

# Constructing a Commitment Scale and Developing a Model of Organizational Commitment for IT Industry in Eastern India

Punam Bihani★ Kaushik Kundu★★ Sharmistha Banerjee★★★ Dev Narayan Sarkar★★★★

## Abstract

*The concept of organisational commitment (OC) has evoked considerable interest among scholars. While extant literature is rich in generalized studies on employee organisational commitment, it may be pertinent to develop an understanding of this aspect in the IT sector. The present study identifies variables as well as the sub-variables, of organizational commitment. Subsequently, the study constructs and validates an instrument to measure the reconceptualised OC construct, using an empirical study of the IT sector of Kolkata. Data are analysed using the technique of Structural Equation Modelling. The results indicate that an increase in emotional attachment leads to a resultant increase in employee commitment, in the context of the IT sector in the city of Kolkata, India. The results show that an increase in alignment between the employee's beliefs and the organizational beliefs leads to an increase in employee commitment. It is also found that an employee's emotional attachment does not proportionately translate to an employees' concurrence with the organizational beliefs. The present study is specifically on the IT sector in Kolkata. Consequently, the present article does not express any pretensions of being generalizable, and may not be extendable to even the overall IT sector in India. Further studies in other cities may bring out certain more aspects of employees' commitment.*

**Keywords:** *Organizational climate; organizational culture, organizational commitment, Emotional attachment; organizational goals.*

## Introduction

Commitment may be defined as an obligation, agreement, or pledge to someone or some action to be taken up in the future (Bayer, 2014). One may be committed to people, to institutions or to one's workplace. Workplace commitment encompasses commitment to career, occupation, goals, teams, leaders or organization (Meyer & Herscovitch, 2001; Fleishmann & Cleveland, 2003). The

concept of organizational commitment (OC) has received particularly significant attention in the fields of management and organizational behavior. According to Robbins (1978), the existence of dedicated or committed employees serves as the key variables without which the insensate assets are worthless. Islam and bin Mohd Rasad (2006) defined employee commitment as the demonstrated ability to offer assistance to others, to support the goals and objectives of the company.

Mowday et al. (1979) observe that highly committed individuals are likely to be more productive and more satisfied than their less committed counterparts. DeCotiis and Summers (1987) also find that committed employees are more likely to perform better for their organization

- 
- ★ Ms. Punam Bihani, Research Scholar, Department of Business Administration, University of Calcutta
  - ★★ Dr. Kaushik Kundu, Associate Professor, Department of Management and Business Administration, Aliah University, Newtown, Kolkata, West Bengal.
  - ★★★ Dr. Sharmistha Banerjee, Professor, Department of Business Administration, University of Calcutta
  - ★★★★ Dr. Dev Narayan Sarkar (Corres. Author), Associate Director, PepsiCo India, Kolkata, West Bengal.

than less committed ones. As businesses face increasing competitive challenges, a strategy of developing committed and loyal employees holds the promise of superior financial returns (Mowday, 1998). In the opinion of Kassahun (2005), truthfully committed employees constitute assets for a company to garner competitive advantage. A loyal base of satisfied and committed employees increases revenues, reduces costs, builds up market share and improves bottom lines (Sahi & Mahajan, 2014). Considering the remarkable role of OC in paving the way to organizational success, numerous studies on OC have been conducted in India as well as other countries across different sectors. IT sector of India has emerged as a keystone of Indian economy (Bhalerao & Kumar, 2016; Kundu & Mor, 2017; Sharma & Garg, 2017). Several studies have been conducted on Indian IT sector in recent years that establish the significance of OC (e.g. Messner, 2017, 2013; Naim & Lenka 2017, Pathak & Srivastava, 2017; Pradhan & Pradhan, 2015). OC is based more on trust and commitment than contractual agreements (Tseng & Kang, 2009). OC has also been found to influence job performance of an employee (Lin & Ma, 2004; Weng, Su, & Lai, 2011). However, several researchers (Bhalerao & Kumar, 2016; Joydeep, 2013; Mitra, 2009) have observed that the Indian IT industry is witnessing challenges such as issues of loyalty, attrition and OC among others. As OC is an important issue for contemporary organizations (Jena, 2015; Neelam, Bhattacharya, Sinha & Tanksale, 2015; Pradhan & Jena, 2016), a need has been felt to undertake a conceptual study of OC in the context of the Indian IT sector.

In the present study, an attempt has been made to understand the conceptualisation and measurement of OC over the years since its origin with a view to designing a questionnaire for surveying IT sector employees.

The paper begins with a review of existing literature on OC. The review of literature is used to identify certain observable variables that are subsequently used to construct a questionnaire. The method of questionnaire design is explained. Sampling methodology is also explicated. Data are analysed using Exploratory and Confirmatory Factor Analyses to validate the instrument. A Structural Equation Modelling is subsequently conducted to arrive at certain results in the context of employee commitment. The results are discussed and the article closes with some clarifications regarding its limitations, as well as, certain suggestions for future studies.

## Review of Literature

OC has been conceptualised and studied in a variety of ways (Randall, Fedor, & Longenecker, 1990). For example, Becker (1960) remarked “commitments manifest when an individual, by making a side bet, links extraneous interests with a consistent line of activity”. Literature is reviewed in two sections namely (1) On Conceptualising OC (2) Measuring OC.

### 1. Conceptualizing OC

Sheldon (1971) defines OC as an attitude toward the organization which connects the identity of an employee to the organization. Buchanan (1974) finds OC as a partisan, affective attachment to the objectives and values of an organization, to one's specific roles in relation to the objectives and values, and to the organization for its own sake, apart from its purely instrumental worth. According to Allen and Mayer (1990), organizational commitment is the psychological bond that associates an employee to an organization, thereby, reducing the incidence of attrition. Cohen (2007) defined OC as concerning an employee's faithfulness to the organization, willingness to exert effort for the benefit of the organization, degree of goal, and

value congruency with the organization, and desire to maintain membership. A unanimous definition of OC has been elusive in the body of management and leadership research.

