of respondents reported that they are not encouraged or satisfied by the current system (Mean=2.18, SD=1.116). This widespread dissatisfaction poses a risk to organizational stability and long-term employee commitment.

Table 7
Employees Response on Determination of Compensation System

Statement	Level of Agreement	Frequency	Percentage	Mean	SD
Employee compensation plan at the health organization is well formulated	Strongly Disagree	50	40.7	2.02	1.063
	Disagree	37	30.1		
	Undecided	22	17.9		
	Agree	12	9.8		
	Strongly Agree	2	1.6		
	Total	123	100.0		
The pay structure in my organization meets the requirements of the government's pay policy.	Disagree	30	24.4	3.18	.859
	Undecided	47	38.2		
	Agree	40	32.5		
	Strongly Agree	6	4.9		
	Total	123	100.0		
The pay structure in my organization ensures that there is a good balance of pays between the employees in the organization	Strongly Disagree	38	30.9	2.25	1.037
	Disagree	32	26.0		
	Undecided	37	30.1		
	Agree	16	13.0		
	Total	123	100.0		
The pay structure in my organization ensures that there is a good balance in comparison with other employees of other related organizations.	Strongly Disagree	46	37.4	2.08	1.053
	Disagree	34	27.6		
	Undecided	34	27.6		
	Agree	5	4.1		
	Strongly Agree	4	3.3		
I feel that my job is very well defined and compensated.	Total	123	100.0	2.17	1.099
	Strongly Disagree	42	34.1		
	Disagree	37	30.1		
	Undecided	29	23.6		
	Agree	11	8.9		
	Strongly Agree	4	3.3		
The organization gives salaries, bonus and other monetary benefits to the employees on the required time.	Total	123	100.0	2.11	1.047
	Strongly Disagree	48	39.0		
	Disagree	25	20.3		
	Undecided	41	33.3		
	Agree	7	5.7		
	Strongly Agree	2	1.6		
My interest to work is influenced by the compensation system of the organization.	Total	123	100.0	3.55	.951
	Disagree	20	16.3		
	Undecided	35	28.5		
	Agree	48	39.0		
	Strongly Agree	20	16.3		
	Total	123	100.0		

Statement	Level of Agreement	Frequency	Percentage	Mean	SD
I believe that most of the employees in the organization are relatively encouraged by the compensation system of the organization.	Strongly Disagree	40	32.5	2.18	1.116
	Disagree	43	35.0		
	Undecided	23	18.7		
	Agree	12	9.8		
	Strongly Agree	5	4.1		
	Total	123	100.0		

Source: Own Survey, 2024

Effect of Direct Compensation on Employee Commitment

This section analyzes the impact of direct compensation—including base pay, incentives, and recognition—on employee commitment levels within the health organizations. Direct compensation serves as a fundamental motivator; however, the findings, as summarized in Table 8, indicate significant deficiencies in the current system.

Base Pay and Basic Income

The study assessed whether the current base pay is balanced relative to the workload. A substantial 65.0% of respondents expressed disagreement (Mean=2.09, SD=1.079), suggesting that the foundational salary structure does not meet employee expectations for effort-to-reward parity. Furthermore, 57.8% of the workforce disagreed that their basic income, independent of incentives, was sufficient to enhance their work effort (Mean=2.35, SD=1.254), indicating that current salary levels are perceived as inadequate for fostering high levels of commitment.

Incentives and Performance-Based Pay

The analysis reveals a critical lack of performance-based financial incentives: **Commissions** —A combined 83.0% of respondents disagreed that commissions are paid for meeting job targets, with 61.0% strongly disagreeing. **Target-Based Compensation** —Approximately 81.3% of respondents reported that no formal system exists to compensate employees for achieving specific job targets (Mean=1.84, SD=0.953). **Overtime** —Punctual rewards for extra effort are largely absent, as 78.8% of the respondents disagreed that they receive overtime payments for working extra hours. The absence of these financial drivers represents a significant organizational gap, as the lack of rewards for exceeding targets often results in diminished morale and lower organizational commitment.

Recognition and Supervisory Praise

Beyond financial rewards, non-monetary recognition was found to be equally lacking. Approximately 71.6% of the participants disagreed that a recognition system exists to increase their work effort (Mean=2.08, SD=1.191). Additionally, 58.5% of respondents stated they rarely receive praise from superiors for a job well done (Mean=2.34, SD=1.207). While respondents leaned toward agreeing that praise would motivate them to exceed targets (Mean=2.82), the current lack of supervisory feedback and formal recognition acts as a barrier to maximizing employee potential and commitment. The result is in line with (Vizano et al., 2020).

Table 8
Employees Response on Direct Compensation

Statement	Level of Agreement	Frequency	Percentage	Mean	SD
I am more interested and encouraged in my base pay as it is more balanced to the work I do.	Strongly Disagree	48	39.0	2.09	1.079
	Disagree	32	26.0		
	Undecided	29	23.6		
	Agree	12	9.8		
	Strongly Agree	2	1.6		
	Total	123	100.0		
I am paid commissions if I meet my job targets.	Strongly Disagree	75	61.0	1.65	.975
	Disagree	27	22.0		
	Undecided	11	8.9		
	Agree	9	7.3		
	Strongly Agree	1	.8		

