

The study of impact of Psychological Capital on work attitude and commitment

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Abstract

This project is the result of the study conducted on “The study of the impact of psychological capital on the employees work attitude and commitment.”

In today’s ever-changing world, effective management of human resources is a necessity, but is accompanied with differing management philosophies and methods. This study addresses the growing body of psychological capital research, defined as a positive situation for personal development with the features of self-reliance while dealing with the challenges (self-efficacy), positive expectations for the future success (optimism), being full of determination (hope), and accomplishment in spite of obstacles (resilience). Based on a review of pertinent literature and theory, this study aims to examine all Psychological Capital concepts with employee’s commitment towards to the organization. The greatest source of references is management literature specifically related to Psychological Capital and its management.

Due to increasing psychological capital approach in organizations, the study aimed to evaluate the effects of psychological capital on organizational commitment. The study population consisted of employees from both the government sector as well as the private organizations located in Shillong, Meghalaya. The study population size is 200 people out of which the sample size used in the study is 165 people. The private organizations in which the study was conducted include Aircel (North East Circle) and Idea (Zonal Office). The Government sectors included in the study comprised of NEEPCO (North Eastern Electric Power Corporation Ltd, MBDA (Meghalaya Basin Development Authority, Department of Fisheries, Department of Water Resources, Department of Labor and Employment and the Forest Department.

Respondents were across a range of demographics including gender, age, and nature of work, educational qualification and years of service to the organization. The questionnaire administered was a culmination of 5 standard questionnaires which measured the four constructs of psychological capital (Hope, Self-efficacy, Resilience and Optimism) and Employee’s Commitment towards the organization.

The primary objective of the study is to prove that there is a significant relationship between psychological capital and Commitment. The Psychological Capital was taken as the independent variable, whereas Commitment was observed as the dependent variable. Having determined the variables in the study, the hypothesis was formed. The study also included secondary objectives which focussed on finding a significant relationship for each respective psychological construct with overall commitment and analysis of data collected around the demographics of the sample and come to some conclusion with regards to psychological capital and overall commitment.

For the analysis, SPSS statistics software and Microsoft Excel were used. The analysis carried

out included the test for reliability, the regression test and the correlation test. A reliability test was carried out to determine the internal consistency of the administered questionnaire. Here the Cronbach's alpha showed a satisfactory value indicating a good reliability. To test the hypothesis, regression was used and from the results of the analysis it was observed that psychological capital had no significant relationship with employee's commitment.

However, the results of the secondary objectives showed a different result. Here the analysis observed optimism as one of the psychological construct displaying a significant relationship with commitment. Also, when the individual components of psychological capital were analyzed with individual components of commitment, it was observed that Optimism and Self-efficacy displayed a significant relationship with normative commitment. For Continuance commitment, none of the four constructs showed a significant relationship with the dependent variable. For Affective commitment as well, all constructs except for optimism showed a significant relationship with Affective commitment.

However, the R square value was very low for all those factors that had a significant relationship with commitment indicating that a low percentage of change in the dependent variable can be attributed to changes in the independent variable. In some fields, it is entirely expected that R square values will be low, especially in fields that attempt to predict human behavior such as psychology as humans are simply harder to predict.

Introduction

Psychological capital is one of the new research interest areas of organizational behavior and human resources. In the past, many clinicians and researchers approached organizational behavior on the weaknesses of the employees and pathological behaviors in order to provide appropriate solutions to reduce their weaknesses and capabilities. The focus on positive aspects of employee behavior was not great. With the advent of the positive psychology movement oriented in the 90s, the positive approach towards convergence and emphasizing the positive aspects of behavior changed, and approaches for positive organizational behavior was oriented.

Psychological capital, including human capital and social capital are the intangible assets of organizations unlike tangible assets. According to Luthanz et al (2007) Psychological capital can be considered a competitive advantage by investing in people. Several studies on the relationship between psychological capital and organizational elements have been conducted. The results showed a positive relationship between the different psychological capital and organizational many good results, such as corporate citizen satisfaction, participation, performance, reduced absenteeism and reduced anxiety.

Employees commit to the highest level of satisfaction with the goals and values of the organization, as the human resources considered that organizational performance and success will be enhanced by the organization's competitive advantage (Cetin, 2011). Accordingly, since the tendency of organizational commitment and job satisfaction relates to organizational performance, the organizational psychological capital components may affect these trends.

In other words, employees with a high level of self - reliance, hope, optimism and resilience are more likely to have cognitive and behavioral characteristics of good and higher motivation, more satisfied with their jobs and more committed to their organization (Nelson et al., 2007). Whereas the result of all the activities aimed at achieving the goals of management and organizational

performance, it is essential to promote new approaches and tools designed to improve performance.

Over the past decade, studies have shown that psychological capital has an impact on organizational performance, job satisfaction and organizational commitment.

Psychological capital or positive psychological capital emphasizes positive approaches, meanings, and results, and are described as “a common underlying capacity considered critical to human motivation, cognitive processing, striving for success, and resulting performance in the workplace. The focal point of psychological capital is the positive side of human life, defined as hope, creativity, courage, wisdom, responsibility, and so on. It is hoped that if these mentioned positive human properties are understood well, positive psychology will provide and form a basis for a wonderful world.

The four fundamental characteristics of Psychological Capital (self-efficacy, hope, optimism, and resiliency) are the key factors needed to form a psychological capital structure. Efficacy is a perception or belief regarding one’s personal abilities, while optimism is a positive expectation, and therefore less related or connected to an individual’s actual ability. On the other hand, hope relates to the attitude of mind or way of thinking which plays a direct role in work performance. Lastly, resiliency concerns positive adaptation and the ability to bounce back from adversity.

It is true to say that positive characteristics, either individual or group, will help to improve and maintain a sustainable positive psychological capital at work and general life. Positive characteristics and thoughts will bring positive experiences and relationships. According to Page et al, positive experiences advance one’s personal capacity to act effectively, achieve high performance levels, and realize their full potential⁷.

Project Objectives

Primary Objective:

- To study the impact of psychological capital on employees' commitment, i.e., to check whether or not psychological capital has a significant relationship with employee’s commitment.

Secondary Objectives:

- To check if there is a significant relationship between employee hope and organizational commitment.
- To check if there is a significant relationship between self-efficacy among employees and organizational commitment.
- To check if there is a significant relationship between optimism among employees and organizational commitment.
- To check if there is a significant relationship between employee resiliency and organizational commitment.
- To find if there is any significant relationship between individual components of psychological capital and individual components of Commitment.
- To analyze data on demographics of the sample and come to some conclusion with regards to psychological capital and overall commitment.

