



Factors Affecting Human Resource Management in Insurance Companies in Punjab: An Exploratory Factor Analysis

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Abstract: Purpose: This study identifies the underlying factors that shape Human Resource Management (HRM) in life and general insurance companies operating in Punjab, India, and tests the reliability and validity of a scale to measure them.

Design and Methodology: A structured questionnaire of 28 items on a five-point Likert scale was administered to 312 employees of public and private insurers across six districts of Punjab (Ludhiana, Amritsar, Jalandhar, Patiala, Bathinda and SAS Nagar). Internal consistency was tested with Cronbach's alpha and corrected item-total correlations. Sampling adequacy was tested with the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. Exploratory Factor Analysis (EFA) with principal component extraction and varimax rotation was used to identify the factors. Convergent validity was assessed through composite reliability (CR) and average variance extracted (AVE), and discriminant validity through the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio.

Findings: The KMO value was 0.879 and Bartlett's test was significant ($\chi^2 = 3747.05$, $df = 378$, $p < 0.001$). Seven factors with eigenvalues above 1 explained 67.07% of the total variance: Training and Development, HR Technology and Digitalisation, Recruitment and Selection, Compensation and Incentives, Performance Appraisal, Work-Life Balance, and Organisational Culture and Leadership Support. All factors showed Cronbach's alpha between 0.787 and 0.861, CR between 0.826 and 0.877, and AVE above 0.50. Employees rated Work-Life Balance (mean 2.69) and Compensation and Incentives (mean 2.81) lowest, and HR Technology highest (mean 3.47).

Practical Implications: Insurers in Punjab can use the validated scale as a diagnostic tool. The weak scores on work-life balance and pay point to target pressure and incentive design as the main areas for HR intervention.

Originality: Few studies examine HRM in insurance at the state level in India. This paper offers a validated seven-factor measure for Punjab's insurance workforce and a base for later confirmatory and structural studies.

Keywords: Human Resource Management, Insurance Sector, Exploratory Factor Analysis, Reliability, Validity, Work-Life Balance

1. Introduction

Insurance is a people's business. Because an insurer has nothing to differentiate, it's their policies—intangible promises—and the quality of the promise is measured by the people who sell, underwrite and service it. The ability to attract, develop, incentivize and retain staff members is thus a key ingredient in the competitive position of an insurance company. Thus, Human Resource Management (HRM) is a strategic activity in the industry than an administrative. Since the Insurance Regulatory and Development Authority (IRDA) Act, 1999, that liberalized the insurance industry with private and foreign players, the Indian insurance sector has undergone a radical transformation. The erstwhile near monopolists – the LIC and the four PGI – are now facing a major competition from many private life, general, health, and standalone insurance companies. Competition for customers and talent has grown with successive lifts in the foreign direct investment limit, rise of Bancassurance and Digital Distribution and also regulatory changes. Now, insurance companies are experiencing high sales force turnover,



monthly and quarterly quotas and fast technology uptake, as well as hiring and retention challenges in key functions like underwriting, claims, and analytics.

The province of Punjab is an appropriate arena to examine such pressures. There is a high per capita income in the state, a large non-resident Indian (NRI) population, which would ensure the demand for life and investment products, and a rising number of urban centres like Ludhiana, Amritsar, Jalandhar and Mohali where majority of private insurance firms have their branch network. Meanwhile insurance employees in Punjab operate in an environment that requires personal relationships to gain the trust of clients, where employers from the public and private sectors operate together with widely divergent HR systems and where youth look overseas for employment. All of these conditions make it important and difficult to manage the human resources of the state's insurance offices. Previous studies have found that various HRM practices like recruitment, training, performance appraisal and compensation can affect the attitudes of employees and performance of the organisation (Huselid, 1995; Becker & Gerhart, 1996; Combs et al., 2006). Based on the study on Indian insurance sector, groups of HR practices have been identified via factor analysis (Kundu & Malhan, 2009; Chaudhuri, Kakkar & Shekhar, 2013). Much of this work, however, is national in scope, involves only one or a few companies or is more than 10 years old. It is not just a victim of the deluge of digital HR systems and the post-pandemic focus on employee wellbeing and work-life balance. In Punjab, there is not much evidence on the state level and very few studies present complete reliability and validation of measurement scale they used. This paper fills this gap. It develops and tests a 28 items instrument consisting seven domains of HRM, performs Exploratory Factor Analysis (EFA) to discover underlying factors on bases of their perception of insurance workers in Punjab and checks the reliability and validity of the instrument. The paper is organised as follows. The review of literature is in Section 2. Research gap and research goals are stated in Section 3. Methodology is described in Section 4. The findings of data analysis are provided in Section 5. The findings are presented in Section 6, implications and limitations are outlined in Section 7, and the conclusion is provided in Section 8.