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Statement	Level of Agreement	Frequency	Percentage	Mean	SD
More than incentives, my basic income enhanced my effort to complete my work.	Total	123	100.0	2.35	1.254
	Strongly Disagree	43	35.0		
	Disagree	28	22.8		
	Undecided	23	18.7		
	Agree	24	19.5		
	Strongly Agree	5	4.1		
There exists a system of compensating employees in the organization if they achieve their targets.	Total	123	100.0	1.84	.953
	Strongly Disagree	54	43.9		
	Disagree	46	37.4		
	Undecided	14	11.4		
	Agree	7	5.7		
	Strongly Agree	2	1.6		
Recognition systems increase my effort to work well in my area and even to go beyond the call of duty.	Total	123	100.0	2.08	1.191
	Strongly Disagree	5	4.1		
	Disagree	16	13.0		
	Undecided	14	11.4		
	Agree	37	30.1		
	Strongly Agree	51	41.5		
I receive overtime payment if I work extra hours in the organization.	Total	123	100.0	1.72	1.043
	Strongly Disagree	72	58.5		
	Disagree	25	20.3		
	Undecided	18	14.6		
	Agree	4	3.3		
	Strongly Agree	4	3.3		
I am praised for a job well done by my superiors.	Total	123	100.0	2.34	1.207
	Strongly Disagree	40	32.5		
	Disagree	32	26.0		
	Undecided	24	19.5		
	Agree	23	18.7		
	Strongly Agree	4	3.3		
If get praise for the work well done, I will work more to exceed my targets.	Total	123	100.0	2.82	1.337
	Strongly Disagree	28	22.8		
	Disagree	22	17.9		
	Undecided	33	26.8		
	Agree	24	19.5		
	Strongly Agree	16	13.0		
	Total	123	100.0		

Source: Own Survey, 2024

Effect of Indirect Compensation on Employee Commitment

This section explores the impact of non-monetary and fringe benefits—collectively referred to as indirect compensation—on employee commitment within the Kena Woreda Health Organizations. Indirect compensation typically includes health insurance, paid leave, and recreational facilities. The findings, detailed in Table 9, reveal a widespread lack of satisfaction with the current benefits packages.

Retention and Fairness of Benefits

The study first assessed whether existing benefits act as a retention tool. A staggering 83.7% of respondents disagreed that benefits are the reason they remain with the organization (Mean=1.82, SD=0.779). This suggests that employees persist in their roles despite, rather than because of, the indirect compensation offered. Furthermore, 75.6% of the workforce perceived discrimination in how benefits are distributed among employees at the same level (Mean=1.98, SD=0.82), indicating a significant issue with internal equity that could undermine organizational trust.

Facilities, Leave, and Insurance Coverage

Specific components of the indirect compensation system were found to be largely deficient: **Recreational Facilities**—A combined 73.1% of respondents expressed dissatisfaction with the organization's contribution to recreational facilities and flexible work support (Mean=1.97, SD=0.839). **Leave Policy**—Regarding "free time payments" (holidays, vacations, and sick leave), 67.5% of respondents disagreed that a well-designed system exists (Mean=2.05, SD=0.876). **Insurance**—65.9% of participants felt they gained little to no benefit from medical and accident insurance coverage (Mean=2.07, SD=0.87*), highlighting a critical gap in workplace safety and employee wellness support.

Impact on Effort and Motivation

The perceived lack of equity in benefits appears to negatively influence workforce morale. Approximately 57.0% of respondents disagreed that the current benefit structure encourages them to put more effort into their work (Mean=2.30, SD=1.048). Furthermore, 62.6% of respondents disagreed that they are more encouraged by benefits than by their base pay (Mean=2.21, SD=1.026). Combined with the previous findings on base pay, this suggests that neither the direct nor the indirect compensation systems are currently viewed as sufficient to foster strong organizational commitment.

Table 9
Employees Response on Indirect Compensations

Statement	Level of Agreement	Frequency	Percentage	Mean	SD
I am still working for this organization because of the benefits that I receive.	S. Disagree	46	37.4	1.82	.779
	Disagree	57	46.3		
	Undecided	16	13.0		
	Agree	4	3.3		
	Total	123	100.0		
The benefits in the organization do not discriminate against employees at the same level in the organization.	S. Disagree	37	30.1	1.98	.820
	Disagree	56	45.5		
	Undecided	25	20.3		
	Agree	5	4.1		
	Total	123	100.0		
The majority of employees in this organization are happy with the flexible work they have done as a result of the organization's contribution of recreational facilities and vehicles.	S. Disagree	41	33.3	1.97	.839
	Disagree	49	39.8		
	Undecided	29	23.6		
	Agree	4	3.3		
	Total	123	100.0		
The quality and quantity of work I have done as a result of benefits to an extent depends on my effort.	S. Disagree	0	0	2.13	.949
	Disagree	11	8.9		
	Undecided	31	25.2		
	Agree	44	35.8		
	S. Agree	37	30.1		
Equity in benefits gives me a sense to put more effort into organizational work.	Total	123	100.0	2.30	1.048
	S. Disagree	35	28.5		
	Disagree	35	28.5		
	Undecided	34	27.6		
	Agree	19	15.4		
The organization has well-designed free time payments such as holidays, vacations, and sick leaves, which employees are more interested in.	Total	123	100.0	2.05	.876
	S. Disagree	39	31.7		
	Disagree	44	35.8		
	Undecided	35	28.5		
	Agree	5	4.1		
I have gained many of the benefits from the medical and accident insurance	S. Disagree	38	30.9	2.07	.879
	Disagree	43	35.0		
	Undecided	37	30.1		

Statement	Level of Agreement	Frequency	Percentage	Mean	SD
coverage that encourage me to work more effectively for the organization. I believe that most of the employees in the organization are more encouraged by the benefits they get than their base pay.	Agree	5	4.1	2.21	1.026
	Total	123	100.0		
	S. Disagree	37	30.1		
	Disagree	40	32.5		
	Undecided	29	23.6		
	Agree	17	13.8		
	Total	123	100.0		

Source: Own Survey, 2024

Employee Commitment Analysis

Employee commitment was evaluated across three dimensions—Affective, Continuance, and Normative—using mean scores and standard deviations (SD) to determine how compensation management influences organizational attachment in KWHOs.