Literature Review

Positive psychology is one of the indicators of positive-based psychological capital, with features such as a person's belief in their ability to achieve success in the pursuit of the objectives of the work, creating a positive attribution and tolerance defined problems (Ryan et al., 2001: 141)⁷. By definition, psychological capital is positive attributes and capabilities of employees, managers and the general atmosphere of the organization or company, such as self-confidence, hope, optimism, and resilience (Luthans et al., 2007)¹.

Self-efficacy is a concept borrowed from Albert Bandura and is often defined as task-specific self-confidence, the belief that we are able to accomplish something effectively. Self-efficacy can be thought as an inner agent to direct people and effectively execute different tasks and roles in their life (Ozkalp et al).

Hope is described as a pathway to achieve the goals and (Snyder et al) determined hope as a motivational state which has two dimensions, agency and pathways. Agency is a determination that directs the goals while the pathway is described as a plan to achieve desired goals. Hope can be defined as energy focused on the personal goals and a way or alternative ways which direct people in the target. Hope is a tool that motivates people while doing their job requirements.

Optimism can be defined as a generalized expectation to have a better future (Keles et al). Researches by (Hmieleski et al) demonstrated that optimism and personal wellbeing have a positive relationship with psychological capital. Similarly, again (Carver et al) emphasized that optimists are able to differ in approaching “problems and challenges”; and differ in “manner and success” to deal with adversity. It has been supported by (Luthans et al) that optimists have a high level of job satisfaction.

Resiliency is based on the work of Ann Masten and is seen as the ability to bounce back and beyond when faced with adversity i.e., returning to the former level of functioning and learning from the experience. (Luthans et al) illustrated that resilient people can change for the better through the complexity. Resiliency has a reactional character that affects people to orient to all kinds of situations faced in their life. (Luthans et al) supports that psychological resiliency is the coping skills of people in case of uncertainty, negative situations, and obstacles; and according to (Çetin et al) it contains in itself the other components hope, self-efficacy, and optimism.

Bandura touches on the subject by emphasizing that these four positive dimensions interact in a synergy as briefly mentioned above in such a way that, hopeful people are more resilient and motivated to deal with difficulties in their life. On the other hand, self-confident people can easily adapt and transfer their optimistic thoughts and resilience. (Peterson et al) also emphasizes that because of this synergistic work of all these constructs; when one component is influenced, it is most probably that the others will also be eventually influenced.

As (Luthans et al) emphasized that it is the fact that well-managed positive psychological capital will help to establish the criteria for long-term business success and competitive advantages across the board. For this sense, organizations should focus on the positive behaviors of employees for transferring them to productivity in today's globalizing world. Developing success can be gained by psychological capital because it provides people an opportunity for training and

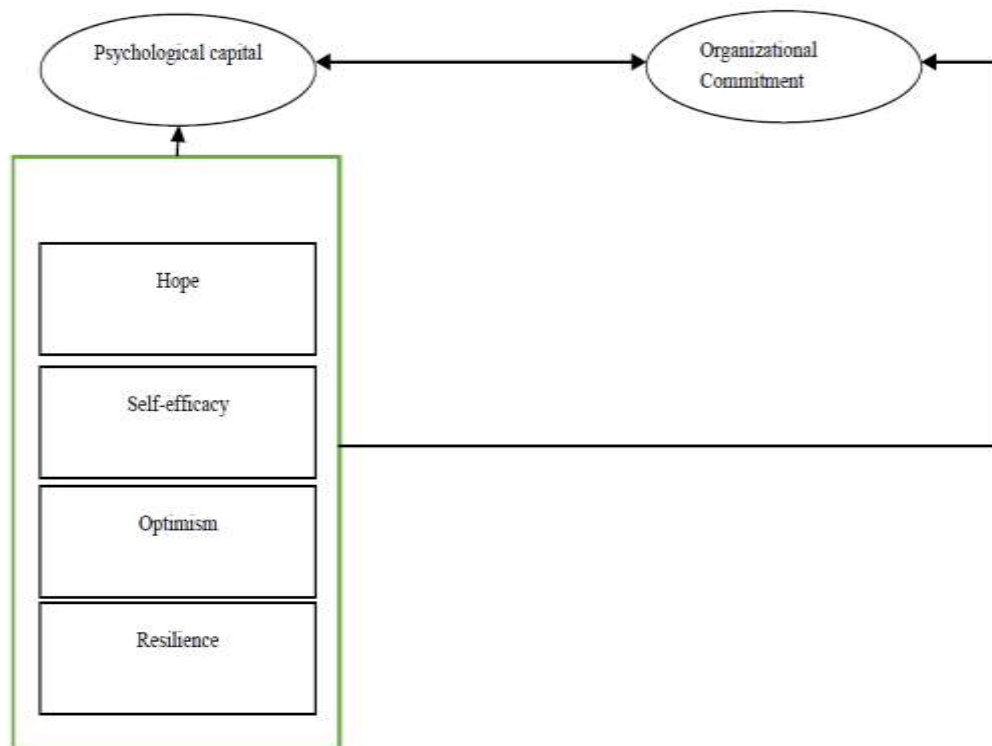
improving themselves¹.

Conceptual Model

Results of studies in the field of positive organizational behavior suggest that psychological capacities, such as: hope, self-efficacy, optimism and resilience together form factor as psychological capital.

In other words, some psychological variables, collectively make up a new potential source of each of these variables is visible (Avey et al. 2010). Therefore, psychological capital, including positivism is the psychological variables that can be measured, and to develop management practices on them.

According to this model, employees who expect a high level of self-efficacy, optimism and resilience, more likely, have cognitive and behavioral characteristics of good and higher motivation, more satisfied with their jobs and more committed to their organization (Nelson et al. 2007), and have high performance (Luthans et al. 2007).



Research Methodology

1. Collection of primary data through the distribution of questionnaires
 - The questionnaire is a combination of questions taken from researches such as Self-confidence (Parker's efficacy scale), Hope (State Hope scale by Snyder), Optimism (Life Orientation scale by Scheier & Carver 12 items), Resiliency (Block & Kremsn's 14 item Resiliency scale) and Organizational Commitment of Allen & Meyer (1997) which used a standard questionnaire.
 - It should be noted that 5 point Likert scale questionnaire to the research is used.

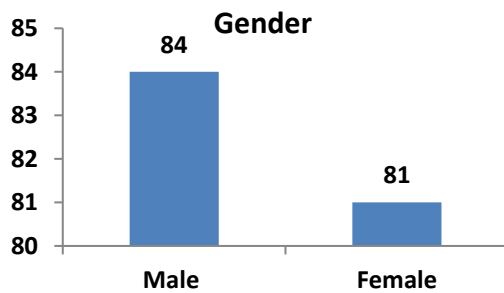
¹ Source: Wikipedia

2. The study population size is 200 people
3. The study sample size consisted of 165 people
4. Sampling is random
5. The research data analysis, SPSS statistical software and Excel were used.