2. Review of Literature

2.1 Theoretical Foundations

The study is based on two streams of theory. According to the resource-based view (RBV), resources which are valuable, rare, inimitable and non-substitutable help the firm achieve sustained competitive advantage (Barney, 1991). Human capital, and the HR systems that create it, fit these criteria since it is difficult to copy and it is deeply rooted in a firm's history, culture and social relationships (Wright & McMahan, 1992). In the insurance industry, products can be replicated with ease, and the ability, reputation, and relationships that representatives establish are among the resources that are truly unique.

The second stream is the ability-motivation-opportunity (AMO) concept which claims that employee performance depends on employee ability, motivation, and opportunities to perform (Appelbaum et al., 2000). HR practices can be classified by the three levers they have on: ability (recruitment and training); motivation (compensation and appraisal); and opportunity (culture, job design and work arrangements). The impact of skill-enhancing, motivation-enhancing and opportunity-enhancing practices on human capital and motivation, and on operational and financial outcomes, was confirmed by Jiang et al. (2012) in a meta-analysis. Social exchange theory takes the equation one step further, in that when people think that they are being invested in by an organisation, they invest back in their organisation and are committed.

These ideas are reinforced with the larger body of HRMperformance literature. Huselid (1995) reported a lower level of turnover associated with high performance work practices and a greater level of financial performance and productivity. Delery and Doty (1996) contrasted universalistic, contingency and configurational perspectives and discovered that some practices, in particular profit sharing, results-oriented appraisal and employment security, had universalizing impacts. HR needs to be better understood in relation to the mechanisms that link HR



to performance (Becker and Gerhart, 1996; Guest, 1997). A one SD increase in the high-performance work practices score was found to be related to meaningful increases in performance, according to Combs et al.'s (2006) meta-analysis of 92 studies. Boselie, Dietz and Boon (2005) noticed that studies vary widely as they measure different practices, thus highlighting the need for context-specific and validated instruments such as those developed in this paper.

2.2 Recruitment and Selection

The HRP process of recruitment and selection dictate the quality of human capital that enters the firm. Breaugh and Starke (2000) demonstrated that recruitment source, realistic job previews and recruiter behaviour have an impact on attracting applicants and post-hire outcomes. The front-lines in insurance is many times a sales position where people are expected to hit targets and in this scenario, poor person-job fit is a top reason for attrition. Time and time again, research has pointed out the high attrition rates of insurance agents and development officers, which are typically due to their unrealistic expectations, likely built at the time of recruitment. Kundu and Malhan (2009) conducted a study on 218 respondents on Indian and multinational insurers, and found that "selection and socialisation" and "HR planning and recruitment" came out as different factors; both of which were practiced to a moderate extent.

2.3 Training and Development

Training develops the product information, regulatory awareness and selling skills required for insurance. According to Noe (2017), training is an investment not an expense. Continuous training is key in the Indian insurance industry, where it is required to comply with regulations and licensing requirements, and the industry has undergone frequent product changes and a shift towards digital platforms. Training and benefits is the area which is most widely followed HR area in insurers studied by, Kundu and Malhan (2009). It also represents a message that training is an investment by the organisation in employees and this, social exchange theory would suggest, is associated with commitment and retention.

2.4 Compensation and Incentives

One of the most obvious HR practices and primary motivators of pay is the obvious. According to expectancy theory (Vroom, 1964), employees are motivated to work if they think that their efforts will result in their performance, and their performance will result in rewards that they value. Equity theory (Adams, 1965) also states that employees compare themselves with others, if they feel they are being treated inequitably, then they will not be as motivated. According to Herzberg, Mausner and Snyderman (1959), pay belongs to a group of factors that are known as hygiene factors and their absence from the job leads to dissatisfaction. Insurance compensation in India is unique: for the public sector employees it is a fixed component which is negotiated on an industry level and for the employees of the private sector, there is a big variable component based on sales. Kundu and Malhan (2009) determined that the compensation was more performance oriented in the multinational insurers than in the Indian insurers and there were differences in perception of compensation based on gender.

2.5 Performance Appraisal

Rewards and development are connected to individual contribution through performance appraisal. Murphy and Cleveland (1995) pointed out that appraisal is not just influenced by the accuracy of measurement, but also by organisational context and rater motives. After summarizing 100 years of research on the subject, DeNisi and Murphy (2017) found that perceptions of fairness and whether the appraisal is for development or rating are equally important as rating accuracy. Also, in insurance, there can be a greater emphasis on sales performance which can have a negative impact on the fairness of appraisal for sales jobs that produce less tangible results such as Claims, Underwriting/Operations.



2.6 Work-life Balance

Work-family conflict occurs when work demands make it difficult to meet family demands (Greenhaus & Beutell, 1985). Sales and branch positions frequently require working long hours, on weekends and around month end and year end, especially in January-March when tax saving policies are put on the market. Burnout, absenteeism and turnover intention is related to poor work life balance. From the current COVID-19 pandemic, there has been increased employee expectations for flexibility and wellbeing has become one of the primary concerns of HR.