Affective Commitment

Affective commitment represents the emotional attachment, identification, and involvement an employee has with their organization. As summarized in Table 10, the findings indicate a moderate level of affective commitment across the workforce, with an overall mean of $M=3.07$ ($SD=0.92$).

The analysis of individual items reveals varying degrees of emotional integration: **Organizational Identity**—Respondents demonstrated a relatively strong sense of inclusion, with many feeling like members of the organization's "family" ($M=3.41$, $SD=1.17$) and possessing a strong sense of belonging ($M=3.16$, $SD=1.21$). **Ownership and Advocacy**—Employees showed a neutral to moderate tendency to view organizational problems as their own ($M=3.00$, $SD=1.22$) and reported a moderate level of enjoyment when discussing the organization with outsiders ($M=2.79$, $SD=1.14$). **Alignment of Needs**—The lowest score in this dimension related to whether employees felt their personal needs were aligned with organizational objectives ($M=2.54$, $SD=1.09$), suggesting a disconnect between individual goals and organizational mission. **Transition Anxiety**—Interestingly, employees expressed significant concern regarding the consequences of leaving their work without a replacement lined up ($M=3.54$, $SD=1.21$), which often bridges the gap between emotional concern for the organization and personal stability. The moderate mean score suggests that while employees feel a baseline sense of belonging, there is substantial room to strengthen their emotional bond through improved compensation and organizational support.

Table 4
Descriptive Statistics for Affective Commitment

Affective Commitment			
Statement	N	Mean	SD
I am more interested in the organization as I feel my personal needs are aligned with the organization's objectives.	123	2.54	1.096
I enjoy discussing my organization with other people outside it.	123	2.79	1.140
I honestly believe that the problems of this organization are my own.	123	3.00	1.221
I do feel like I am a member of this organization's 'family.'	123	3.40	1.172
I do feel a strong sense of belonging to this organization.	123	3.16	1.210
I am worried about what happens if I quit my work without a replacement lined up.	123	3.54	1.216
Affective commitment (Average Mean)	123	3.0732	.92579

Source: Own Survey, 2024

Continuance Commitment

Continuance commitment refers to an employee's assessment of the costs and risks associated with leaving the organization versus the perceived benefits of staying. This dimension reflects loyalty based on the "accrued investments" (such as seniority or specialized benefits) and the availability of external alternatives. As shown in Table

11, the overall findings for continuance commitment indicate a moderate level of attachment, with a total mean score of $M=2.72$ ($SD=0.79$).

The analysis of the individual indicators reveals the following: **Availability of Alternatives** —The highest-rated factor in this category was the perception that leaving the organization would result in a scarcity of available alternatives ($M=2.91$, $SD=1.17$). Similarly, respondents perceived they had relatively few other options to consider should they choose to exit ($M=2.66$, $SD=1.18$). **Professional Advancement** —Employees indicated a moderate belief that staying provides opportunities for personal advancement ($M=2.80$, $SD=1.15$), which acts as a primary driver for their continued engagement. **Difficulty of Leaving** —Respondents expressed that it would be somewhat difficult to leave the organization immediately ($M=2.75$, $SD=1.09$). This is reinforced by a general observation that many employees in the sector are currently moving between organizations frequently in search of better incentives ($M=2.74$, $SD=1.13$). **Benefit Matching** —Interestingly, the lowest score was attributed to the idea that other organizations could not match their current benefits ($M=2.46$, $SD=1.02$). This suggests that while employees are staying due to a lack of immediate alternatives, they do not necessarily view their current benefit package as superior or "unmatchable" by the external market. The moderate mean score suggests that employees' loyalty at KWHOs is largely "calculative" and driven by the current economic reality of limited job alternatives rather than a strong satisfaction with the existing compensation benefits.

Table 5
Employees Response on Continuance Commitment

Continuance Commitment				
Statement	N	Mean	Std. Deviation	
I am more engaged with the organization because I feel there is an opportunity for my personal advancement.	123	2.80	1.150	
Even if I wanted to, it would be very difficult for me to leave this organization right now.	123	2.75	1.098	
One of the major reasons I continue to work for this organization is that another organization may not match the overall benefit that I get here.	123	2.46	1.027	
I think some employees these days move from my organization to others too often in search of better incentives.	123	2.74	1.130	
I believe I have a few options to consider when it comes to leaving this organization.	123	2.66	1.179	
One of the few serious consequences of leaving this organization would be scarcity of available alternatives.	123	2.91	1.174	
Continuance commitment (Average Mean)	123	2.7209	.79774	

Source: Own Survey, 2024

Normative Commitment

Normative commitment represents the employee's sense of obligation to remain with the organization, often driven by internalized moral standards or a sense of duty developed through socialization. As summarized in Table 12, the findings indicate a moderate level of normative commitment among the staff of KWHOs, with an overall mean of $M=2.86$ ($SD=0.63$).