## 2. Measuring OC

Ever since the origin of the concept of OC which can be traced back to the works of Weber (1947), Fayol (1949), and Tan (2016), several theoretical frameworks of OC, each accompanied by a recommended measure or set of measures, have been proposed by several researchers. Some researchers (e.g. Buchanan, 1974; Kanter, 1968; Sheldon, 1971) view OC as a uni-dimensional construct based on attitudinal perspective. According to Porter et al. (1974), an attitudinal perspective refers to the psychological attachment or affective commitment of an employee towards his employing organisation whereby he desires to remain attached to the organisation (i.e. loyalty), identifies with the values and goals of the organisation (i.e. acceptance or identification) and is willing to exert effort on behalf of the organisation (i.e. participation or involvement). Another perspective on OC is the behavioural perspective which is explained through calculative and normative commitments. Calculative commitment views OC as a one dimensional construct and refers to an employee's commitment to continue working for an organisation based on the notion of weighing cost-benefits of leaving an organisation. Calculative commitment is the corner-stone of the side bet theory of Becker (1960). Normative commitment also views organisational commitment as a single dimensional construct and refers to the totality of internalized normative pressures to act in a way which meets organizational goals and interests (Wiener, 1982). Behavioural perspective of OC as explained through calculative and normative commitments, refers to an employee's commitment not to the target of the organisation but to a behavioural act of employees

to continue in the organization.

The integrated approach views commitment as a multidimensional construct that can take multiple forms. Several models that view organisational commitment as a multidimensional construct have been developed by different researchers (e.g. Allen & Meyer, 1990; Angle & Perry, 1981; Cohen, 2007; Mathieu & Zajac, 1990; Meyer & Allen, 1984, 1991, 1997; O'Reilly & Chatman, 1986). Of all the multidimensional models, the most popular one is the three-component model (TCM) forwarded by Meyer and Allen (1984, 1991, 1997 and Cohen 2007). These researchers separated commitment into three components, namely affective commitment (AC), continuance commitment (CC), and normative commitment (NC).

The TCM (Three component model ) arguably dominates OC research (Bergman, 2006; Cohen, 2007; Paul et al., 2016; Simo et al., 2014). In literature, several empirical studies have assessed the TCM and found a fairly stable underlying structure to Meyer and Allen OC scales. Hackett, Bycio and Hausdorf (1994) assessed the construct validity of Meyer and Allen's (1991) TCM. A Confirmatory factor analysis (CFA) of data from 2,301 nurses generally supported the existence of AC, CC, and NC. Hartmann and Bambacas (2000) examined the construct validity on the basis of Meyer and Allen's (1990) TCM in a study of women academic staff in casual employment at an Australian Tertiary Institution. Results indicated the TCM had a reasonably good fit.

In the Indian context, Naim and Lenka (2017) explored knowledge sharing to evoke AC of Gen Y employees through competency development in India. Nazir and Islam (2017) examined the relationships between perceived organizational support, employee engagement, employee performance and AC in the Indian higher education context. This implies that researchers are now

focusing more on the AC component of the TCM rather than on TCM as a whole. But it must be pointed out that Meyer and Allen's ACS have also been criticized for focusing predominantly on emotional attachment to affect, identification with the organization (affect and cognition), and neglecting the notion of action in measuring OC (Solinger et al., 2008).

It must be pointed out here that Solinger et al. (2008) observe that OC must be strictly conceptualized as an attitude of employees towards their organization-covering affective, cognitive, action tendency/behavioural facets and nothing beyond. The researchers proposed that future research may expand or refine the existing instruments of attitudinal or AC by giving due attention to the affective, cognitive, and behavioural components of the attitude construct.

At this juncture, it is pertinent to mention that most of these frameworks and their accompanying scales have been developed and validated in western nations (Jena, Bhattacharyya, & Pradhan, 2017). However, despite the western outlook of the popular frameworks of organisational commitment, most of the studies pertaining to organisational commitment in India have adopted them (e.g. Pathak & Srivastava, 2017; Jauhari, Singh & Kumar, 2017; Bhalerao & Kumar, 2016). Adopting commitment models from western contexts into an eastern context without considering the local context does not provide appropriate solutions (Tsui, 2013; Lau. et. al., 2017). Thus, a need has been felt in the present study to develop and validate a comprehensive, cognitive construct of employee commitment that would take into consideration dimensions and characteristics that portray the unique socio-cultural norms and legacies of India. The employee commitment construct, accompanied by an employee commitment scale, would incorporate factors that would attempt to measure

the commitment levels of employees towards their employing organisations and would be validated in the IT sector of Kolkata.

The present study has developed an augmented version of the earlier instrument for the specific purpose of surveying IT sector employees in eastern India from the perspectives of affective, cognitive, and behavioural components of the attitude construct. An important caveat is that the present study does not profess to introduce any new scale. It develops an augmented version of previous instrument relevant to the present study to examine the degree of re-conceptualization of the Allen & Meyer model.

## **Objectives of Study**

The present study comprises of the following intertwined objectives: a) identify the variables and sub-variables that may be required for conceptualizing an OC construct relevant for a study of the IT sector in eastern India; b) construct a certain number of statements that represent the identified variables and sub-variables of the OC construct to be used for the present study; c) based on the identified variables and sub-variables, develop an instrument which may appear relevant the present study ; d) draw insightful learning on OC of the IT sector in Kolkata using a pre-hypothesized model; e) examine the augmented and modified version of the existing model of OC in the context of the IT sector in the eastern India

## **Hypothesized model**

The present study concerns itself with the three constructs corresponding to Emotional Attachment, Employee Commitment, and the Belief in Organizational Goals. The Hypothesized model consists of these three constructs only. Since a detailed discussion has already been presented in the literature review section, only a summary is presented before stating each hypothesis.