2.7 Organisational Culture and Leadership Support

According to Schein (2010), organisational culture is the collectively learned set of basic assumptions that help a group or organisation to function as a unit. The impact of formal HR practices is enhanced by a supportive culture and open communication; involving employees in decisions and recognising them. In the study of an insurance company in India, Chaudhuri, Kakkar and Shekhar (2013) found six aspects that influence employee perceptions and suggested a socio-technical approach that addresses aspects of both the systems and relationships. Public insurers' cultures tend to be largely hierarchical with a strong emphasis on seniority, while private insurers can be more positive and performance-focused.

2.8 HR Technology & Digitalisation

Electronic HRM (e-HRM) is about the application of information technology to provide HR practices (Strohmeier, 2007). Bondarouk and Ruël (2009) pointed out that although there is a possibility of increasing the efficiency, service quality and strategic orientation of the HR function with the help of e-HRM, the results of e-HRM use heavily rely on user acceptance. Indian insurance companies have integrated HR systems, online training solutions and mobile attendance/performance scoreboards. While these tools can help to streamline HR operations and boost transparency, they also leave people to consider issues of surveillance and the loss of personal touch and digital competence.

2.9 Study in Indian Insurance Context

There is a small body of research on HRM in the Indian insurance industry and it is increasing. Six factors were extracted by Kundu & Malhan (2009) and differences between Indian companies and multinational companies were detected. Chaudhuri, Kakkar and Shekhar (2013) applied factor analysis to the data collected from only one insurer and determined six areas that impact employee perceptions. Some studies on employee turnover have shown that sales personnel turnover is associated to pay and job stress, lack of job growth in the Indian insurance industry. HRM in India is influenced by national culture, institutions and the business environment (Budhwar and Sparrow – 2002) and hence, results from Western countries cannot be taken for granted. Altogether these studies suggest some common practices (recruitment, training, compensation, appraisal) and some context specific factors that can also be different based on ownership, region and time.

The constructs, their theoretical basis and key sources are summarised below.

Construct	Theoretical basis	Key sources
Recruitment and Selection	RBV; AMO (ability)	Breaugh & Starke (2000); Kundu & Malhan (2009)
Training and Development	AMO (ability); social exchange	Noe (2017); Kundu & Malhan (2009)
Compensation and Incentives	Expectancy, equity, two-factor theory	Vroom (1964); Adams (1965); Herzberg et al. (1959)



Construct	Theoretical basis	Key sources
Performance Appraisal	AMO (motivation)	Murphy & Cleveland (1995); DeNisi & Murphy (2017)
Work-Life Balance	Work-family conflict theory	Greenhaus & Beutell (1985)
Organisational Culture and Leadership Support	AMO (opportunity); culture theory	Schein (2010); Chaudhuri et al. (2013)
HR Technology and Digitalisation	e-HRM	Strohmeier (2007); Bondarouk & Ruël (2009)

3. Research Gap and Objectives

The review shows three gaps. First, most studies in HRM in Indian insurance are national or single companies based studies; no specific work has been done on Punjab which has a unique insurance market. Second, existing instruments are limited in their ranges of dimensions because earlier factor analytic studies fall short in regard to representing the new dimensions of HR technology and post-pandemic work-life balance. Third, many studies only report the Cronbach's alpha, and do not examine convergent and discriminant validity, thus reducing confidence in the factor structures proposed.

The study therefore sets out to achieve four objectives:

1. To identify the factors influencing HRM in insurance companies of Punjab through Exploratory Factor Analysis.
2. To evaluate the reliability of the measurement scale based on the Cronbach's alpha and corrected item-total correlation and composite reliability.
3. To evaluate the construct validity of the scale based on convergent and discriminant validity (Fornell-Larcker criterion, HTMT ratio and factor loadings, AVE).
4. To investigate the perceptions of the employees regarding each of the identified factors and make some recommendations on how HR can be improved in the sector.

As an exploratory study, it does not go so far as to test causal hypotheses. But it does have two valid propositions based on the literature:

P1: The 28 items will cluster in such a way that separate and meaningful factors emerge that reflect identified areas of HRM.

P2: The resulting factors will show acceptable reliability (α and CR ≥ 0.70), convergent validity (AVE ≥ 0.50) and discriminant validity.

4. Research Methodology

4.1 Research Design

This study will be a descriptive and exploratory type of cross-sectional design. Structured questionnaire was used to gather the primary data at a single time.



4.2 Population and Sampling

The population comprises employees of branch, divisional and regional offices of life and general insurance companies (both public sector and private sector) in Punjab. Those who are sales staff on straight commission were not included as they are not legally an employee and will not need most HR practices. To ensure representation of the key commercial hubs of the state, across Majha, Doaba and Malwa regions, 6 districts were selected namely Ludhiana, Amritsar, Jalandhar, Patiala, Bathinda and SAS Nagar (Mohali).

A multi-stage sampling approach was used. Districts were purposively selected in the first stage. During the second stage, the branches of public and private insurers in the district were listed and selected by convenience with permission of the branch management. During the third phase, questionnaires were handed out to all the cadres of employees who participated during the visit. The 400 questionnaires which were sent out were returned by 334, with a 312 useable return (82.1% usable return rate).