Frequencies of the Data Collected around the demographics

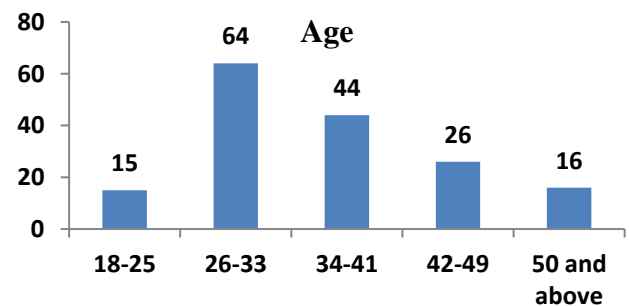
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	84	50.9	50.9	50.9
Female	81	49.1	49.1	100.0
Total	165	100.0	100.0	

Gender



	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	15	9.1	9.1	9.1
26-33	64	38.8	38.8	47.9
34-41	44	26.7	26.7	74.5
42-49	26	15.8	15.8	90.3
50 and above	16	9.7	9.7	100.0
Total	165	100.0	100.0	

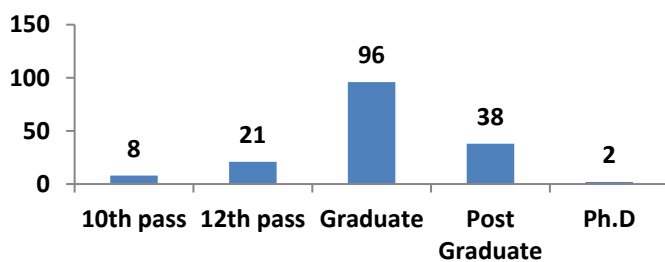
Age



Educational level

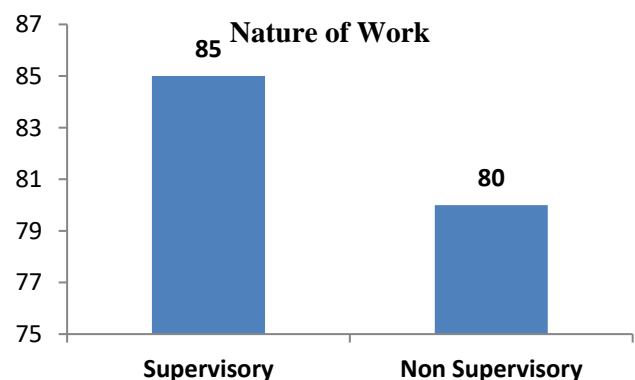
	Frequency	Percent	Valid Percent	Cumulative Percent
10th pass	8	4.8	4.8	4.8
12th pass	21	12.7	12.7	17.6
Graduate	96	58.2	58.2	75.8
Post Graduate	38	23.0	23.0	98.8

Educational Level



	Frequency	Percent	Valid Percent	Cumulative Percent
Supervisory	85	51.5	51.5	51.5
Non-Supervisory	80	48.5	48.5	100.0
Total	165	100.0	100.0	

Nature of Work

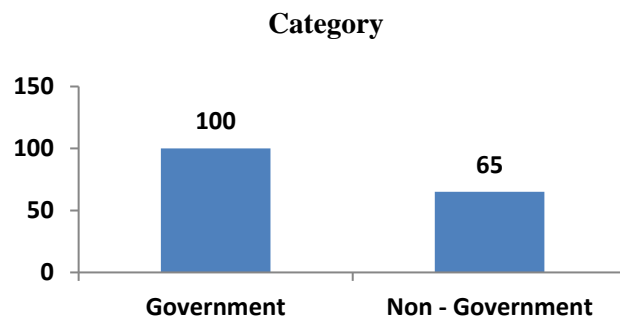
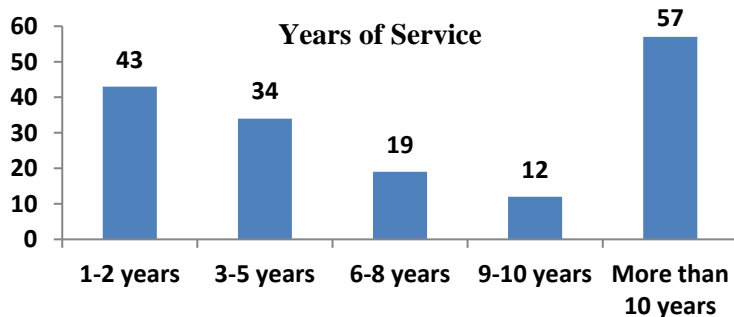


Years of Service

	Frequency	Percent	Valid Percent	Cumulative Percent
1-2 years	43	26.1	26.1	26.1
3-5 years	34	20.6	20.6	46.7
6-8 years	19	11.5	11.5	58.2
9-10 years	12	7.3	7.3	65.5
More than 10 years	57	34.5	34.5	100.0
Total	165	100.0	100.0	

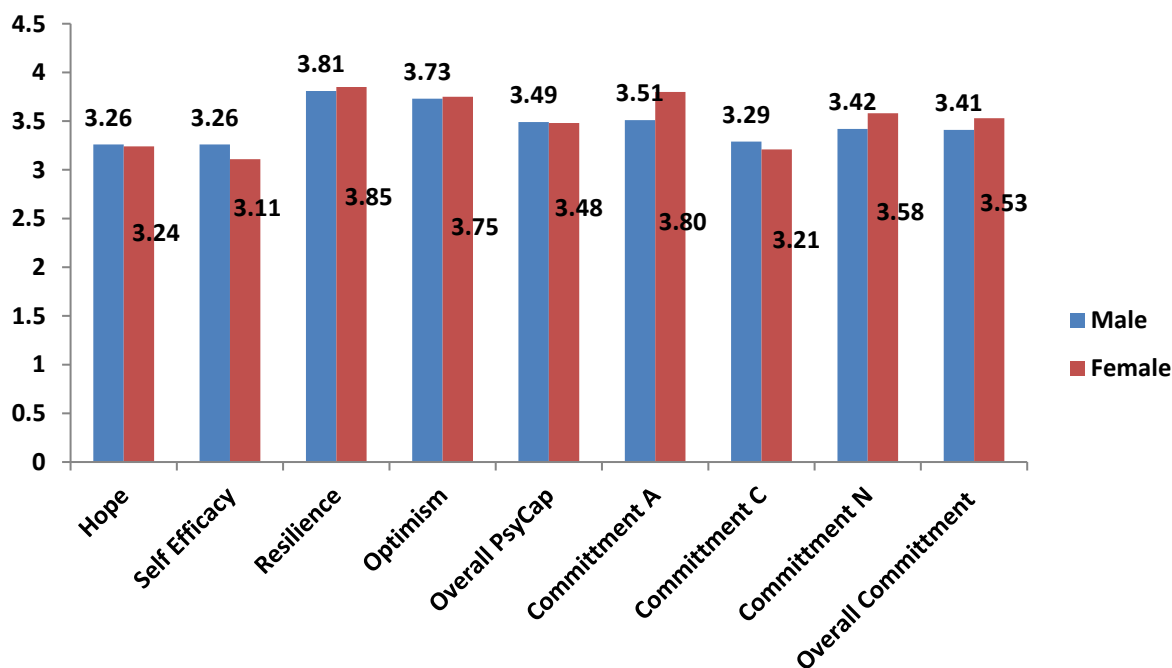
Category

	Frequency	Percent	Valid Percent	Cumulative Percent
Government	100	60.6	60.6	60.6
Private	65	39.4	39.4	100.0
Total	165	100.0	100.0	