Allen & Meyer (1990) defined affective commitment (AC) as the employees' emotional attachment to, association with, and participation in, the organization. Employees with a strong AC continue employment with the organization because they want to or desire to do so (Meyer & Allen, 1991). AC was based on the attitudinal approach of Porter and his colleagues (Porter, Crampon, & Smith, 1976; Mowday, Steers, & Porter, 1979). The preceding discussion may be written as the following hypothesis:

**H1:** An increasing emotional attachment with the organization leads to an increasing employee commitment in the IT sector of India.

Porter et al. (1974) stated that an attitudinal perspective refers to the psychological or emotional attachment or affective commitment of an employee towards his employing organisation whereby he desires to remain attached to the organisation (i.e. loyalty), identifies with the values and goals of the organisation (i.e. acceptance or identification), and is willing to exert effort on behalf of the organisation (i.e. participation or involvement). These arguments may be presented as the following hypotheses:

**H2:** An increasing emotional attachment by the employees in the Indian IT sector leads to an increasing belief in organizational goals.

**H3:** An increasing belief in organizational goals by the employees in the Indian IT sector leads to an increasing employee commitment

### **Figure 1: Hypothesized model of employee commitment in Appendix B**

Research design :Identifying the variables and sub-variables of the reconceptualised OC construct

The OC construct, utilized in the present study, is rooted in the attitudinal approach of Porter and his colleagues (1974). There is widespread unanimity among researchers that OC is an attitude towards

the organization (e.g., Allen & Meyer, 1990; Angle & Perry, 1981; Buchanan, 1974; Jaros, Jermier, Koehler, & Singh, 1993; Kanter, 1968; Mowday et al., 1982; O'Reilly & Chatman, 1986). Kanter (1968) who pioneered the attitudinal commitment theory termed this attitudinal type of commitment as cohesion commitment. Others have referred to it as a bond or linking (Buchanan, 1974; Mathieu & Zajac, 1990; Mowday et al., 1982), an orientation (Sheldon, 1971), the readiness to act (Leik, Owens, & Tallman, 1999), or an un conflicted state of inner readiness (Brickman, Janoff-Bulman, & Rabinowitz, 1987). Meyer & Allen (1984, 1991) viewed attitudinal commitment as AC. In describing AC, Meyer & Allen (1984, 1991, 1997) identify three dimensions of the affective bond that an employee has with his organization. The dimensions are (a) emotional attachment with the organization that an employee enjoys and takes pride in organizational membership, (b) an employee should have strong belief and acceptance of organizational values so that he/she is able to have identification with the organisation's goals and values (c) Involvement in the organization such that an employee desires to continue in the organization and is willing to exert considerable effort on behalf of the organization. Meyer and Allen (1984, 1991, 1997), thus, identifies emotional attachment with the organisation, identification with the organisation, and involvement with the organisation as the core essence of the AC construct.

Jaros et al. (1993) observe that emotional attachment with the organisation refers to the degree to which an individual is psychologically attached to an organization through feeling such as loyalty, affection, worth, belongingness, pleasure and so on. Psychological Attachment would, consequently, be the first variable of our reconceptualised OC model, and the sub-variables would be loyalty, pride in organizational membership, affection & warmth, belongingness, fondness, pleasure and care for the

organization. With respect to identification with the organisational goals and values, two variables have been identified, namely, conditional affiliation to organisation, and belief in organisational goals & compatibility with individual goals. It has been observed that sometimes an employee desires to identify or attach with the organization but without accepting the organization's values as his own and/or without accepting the organizational policies. His identification or attachment with the organisation is, thus, conditional. This reflects the second variable of our reconceptualised OC model which has been termed as conditional affiliation to the organisation.

Two sub-variables have been identified for this dimension, namely, affiliation without value acceptance, and affiliation without policy acceptance. Affiliation without value acceptance refers to the degree to which an employee desires to identify or attach with the organization but without accepting the organization's values as his own. Affiliation without policy acceptance refers to the degree to which an employee desires to identify or attach with the organization but without accepting the organization's policies. Belief in organisational goals & compatibility between Individual and Organisational Goals is the third variable of the reconceptualised OC construct. Individual belief in Organisational Goals refers to the degree to which an employee has a strong belief in organization's goals. Compatibility between Individual and Organisational Goals refers to the degree to which an employee's personal goals are compatible with organisational goals. These two sub-variables together constitute the third variable.

Finally, with respect to involvement in the organization, it has been observed that an employee may involve himself in the organisation in three ways. In the first way, an employee may desire to involve himself in the organisation by willingly discharging his organisational duties. In the second

way, an employee may desire to involve himself in the organisation by willingly discharging extraordinary duties for the organisation. Finally, an employee may desire to involve himself in the organisation by his willingness to do anything and everything for his organisation. These three sub-variables together constitute the final variable of the reconceptualised model of OC which has been termed Behavioural Readiness for Organisational Purpose. The instrument constructed for the specific purpose of the present study has been depicted in Figure 2.

### **Figure 2: Reconceptualised OC Construct in Appendix B**

#### **Construction of Questionnaire**

The questionnaire containing 5-point Likert-scaled items was drafted in English through the help of experts in services marketing working in a university in Kolkata, using the items identified in the preceding subsection, and the literature review. Some statements were reverse-coded for removing biases in responses.

Pre-testing has been also carried out with five academicians with an appropriate subject and research familiarity at a leading university in the city of Kolkata. The objective of the pre-testing is to enhance the questionnaire and to evaluate the face/content validity of measures (Anastasi, 1982).

The descriptions of all the variables used in the final questionnaire are presented in Appendix A: Variable Descriptions.