The number of samples ($N = 312$) meets the common criteria for factor analysis. Based on Hair et al. (2019), the number of observations needed is minimum of five and recommended to be at least ten observations each variable, which is 11.1:1 in this instance. Moreover, the size of the sample is above the minimum recommended by Krejcie and Morgan (1970) for a large population at the 95% level of confidence.

4.3 Instrument Development

Part one of the questionnaire is the PSS Q. The PSS Q (queue) is part one of the questionnaire. Part A documents the demographic information of the heads and job profile: gender, age, sector (public/private), type of insurer (life/general/health), experience, cadre and district. Part B consists of seven HRM domains with four items (rated on a 5-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5) each. The items were taken from previous studies (Kundu & Malhan, 2009; Chaudhuri et al., 2013) and from literature reviewed on HRM in Section 2, the items were rewritten with reference to the insurance industry. The entire survey is attached as Appendix.

Content validity was reached through the assessment of three academics from HRM and two HR managers from the insurance companies as each of them judged the items in terms of relevance and clarity. In the pilot test conducted with 35 employees at Ludhiana, the wording was changed in a few places, though none of the pilot respondents were part of the final sample.

4.4 Statistical Tools

Data were analysed in SPSS. The following procedure was followed:

1. Descriptive Statistics: Sample profile & construct means.
2. Reliability: Cronbach's alpha (Cronbach, 1951) at a cut-off value of 0.70 (Nunnally & Bernstein, 1994), corrected item-total correlation (threshold level equals 0.30) and alpha if item deleted.
3. Sampling adequacy: Kaiser's measure of sampling adequacy (KMO) (Kaiser 1974) (necessary to be >0.60 , and desired to be >0.80); anti-image matrix individual measures of sampling adequacy (MSA); Bartlett's test of sphericity (Bartlett 1954).

Exploratory Factor Analysis (EFA) was carried out to identify the underlying factors in the data using principal component extraction with varimax rotation. Factors were retained based on Kaiser's rule of retaining those that had eigenvalues greater than 1 (Kaiser, 1960) and the scree plot (Cattell, 1966). Items were kept if they had a loading of 0.50 or higher on one factor and a loading of less than 0.40 on all other factors.

5. Validity: composite reliability ($CR \geq 0.70$) and average variance extracted ($AVE \geq 0.50$) for convergent validity, and Fornell-Larcker criterion (Fornell & Larcker, 1981) and HTMT ratio (< 0.85 ; Henseler, Ringle & Sarstedt, 2015) for discriminant validity.

6. Common method bias – Harman's single factor test (Podsakoff et al 2003).

Composite reliability and AVE were computed from the standardised rotated loadings (λ) of the k items on each factor:

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + \sum (1 - \lambda_i^2)} \quad AVE = \frac{\sum \lambda_i^2}{k}$$

4.5 Ethical considerations

All responses were anonymous and voluntary. Respondents were informed that the responses would be used for academic purposes and that no company names would be reported on the respondent level.

5. Data Analysis and Results

5.1 Profile of Respondents

The sample is predominantly male (62.8%), aged 30–40 (42.9%), and employed in private insurers (63.8%). Respondents include 56.1% life insurers. With respect to its contribution, Ludhiana leads the list (26.6%), the state's biggest commercial hub.

Table 1: Demographic profile of respondents

Variable	Category	Frequency	Per cent
Gender	Male	196	62.8
	Female	116	37.2
Age	Below 30	76	24.4
	30–40	134	42.9
	41–50	61	19.6
	Above 50	41	13.1
Sector	Public	113	36.2
	Private	199	63.8
Type of insurer	Life	175	56.1
	General / health	137	43.9
Experience	Below 3 years	95	30.4
	3–7 years	111	35.6
	8–15 years	66	21.2
	Above 15 years	40	12.8
Cadre	Officer / executive	98	31.4

Variable	Category	Frequency	Per cent
	Development officer / sales manager	102	32.7
	Assistant / clerical	79	25.3
	Branch manager and above	33	10.6
District	Ludhiana	83	26.6
	Amritsar	64	20.5
	Jalandhar	38	12.2
	Patiala	51	16.3
	Bathinda	34	10.9
	SAS Nagar (Mohali)	42	13.5

5.2 Reliability analysis

Cronbach's alpha values of all seven constructs are above 0.7 (Organisational Culture = 0.787 and Training and Development = 0.861). Scale alpha for the 28 items is 0.898. All corrected item-total correlations exceed the recommended minimum (0.30) and all are high (> 0.50); removal of any single corrected item would decrease the alpha of the construct. All 28 items were thus kept for the factor analysis.

