

## Developing and Validating the Scale for Measuring Psychological Contract of Private Higher Educational Institutions in Odisha

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### Abstract:

*There is a much discussion on the psychological contract among the private sectors. This has resulted in understanding the different aspects of psychological contract in private higher educational institutions in Odisha. The psychological contract has emerged as an important analytical framework to examine the employment relationship. The term "psychological contract" means that the person has a lot of different expectations from the organization and the organization has a lot of different expectations from the person as well. These expectations not only deal with how much work should be done for how much money, but also how workers and organisations should treat each other. This study attempts to undertake a pilot study among the 47 employees of higher educational intuitions in Odisha. In this study, we have done the pilot study and reliability and validity test by taking 47 respondents who are the employees of different private higher educational institutions in Odisha. The sample of the respondents were carefully also identified. The results indicate that the psychological contract questionnaire is a reliable and valid instrument for measuring the different dimensions of psychological contract. Understanding different aspects of psychological contract help the institutions to retain and engage their employees for better productivity.*

**Key words:** Psychological contract, higher educational institutions, validity, reliability, Odisha

### Introduction

In recent years, there has been a belief among human resource management practitioners that employees from different generations have different views on how to manage a diverse workforce. Psychological contract theory is increasingly gaining traction as a means of examining the linkages between Human Resource Management (HRM) and performance (Kutala et.al. 2020). The concept of the psychological contract has been getting a lot of attention from academics, researchers, and managers in the corporate world as well because of changes in technology, more competition, downsizing, demographic diversity, and more. Both academics and people who work in the field say that the concept of the psychological contract can be used to understand and manage changes in employment relationships. In psychology, contract theory has been studied a lot about the relationship between the employer and the employee, as well as the reciprocal expectations and obligations that each person sees in the relationship. Some research, on the other hand, says that forming a psychological

contract is an important way to keep employees happy. The psychological contract talks about how people and organisations work together. It talks about this interface not just in terms of the employment contract, but also in terms of the "unwritten expectations" that are part of the exchange process that sets the rules for being a member of a group (Schein, 1980).

The psychological contract has emerged as an important analytical framework to examine the employment relationship (Conway, Guest, & Trenberth, 2011; Herriot, 2001; Rousseau, 1989). Using the term "psychological contract " means that the person has a lot of different expectations from the organization and the organization has a lot of different expectations from the person as well. These expectations not only deal with how much work should be done for how much money, but also how workers and organisations should treat each other. Employees and employers should work together so that the goal of setting up a business can be reached. This is called a "contract," which in the language of management science is called an "agreement of behaviour on both sides." This

means that there are two types of contracts between an employee and a company. One is a legal contract, and the other one is a psychological contract.

Psychological contract was established by an organizational scholar named Denise M. Rousseau in 1989. It includes casual measures, mutual faith, common ground, and assumptions between the two people. The psychological contract grows and changes all the time, based on how well or how poorly the employee and employer communicate in a business setting. Employers need to be careful not to give employees the wrong impression of what they're going to do, which then doesn't happen.

## Review of Literature

Argyris coined the phrase "psychological contract" in the early 1960s. This contract specifically addresses how employees view the employment agreement (Höglund, 2012). Social exchange theory, which is predicated on the reciprocity principle, is the cornerstone of the psychological contract. When someone receives a benefit, reciprocity suggests that they feel obligated to return the favour (Sonnenberg, Koene, & Paauwe, 2011). Because of this, the benefits of these social contracts are frequently ill-defined and may be intrinsic or extrinsic (Kasekende, 2017). The psychological contract, according to Guest (1998) and Rousseau (2012), is a term used to describe people's perceptions of the terms and circumstances of an exchange relationship between themselves and their employer. Every worker has opinions about the "ideal" returns (Rousseau, 2012) that their employer has consented to (either implicitly or explicitly) to provide him/her as exchange for his/her contribution.