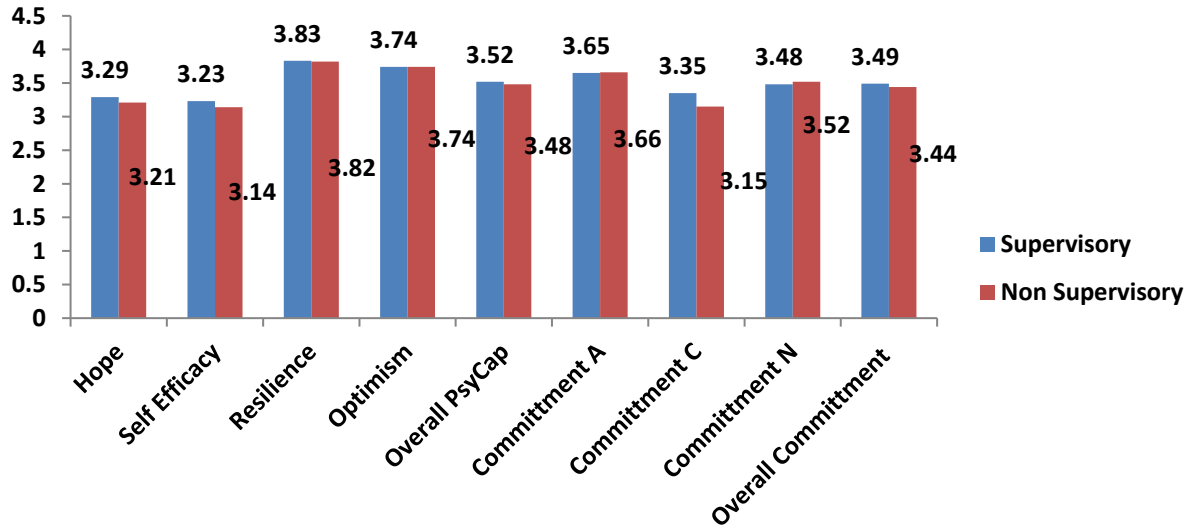


Graphic presentation of the scores obtained for each of the variables by the respondents around the varied demographics

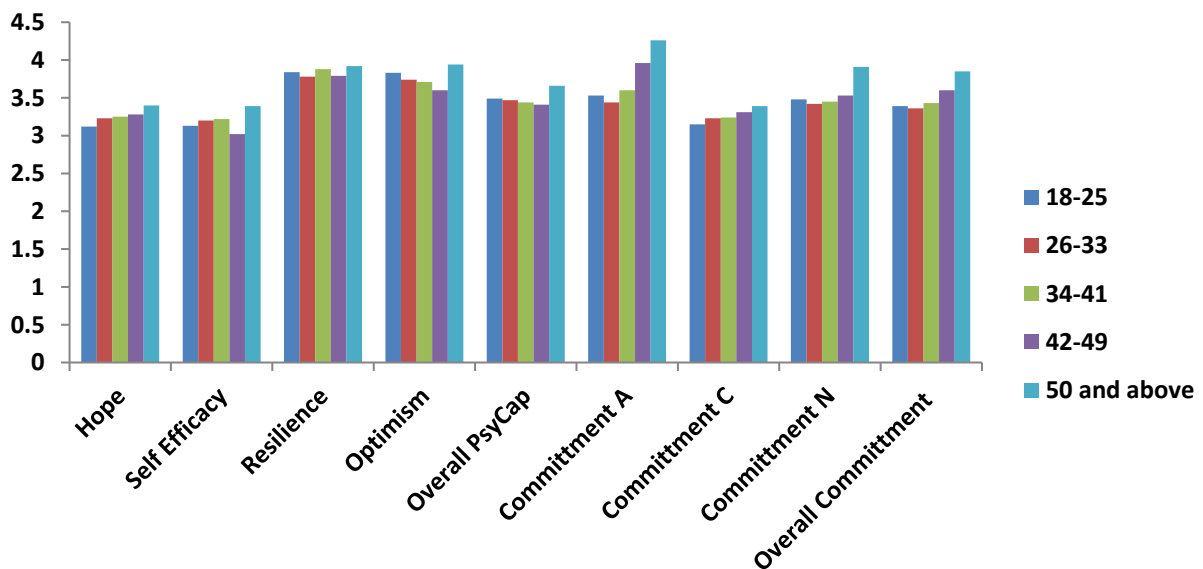
Gender	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
Male	3.26	3.26	3.81	3.73	3.49	3.51	3.29	3.42	3.41
Female	3.24	3.11	3.85	3.75	3.48	3.80	3.21	3.58	3.53



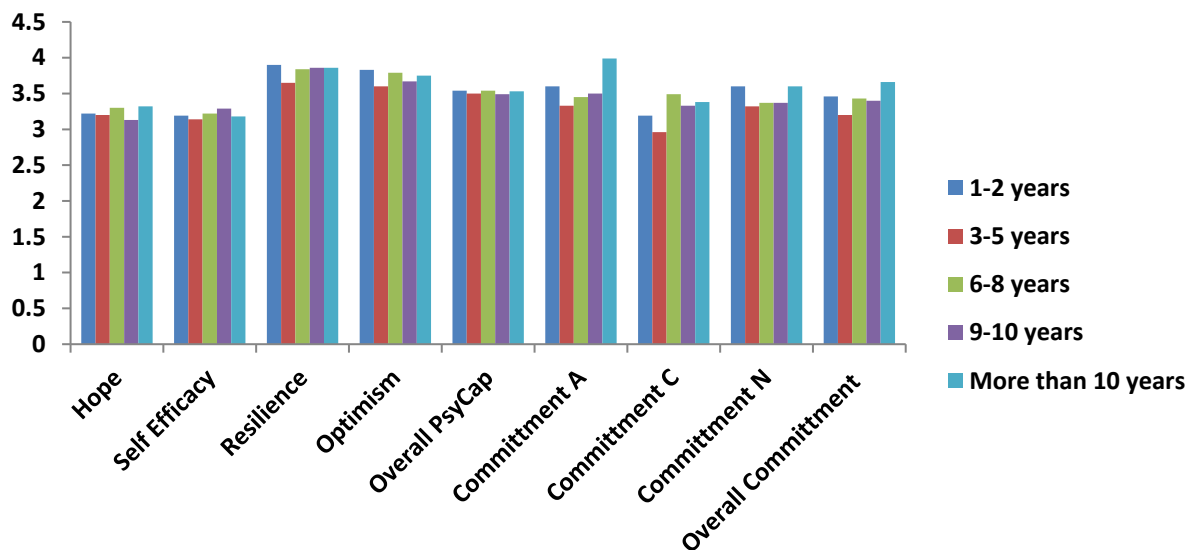
Nature Of Work	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
Supervisory	3.29	3.23	3.83	3.74	3.52	3.65	3.35	3.48	3.49
Non-Supervisory	3.21	3.14	3.82	3.74	3.48	3.66	3.15	3.52	3.44