Table 2: Reliability Statistics

Construct	Items	Mean	SD	Cronbach's α	Corrected item-total correlation (range)	Highest α if item deleted
Recruitment and Selection (RS)	4	3.21	0.90	0.835	0.617–0.722	0.814
Training and Development (TD)	4	3.20	0.93	0.861	0.694–0.717	0.828
Compensation and Incentives (CI)	4	2.81	0.85	0.824	0.621–0.671	0.791
Performance Appraisal (PA)	4	3.09	0.87	0.812	0.588–0.701	0.784
Work-Life Balance (WLB)	4	2.69	0.87	0.817	0.544–0.712	0.812
Organisational Culture and Leadership Support (OC)	4	3.27	0.85	0.787	0.547–0.629	0.758
HR Technology and Digitalisation (TE)	4	3.47	0.91	0.851	0.643–0.737	0.830
Overall scale	28			0.898		

Source: Data Compiled from SPSS Version 21

5.3 Sampling adequacy

The KMO value of 0.879 is in the "meritorious" range (Kaiser, 1974), while individual MSA values in the anti-image correlation matrix range from 0.838 to 0.905, which are all well above 0.50. The Bartlett's test of sphericity

is significant indicating that the correlation matrix is not an identity matrix and that sufficient common variance exists among items for factor analysis.

Table 3: KMO and Bartlett's test

Test	Value
Kaiser-Meyer-Olkin measure of sampling adequacy	0.879
Bartlett's test: approximate chi-square	3747.05
Bartlett's test: degrees of freedom	378
Bartlett's test: significance	< 0.001
Individual MSA (range)	0.838–0.905

Source: Data Compiled from SPSS Version 21

5.4 Exploratory Factor Analysis

A total of seven components were extracted with eigenvalues > 1, accounting for 67.07% of the total variance, which is above the 60% that is usually deemed satisfactory for social science research (Hair et al., 2019). The eighth eigenvalue has fallen to .679 and the scree plot shows a definite "elbow" after seventh component, which is interpreted as a seven factor solution. The variance of the factors is distributed fairly equally after varimax rotation, ranging between 10.57% (Training and Development) and 8.59% (Organisational Culture).

Table 4: Total Variance Explained

Component	Initial eigenvalue	% of variance	Cumulative %	Rotated sum of squared loadings	Rotated % of variance	Rotated cumulative %
1	7.536	26.91	26.91	2.959	10.57	10.57
2	2.335	8.34	35.25	2.840	10.14	20.71
3	2.032	7.26	42.51	2.722	9.72	30.43
4	1.919	6.85	49.36	2.633	9.41	39.84
5	1.796	6.41	55.78	2.617	9.35	49.19
6	1.672	5.97	61.75	2.605	9.30	58.49
7	1.490	5.32	67.07	2.406	8.59	67.07

Source: Data Compiled from SPSS Version 21

Extraction: principal component analysis. Rotation: varimax with Kaiser normalisation. Rotated cumulative total differs from the sum of rounded values by 0.01 due to rounding.

The rotated component matrix is shown in Table 5. All items load on the intended factor with a factor loading of 0.674 to 0.823 which are above the 0.50 cut-off value (Table 1). The highest loading on any other than the "Targets" is 0.289 which is below 0.4 so the structure is clean, no items were dropped. Communalities range from 0.532 (WLB2) to 0.743 (RS4), which means that together the seven factors account for a fair amount of variance of each of the items.

Table 5: Rotated Component Matrix

Item	F1	F2	F3	F4	F5	F6	F7	h ²
TD1	0.770							0.682
TD2	0.821							0.720
TD3	0.823							0.727
TD4	0.789							0.702
TE1		0.810						0.741
TE2		0.802						0.712
TE3		0.788						0.681
TE4		0.778						0.645
RS1			0.794					0.698
RS2			0.757					0.670
RS3			0.777					0.647
RS4			0.770					0.743
CI1				0.763				0.676
CI2				0.799				0.696
CI3				0.743				0.647
CI4				0.742				0.672
PA1					0.779			0.658
PA2					0.765			0.618
PA3					0.809			0.724
PA4					0.737			0.602
WLB1						0.760		0.663
WLB2						0.674		0.532
WLB3						0.792		0.686
WLB4						0.797		0.735
OC1							0.757	0.642
OC2							0.784	0.667
OC3							0.697	0.581
OC4							0.709	0.616

Source: Data Compiled from SPSS Version 21

F1 = Training and Development; F2 = HR Technology and Digitalisation; F3 = Recruitment and Selection; F4 = Compensation and Incentives; F5 = Performance Appraisal; F6 = Work-Life Balance; F7 = Organisational Culture and Leadership Support. Item wording is in the Appendix.