#### **Sampling Design**

The study was conducted in the IT sector of the city of Kolkata (Sector V, Bidhannagar). Since the total size of the universe of IT sector employees was not known, and since it is more than half a million, an assumption of infinite population may be safely made. Cochran's (1977) formula for finite population

was used to calculate the necessary sample size, using a confidence level of 94% (corresponding Z-score is 1.88 and confidence interval is 0.06) and a p value (population proportion) of 0.5.

$$\begin{aligned} &\text{Sample Size for infinite population} \\ &= (Z\text{-score})^2 * p*(1-p) / (\text{Confidence Interval}) \\ &= (1.88)^2 * 0.5*(1-0.5) / (0.06) = 245 = \text{SS} \end{aligned}$$

SS is the Sample size calculated using an assumption of infinite population.

With an idea to survey 245 IT sector employees, or a little more, it was decided to follow a systematic random sampling. The researcher stood at the entry point of the Special Economic Zone for IT (IT-SEZ) of sector V and surveyed every tenth person coming in through the gate, if the person proves to be working in the IT sector. Sector V of Kolkata, is the IT capital of Eastern region of India. In case, the tenth person was not an IT-sector employee, the surveyor skipped to the next person and surveyed that individual. In this manner, 267 respondents were accosted and surveyed as part of the present study.

The respondents were working in the IT sector, at the time of the survey and ranged from 23 years to 38 years. All respondents, on account of being employed in the IT sector, were found to be graduates, mostly in the engineering discipline. The gender was nearly equally divided between the sexes. Eighty percent of the respondents were Bengalis, and the rest were from across India.

## Results and Interpretation

With the final empirical data, the internal consistency of items was tested using Cronbach alpha coefficient. The alpha coefficient (0.915 in this case) is higher than the minimum prescribed level of 0.70 (Nunnally, 1978). Cronbach's Alpha does not increase significantly from the 0.915 value calculated initially on the removal of any of

the variables. In this case, there is no step-jump in Cronbach alpha, if item removed – therefore, all items are retained.

Reliability is the degree to which an assessment tool produces stable and consistent results. A measure is said to have a high reliability if it produces similar results under consistent conditions (Nunnally, 1978). Split-Half method treats the two halves of a measure as alternate forms. It involves: Administering a test to a group of individuals; splitting the test in half; Correlating scores on one half of the test with scores on the other half of the test. The correlation between these two split halves is used in estimating the reliability of the test. This halves reliability estimate is then stepped up to the full test length using the Spearman–Brown prediction formula.

The Spearman–Brown prediction formula (or Step Up formula), also known as the Spearman–Brown prophecy formula, is a formula relating psychometric reliability to test length and used by psychometricians to predict the reliability of a test after changing the test length. Guttman split-half reliability coefficient is an adaptation of the Spearman–Brown coefficient, but one which does not require equal variances between the two split forms.

Spearman-Brown Coefficient (.841) as well as Guttman Split-Half Coefficient (.840) compare variances of one half with the second half of data set – if the ratio of variances is within acceptable limits (as in this case), it is assumed that the halves are similar in nature or that the total data set is internally consistent. Moreover, Cronbach alpha for the 2 parts (0.838 and 0.872 respectively) are similar to each other, further reinforcing our contention of internal consistency.

## Exploratory Factor Analysis

Principal axis factoring is used when the combination

of variables that may measure a factor, is not known beforehand (Byrne, 2010). We cannot directly measure a construct like “employee engagement”. Instead, we give people a bunch of questions to answer, and we assume that there is some latent construct called "employee engagement" that is influencing how people answer these questions. This is a case to use principal axis factoring.

The 41 items used in the questionnaire were all subjected to Exploratory Factor Analysis (EFA) with principal axis factoring and Varimax rotation. The KMO value is 0.869 - KMO value that is over 0.60 shows that the sample size is sufficient for discerning factors (Hutcheson & Sofroniou, 1999). Chi-square’s significance level for Bartlett’s test is less than 0.001. Hence, null hypothesis of no-correlation is rejected and factor analysis is applicable. The total variances explained are presented in Table 1 and scree plot is in Figure 3. The factor solution table is presented in Appendix B.

13 factors explain 60.231% of the total model variance. However, the scree-plot also indicates that 4 factors need to be used, explaining 40% of the variance. Results from EFA are shown in Table 2 (replace with actual table numbers when using this text in your publication). Loadings below 0.40 are suppressed for easier representation.

### **Figure 3: Scree plot in Appendix B**

### **Table 1: Variances explained In Appendix B**

### **Table 2: Rotated factor matrix (first four factors taken) in Appendix B**

### **Confirmatory factor analysis**

The primary solution, as identified through EFA, has been used for CFA after removing the variables with low loadings. Each of the 25 observable variables, that showed a high loading, are constrained to load onto only the factor against

which it showed the highest loading after Varimax rotation (principal axis factoring) during EFA, as suggested by Brahma (2009) for CFA. The input model has 4 latent constructs with one factor per item. Reasonably good model-fit indicators would confirm that the 4 factors identified to represent the 25 variables through EFA are the valid ones. CFA is conducted using IBM AMOS 21.0. The model fit indicators are presented in Appendix C: Measurement Model for CFA.

The convergent and discriminant validity tables are provided in Appendix, and indicate a reasonable convergent validity, as indicated by an eigenvalue of less than 0.000, and the high condition number of 225.877, at the tenth iteration.

A good model fit is indicated by the Chi-square value (CMIN) of 601.885,  $P < .001$ , and degrees of freedom (DF) = 270 since the ratio of Chi-square and the degree of freedom (CMIN/DF = 2.229) is less than 3 (Schreiber et al., 2006). Comparative-Fit-Index (CFI) is 0.848, which is a good fit (Byrne, 2010; Cheung & Rensvold, 2002). Incremental Fit Index (IFI) is 0.850, which also indicates a good fit (Byrne, 2010; Cheung & Rensvold, 2002); Tucker–Lewis Index (TLI) is 0.831, which also represents a good fit (Byrne, 2010; Cheung & Rensvold, 2002) given the complex nature of the model.

### **Structural Equation Modelling**

The model in Figure 2 was tested on AMOS 21.0 using the imputed factors which were validated from survey data. The model validated through SEM is presented in Figure 4. The model fit indicators are presented in Table 3. The standardized and non-standardized estimates are presented in Appendix B.