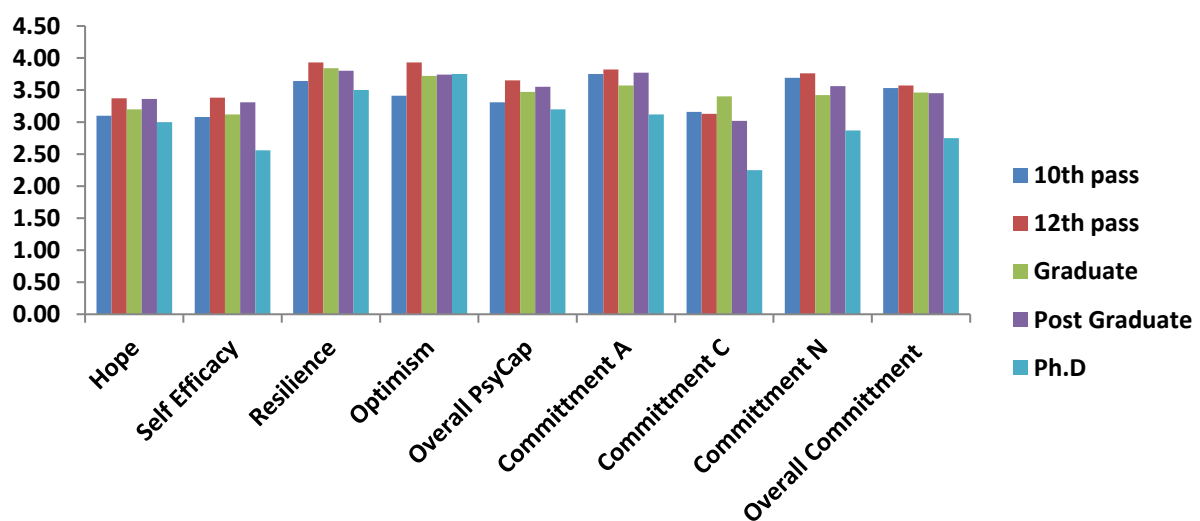
Age	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
18-25	3.12	3.13	3.84	3.83	3.49	3.53	3.15	3.48	3.39
26-33	3.23	3.20	3.78	3.74	3.47	3.44	3.23	3.42	3.36
34-41	3.25	3.22	3.88	3.71	3.44	3.60	3.24	3.45	3.43
42-49	3.28	3.02	3.79	3.60	3.41	3.96	3.31	3.53	3.60
50 and above	3.40	3.39	3.92	3.94	3.66	4.26	3.39	3.91	3.85



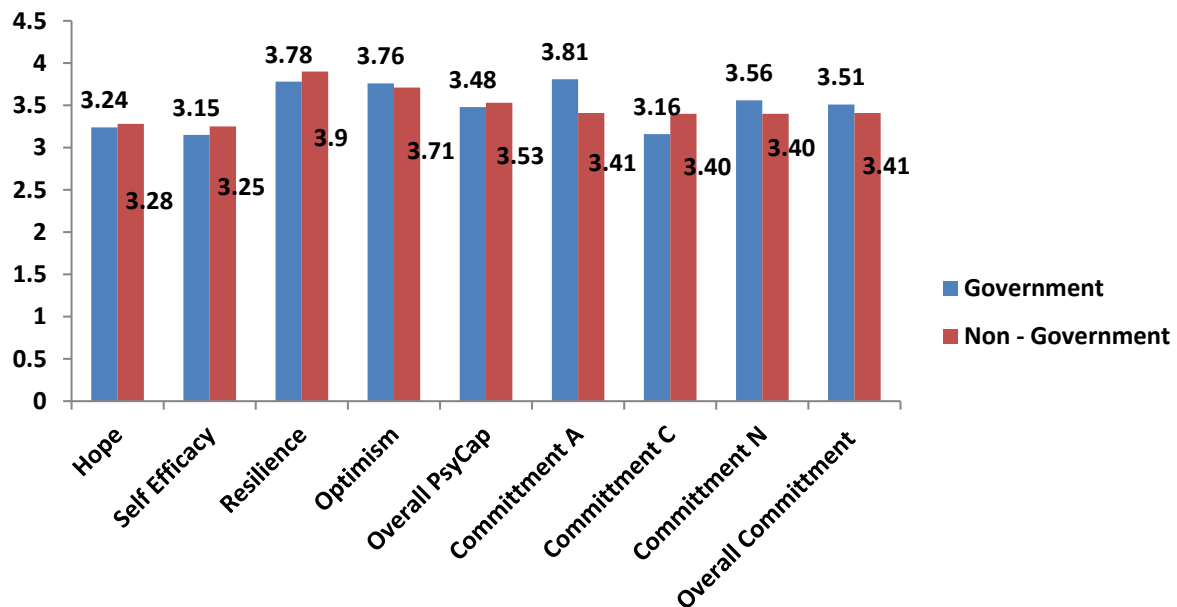
Years of Service	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
1-2 years	3.22	3.19	3.90	3.83	3.54	3.60	3.19	3.60	3.46
3-5 years	3.20	3.14	3.65	3.60	3.50	3.33	2.96	3.32	3.20
6-8 years	3.30	3.22	3.84	3.79	3.54	3.45	3.49	3.37	3.43
9-10 years	3.13	3.29	3.86	3.67	3.49	3.50	3.33	3.37	3.40
More than 10 years	3.32	3.18	3.86	3.75	3.53	3.99	3.38	3.60	3.66



Educational Level	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
10th pass	3.10	3.08	3.64	3.41	3.31	3.75	3.16	3.69	3.53
12th pass	3.37	3.38	3.93	3.93	3.65	3.82	3.13	3.76	3.57
Graduate	3.20	3.12	3.84	3.72	3.47	3.57	3.40	3.42	3.46
Post Graduate	3.36	3.31	3.80	3.74	3.55	3.77	3.02	3.56	3.45
Ph.D	3.00	2.56	3.50	3.75	3.20	3.12	2.25	2.87	2.75



Category	Hope	Self-Efficacy	Resilience	Optimism	Overall PsyCap	Commitment A	Commitment C	Commitment N	Overall Commitment
Government	3.24	3.15	3.78	3.76	3.48	3.81	3.16	3.56	3.51
Non – Government	3.28	3.25	3.9	3.71	3.53	3.41	3.40	3.40	3.41



Findings and analysis of Primary Objective

Test of Reliability of the questionnaire Cronbach’s alpha Reliability

Cronbach’s alpha (α) is a measure used to assess the reliability, or internal consistency, of a set of scale or test items included in a questionnaire. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach’s alpha is one way of measuring the strength of that consistency. A high coefficient shows that the items are consistently measuring the same underlying construct.