The seven factors are interpreted as follows:

- F1 Training and Development (10.57% of variance) covers induction training, regular skill and product updates, adequacy of training budgets, and the transfer of training to work. It is the strongest factor, consistent with the regulatory and product-knowledge demands of insurance work.
- F2 HR Technology and Digitalisation (10.14%) captures the use of HRIS, online learning, digital attendance and leave systems, and the ease of accessing HR services online.
- F3 Recruitment and Selection (9.72%) covers merit-based hiring, clarity of job descriptions, realistic previews of target expectations, and induction into the organisation.
- F4 Compensation and Incentives (9.41%) captures pay fairness relative to the market, incentive transparency, timely payment of incentives, and benefits.
- F5 Performance Appraisal (9.35%) covers objectivity of appraisal, clarity of criteria beyond sales numbers, feedback, and the link between appraisal and promotion.
- F6 Work-Life Balance (9.30%) captures working hours, target pressure, leave availability and the ability to meet family responsibilities.
- F7 Organisational Culture and Leadership Support (8.59%) covers supervisor support, open communication, employee involvement and recognition.

5.5 Convergent validity

All of the standardized loadings are above 0.67. All constructs have composite reliability (CR) values from 0.826 to 0.877 and AVE values from 0.544 to 0.642 which exceeds 50% of the variance in the items (Fornell & Larcker, 1981; Hair et al., 2019). Convergent validity is demonstrated.

Table 6: Convergent Validity

Factor	Loading range	CR	AVE	$\sqrt{\text{AVE}}$
F1 Training and Development	0.770–0.823	0.877	0.642	0.801
F2 HR Technology and Digitalisation	0.778–0.810	0.873	0.632	0.795
F3 Recruitment and Selection	0.757–0.794	0.857	0.600	0.775
F4 Compensation and Incentives	0.742–0.799	0.847	0.581	0.762
F5 Performance Appraisal	0.737–0.809	0.856	0.598	0.773
F6 Work-Life Balance	0.674–0.797	0.843	0.574	0.757
F7 Organisational Culture and Leadership Support	0.697–0.784	0.826	0.544	0.738

Source: Data Compiled from SPSS Version 21

5.6 Discriminant validity

The Fornell-Larcker criterion states that the square root of each construct's AVE (diagonal) should be higher than the correlations between each construct and other constructs. This is true for each pair (the smallest diagonal value, 0.738 is approximately twice the largest inter-construct value, 0.376, between Compensation and Work-Life Balance). The HTMT ratios are between 0.261 and 0.458, significantly lower than the conservative cut-off of 0.85 (Henseler et al., 2015). The discriminant validity is set.

Table 7: Fornell-Larcker Criterion

	F1 TD	F2 TE	F3 RS	F4 CI	F5 PA	F6 WLB	F7 OC
F1 TD	0.801						
F2 TE	0.331	0.795					
F3 RS	0.371	0.272	0.775				
F4 CI	0.323	0.342	0.362	0.762			
F5 PA	0.221	0.235	0.215	0.265	0.773		
F6 WLB	0.294	0.314	0.326	0.376	0.298	0.757	
F7 OC	0.259	0.335	0.299	0.283	0.329	0.360	0.738

Source: Data Compiled from SPSS Version 21

Correlations are between summated construct scores; all are significant at $p < 0.01$.

5.7 Common Method Bias

All of the data were obtained from the same self-report survey, so Harman's single factor test was used. The first unrotated factor accounts for 26.91% of the total variance, which is below the 50% threshold and common method bias is unlikely to be a concern (Podsakoff et al., 2003). Anonymity was also guaranteed, and items from various constructs were not clustered under various construct headings in the printed questionnaire, procedural remedies were also used.

5.8 Employee Perceptions of the Factors

Construct – indicate the location of strong HR practice or weak HR practice. HR Technology (3.47) and Organisational Culture (3.27) have the highest scores, which means that employees perceive their digital HR tools and their relationships with their supervisors as relatively well developed. Work-Life Balance (2.69) and Compensation and Incentives (2.81) are also below the scale mid-point of 3 and are areas of dissatisfaction.

Table 8: Ranking of Factors by Mean Score

Rank	Factor	Mean	SD	Level
1	HR Technology and Digitalisation	3.47	0.91	Moderately positive
2	Organisational Culture and Leadership Support	3.27	0.85	Moderately positive
3	Recruitment and Selection	3.21	0.90	Neutral to positive
4	Training and Development	3.20	0.93	Neutral to positive
5	Performance Appraisal	3.09	0.87	Neutral
6	Compensation and Incentives	2.81	0.85	Below midpoint
7	Work-Life Balance	2.69	0.87	Below midpoint

Source: Data Compiled from SPSS Version 21

6. Discussion

The analysis confirm both the working propositions. Seven factors were interpretable, and each factor had acceptable reliability and convergent validity and discriminant validity (P1 and P2). The results provide a valid



profile of the HRM experienced in the insurance industry in Punjab. There is a core of the old practices that remain. Four of the seven factors are the same as the core HR functions in the previous Indian insurance research (Kundu & Malhan, 2009) and those in the international literature about H-PWP (Huselid, 1995; Combs et al., 2006). It means the building blocks of HRM have not been altered with the change in the industry. These four factors represent the ability-building and motivation-enhancing levers, in AMO terms.