When people feel that their organization has committed to give them specific benefits in exchange for their contributions to the organization, psychological contracts are formed (Turnley and Feldman 2000). Turnley et al. (2003), Conway and Briner (2002), Coyle-Shapiro (2002), commitment, and organizational citizenship behaviours are all improved when it appears that promises are being kept (Robinson and Morrison 1995). Subsequently, these assurances materialize into a set of duties and expectations that each employee must fulfil during

their employment (Rousseau, 2012). The terms of supervisor & subordinate disparities can shape these job situations. Kasekende (2017). Numerous academics concur that the psychological contract is an informal agreement between an employer and employee that comprises a set of mutual expectations.

According to Rousseau (2012), the psychological contract is the idea that two parties have mutually beneficial agreements. The operationalization of the psychological contract is a topic of ongoing controversy in the literature, despite its significance (Kasekende, 2017). Advocates of the psychological contract thought that there were multiple ways to operationalize the idea (Augustina, 2014). In Rousseau's (2012) operationalization of the psychological contract, for instance, the three components are perceived obligations of the employee, perceived duties of the employer (organization), and perceived fulfilment or violation of employer commitments. This suggests modifications to the working relationship that could affect both the employment relationship's sustainability (Guest, 2004; Tyagi & Agrawal, 2010) and the subjective perceptions of the working relationship and job by employees (Rothmann & Cilliers, 2007; Schreuder & Coetzee, 2010).

Based on the material that is currently available, it appears that there is no universally accepted operationalization for the concept of psychological contract. The assumption that there are duties between two or more parties is the most widespread operationalization of the psychological contract (Rousseau, 2012). An obligation is a future activity that the parties have agreed upon, even though disagreements may arise on the terms, fulfilment, and degree of mutuality of the commitment. According to Rousseau (2012), before entering an organization, people start to formulate their end of the psychological contract, or expected obligations.

Bal et al. (2010) are among the other academics who have investigated the idea of a psychological contract by assessing the degree to which employee and employer duties and expectations are met. Employees expect their employer (supervisor) to develop general management skills and help subordinates monitor and maintain systems,



according to Bal et al. (2010). As a result, the employer has obligations in this regard. In addition, the employer's responsibilities to the subordinate/employee are expected to grow as they search for methods to innovate, enhance the company, take chances, and try new things (Bal et al., 2010).

**Objective of the Study**

The broad objective is to understand the psychological contract in employee engagement and the imperatives for the future with respect to the selective private higher educational institutions in Odisha. Specific objectives may be stated as follows:

1. To test the normality of psychological contract scale in the private higher education in Odisha
2. To assess the reliability and validity of the scale in the private higher education in Odisha

**Research Methodology**

*Sampling, data collection and data analysis*

Data was collected between August to September 2024 by means of convenient sampling. To expand the number of respondents in a short period of time, a non-probability convenient sampling method (Goodman, 1996) is used. For the pilot survey, a total of 47 respondents were collected from the employees of private higher education institutions. A five-point Likert scale is used to measure the psychological contract which ranged from “1= strongly disagree” to “5= strongly agree”. In addition, a five-point Likert scale ranging from “1 = very dissatisfied” to “5= very satisfied” has been used to measure the employee perception and assessment to overall psychological contract.

Data analysis (descriptive statistics, reliability analysis, validity analysis and factor analysis) were carried out using SPSS version 20. Demographics are presented as proportions. Cronbach’s alpha was used to assess the reliability and internal consistency of each of the scale.

**Pilot Study**

A pilot study is a small study to test research protocols, data collection instruments, sampling method, and other research techniques in preparation for a larger study. This study is necessary and useful in providing the groundwork in a research study.

*Profile of the Respondents*

The data was entered into an IBM SPSS (Statistical Package for Social Sciences) datasheet, which was then coded and edited as needed. The missing data imputation technique, which is accessible in SPSS, was used to solve the issues posed by missing data. The information was examined for normalcy. It is agreed to proceed with the final analysis after checking the data normality. The Researcher clearly defines the demographics.

