CHAPTER 2: Method

2.1 Variables

PsyCap is considered as a personal resource, which an individual can call upon to manage different challenges. It can act as a sustainable and human based competitive advantage. PsyCap is a state like concept. Unlike traits, its state like quality leads it to be open to development. The present study focused on whether PsyCap can be developed in working professionals. It can help individuals to grow and develop their potential. When this is done, it can have a tangible impact on the performance. To study whether PsyCap can have an impact on the performance of employees, whether PsyCap can explain different workplace behaviors and workplace emotions it also focused on different workplace behaviors and emotions. The workplace behaviors that were studied were Organizational Citizenship behaviors and counterproductive workplace behaviors. The workplace emotions that were studied were work engagement and emotional labor. These variables of the study are defined below.

2.1.1 Operational Definition of Variables

2.1.1.1 Psychological Capital

Psychological Capital (PsyCap) is a core construct in the positive organizational behavior (POB) and psychology. It has been defined by Luthans, Youssef-Morgan and Avoilio (2015) as “an individual’s positive psychological state of development that is characterized by

(1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks;

(2) making a positive attribution (optimism) using positive attributional style about succeeding now and in the future;

(3) persevering towards goals and, when necessary, redirecting paths to goals (hope) in order to succeed;

(4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success."

PsyCap is a higher order construct made up of four first order constructs of self efficacy, hope, resilience and optimism. To show this throughout this study, these first order constructs have been referred to as PsyCap efficacy, PsyCap hope, PsyCap resilience and PsyCap optimism.

This study has adopted Luthans, Youssef and Avolio's (2007) framework of PsyCap. The PsyCap variable is the score of the participant on the Psychological Capital questionnaire (PCQ). It is made up of four constructs i.e. efficacy, hope, resilience and optimism. The sum total of these four constructs forms the higher level construct of PsyCap.

2.1.1.1.1 PsyCap Efficacy

PsyCap Efficacy is one of the first order constructs under the umbrella of PsyCap. It is greatly RRen defined as "one's conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998). Although Luthans, Youssef and Avolio (2007) recommend using confidence as interchangeable with efficacy, in this study the researcher has used the term PsyCap efficacy.

2.1.1.1.2 PsyCap Hope

PsyCap hope has been based on the research of Rick Snyder. Snyder's research supports the idea of hope as a cognitive state in which a person sets realistic but challenging goals. An individual after setting these goals reaches out to them using self-determination and energy. This is considered to be the "will-power" or the agentic component of PsyCap hope. The other very important component of PsyCap hope is the "way-power" component. In this

component the individual comes up with alternate routes if the original plan or route which was mapped out to reach the desired goal gets blocked (Snyder, 2002; Snyder, 1989). According to Luthans, Youssef and Avolio (2007), it is the "way-power" component which differentiates PsyCap hope from other PsyCap states.

2.1.1.1.3 PsyCap Optimism

PsyCap Optimism is an attributional style of the individual. This is based on Seligman (1998)'s research on learned optimism. Optimists interpret a positive event using personal, pervasive and permanent explanations. A case could of an employee who gets a promotion, who attributes it to his/her hard work which has always been a strong base for him/her and he/she gives their best in all areas of work. This style allows them to savor positive events. It also gives them a feeling of power and control. When undergoing a negative event, they attribute it to temporary, external and specific reasons. It helps them remain positive even in trying circumstances.

Pessimists on the other hand would explain a positive event to an external reason (e.g. luck) temporary and situation specific. A person low in PsyCap optimism would explain a promotion as being lucky, this stroke of good fortune may not last and he/she may get it only if the current boss is happy. Such a person would while facing an undesirable situation would blame themselves (internal). They would assume that the situation will continue for a long time (permanent) and will color all aspects of their lives (pervasive). This explanatory style threatens their success and well-being. Thus PsyCap optimism has been understood from the research as *attributing a life challenge as temporary, specific and external to self and attributing a positive event in life as permanent, pervasive and internal to self.*

2.1.1.1.4 PsyCap Resilience

PsyCap resilience is based on the research by Ann Masten (2001) who stated that resilience evolved from 'everyday magic of ordinary'. PsyCap resilience is "the capacity to

'bounce back' from adversity, uncertainty, conflict failure or even positive events, progress and increased responsibility" (Luthans, 2002). It not only involves 'bouncing back' but may provide an opportunity to grow and develop.

2.1.1.2 Organizational Citizenship Behavior

An important outcome variable in the present study is organizational citizenship behavior. It has been defined as discretionary behaviors on part of employees that are helpful in promoting the effective functioning of an organization. These behaviors are not part of the employee's role behavior. The leader or manager cannot force the employee to perform these behaviors. There are various kinds of OCBs. The Podsakoff and MacKenzie (1994) tool measures OCB using three dimensions i.e. helping, civic virtues and sportsmanship.

2.1.1.2.1 Helping

Helping behaviors are a complex of several types of OCBs. These include altruism, courtesy, peacekeeping, and cheerleading identified by Organ (1988). The common theme under it is helping coworkers to solve or avoid work-related problems. Altruism consists of volunteering to do those actions that help another person with a work- related problem (e.g., sharing needed information, voluntarily helping to orient new employees). Courtesy entails actions which help reduce or eliminate work – related problems from occurring. Peacemaking involves actions by the employee that help prevent, resolve, or ease needless interpersonal conflict (e.g., acting as a calming influence when others have disagreements over issues). Cheerleading is defined as encouraging and supporting colleagues' accomplishments and professional growth (e.g. encouraging a coworker who is discouraged).