The most prominent factor is Training and Development. It accounts for the largest amount of variance after rotation (10.57%) and is the most reliable ($\alpha = 0.861$). This is in line with Kundu and Malhan (2009) studies which revealed 'Training' to be the most adopted HR function in the insurance industry in India and the requirement for 'Licensing, product and compliance knowledge' in the insurance industry. However, its mean of 3.20 is just above the midpoint indicating that training is considered important, but quality and relevance still have elements for improvement. There are two new dimensions that are independent. HR Technology and Digitalisation and Work-Life Balance seem to be their own factors, not part of the classic practices. These were not considered as different domains in earlier instruments for Indian insurance. Their rise can be attributed to two developments since the studies were made: firstly, being the fast-paced pace of digitalisation in HR and, secondly, the increased employee focus on wellbeing following the COVID-19 pandemic. This result corroborates the position of Boselie et al. (2005) that HR measurement should be flexible to respond to its context and time.

Technology is embraced but not the issue. The highest score is for HR Technology with a mean score of 3.47. This shows that the employees seem to be at ease with the digital HR systems, consistent with the fact that e-HRM studies associate usable HR systems with efficiency and quality of service (Bondarouk & Ruël, 2009). The comparatively high score may also indicate that there is more investment in HR technology than in HR people. The problem areas are work-life balance and compensation. Only two factors Work-Life Balance (2.69) and Compensation and Incentives (2.81) are below the midpoint and these two factors also have the highest correlation with each other ($r = 0.376$). This is the reality of insurance – a job chasing targets, month-end and financial-year-end pressure and a system of incentives based upon volume. Employees are double burdened when incentives are unclear or are not paid out immediately and when hours are long. The Equity theory (Adams, 1965) suggests that all motivational levels will go down with perceived unfairness in the exchange of effort-reward and work-family conflict theory (Greenhaus & Beutell, 1985) suggests that strain and withdrawal will result. These all contribute to a high rate of turnover reported in insurance sales positions in India. Culture and leadership is an enabling influence. Organisational Culture and Leadership Support has a relatively good mean score (3.27), and is most strongly correlated with Work-Life Balance ($r = 0.360$). This indicates that there might be a mitigating role of supportive supervisors as pointed out by Chaudhuri et al. (2013) as a socio-technical approach requires not only a focus on systems but also on relationships.

Performance appraisal is seen as an impartial process. It has a mean of 3.09, which is relatively low, and is relatively independent of training and reward. This is reflected in the findings of DeNisi and Murphy (2017) that appraisal does not necessarily link to development. In insurance, for example, if an organization is focused on sales numbers, the appraisal process can apply to a sales position much more easily than to the operations/claims/underwriting position.

The implications, limitations and future research are discussed in the following.

7.1 Theoretical Implications

The study builds on the literature of HRM in insurance in India by proposing a seven-factor model and providing two new factors—HR Technology and Work-Life Balance along with the classic HR functions. It also offers complete psychometric assessments such as CR, AVE, Fornell-Larcker and HTMT tests, which were not reported in previous factor-analytical studies in the sector. The results reflect the AMO model: factors can be aligned to ability-enhancing (recruitment and training), motivation-enhancing (compensation and appraisal) and



opportunity-enhancing (culture, work-life balance and technology) practices. This validated scale can be used as the measurement model for future structural research on the relationship between HRM and employee outcome variables like commitment, intention to quit and branch performance.

7.2 Managerial Implications

1. Changing targets and working patterns: The sales targets set and phased – especially in the financial year end – should be reviewed by insurers, who should also consider flexible scheduling and implementing protected leave and limits for after-hours contact. Line managers should be responsible for team wellbeing as well as sales.
2. Promote transparency and timeliness of incentives: Low compensation score can be addressed through clear written incentive rules, real-time dashboards for earned incentives and prompt payment of the incentives. Private insurers should use a market benchmark for fixed pay to minimize reliance on variable pay.
3. Broaden performance appraisal: Appraisal criteria should include volume of sales, service quality, persistency, team contribution and compliance as separate from volume of sales for those not in sales. The results of the appraisal should be directly influential to training plans and promotions.
4. Improve training relevance: Trainings shouldn't stop at just product launches; soft skills, digital tools, financial planning/career development should all be trained and followed up to ensure it is being applied on the job.
5. Technology to assist individuals rather than replace contact: Digital HR-systems have been well received and can be further developed to encompass employee self-service, wellbeing checks and anonymous feedbacks, while maintaining face-to-face supervision.
6. Take action to develop line manager capacity: Giving branch managers the ability to coach, recognise and communicate should have a positive impact on multiple factors, with supportive culture seemingly working as a buffer to work pressures.
7. Use the scale as a diagnostic: The instrument comprises 28 items that can be administered by HR departments every now and then to identify change in other locations and cadres.

The conclusions have implications for regulators and bodies responsible for exerting controls over the industry; they indicate that industry-wide directions on fair sales practices could lead to better customer outcomes and a better employee wellbeing, as aggressive targets harms both.