Note: Conditional affiliation and behavioural readiness was not found to have any significant influence on organizational commitment and these 2 factors were removed from the SEM while



constructing the model.

#### **Figure 4: Validated Structural Equation Model in Appendix B**

#### **Table 3: Model fit indicators in Appendix B**

A good model fit is indicated by the Chi-square value (CMIN) of 11.974,  $P = .176$  (Table 3), and degrees of freedom (DF) = 1 (Table 3) since the ratio of Chi-square and the degree of freedom (CMIN/DF = 11.974) is less than 12, but may be considered acceptable, given the complexity of the model being tested (Schreiber et al., 2006). Comparative-Fit-Index (CFI) is 0.979 (Table 3), which is a reasonable fit (Schermelleh-Engel et al., 2003; Steenkamp & Baumgartner, 2000). IFI is 0.979 (Table 3), which seems to be a logical fit (Banchuen, Sadler, & Shee, 2017; Cunningham, 2008); Goodness of Fit Indicator (GFI) is coming at 0.971 (Table 3) which is a good fit (Cunningham, 2008). TLI is 0.937 (Table 3), which appears to be a logical fit (Baumgartner & Homburg, 1996; Cunningham, 2008). RMSEA is 0.203 (Table 3), which is not such a good fit, but may be considered acceptable, given the complexity of the model being tested. The SEM presented in Figure 3 and estimates for the significance of relationships and covariances are presented in Table 3.

From figure 3, the validated SEM, it is seen that hypothesis H1 and hypothesis H3 are substantiated, while hypothesis H2 could not be substantiated.

### **Discussion & Conclusion**

As shown by EFA, four factors emerge to be important in the case of organizational commitment. Following the reconceptualised model, factor 1 may be termed as emotional attachment with seven variables loaded onto it. Similarly, factor 2 may be called conditional affiliation with a loading of three variables. The construct, belief in organizational goals, may be seen as factor 3 with 3 variables

loaded onto it. Finally, behavioural readiness emerges as factor 4, with two variables.

Confirmatory Factor Analysis is a necessary step to validate an instrument. Each variable is constrained to load onto just one factor and the resultant model is tested. The model fit indicators, already presented, indicate a good model fit. The results of the confirmatory factor analysis validate the constructs manifested in EFA, along with the variables loaded under each of the constructs. Considering the acceptable results of the reliability and the validity tests, we may propose an organizational commitment scale with 23 validated statements or items as presented in Table 2 in Appendix B.

An important caveat is that the present study is specifically on the IT sector, and is conducted in eastern India. It, consequently, does not profess any notion of being universal in nature. The results indicate that increasing emotional attachment leads to an increase in employee commitment in the IT sector of the eastern India. An increasing coincidence between the employee's belief and the organizational beliefs also leads to an increased commitment on the part of the IT sector employees. However, emotional attachment does not proportionately translate to an employee's concurrence with the organizational beliefs in the IT sector of the eastern India.

In conclusion, results seem to indicate that the constructs of the reconceptualised model, as presented in the research design, has been reduced into two important latent constructs, namely emotional attachment and belief in organizational goals. These two constructs are on the employee commitment, as found through the SEM. Belief in organizational goals has a higher influence on the employee commitments than the emotional attachment with the organization. An organization may have committed employees if the organizational goals are more aligned with the employee's goals

say, both want to grow fast in a dynamic industry. The employee commitment may also be engendered through increasing the emotional attachment of an employee with the organization through various means.

The practical implication of such a finding is that IT Sector organizations in the eastern India, and possibly in India, should screen candidates in order to select the ones whose personal beliefs coincide with those of the organization. This is a significant implication since even an eventual emotional attachment with the IT Company does not bring about any increase in concurrence with organizational beliefs.

The beliefs of an employee may also be moulded to concur with the organizational beliefs through specific workshops for that purpose. It begins with measuring the emotional connection. Quantifying emotions and emotional connections are not a simple task. Asking questions about feelings pushes people to look beyond their conscious calculating minds to their emotions, a part of ourselves that we traditionally strive to keep in strict control when at work. All the same, to increase an employee's emotional connection and enhance the employee experience, it is necessary to try to gauge employees' feelings about work, the company and their colleagues. Fortunately, there are a few different ways in which employers can do this. While none are perfect, all are better than not trying at all.

There are various techniques an organization can choose from, such as direct employee engagement surveys, implicit association tests or analyzing employee comments to determine underlying feelings. Regardless of method, assessing employee feelings is essential for improving the emotional attachment that is necessary for healthy employee engagement.

After such a measurement, an increase in emotional

attachment may be attempted through means like team outings, teambuilding activities, creation of emotional connections between family members etc., increases employee commitment. Employees with low organizational commitment are more likely to try to leave the organization than individuals with high organizational commitment (Lin & Chen, 2004).

A limiting factor in the present study is that the study has been conducted in one particular IT location (Sector V, Kolkata) and may need further studies in other cities to be generalizable even to the IT sector in India. A logical future scope of study would be to conduct similar surveys in other cities known for their IT sectors. A comparative study across different service sectors could also be conducted to understand the peculiarities, if any, in the organizational commitment factors across various sectors.

The existing instrument needs to be verified cross-culturally with other regions in India. Because India is emerging as one of the most important hub for IT industry and because the particular industry in this country is essentially dominated by Indians, an organizational commitment scale customized for IT sector may be very useful for measuring and comparing the commitment levels of employees across the various IT companies.