The detailed analysis of normative indicators reveals the following: **Ideology of Loyalty** —The highest scores in this dimension were related to the belief that a person must always be loyal to their organization ($M=3.20$, $SD=1.16$) and the value placed on remaining loyal to a single organization ($M=3.15$, $SD=1.04$). This suggests that employees possess a strong cultural or personal foundation of organizational loyalty. **Career Intentions and Necessity** —Respondents showed a moderate willingness to spend their entire career with the organization ($M=2.84$, $SD=1.07$). Notably, employees viewed staying as a matter of necessity as much as a desire ($M=2.85$, $SD=0.49$), indicating that the sense of duty is partially reinforced by practical circumstances. **Moral Obligation vs. Opportunity** —Interestingly, when faced with a better job offer elsewhere, employees were less certain that leaving would be the "wrong" choice ($M=2.61$, $SD=0.83$). This lower score implies that while they value loyalty in theory, their sense of moral obligation might be challenged by superior external opportunities. **Perceived Disruption** —The lowest score was recorded for the idea that their lives would be significantly disrupted by leaving the organization ($M=2.49$, $SD=0.86$), suggesting that the perceived personal cost of departure is not the primary driver of their normative commitment. Overall, the moderate normative commitment indicates that while staff members hold a philosophical belief in loyalty, this sense of obligation is not strong enough to override the potential benefits of career moves, especially given the current compensation challenges.

Table 6
Employees Response on Normative Commitment

Normative Commitment			
Statement	N	Mean	Std. Deviation
I would be satisfied to spend my career with this organization.	123	2.84	1.074
I do believe that a person must always be loyal to his/her organization.	123	3.20	1.164
My life would be disrupted if I decided to leave this organization now.	123	2.49	.862
If I got another offer for a better job elsewhere, I would not feel it would be the right choice to leave the organization.	123	2.61	.826
I was taught to believe in the value of remaining loyal to one organization.	123	3.15	1.038
Staying with this organization is currently a matter of necessity as much as desire.	123	2.85	.491
Normative commitment (Average Mean)	123	2.8550	.62505

Source: Own Survey, 2024

Correlation Analysis

To evaluate the strength and direction of the linear relationship between compensation management and employee commitment, Pearson's correlation analysis was conducted. Correlation coefficients (r) range from -1.00 to $+1.00$, where zero indicates no association. According to [Hair et al. \(2003\)](#), the magnitude of these coefficients defines the strength of the relationship, as categorized in Table 13.

Table 7
Range of Correlation Coefficient

Coefficient Range	Strength
+0.91 to +1.0	Very Strong
+0.71 to +0.90	High
+0.41 to +0.70	Moderate
+0.21 to +0.40	Small but definite relationship
0 to +0.20	Slight, almost negligible

Source: [Hair et al. \(2003\)](#)

Correlation analysis was used to show the strength of the association or the relationship between the variables involved. Inter-correlation coefficients (r) were calculated using Pearson's Product Moment.

Relationship between Compensation and Employee Commitment

Pearson's correlation analysis was performed to examine the relationships between direct and indirect compensation and the levels of employee commitment within KWHOs. The results of this analysis are summarized in Table 14.

Direct Compensation and Employee Commitment

The correlation coefficient between direct compensation and employee commitment is $r = 0.533$ ($P < 0.01$). This indicates a moderate, positive, and statistically significant relationship. The result suggests that as direct financial rewards (base pay and incentives) improve, employee commitment to the organization increases substantially. This finding aligns with the research by Seleem (2011), which similarly identified a significant positive link between direct financial compensation and organizational commitment.

Indirect Compensation and Employee Commitment

The relationship between indirect compensation and employee commitment yielded a correlation coefficient of $r = 0.423$ ($P < 0.01$). This also represents a moderate and statistically significant positive association. It can be concluded that the provision of benefits such as insurance and leave policies contributes moderately to employee commitment levels. This result supports the findings of Lumley et al. (2011), reinforcing the premise that indirect compensation remains a critical determinant of organizational commitment.

Table 8
Correlation Coefficient between Compensation and Employee Commitment

		Correlations		
		Direct Compensation	Indirect Compensation	Employee Commitment
Direct Compensation	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	123		
Indirect Compensation	Pearson Correlation	.523**	1	
	Sig. (2-tailed)	.000		
	N	123	123	
Employee Commitment	Pearson Correlation	.533**	.423**	1
	Sig. (2-tailed)	.000	.000	
	N	123	123	123

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation between Compensation and Commitment Dimensions

To provide a more granular understanding of the data, the relationships between the two independent variables (direct and indirect compensation) and the three specific dimensions of employee commitment (affective, continuance, and normative) were analyzed. The results are presented in Table 15.

Comparative Analysis of Commitment Dimensions

The findings indicate that both direct and indirect compensation are positively and significantly correlated with all three dimensions of commitment ($r > 0.3$, $P < 0.01$). However, the strength of these relationships varies: **Affective Commitment**—This dimension showed the strongest association with both types of compensation. It is most notably correlated with direct compensation ($r = 0.513$) and indirect compensation ($r = 0.371$). This suggests that financial and non-financial rewards are primary drivers of the emotional bond employees feel toward the organization. **Normative Commitment**—Compensation variables demonstrated a moderate positive relationship with normative commitment ($r = 0.507$ for direct and $r = 0.361$ for indirect). This implies that a well-structured compensation system reinforces the

employee's sense of moral obligation to remain with the institution. **Continuance Commitment**—This dimension yielded the weakest—though still positive and significant—correlations ($r = 0.333$ for direct and $r = 0.341$ for indirect). Overall, the data suggests that affective commitment is the most dominant dimension influenced by compensation management, followed by normative and continuance commitment, respectively. This confirms that while compensation plays a role in the "calculative" decision to stay (continuance), its most significant impact is on the "emotional" (affective) and "moral" (normative) attachments of the healthcare workers in the study area.