7.3 Limitations

There are some limitations in this study. The sample was convenience sample at branch level limiting the generalisation to all insurance employees in Punjab. The cross-sectional design is measuring perceptions at a single time, and cannot conclude causality. All data are self-reported and, while common method bias does not seem to be severe according to Harman's test, it cannot be completely excluded. A big segment of the insurance industry, commission-based agents, was left out. Last, EFA finds a structure in one sample; the structure should be confirmed in an independent sample.

7.4 Areas for Further Investigation

A fresh sample should be replicated using Confirmatory Factor Analysis (CFA) to verify the seven factors and activation of each factor should be tested using structural equation modelling to determine their impacts on the variables like job satisfaction, organisational commitment and turnover intention. Comparisons of public and private insurers; life and general insurers; and sales and non-sales personnel would reveal differences in factor effects among these groups. It would be useful to extend the study to agents and to neighbouring states like Haryana and Himachal Pradesh and to include longitudinal designs.



8. Conclusion

The aim of this study was to identify the factors influencing HRM in insurance companies of Punjab and to test reliability and validity of a measuring scale for that. Exploratory Factor Analysis was conducted on 312 employees from six Districts and 7 factors were obtained which account for 67.07% of the variance – namely, Training and Development, HR Technology and Digitalisation, Recruitment and Selection, Compensation and Incentives, Performance Appraisal, Work-Life Balance, and Organisational Culture and Leadership Support. The scale possessed high internal consistency (overall $\alpha = 0.898$), good convergent validity ($AVE > 0.50$, $CR > 0.82$) and a good level of discriminant validity.

In Punjab, the main message for insurers is that the technical aspect of HR is advanced as compared to the human aspect. Digital HR systems and their managers are relatively well-liked by employees, but work life balance and remuneration are not. The two vulnerabilities go hand in hand and stem from the target-driven dynamics of insurance jobs. They can be addressed through more equitable target setting, better and timely incentives, greater publicity in the appraisal process and a stronger line-manager relationship; and a more committed and stable workforce—directly related to competitive advantage in a relationship-driven business—can be insurers' reward for doing so.

Consent to Participate Declaration

Informed consent was obtained from all individual participants involved in the study, and all procedures were conducted in accordance with applicable ethical standards.

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Ethics approval

The research meets all applicable standards concerning the ethics of experimentation and research integrity, and the following is being certified/declared true. The paper has been submitted with full responsibility, following the due ethical procedure, and there is no duplicate publication, fraud, plagiarism, or concerns about animal or human experimentation.

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Appendix: Questionnaire

Dear respondent, this survey is part of an academic study on Human Resource Management in insurance companies in Punjab. Participation is voluntary and anonymous. Your responses will be used only for research. It takes about 10 minutes to complete.

Part A: Respondent profile

1. Gender: Male / Female / Prefer not to say
2. Age: Below 30 / 30–40 / 41–50 / Above 50
3. Sector of your company: Public / Private
4. Type of insurer: Life / General / Standalone health
5. Total experience in insurance: Below 3 years / 3–7 years / 8–15 years / Above 15 years
6. Cadre: Officer or executive / Development officer or sales manager / Assistant or clerical / Branch manager and above
7. District of posting: Ludhiana / Amritsar / Jalandhar / Patiala / Bathinda / SAS Nagar (Mohali) / Other

Part B: HRM practices

Please rate your agreement with each statement about your organisation: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree. (Construct codes are for the researcher; print the items in mixed order without headings.)

Code	Statement
RS1	My organisation selects employees on the basis of merit and competence.
RS2	Job descriptions and roles were clearly explained to me at the time of hiring.
RS3	The sales targets and work expectations described during hiring matched the actual job.
RS4	New employees receive a proper induction into the organisation.
TD1	I received adequate training when I joined the organisation.
TD2	My organisation regularly updates my knowledge of products and regulations.
TD3	Sufficient time and resources are given for employee training.
TD4	The training I receive helps me perform my job better.
CI1	My salary is fair compared with similar jobs in other insurance companies.
CI2	The rules for incentives and commissions are clear and transparent.
CI3	Incentives earned are paid on time.
CI4	The benefits provided (medical, leave encashment, retirement) are satisfactory.
PA1	Performance appraisal in my organisation is fair and objective.



Code	Statement
PA2	Appraisal criteria include more than sales figures alone.
PA3	I receive useful feedback on my performance from my superior.
PA4	Promotions are linked to appraisal results.
WLB1	My working hours allow me enough time for my family and personal life.
WLB2	Target pressure does not affect my personal life.
WLB3	I can take leave when I need it.
WLB4	I am able to balance my work and family responsibilities.
OC1	My superior supports me when I face difficulties at work.
OC2	Communication between management and employees is open.
OC3	Employees are involved in decisions that affect their work.
OC4	Good work is recognised and appreciated in my organisation.
TE1	My organisation uses an HR information system (HRIS) for HR processes.
TE2	Online learning platforms are available for employee training.
TE3	Attendance and leave are managed through digital systems.
TE4	I can easily access HR services and information online.

Thank you for your participation.