## References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3), 252-276.

- Anastasi, A. (1982), *Psychological testing*, MacMillan, New York, NY.
- Angle, H. L., & Perry, J. L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly*, 26(1), 1-14.
- Banchuen, P., Sadler, I., & Shee, H. (2017). Supply chain collaboration aligns order-winning strategy with business outcomes. *IIMB Management Review*, 29(2), 109-121.
- Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139-161.
- Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66(1), 32-40.
- Bergman, M. E. (2006). The relationship between affective and normative commitment: review and research agenda. *Journal of Organizational Behavior*, 27(5), 645-663.
- Bhalerao, H., & Kumar, S. (2016). Role of emotional intelligence in leaders on the commitment level of employees: A study in information technology and manufacturing sector in India. *Business Perspectives and Research*, 4(1), 41-53.
- Bhalerao, H., & Kumar, S. (2016). Role of emotional intelligence in leaders on the commitment level of employees: A study in information technology and manufacturing sector in India. *Business Perspectives and Research*, 4(1), 41-53.
- Brahma, S. S. (2009). Assessment of construct validity in management research. *Journal of Management Research*, 9(2), 57-71.
- Brickman, P., Janoff-Bullman, R., & Rabinowitz, V. C. (1987). Meaning and value. C. B. Wortman, & R., Sorrentino, (Eds.) *Commitment, Conflict, and Caring* (pp. 59-105). Englewood Cliffs, N.J.: Prentice-Hall.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative science quarterly*, 19(4), 533-546.
- Byrne, B. M. (2010). *Structural equation modelling with Amos: Basic concepts, applications and programming*. New York: Routledge.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233-255.
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). New York: Wiley.
- Cohen, A. (2007). Commitment before and after: An evaluation and reconceptualization of organizational commitment. *Human Resource Management Review*, 17(3), 336-354.
- Cunningham, E. (2008). *A practical guide to structural equation modelling using AMOS*. Melbourne: Statsline.
- DeCotiis, T. A., & Summers, T. P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. *Human relations*, 40(7), 445-470.
- Fayol, H. (1949). *General and industrial administration*. NY: Pitman.
- Fleishmann, E. & Cleveland, J. (2003). Series Foreword. In Cohen, A. (Ed.), *Multiple Commitments in the Workplace, an Integrative Approach* (pp. ix-x). Mahvah,

- NJ: Lawrence Erlbaum Associates, Publishers.
- Hackett, R. D., Bycio, P., & Hausdorf, P. A. (1994). Further assessments of Meyer and Allen's (1991) three-component model of organizational commitment. *Journal of Applied Psychology*, 79(1), 15-23.
- Hartmann, L. C., & Bambacas, M. (2000). Organizational commitment: A multi method scale analysis and test of effects. *The International Journal of Organizational Analysis*, 8(1), 89-108
- Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London: Sage.
- Islam, R., & bin Mohd Rasad, S. (2006). Employee performance evaluation by the AHP: A case study. *Asia Pacific Management Review*, 11(3), 163-176.
- Jaros, S. J., Jermier, J. M., Koehler, J. W., & Singh, T. (1993). Effects of continuance, affective, and moral commitment on the withdrawal process: An evaluation of eight structural equation models. *Academy of Management Journal*, 36(1), 951-995.
- Jena, R. K. (2015). An assessment of factors affecting organizational commitment among shift workers in India. *Management: Journal of Contemporary Management Issues*, 20(1), 59-77.
- Joydeep (2013). The Information Technology (IT) Industry in India: An overview. [Blog Post]. Retrieved November 15, 2017, from <http://www.mapsofindia.com/my-india/government/the-information-technology-industry-of-india-an-overview>.
- Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. *American Sociological Review*, 17(1), 499-517.
- Kaur Sahi, G., & Mahajan, R. (2014). Employees' organisational commitment and its impact on their actual turnover behaviour through behavioural intentions. *Asia Pacific Journal of Marketing and Logistics*, 26(4), 621-646.
- Kundu, S. C., Kundu, S. C., Mor, A., & Mor, A. (2017). Workforce diversity and organizational performance: a study of IT industry in India. *Employee Relations*, 39(2), 160-183.
- Lau, P. Y. Y., McLean, G. N., Hsu, Y. C., & Lien, B. Y. H. (2017). *Learning organization*,
- Leik, R. K., Owens, T. J., & Tallman, I. (1999). Interpersonal Commitments. In *Handbook of Interpersonal Commitment and Relationship Stability* (pp. 239-256). New York: Springer.
- Lin, C. P., & Chen, M. F. (2004). Career commitment as a moderator of the relationships among procedural justice, perceived organizational support, organizational commitment, and turnover intentions. *Asia Pacific Management Review*, 9(3), 519-538.
- Lin, C. P., & Ma, H. C. (2004). Effects of leader-member exchange, job satisfaction, and organizational commitment on diagnosing employee job performance using career stage as a moderator. *Asia Pacific Management Review*, 9(1), 79-99.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-187.
- Messner, W. (2013). Effect of organizational culture

- on employee commitment in the Indian IT services sourcing industry. *Journal of Indian Business Research*, 5(2), 76-100.
- Messner, W. (2017). The role of gender in building organisational commitment in India's services sourcing industry. *IIMB Management Review*, 29(3), 188-202.
- Meyer J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. New Delhi: Sage Publications.
- Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69(3), 372.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299-326.
- Mitra, R. M. (2009). IT Industry in transformation: Opportunities and Challenges in India. Retrieved November 15, 2017, from [http://www.lse.ac.uk/asiaResearchCentre/\\_files/ARCWP29-Mita.pdf](http://www.lse.ac.uk/asiaResearchCentre/_files/ARCWP29-Mita.pdf).
- Mowday, R. T. (1998). Reflections on the study and relevance of organizational commitment. *Human Resource Management Review*, 8(4), 387-401.
- Mowday, R. T., Porter, L. W., & Steers, R. (1982). *Organizational linkage: the psychology of commitment, absenteeism and turnover*. New York, NY: *Academic Press*.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247.
- Naim, M. F., & Lenka, U. (2017). Linking knowledge sharing, competency development, and affective commitment: Evidence from Indian Gen Y employees. *Journal of Knowledge Management*, (just-accepted), 00-00.
- Nazir, O., Nazir, O., Islam, J. U., & Islam, J. U. (2017). Enhancing organizational commitment and employee performance through employee engagement: An empirical check. *South Asian Journal of Business Studies*, 6(1), 98-114.
- Neelam, N., Bhattacharya, S., Sinha, V., & Tanksale, D. (2015). Organizational culture as a determinant of organizational commitment: What drives IT employees in India? *Global Business and Organizational Excellence*, 34(2), 62-74.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- O'Reilly, C.A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492.
- Paul, H., Kardam, B. L., & Kataria, Y. (2016). Organizational commitment: a re-examination of three-component model in Indian context. *IJABER*, 14(10), 6783-6798.
- Porter, L. W., Crampon, W. J., & Smith, F. J. (1976). Organizational commitment and managerial turnover: A longitudinal study. *Organizational Behavior and Human Performance*, 15(1), 87-98.
- Pradhan, R. K., & Jena, L. K. (2016). Workplace