A total of 47 valid responses were collected through the convenience sampling method. The data was collected from the respondents during their free time, after obtaining verbal permission from them. The information was entered into an IBM SPSS (Statistical Package for Social Sciences) datasheet, which was then coded and edited as necessary. The missing data imputation technique was utilised to address the challenges caused by missing data. The data was evaluated for normality. It was agreed to proceed with the final analysis after ensuring data normalcy. Table 1 presents the descriptive statistics of demographics.

**Table-1 Demographic Profile of the respondents**

Demographic ariable	Demographic Sub-groups	Number	Percent
Age (years)	21 to 30 years	13	28%
	31 to 40 years	12	26%
	41 to 50 years	20	43%
	51 and above	02	4%
Marital Status	Single	19	40%
	Married	26	55%
	Widow	02	4%
	Divorced	0	0%
Job Level	Junior	25	53%

	Middle	17	36%
	Senior	05	11%
Gender	Male	25	53%
	Female	22	47%
	Transgender	0	0%
Education	Graduate	28	60%
	Post Graduate	12	26%
	Professional	5	11%
	Others	2	4%
Length of service	1-5 years	28	60%
	6-10 years	12	26%
	11-15 years	5	11%
	16years and above	2	4%

**Table 2: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.935	
Bartlett's Test of Sphericity	Approx. Chi-Square	8624.659
	Df.	1378
	Sig.	0.000

**Source: Researchers' own calculation**

This study has taken 47 responses which are adequate for running the factors analysis (Tabachnick & Fidell, 2005). In addition, the Kaiser-Meyer-Olkin (KMO) is a test for sample adequacy in terms of meeting the best practice standard for EFA (Kaiser, 1970). A KMO value of more than .50 is considered adequate (Kaiser, 1974), and values of more than .80 are regarded as excellent (Hair et al, 2006). Here the KMO value of .935 justifies that the sample is adequate for further analysis (Table-2). The Bartlett's Test of Sphericity helps a researcher to decide whether the results of factor analysis are worth considering and whether we should continue analysing the research work. The results were significant. Correlation between the variables are positive and the correlation between customer satisfaction and trust is the highest and between reliability and awareness is the lowest one (Table-3).

**Skewness and Kurtosis Indices of Items**

The initial precondition for the statistical test of the hypotheses of the current study is that the existing data must meet the normal distribution pattern. Graphical analysis of data distribution (e.g., histograms) for all of the items comprising the dependent and independent variables including the

residual plots was performed to assess normality (Chambers et al., 1983). Table 2 revealed the skewness and kurtosis of each construct.

The descriptive statistics show that the skewness ranged from -.104 to 1.404 while the kurtosis varied from -.390 to +2.018. Whilst normal distribution should have values of skewness and kurtosis close to zero (Field, 2005), the values presented in the two tables suggested that the distribution of data was relatively normal. Conditions of mild skewness (-1 to +1) or kurtosis (-2 to +2) were observed to be within the normal range so that statistical analysis such as factor analysis that would be used in the study could continue (Heck, 1998). Additionally, multiple researchers recommend that absolute values of skewness indices greater than 3.00 seem to describe extremely skewed data sets (Chou and Bentler, 1995; Huet et al., 1992; Kline, 2005; Schumacher and Lomax, 1996). Likewise, absolute values of kurtosis indices higher than 10.00 suggest a problem and values greater than 20.00 may indicate a more serious problem (Hoyle,1995; Kline, 2005). The data set shows that the skewness and kurtosis were much lower than these maximum limits and pose no problem.

**Table-3 Skewness and Kurtosis Indices of Items**

Item	Skewness Statistics	Kurtosis Statistics
V1	-1.138	1.529
V2	-.967	.748
V3	-1.095	1.295
V4	-.931	.821
V5	-.870	.709
V6	-.906	.263
V7	-.853	.299
V8	-.625	.050
V9	-1.220	1.513
V10	-.647	-.038
V11	-.493	-.538
V12	-.481	-.390
V13	-.104	-.872
V14	-.219	-.953
V15	-.676	-.111
V16	-1.305	1.734
V17	-.986	.839
V18	-1.204	1.527
V19	-1.095	.911
V20	-.645	.034
V21	-.838	.503
V22	-1.117	1.283
V23	1.404	2.018
V24	-1.068	1.307
V25	-1.048	1.401
V26	-.995	1.050