The resulting α coefficient of reliability ranges from 0 to 1 in providing this overall assessment of a measure’s reliability.

Correlation Coefficient	Strength of Relationship
+/- 0.7 to 1.0	Strong
+/- 0.3 to 0.69	Moderate
+/- 0.0 to 0.29	None to weak

	N	%
Cases Valid	165	100.0
Excluded	0	.0
Total	165	100.0

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.782	.801	42

The alpha coefficient for the 42 items is 0.782, suggesting that the items have relatively high internal consistency. Cronbach's α employs covariance whereas the Cronbach's α based on standardized items, employs correlation for computing α value. The Cronbach's α based on standardized items assumes that all of the items have equal variances which is often false in practice. The α that is reported in the "Cronbach's alpha of item deleted" column is the first Cronbach's α .

Item- Total Statistics

The **Item-Total Statistics** table presents the "**Cronbach's Alpha if Item Deleted**" in the final column, as shown below:

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
There are lots of ways around any problem	143.93	147.697	.051	.261	.783
I meet the goals that I set for myself	144.51	145.971	.106	.412	.783
I feel that I can handle many things at a time	144.22	146.050	.092	.436	.783
I can usually find something to laugh about	143.78	145.260	.134	.334	.782
I hardly ever expect things to go my way	144.97	149.883	-.089	.300	.794
It would be very hard for me to leave my organization right now, even if I wanted to	144.18	143.085	.154	.599	.783
Too much of my life would be disrupted if I decided I wanted to leave my organization now	144.14	145.060	.083	.453	.786
One of the few negative consequences of leaving this organization would be the scarcity of available alternatives	144.49	151.739	-.154	.426	.796
I do not feel any obligation to remain with my current employer	144.27	146.343	.046	.324	.787

The following items given in the above figure indicate those items included in the questionnaire whose exclusion could have increased the Cronbach's alpha and the overall internal consistency of the instrument. The statement "I can usually find something to laugh about" would not change the alpha value irrespective of whether it is included or excluded from the questionnaire.

Regression Analysis

In this study, a multiple regression analysis has been carried out for determining the impact of psychological capital (independent variable) on the overall employee's commitment (dependent variable).

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want

to predict is called the dependent variable (or sometimes, the outcome, target or criterion variable). The variables we are using to predict the value of the dependent variable are called the independent variables (or sometimes, the predictor, explanatory or regressor variables). Multiple regression also allows you to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained.

Determining how well the model fits

The first table of interest is the **Model Summary** table. This table provides the R , R^2 , adjusted R^2 , and the standard error of the estimate, which can be used to determine how well a regression model fits the data:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.232 ^a	.054	.030	5.689

The "**R**" column represents the value of R , the **multiple correlation coefficient**. R can be considered to be one measure of the quality of the prediction of the dependent variable. In statistics, the coefficient of **multiple correlation** is a measure of how well a given variable can be predicted using a function of a set of other variables.

Interpretation of R

- **The strength of the Association:** The strength of the association is measured by the sample Multiple Correlation Coefficient; R . R can be any value from **0 to +1**.
 - The **closer R is to one**, the **stronger the association** is.
 - If **R equals zero**, then there is **no association** between the dependent variable and the independent variables.

Unlike the simple correlation coefficient, r , which tells both the **strength** and **direction** of the association, " R " tells only the **strength of the association**. R is never a negative value.

R value	Interpretation
0.5 - 0.9	Strong Association
0.26 - 0.5	Moderate Association
0 - 0.25	Weak Association

In this case, a value of 0.232 which indicates a weak level of prediction or weak association between psychological capital and employee's commitment.

Coefficient of Determination (R^2)

It determines how much variance is explained, or accounted for, by a set of variables (predictors) in an outcome variable. It is the extent (%) to which a change in the value of X causes a change in the value of Y .

R^2 Value	Interpretation
Equal to 0	No Correlation
Closer to 0	Weak Correlation
Closer to 1	Strong Correlation
Equal to 1	Perfect Correlation

It has been observed from the Model Summary Table that the R^2 value = 0.054 that our independent variables explain 5.4% of the variance of our dependent variable. R^2 value closer to

0 indicates a **weak correlation** between the independent and dependent variables. It indicates that 5.4% of change in employee's commitment can be attributed to changes in psychological capital.

Adjusted R²

One major difference between R-squared and the adjusted R-squared is that R-squared supposes that every independent variable in the model explains the variation in the dependent variable. It gives the percentage of variation explained assuming all independent variables in the model affect the dependent variable, whereas the adjusted R-squared gives the percentage of variation explained by only those independent variables that in reality affect the dependent variable.

Typically speaking, the more variables that are inserted in a regression model, the higher the R² statistic, which means that the R² will improve even when essentially irrelevant variables are added. The Adjusted R² statistic is typically smaller than the R² statistic because it downward adjusts the R² statistic when additional variables of limited significance are added to a model. It is a common practice to say that one regression model "fits" the data better than another regression model if its adjusted R² statistic is higher.

Interpretation of adjusted R² value

1. R² can never be negative, whereas the adjusted R² can be negative when R² is close to zero.
2. Adjusted R² value always be less than or equal to R² value.

From the Model Summary Table the adjusted R² value is 0.030 which is lower than the R² value of 0.054. This indicates that only 3% of the variation in the employee's commitment is explained by psychological capital which actually affects overall commitment.

Standard Error of Estimate

The Standard error of estimate helps to measure the accuracy of the regression estimates using the variations of the actual values of the dependent variable against their regression estimates. In other words, it measures the scatter or the variability of the observed values around the regression line. It is a measure of dispersion like Standard Deviation.

The smaller the value of the SEE, the better is the fit of the equation to the given data and the estimates based on the regression equation. The larger the value of standard error estimate, the greater the scattering of points around the regression line.