- spirituality and organisational commitment: Role of emotional intelligence among Indian banking professionals. *Journal of Human Resource Management*, 19(1), 13-23.
- Pradhan, S., & Pradhan, R. K. (2015). An empirical investigation of relationship among transformational leadership, affective organizational commitment and contextual performance. *Vision*, 19(3), 227-235.
- Randall, D. M., Fedor, D. B., & Longenecker, C. O. (1990). The behavioral expression of organizational commitment. *Journal of Vocational Behavior*, 36(2), 210-224.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323-338.
- Sharma, N., & Garg, P. (2017). Psychological contract and psychological empowerment as employee engagement drivers in Indian IT sector. *International Journal of Applied Business and Economic Research*, 15(1), 279-287.
- Sheldon, M. E. (1971). Investments and involvements as mechanisms producing commitment to the organization. *Administrative Science Quarterly*, 1(1), 143-150.
- Simo, P., Enache, M., Sallan, J. M., & Fernandez, V. (2014). Relations between organizational commitment and focal and discretionary behaviours. *The Service Industries Journal*, 34(5), 422-438.
- Steenkamp, J. B. E., & Baumgartner, H. (2000). On the use of structural equation models for marketing modelling. *International Journal of Research in Marketing*, 17(2), 195-202.
- Tan, B. U. (2016). The role of work centrality in the relationship between work alienation and organisational commitment: A study of Turkish SMEs. *Journal of East European Management Studies*, 21(1), 60-81.
- Tseng, H. C., & Kang, L. M. (2009). Regulatory focus, transformational leadership, uncertainty towards organizational change, and job satisfaction: In a Taiwan. *Asia Pacific Management Review*, 14(2), 215-235.
- Tsui, A. S. (2013). Making research engaged: Implications for HRD scholarship. *Human Resource Development Quarterly*, 24(2), 137-143.
- Weber, M. (1947). *The theory of economic and social organization*. Trans. AM Henderson and Talcott Parsons. New York: Oxford University Press.
- Weng, L. C., Su, C. W., & Lai, Y. C. (2011). Superior service performance through transformational leadership: A cross-level study of a large Taiwanese commercial bank. *Asia Pacific management review*, 16(2), 181-195.

## APPENDIX A

Table 1: Variances Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.557	19.926	19.926	11.093	19.126	19.126	6.948	11.979	11.979
2	7.099	12.240	32.166	6.590	11.361	30.487	4.079	7.033	19.012
3	2.654	4.575	36.741	2.165	3.733	34.220	3.122	5.383	24.395
4	1.980	3.415	40.155	1.497	2.580	36.801	2.701	4.658	29.052
5	1.616	2.786	42.942	1.169	2.015	38.816	2.155	3.716	32.768
6	1.536	2.648	45.590	1.002	1.728	40.544	1.686	2.908	35.676
7	1.443	2.488	48.078	.895	1.543	42.087	1.441	2.485	38.161
8	1.357	2.340	50.417	.845	1.457	43.544	1.368	2.358	40.519
9	1.276	2.200	52.617	.764	1.317	44.861	1.300	2.241	42.760
10	1.205	2.078	54.695	.687	1.185	46.046	1.067	1.839	44.600
11	1.118	1.927	56.622	.593	1.022	47.068	.958	1.652	46.252
12	1.066	1.838	58.460	.541	.933	48.001	.865	1.491	47.744
13	1.027	1.771	60.231	.535	.923	48.925	.685	1.181	48.925

Extraction Method: Principal Axis Factoring.

Table 2: Rotated Factor Matrix (first four factors taken)

	Variable Code	Emotional Attachment (Factor 1)	Conditional Affiliation (Factor 2)	Belief Org Goals (Factor 3)	Behavioral Readiness (Factor 4)
My colleagues do not care much for the organisation	PAC56	0.763			
My colleagues don't take pleasure in working with this organisation.	PAP24	0.681			
Most of us employees do not feel emotionally attached to this organisation.	M51	0.666			
People in this organisation will prosper, but the organisation will not.	BGCIC149	0.613			
Given a choice, I would never choose to attach myself with this organisation	M58	0.6			
Although my colleagues are very caring about the organisation, they are not ready to accept the values espoused by it.	CAOV43	0.598			
A strong belief in organisational goals is a false notion.	BGCIBG36	0.577			
I feel annoyed if I have been asked to do any extra work for the organisation.	BREOD8	0.571			
Most of my colleagues do not have any special feeling for the organisation	PAAW16	0.563			
Most of my colleagues feel that joining this organisation was a definite mistake on their part.	M37	0.555			
We feel that we do not belong to this organisation	PAB17	0.55			
My colleagues have a better lifestyle than me because they have not compromised their personal goals for the sake of organisational goals.	BGCIC129	0.546			
We feel ashamed to be introduced to a stranger as a member of this organisation	PAPOM26	0.545			
I care a little for the organisation	PAC52	0.539			
We are generally unwilling to undertake any extra responsibility beyond our routine organisational duties.	BREOD45	0.515			
I like the day to day activities, even the minor activities of this organisation.	PAF35		0.574		
I feel my identity is linked with the identity of this organisation	M25		0.558		
I like my organisation, despite some reservations about its policies.	CAOP33		0.527		
Most of my colleagues discharge their duties and responsibilities willingly	BROD42			0.69	
Most of my colleagues discharge their duties properly because they believe in the core values associated with them.	CAOV47			0.684	
Employees are committed to the organisation means belief in organisational goals and compatibility with individual goals	BGCI39			0.629	
The organisation treats us employees as family members.	PAB44				
I happily discharge the duties assigned to me even though I have certain reservations about the values associated with them	CAOV31				
Most of my colleagues are very fond of their workplace.	PAF19				0.714
Most of my colleagues believe in the organisation goals	BGCIBG18				0.541
Extraction Method: Principal Axis Factoring.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 77 iterations.					