Table 15
Correlation Coefficient between Compensation and Commitment Dimensions

		Affective commitment	Continuance commitment	Normative commitment
Direct	Pearson Correlation	.518**	.333**	.507**
Compensation	Sig. (2-tailed)	.000	.000	.000
	N	123	123	123
Indirect	Pearson Correlation	.371**	.341**	.361**
Compensation	Sig. (2-tailed)	.000	.000	.000
	N	123	123	123

Source: SPSS Output, 2024

Inter-Correlation between Commitment Dimensions

The inter-relationships among the three dimensions of commitment were analyzed to determine their internal consistency. As shown in Table 16, all dimensions are positively and significantly correlated ($P < 0.01$). The strongest association was observed between Affective and Normative commitment ($r = 0.609$), followed closely by the relationship between Affective and Continuance commitment ($r = 0.604$). The weakest association, though still significant and positive, was found between Continuance and Normative commitment ($r = 0.453$). These results indicate that while the dimensions are distinct, they are moderately and positively integrated, with emotional attachment (Affective) acting as the central link.

Table 16
Commitment Inter-Correlation

		Affective Commitment	Continuance Commitment	Normative Commitment
Affective commitment	Pearson Correlation	1	.604**	.609**
	Sig. (2-tailed)		.000	.000
	N	123	123	123
Continuance commitment	Pearson Correlation	.604**	1	.543**
	Sig. (2-tailed)	.000		.000
	N	123	123	123
Normative commitment	Pearson Correlation	.609**	.543**	1
	Sig. (2-tailed)	.000	.000	
	N	123	123	123

Source: SPSS Output, 2024

Correlation between Demographic Variables and Employee Commitment

While the study initially considered eight demographic variables—including gender, age, and management position—only educational level and monthly income demonstrated a statistically significant relationship with employee commitment. Consequently, the analysis focused on these two factors, as summarized in Table 17.

Analysis of Significant Demographic Drivers

The findings reveal a positive, albeit small but definite, correlation between these demographic variables and specific commitment dimensions: **Education Level** —Showed a significant positive correlation with Affective commitment ($r = 0.334$) and Continuance commitment ($r = 0.346$), suggesting that higher educational attainment is associated with a greater emotional and calculative attachment to the organization. **Monthly Income** —Similarly, income levels were positively linked to Affective commitment ($r = 0.240$) and Continuance commitment ($r = 0.234$). This confirms that financial compensation remains a tangible driver of commitment. Interestingly, both variables showed a negligible correlation with normative commitment ($r = 0.196$ and $r = 0.194$, respectively). This indicates that an employee's sense of moral obligation is largely independent of their education or income level.

Combined Commitment

Overall, the combined measure of employee commitment maintains a positive and statistically significant relationship with both education level ($r = 0.314$) and monthly income ($r = 0.315$). These results highlight that individual background and economic status are secondary but relevant factors in shaping organizational commitment within the study area.

Table 17
Correlation between Demographic Variables and Commitment Dimensions

		Affective Commitment	Continuance Commitment	Normative Commitment	Employee Commitment
Educational Level	PCorrelation	.334**	.241**	.196*	.314**
	Sig. (2-tailed)	.000	.007	.030	.000
	N	123	123	123	123
Monthly Income	Correlation	.346**	.234**	.194*	.315**
	Sig. (2-tailed)	.000	.009	.031	.000
	N	123	123	123	123
Employee Commitment	Correlation	.894**	.846**	.802**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	123	123	123	123

Source: SPSS Output, 2024

Multiple Linear Regression Analysis

Multiple linear regression was employed to determine the extent to which the independent variables (direct and indirect compensation) explain the variance in the collective dependent variable, employee commitment (Ghani & Ahmad, 2011). To ensure the validity of the results, diagnostic tests were conducted to confirm that the data met the assumptions of Ordinary Least Squares (OLS).

Multicollinearity Test

Multicollinearity arises when independent variables are too highly correlated, making it difficult to isolate their individual effects. This study assessed multicollinearity through two methods: **Correlation Analysis** —As previously shown, the highest correlation between independent variables was 0.384 (between direct and indirect compensation), which is well below the 0.90 threshold suggested by Wheeler & Tiefelsdorf (2005). **VIF and Tolerance** —According to Hair et al. (2003), multicollinearity is avoided if Tolerance values are above 0.10 and Variance Inflation Factor (VIF) values are below 10. As summarized in Table 18, all values fall within the optimal ranges, confirming that multicollinearity is not a concern in this model.

Table 18
Coefficients

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.685	.175		9.608	.000		
	Direct Compensation and Employee Commitment	.384	.080	.429	4.828	.000	.727	1.376
	Indirect Compensation and Employee Commitment	.192	.086	.198	2.235	.027	.727	1.376

a. Dependent Variable: Employee Commitment

Source: SPSS Output, 2024

Autocorrelation Test

The assumption of autocorrelation (or serial correlation) ensures that the error terms for different observations are independent of one another. To test this, the Durbin-Watson (d) statistic was employed. Following the criteria set by [Cochrane \(1997\)](#), a value between 1.5 and 2.5 indicates the absence of autocorrelation. As shown in Table 19, the model yields a Durbin-Watson value within this optimal range, confirming that the residuals are independent.