**Table 4: Tests of Normality of Items**

Tests of Normality of Items				
Item	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
V1	0.273	0.000	0.812	0.000
V2	0.257	0.000	0.841	0.000
V3	0.271	0.000	0.821	0.000
V4	0.247	0.000	0.843	0.000
V5	0.286	0.000	0.850	0.000
V6	0.277	0.000	0.847	0.000
V7	0.279	0.000	0.855	0.000
V8	0.252	0.000	0.879	0.000
V9	0.289	0.000	0.805	0.000
V10	0.319	0.000	0.825	0.000
V11	0.262	0.000	0.855	0.000
V12	0.284	0.000	0.853	0.000
V13	0.232	0.000	0.877	0.000
V14	0.266	0.000	0.860	0.000
V15	0.224	0.000	0.876	0.000
V16	0.304	0.000	0.788	0.000
V17	0.292	0.000	0.838	0.000
V18	0.304	0.000	0.805	0.000
V19	0.300	0.000	0.821	0.000
V20	0.234	0.000	0.880	0.000
V21	0.278	0.000	0.857	0.000



V22	0.313	0.000	0.814	0.000
V23	0.334	0.000	0.767	0.000
V24	0.294	0.000	0.823	0.000
V25	0.301	0.000	0.826	0.000
V26	0.262	0.000	0.833	0.000

Source: Researchers' own calculation

**Reliability Statistics**

The reliability of the questionnaire is assessed to check the internal consistency of the data based on Cronbach's alpha. According to L.J. Cronbach (1995), an alpha value greater than 0.70 is considered to be suitable for further analysis. The alpha coefficient for the total number of items is

0.926 (Table 3), suggesting that the items have relatively high internal consistency. Reliability was also checked by deleting questions one by one and it was found that there is no significant variation in Cronbach's alpha. Therefore, it may be concluded that the scale used for the study is reliable. Reliability for construct-wise and items-wise are also highlighted (Table 5).

**Table-5**

Cronbach's Alpha	N of Items
.926	26

**Item Validity Test**

In this study, correlation for data assumed to be normal was calculated using Pearson's correlation Coefficient two-tailed test with a confidence interval of 95%. The validity of each item was determined by the significance of its correlation coefficient scores (Table 6).

It is observed that the correlation is significant at the 0.01 level for all the questions. The sample size is 47 . Therefore, the degree of freedom is 45. Using Pearson's correlation coefficient significant table for the degree of freedom of 45 with a significance level of .05 (Confidence level of 95%), the coefficient of correlation values is greater than the tabulated value. So, all the questions on the scale are valid.

**Table-6: Validity Test**

Pearson Correlation					
Item	Coefficient	Item	Coefficient	Item	Coefficient
Item 1	.650**	Item 2	.725**	Item 3	.722**
Item 4	.565**	Item 5	.786**	Item 6	.785**
Item 7	.762**	Item 8	.664**	Item 9	.608**
Item 10	.785**	Item 11	.763**	Item 12	.653**
Item 13	.718**	Item 14	.519**	Item 15	.731**
Item 16	.840**	Item 17	.839**	Item 18	.752**
Item 19	.638**	Item 20	.598**	Item 21	.670**
Item 22	.638**	Item 23	.756**	Item 24	.713**
Item 25	.811**	Item 26	.794**		

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

**Conclusion**

The increase in number of private higher education has brought many challenges in the education sector. The existing psychological contract scale needs to be redefined keeping in mind the requirements of the newly joined workforce. In this regard, the study intends to validate the new

psychological contract scale by including the new dimensions. The study has conducted a pilot study taking data from 47 respondents across different demographic sections. It also identified that the new psychological contract scale is reliable and valid and can be further extended to study considering a greater number of respondents. Further studies can be considered taking

satisfaction and other dimensions. The study has taken responses from limited number of respondents. The study also includes many limitations such as time and the same can be interpreted differently in other private higher education setup.

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