**Table 3: Model Fit Indicators**

**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	5	11.974	1	.001	11.974
Saturated model	6	.000	0		
Independence model	3	521.613	3	.000	173.871

**Baseline Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.977	.931	.979	.937	.979
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

**RMR, GFI**

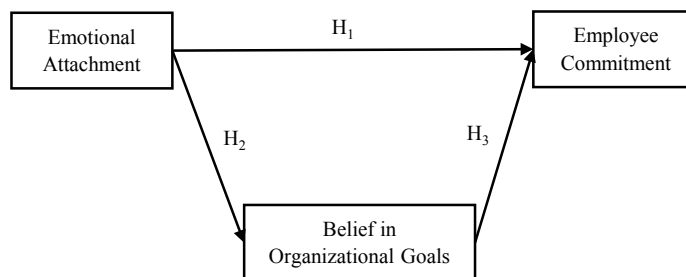
Model	RMR	GFI	AGFI	PGFI
Default model	.049	.971	.829	.162
Saturated model	.000	1.000		
Independence model	.146	.582	.165	.291

**RMSEA**

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.203	.111	.313	.004
Independence model	.806	.749	.865	.000

**APPENDIX B**

**Figure 1: Hypothesized Model of Employee Commitment**



**Figure 2: Reconceptualised OC Construct**

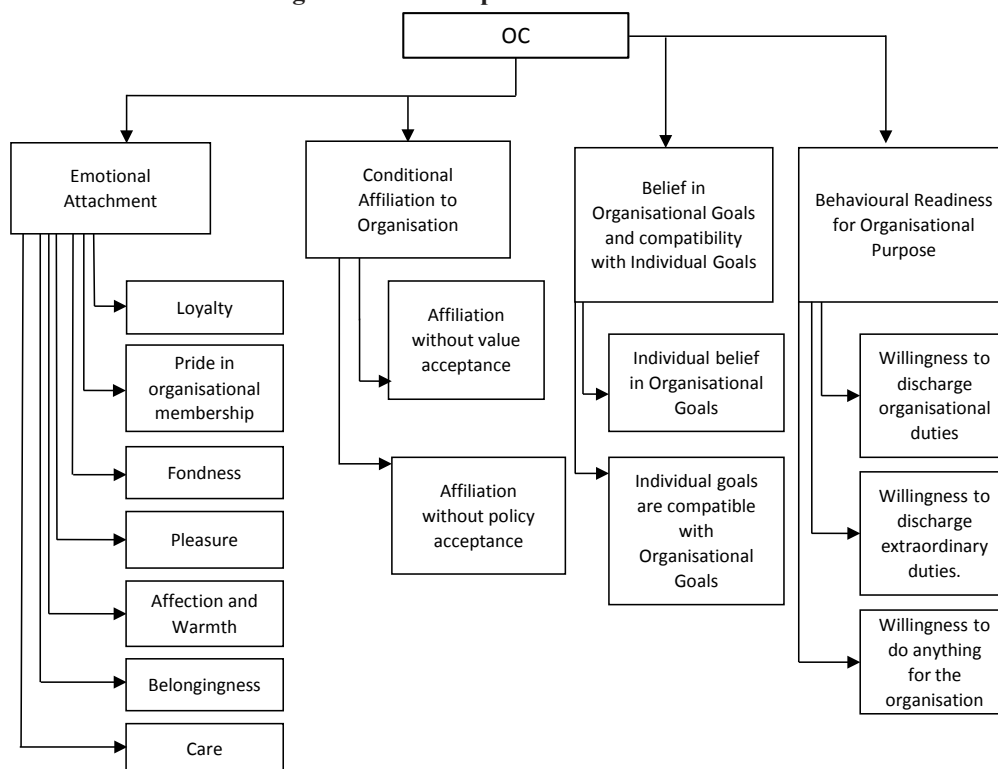




Figure 3: Scree Plot

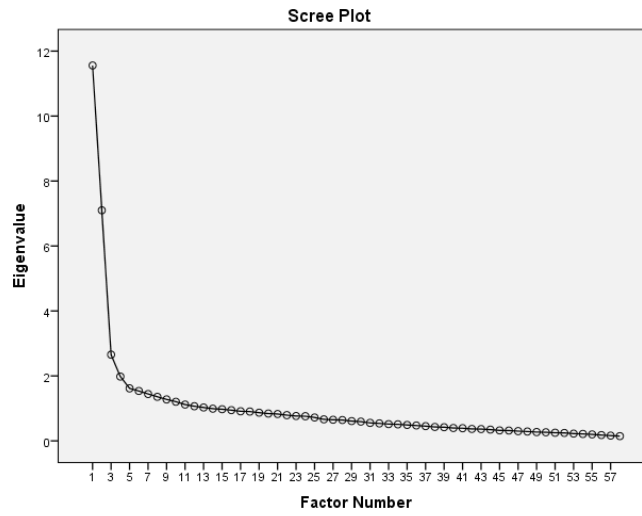


Figure 4: Validated Structural Equation Model