Table 19
Durbin-Watson Test

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559 ^a	.312	.301	.55846	1.511
a. Predictors: (Constant), Direct Compensation, Indirect Compensation					
b. Dependent Variable: Employee Commitment					

Source: SPSS Output, 2024

Normality Test

The normality assumption requires that the residuals (errors) of the regression follow a normal distribution to ensure valid statistical inferences. This was assessed using a Normal P-P Plot, which compares the observed cumulative probabilities against the expected probabilities of a normal distribution ([Asghar & Saleh, 2012](#)). As illustrated in the diagnostic plots, the data points for the dependent variable (Employee Commitment) align closely with the straight diagonal line. This graphical representation confirms that the residuals are approximately normally distributed, satisfying the requirement for multiple linear regression.

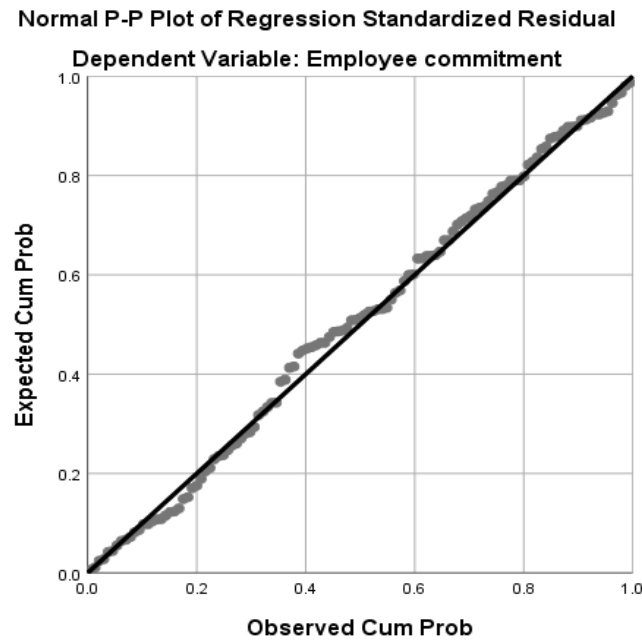


Figure 2. Normal P-P Plot of Residual

Analysis of the Multiple Coefficient of Determination (R^2)

The coefficient of determination (R^2) was used to measure the proportion of variance in the dependent variable (Employee Commitment) explained by the independent variables (Direct and Indirect Compensation). As shown in Table 20, the regression model yielded an R value of 0.559 and an R^2 of 0.312. This indicates that the linear combination of direct and indirect compensation accounts for 31.2% of the total variation in employee commitment within the study area ($F = 27.243$, $P < 0.001$). While the remaining 68.8% of the variation is attributed to factors outside the scope of this study, an R^2 value exceeding 20% is considered sufficient and reliable for concluding social science research (Trivedi, A. Colin Cameron, 2008).

Table 9
Model Summary (Multiple Linear Regression)

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.559 ^a	.312	.301	.55846	.000

a. Predictors: (Constant), Indirect Compensation, Direct Compensation.

Source: SPSS Output, 2024

Analysis of Variance (ANOVA)

The ANOVA results, presented in Table 21, were used to test the overall significance of the regression model. The analysis yielded an F-statistic of 27.243 with a significance value of .000 ($P < 0.05$). Since the p-value is well below the 0.05 threshold, the model is statistically significant. This confirms that the independent variables—direct and indirect compensation—are relevant and valid predictors for explaining the levels of employee commitment at KWHOs.

Table 10

Alehegn, T., Gedeno, K., Katola, G., Deginew, A., Admassu, B., Ayaye, E., & Goshme, H. (2026). The impact of direct and indirect compensation on employee commitment: Evidence from Kena Woreda Health Organizations, Ethiopia. *International Research Journal of Management, IT and Social Sciences*, 13(4), 70–96. <https://doi.org/10.21744/irjm.v13n4.2602>

Analysis of Variance (ANOVA)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.993	2	8.496	27.243	.000 ^b
	Residual	37.426	120	.312		
	Total	54.419	122			
a. Dependent Variable: Employee Commitment						
b. Predictors: (Constant), Indirect Compensation, Direct Compensation						

Source: SPSS Output, 2024

Regression Coefficients and Model Equation

The individual contribution of each independent variable to employee commitment is detailed in Table 22. Both direct compensation ($P < 0.01$) and indirect compensation ($P < 0.05$) are statistically significant predictors of commitment at KWHOs. Based on the standardized beta coefficients (β), direct compensation ($\beta = 0.429$) is the most influential factor, followed by indirect compensation ($\beta = 0.198$).

Table 11
Regression Coefficients

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.685	.175		9.608	.000
	Direct Compensation	.384	.080	.429	4.828	.000
	Indirect Compensation	.192	.086	.198	2.235	.027
a. Dependent Variable: Employee Commitment						

Source: SPSS Output, 2024

According to the Coefficients table, the regression equation is written as:

$$Y = a + \beta_1 X_1 + \beta_2 X_2$$

Where:

X_1 = direct compensation (IV)

X_2 = indirect compensation (IV)

Thus, the equation of the model employed in this research can be written as: -

Employee commitment = 1.685 + 0.384 (direct compensation) + 0.192 (indirect compensation).