From the Model Summary, it is observed that the standard error of estimate is 5.689 which is a moderately low standard error of estimate which indicates that most of the data fits the regression equation.

ANOVA: Analysis of Variance

It is a method for assessing the contribution of an independent variable to the observed variation in the dependent variable. In an ANOVA, we first set up the null and alternative hypothesis. The null hypothesis assumes that there is no significant difference among the groups. The alternative hypothesis assumes that there is a significant difference among the groups. We then test the above assumptions and examine if the data meets or violates the assumptions. F ratio is then computed. Next, we compare the critical p-value of the F-ratio with the established alpha.

Interpretation

1. If the p-value associated with the F is smaller than $p = 0.05$, then the null hypothesis will be rejected and the alternative hypothesis is accepted.
2. Rejecting the null hypothesis, one concludes that the mean of the groups is not equal.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	294.061	4	73.515	2.271	.064 ^b
Residual	5178.388	160	32.365		
Total	5472.448	164			

a. Dependent Variable: Overall Commitment Score

b. Predictors: (Constant), Overall Resilience Score, Overall Optimism Score, Overall Hope Score, Overall Self Efficacy Score

The results from the regression analysis done above has been cross validated by the hypothesis test below.

In the study the following has been taken as the Null and Alternative Hypothesis

H₀: *The null hypothesis is that psychological capital does not have an impact on employee's commitment.*

H₁: *The alternative hypothesis is that psychological capital has an impact on employee's commitment.*

From the table, we find that the p-value associated with the F (indicated by Sig. Column) comes out to be 0.064 which is larger than $p=0.05$, then the null hypothesis will be accepted and the alternative hypothesis is rejected. Accepting the null hypothesis, we conclude that the mean of the groups is not equal, i.e., there is no significant relationship between psychological capital and employee's commitment.

Coefficient Table

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
(Constant)	27.823	5.125		5.429	.000
Overall Hope Score	.229	.251	.085	.914	.362
Overall Self Efficacy Score	.028	.163	.017	.171	.864
Overall Optimism Score	.379	.207	.156	1.837	.068
Overall Resilience Score	.064	.108	.054	.593	.554

The first coefficient, “(Constant)”, is the intercept term. That is, before we account for the dependent variable – or, putting it another way, when X (independent variable) is zero – this is the value of Y (dependent variable). In this case, the intercept is 27.823, so when $X = 0$, “Y” will equal 27.823.

Remember, that regression equations are in this format: $Y = c + bx$. All the other coefficients are b variables, or the slope of the line. For each 1-unit change in X, Y will change by b units.

The standardized coefficient tells us the relative size of the influence of a variable. The standardized coefficient can be interpreted like the Pearson coefficient analysis (a 0-1 scale with 1 being perfectly correlated).

From the table, it is observed that 1% change in hope will change commitment by 22.9%, a 1 % change in self-efficacy will change commitment by 2.8%, a 1 % change in optimism will bring a change in commitment by 37.9% and 1% change in resilience will affect commitment by 6.4%. Optimism has the highest slope for all the factors that make up psychological capital.

Beta (standardized regression coefficients)

The **beta** value is a measure of how strongly each predictor variable influences the criterion (dependent) variable. The **beta** is measured in units of standard deviation.

From the table, it is observed that the beta for hope is 0.085 (8.5%) i.e., “hope” influences commitment by 8.5%. The beta value of self-efficacy, optimism and resilience is 0.017 (1.7%), 0.156 (15.6%) and 0.054 (5.4%) i.e., self-efficacy, optimism and resilience influences commitment by 1.7%, 15.6% and 5.4% respectively. Optimism has the highest value of the beta out of all the factors of psychological capital indicating that 15.6% of the change in the criterion variable (commitment) is explained by optimism.

The last column (Sig.) indicates whether there is any significance between any of the factors of psychological capital with commitment. For all the four factors the significance value was found to be less than the required significance level of 0.05. Therefore, the null hypothesis has to be accepted which indicates that all factors of psychological capital (Hope, Self-efficacy, Optimism and Resilience) does not have any significant relationship with the criterion variable (Commitment).

Collinearity

In statistics, multicollinearity (also collinearity) is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy.

There are two predictors of multicollinearity. They are Tolerance and VIF (Variance Inflation Factor).

Interpretation of Tolerance

1. Tolerance of 1 indicates no multicollinearity (for that predictor)
2. Tolerance values approaching 0 indicate a severe multicollinearity problem.

Interpretation of VIF

1. If the VIF value lies between 1- 10, then there is no multicollinearity.
2. If the VIF value is <1 or >10 , then there is multicollinearity.

The VIF can also be thought of the factor by which your sample size needs to be increased to match the efficiency of an analysis with no multicollinearity. So, a VIF of 2.5 implies that we need a sample size 2.5 times larger than the one we actually have to overcome the degree of multicollinearity in our analysis.

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
1 Overall Hope Score	.691	1.448
Overall Self Efficacy Score	.628	1.593
Overall Optimism Score	.820	1.219
Overall Resilience Score	.715	1.400

From the given table, it is observed that the Tolerance values for each component of the psychological capital is somewhat closer to 1 as opposed to approaching zero. This indicates there is no multicollinearity.

The VIF value for all the factors of psychological capital also ranges between 1- 10. Therefore, we can say that the four constructs (Hope, Self-efficacy, Optimism and Resilience) are not collinear.

Findings and Analysis of the Secondary Objectives

Hope and Commitment

H₀: *There is no significant relationship between employee hope and organizational commitment.*

H₁: *There is a significant relationship between employee hope and organizational commitment.*

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.021 ^a	3.482	1	163	.064

a. Predictors: (Constant), Overall Hope Score

b. Dependent Variable: Overall Commitment Score

From the above table, we find that Sig. f is 0.064 which is > 0.05. Therefore, we accept the Null Hypothesis and conclude that hope does not have a significant relationship with commitment.

Self-efficacy and Commitment

H₀: *There is no significant relationship between employee self-efficacy and organizational commitment.*

H₁: *There is a significant relationship between employee self-efficacy and organizational commitment.*

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.019 ^a	3.159	1	163	.077

a. Predictors: (Constant), Overall Self Efficacy Score

b. Dependent Variable: Overall Commitment Score

From the above table, we find that Sig. f is 0.077 which is > 0.05 . Therefore, we accept the Null Hypothesis and conclude that self-efficacy does not have a significant relationship with commitment.

Resilience and Commitment

H₀: There is no significant relationship between employee resilience and organizational commitment.

H₁: There is a significant relationship between employee resilience and organizational commitment.

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.023 ^a	3.905	1	163	.050

a. Predictors: (Constant), Overall Resilience Score

b. Dependent Variable: Overall Commitment Score

From the above table, we find that Sig. f is 0.050 which is $= 0.05$. Therefore, we accept the Null Hypothesis and conclude that resilience does not have a significant relationship with commitment.