Or it can be written as:

$$Y = 1.685 + 0.384X_1 + 0.192X_2$$

This means that, holding other factors constant, a one-unit increase in direct compensation results in a 0.384 unit increase on employee commitment, and a one-unit increase in indirect compensation results in a 0.192-unit increase in employee commitment level.

Interaction Effect Analysis

Interaction effects occur when the combined influence of independent variables on a dependent variable differs from the sum of their individual effects. The interaction between direct and indirect compensation was tested to determine if their combined presence enhances employee commitment more effectively than when managed in isolation. As summarized in Table 23, the hierarchical model shows a progressive increase in the explanatory power (R^2): **Step 1 (Direct Compensation Only)** —Accounts for 28.4% of the variance in employee commitment. **Step 2 (Direct + Indirect Compensation)** —The inclusion of both variables increases the explained variance to 31.2%. **Step 3 (Interaction Effect)** —The interaction term (Direct $\times$ Indirect) further increases the R^2 to 36.1%.

This incremental rise suggests that direct and indirect compensation are synergistic. In other words, the positive impact of direct compensation on commitment is significantly amplified when complemented by a strong indirect compensation (benefits) package.

Table 12
Interaction Effects Model Summary

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.533 ^a	.284	.278	.56761	.284	47.908	1	121	.000	
2	.559 ^b	.312	.301	.55846	.029	4.995	1	120	.027	
3	.601 ^c	.361	.345	.54056	.049	9.079	1	119	.003	1.514
a. Predictors: (Constant), Direct Compensation										
b. Predictors: (Constant), Direct Compensation, Indirect Compensation										
c. Predictors: (Constant), Direct Compensation, Indirect Compensation, Interaction Effect										
d. Dependent Variable: Employee Commitment										

Source: SPSS Output, 2024

Multivariate Analysis of Variance (MANOVA) Test of Between-Subjects Effects

Multivariate Analysis of Variance (MANOVA) was employed to explore how direct and indirect compensation systems differentially influence the three dimensions of employee commitment simultaneously. This approach allows for a single, overall statistical test on the set of correlated dependent variables (Hair et al., 1998; Muhammad et al., 2018).

The results of the MANOVA, summarized in Table 24, highlight the specific impact of each compensation type on the commitment dimensions: **Direct Compensation** —Among the three dimensions, only affective commitment was significantly influenced by direct compensation ($P = 0.005$). In contrast, direct compensation did not have a statistically significant effect on continuance commitment ($P = 0.152$) or normative commitment ($P = 0.084$), as both p-values exceeded the 0.05 alpha level. **Indirect Compensation** —The analysis revealed that indirect compensation did not have a statistically significant effect on any of the three commitment dimensions, with p-values of 0.647 (Affective), 0.192 (Continuance), and 0.146 (Normative), all of which are greater than 0.05. This finding is consistent with the findings of (Alamanda et al., 2022; Burhanudin & Tambun, 2021; Silva et al., 2022; Wijaya et al., 2020; Deveci et al., 2016). These findings suggest that while direct compensation is a key driver of emotional attachment (affective commitment), neither compensation type alone is sufficient to significantly dictate the calculative (continuance) or moral (normative) obligations of the employees within this specific multivariate model.

Table 13
MANOVA Table

Tests of Between-Subjects Effects									
Source	Dependent Variable (commitment dimensions)	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Non cent. Parameter	Observed Power
Direct compensation	Affective	38.861	26	1.495	2.755	.005	.712	71.642	.986
	Continuance	15.944	26	.613	1.483	.152	.571	38.547	.794
	Normative	11.109	26	.427	1.699	.084	.604	44.180	.860
Indirect compensation	Affective	7.183	16	.449	.828	.647	.313	13.243	.402
	Continuance	9.516	16	.595	1.438	.192	.442	23.006	.686
	Normative	6.267	16	.392	1.558	.146	.462	24.925	.731
Error	Affective	15.731	29	.542					
	Continuance	11.995	29	.414					

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Tests of Between-Subjects Effects									
Source	Dependent Variable (commitment dimensions)	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Non cent. Parameter	Observed Power
	Normative	7.292	29	.251					

Source: SPSS Output, 2024

Hypothesis Testing

The study utilized Pearson correlation and multiple linear regression to test the research hypotheses. The results for the first two hypotheses are summarized below based on the regression coefficients presented in Table 25.

Hypothesis 1 (H₁): Direct compensation has a positive and significant effect on employee commitment.

Result: Accepted —The regression analysis shows a coefficient of 0.384 with a p-value of 0.000 ($P < 0.01$). This indicates that for every one-unit improvement in direct compensation, employee commitment increases by 0.384 units, assuming other factors remain constant.

Hypothesis 2 (H₂): Indirect compensation has a positive and significant effect on employee commitment.

Result: Accepted —The regression analysis yields a coefficient of 0.192 with a p-value of 0.027 ($P < 0.05$). This confirms that indirect compensation significantly and positively influences commitment, where a one-unit increase in benefits results in a 0.192 unit increase in commitment.

Table 25
Coefficients Table

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.685	.175		9.608	.000
	Direct Compensation	.384	.080	.429	4.828	.000
	Indirect Compensation	.192	.086	.198	2.235	.027
a. Dependent Variable: Employee commitment						

Source: SPSS Output, 2024

Hypothesis 3 (H₃): The interaction effect of direct and indirect compensation has a significant effect on employee commitment.

Result: Accepted. The interaction model yielded a correlation of $r = 0.601$ and an $R^2 = 0.361$ ($P < 0.01$). This indicates that the synergy between direct and indirect compensation explains 36.1% of the variance in commitment, representing a moderate and statistically significant positive influence.

Table 26
Model summary of interaction effects

Model Summary										
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R ² Change	F Change	df1	df2	Sig. F Change	
1	.601	.361	.345	.54056	.361	22.411	3	119	.000	1.514
a. Predictors: (Constant), Interaction Effect, indirect compensation, direct compensation										
b. Dependent Variable: Employee commitment										

Source: SPSS Output, 2024

Hypothesis 4 (H₄): Both direct and indirect compensation have a significant effect on each of the three commitment dimensions

Result: Rejected —MANOVA results show that direct compensation significantly affects only affective commitment ($P = 0.005$). It had no significant effect on continuance or normative commitment ($P > 0.05$). Furthermore, indirect compensation showed no significant effect on any of the three dimensions ($P > 0.05$).

Hypothesis 5 (H₅): There is a significant relationship between demographic variables and employee commitment dimensions.

Result: Accepted —Analysis confirms that educational level and monthly income maintain statistically significant, positive correlations across all commitment dimensions ($P < 0.05$). Educational level shows the strongest link to overall employee commitment ($r = 0.314$), while monthly income follows closely ($r = 0.315$)

Table 147
Correlation between Demographic Variables and Commitment Dimensions

		Affective Commitment	Continuance Commitment	Normative Commitment	Employee Commitment
Educational Level	Correlation	.334**	.241**	.196*	.314**
	Sig. (2-tailed)	.000	.007	.030	.000
	N	123	123	123	123
Monthly Income	Correlation	.346**	.234**	.194*	.315**
	Sig. (2-tailed)	.000	.009	.031	.000
	N	123	123	123	123

Source: SPSS Output, 2024

4 Conclusion

The primary objective of this study was to examine the impact of compensation management on employee commitment within the Kena Woreda Health Organizations (KWHOs). Based on the empirical findings, the following conclusions are drawn: Regression analysis confirms that both direct and indirect compensation are significant predictors of employee commitment, collectively accounting for 31.2% of its variance. This underscores that compensation is a fundamental driver of the employment relationship in the public health sector. Direct financial rewards (salary and incentives) demonstrate a substantially stronger influence on employee commitment compared to indirect benefits. This suggests that in the current economic context of the study area, tangible financial remuneration remains the primary motivator for healthcare professionals. While compensation significantly influences "Combined Employee Commitment," MANOVA results reveal a more nuanced reality: direct compensation specifically drives affective commitment (emotional attachment) but fails to significantly influence normative or continuance dimensions when analyzed in isolation. Descriptive statistics (mean values < 3.0) indicate that employees are generally unsatisfied with current compensation levels. The parallel low scores in both compensation and commitment suggest that the current system is insufficient to foster high levels of organizational dedication. Only educational level and monthly income showed significant positive correlations with commitment dimensions. This implies that as employees attain higher qualifications and pay grades, their commitment levels—particularly affective and continuance—tend to increase.

Recommendations

To enhance employee commitment and organizational performance within KWHOs, the following recommendations are proposed:

Management should avoid relying solely on base pay. A strategic mix of direct rewards (incentives, bonuses) and indirect benefits (health insurance, recognition) should be implemented to address different dimensions of employee needs.

- ✚ To mitigate dissatisfaction, the organizations must ensure pay structures are transparent and equitable—both internally (among staff of the same level) and externally (relative to similar health organizations).
- ✚ Given that direct compensation strongly influences emotional attachment, timely and fair payment of salaries and performance-based bonuses should be prioritized to reduce turnover and increase job involvement.

- ✚ Beyond financial rewards, management should establish formal systems for praising top performers. Non-monetary recognition can help bridge the gap in normative commitment (moral obligation) where financial resources may be limited.
- ✚ Since education level significantly correlates with commitment, specific retention mechanisms should be designed for highly qualified staff to ensure their expertise remains within the local health system.
- ✚ Compensation plans should not be static. Periodic reviews based on government requirements and the cost of living is essential to maintain the "attract-motivate-retain" cycle effectively.

Limitations and Suggestions for Further Research

This study was limited in scope as it focused exclusively on employees within the Kena Woreda health organizations, which restricts the generalizability of the findings to other regions or sectors. The specific working environment and local administrative culture may have uniquely influenced participant perceptions, and the reliance on self-reported data introduces the potential for response bias. Despite these constraints, the results offer significant implications for compensation management.

Future research should incorporate additional variables such as the work environment, infrastructure quality, and leadership styles to provide a more holistic evaluation of employee commitment. Expanding the geographic scope to include diverse regions and comparing public versus private health sectors would also enhance the external validity of these findings. Finally, a mixed-methods approach is recommended to capture deeper qualitative insights into the psychological drivers of the commitment dimensions analyzed here.

Author Contributions

K. Gedeno: Conceptualization, Methodology, Investigation, and Writing – Original Draft. **T. Alehegn, G. Katola, B. Admassu and A. Deginew, E. Ayaye, H. Goshime:** Data Collection, Writing – Review & Editing, and Supervision. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request.

Conflict of interest statement

The authors declare no potential conflicts of interest with respect to the research, authorship, or publication of this article.

Statement of authorship

The author(s) have a responsibility for the conception and design of the study. The author(s) have approved the final article.

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