Optimism and Commitment

H₀: There is no significant relationship between employee optimism and organizational commitment.

H₁: There is a significant relationship between employee optimism and organizational commitment.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.198 ^a	.039	.033	5.679	.011

From the above table, we find that Sig. f is 0.011 which is < 0.05 . Therefore, we reject the Null Hypothesis and conclude that optimism does have a significant relationship with commitment. However, the R square value is very low only 0.039 indicating that 3.9% of change in employee’s commitment can be attributed to changes in optimism. In some fields, it is entirely expected that R square values will be low, especially in fields that attempt to predict human behavior such as psychology as humans are simply harder to predict.

Furthermore, if R square value is low, but the study has statistically significant predictors, we can still draw some important conclusions about how changes in the “predictor” values are associated with changes in the “response” value.

Individual psychological constructs and Affective component of commitment

The study having carried out a regression analysis did not find any significant relation for the individual psychological constructs with affective commitment. Optimism, however, showed a significant relationship with an affective component of commitment.

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.037 ^a	6.251	1	163	.013

a. Predictors: (Constant), Overall Optimism Score

From the above table, we find that Sig. f is 0.013 which is < 0.05 . Therefore, we reject the Null Hypothesis and conclude that optimism does have a significant relationship with affective commitment. However, the R square value is very low only 0.037 indicating that 3.7% of change in employee’s affective commitment can be attributed to changes in optimism.

Individual psychological constructs and Continuance component of commitment

From the analysis, none of the individual psychological constructs (Hope, Self-efficacy, Resilience and Optimism) displayed a significant relationship with Continuance commitment. The Sig. f value for each of the four psychological constructs was higher than 0.05.

Individual psychological constructs and normative component of commitment

From the analysis, two of the psychological constructs (Optimism and Self-efficacy) displayed a significant relationship with normative commitment. The Sig. f value for Optimism and Self-efficacy is 0.006 and 0.003 respectively, which is lower than 0.05.

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.046 ^a	7.832	1	163	.006

a. Predictors: (Constant), Overall Optimism Score

Model Summary

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.054 ^a	9.354	1	163	.003

a. Predictors: (Constant), Overall Self Efficacy Score

Limitations of the study

- Restrictions of the study due to theoretical or methodological reasons, which may decrease the credibility and generalizability of the research findings.
- Limited in terms of location and sample size.
- The research study is limited to a few organizations.
- Time was a big constraint so more time could not be devoted to individual respondents.
- Due to unwillingness of providing any information, the respondents filled the questionnaire casually which might have affected the conclusions.
- The biases and hesitations of the respondents affect the analysis of the survey in a significant manner.
- Biased sampling
- Experiences, beliefs, feelings, wishes, attitudes, culture, views, state of mind, reference, error and personality can bias analysis and reporting.

Conclusion

In this study, the relationship between psychological capital and employee's commitment is analyzed through a data set obtained by questionnaire method of government and private sector in the city of Shillong. Because of correlation analysis which aims to determine the relationship between variables, there is no significant relationship between the sub dimensions of psychological capital. Because of regression analysis that determines the effect of sub dimensions of psychological capital (self-efficacy, hope, resiliency, and optimism) on organizational commitment, Optimism has a positive effect on commitment. The positive relationship between optimism and organizational commitment can be explained through optimists' determination against difficulties in the work environment, being persistent in achieving targets, evaluating career opportunities and having positive attitudes towards their jobs and working conditions.

High psychological capital and commitment level of the employees enable them to provide a high motivation. By this way, they are willing to exert considerable effort on behalf of the organization. Because of this effort, the organization will be inimitably overtopped. The following suggestions can be offered to increase the commitment level of employees: fair wage plan should be put into effect, supported organizational culture should be created, an effective communication system should build, employee benefits should be improved, awards and penalty system should be constituted and this system should be applied objectively, human resources policies and applications, which have a crucial role in the formation of organizational commitment should be developed.

The results of the research in this area are a little inconsistent with a number of foreign researches. The research Brandt et al (2011) which conducted in countries, Portugal, Finland and Bulgaria (Brandt et al. 2011), as well as research Luthanz et al (2011) in the US reflects the high level of psychological capital (average of 4) (Luthans et al. 2007). The difference in the level of psychological capital of the country and this study may be different spatial and temporal domains of research, as well as working conditions, organization and the quality of working life has been linked. Naturally, the differences in institutional and non-institutional and other factors will affect their psychological capital.

References

1. LUTHANS, Fred, YOUSSEF, Carolyn M. and Bruce J. AVOLIO (2007), *Psychological Capital: Developing the Human Competitive Edge*, Oxford, UK: Oxford University Press.
2. SNYDER, C. R., HARRIS, Cheri, John R. ANDERSON, Sharon A. HOLLERAN, Lori M. IRVING, Sandra T. SIGMON, Lauren YOSHINOBU, June GIBB, Charyle LANGELLE and Pat HARNEY (1991), "The Will and the Ways: Development and Validation of an Individual-Differences Measure of Hope", *Journal of Personality and Social Psychology*, 60 (4), 570-585.
3. YOUSSEF, M. Carolyn and LUTHANS, Fred (2007), "Positive Organizational Behavior in the Workplace: The Impact of Hope, Optimism, and Resilience", *Journal of Management*, 33 (5), 774-800.
4. Scheier MF, Carver CS, Bridges MW. Optimism, pessimism, and psychological wellbeing. (Edt: E. C. Chang). *Optimism & Pessimism: Implications for Theory, Research, and Practice*, American Psychological Association. Washington, D.C. 2001; 198-216.
5. Meyer, J.P. and N.J. Allen, 1991. "A Three-component Conceptualization of Organizational-Commitment: Some Methodological Considerations", *Human Resource Management Review* 1, 61-98.
6. Psychological Capital: Definition, Components and Effects, Mustafa Fedai Çavus and Ayşe Gökçen².
7. Relationship of Psychological Capital and Organizational Commitment of Employees in Payame Noor University, Ali Akbar Ahmadi^{1*}, Mehdi Shahbazi², Neda Hashemian.
8. Keles NH. Positive psychological capital: Definition, components and their effects on organizational management. *Journal of Organization and Management Sciences* 2011.
9. Bandura A. *Self-efficacy: The exercise of control*. New York: Freeman; 1997.
10. Hmieleski KM, Carr JC. The relationship between entrepreneur psychological capital and well-being.
11. Lohrey, S. *The Effects of Servant Leadership on Follower Performance Andwell-Being: Underlying Mechanisms, Boundary Conditions, And The Role Of Training*. ASTON University.
12. Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). "Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test". *Journal of Personality and Social Psychology*, 67, 1063-1078.