2.1.1.2.2 Sportsmanship

Sportsmanship is the preparedness on the part of an employee to tolerate less than ideal conditions without complaining. It also includes remaining open to the fact that there

could be more than one way of doing things, not taking it personally when co-workers do not follow their suggestions or refute their ideas.

2.1.1.2.3 Civic virtues

Civic virtues are behaviors which demonstrate that an employee participates responsibly in the organizational life. It also demonstrates that the employee is concerned about the longevity of the company. The employee may attend meetings/functions that are not required but that help the company, he/she may keep up with changes in the organization and take the initiative to suggest how organizational systems or procedures can be improved.

2.1.1.3 Counterproductive Workplace Behavior

Counterproductive workplace behavior (CWB) is defined as "voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both" (Robinson & Bennett, 1995, p. 556). It includes behaviors such as making fun of somebody at work, being rude to colleagues, spreading rumors which are targeted towards other employees. It also includes serious offences like theft, physical violence and/or consuming alcohol and/or drugs at the workplace. Such behaviors have also been referred to as workplace deviance (Robinson & Bennett, 1995). The Robinson & Bennett scale (1995) allows researchers to independently assess interpersonal deviance as well as organizational deviance.

2.1.1.3.1 Interpersonal Counterproductive Workplace Behavior

Interpersonal Counterproductive Workplace Behaviors (CWB I) are defined as "intentional, potentially harmful behaviors that violate significant organizational norms and are directed at other individuals at work, which combines political deviance and personal aggression" (Bennett & Marasi, 2015). The organizational norms could be basic moral rules as well as community standards. The standards could be formal or informal. Formal standards

are represented by the rules and regulations of the organization. The common factor amongst all CWB-Is is that they are targeted at organizational members i.e. colleagues or coworkers.

2.1.1.3.2 Organizational Counterproductive Workplace Behavior

Organizational Counterproductive Workplace Behaviors (CWB O) are defined as "intentional, potentially harmful behaviors that violate significant organizational norms and are directed at the organization itself, which combines property deviance and production deviance" (Bennett & Marasi, 2015). These include consciously working slower than what one is capable of, consuming the organizational resources for personal benefit, stealing or harming the property of the organization.

2.1.1.4 Work Engagement

Work Engagement is a higher-level construct, which involves a psychological connection of the job holder with the performance of work tasks. It involves identifying very strongly with one's work. It is a relatively stable individual difference variable that varies between persons. It involves investing of personal resources (physical, emotional and cognitive) at work. These are represented by the three dimensions i.e. vigor, dedication and absorption (Christian, Garza, & Slaughter, 2011).

2.1.1.4.1 Vigor

Vigor is the behavioral component of work engagement. It is characterized by having high energy and strength to perform the work, the willingness to invest one's effort in the role and high levels of resilience and persistence while facing challenges at work.

2.1.1.4.2 Dedication

Dedication is the affective component of work engagement. It is characterized by feeling strongly involved in one's work and experiencing a sense of fulfillment, significance, pride and meaningfulness in one's work.

2.1.1.4.3 Absorption

Absorption is the cognitive component of work engagement. It is characterized by being fully concentrated and happily engrossed in one's work. An absorbed employee ceases to notice the passage of time and is completely focused in his or her work.

2.1.1.5 Emotional Labor

Emotional labor is defined as the act of expressing organizationally desired emotions during transactions. It involves effort, planning, and control to express organizationally desired emotion during interpersonal transactions. It is a multi-dimensional construct, which involves four dimensions: frequency of appropriate emotional display, attentiveness to required display rules, variety of emotions to be displayed, and emotional dissonance.

2.1.1.5.1 Surface acting

Surface acting has been taken from the dramaturgical perspective of customer is the observer, the employee the performer and the work role is a stage. The employee has to regulate his/her emotions in order to display appropriate emotion to meet the organization's expectations. This leads to surface acting by an employee who may not feel bright and cheery but needs to smile while facing a customer. The person simply acts as if the required or appropriate emotion is really felt. It is a process in which the employee modifies and controls their emotions to meet work demands. Surface acting undermines the felt emotions of employees.

2.1.1.5.2 Deep Acting

Deep acting is also based on the same dramaturgical perspective. But it involves producing the required emotions within and then displaying them. Deep acting involves controlling internal thoughts and feelings to meet the display rules required for the work role. It is regulation of felt emotions that is required for the interaction. So the employee may think of happy times while serving the customer with a smile.

2.1.1.5.3 Emotional Consonance

When someone effortlessly feels the emotion that is required in a certain situation, the person is considered to be emotionally consonant. It was also called as passive deep acting (Hochschild, 1983). Since there is no effort required to perform the appropriate emotion it is considered to be absence of emotional labor.

2.1.1.5.4 Emotional Suppression

When an employee hides one's emotions to perform effectively on the role, emotional suppression takes place. In order to perform their work role well, the employee may suppress the anger that is felt due to rude behavior of the customer. Thus in emotional suppression the employee consciously suppresses the emotions that are felt, instead displaying the emotions required by the display rules.

2.1.2 Research Design

The research was conducted in three phases.

Phase I

It involved a survey of employees of PsyCap and outcome variables in the identified organizations. After the survey, a median split was performed. Those employees who scored equal to or lower than the median score in PsyCap were included in the second phase.

Phase II

This phase involved training in the form of two interventions for the experimental group and control group. After the completion of training, post training retest measures of PsyCap and outcome variables were taken.

Phase III

All those who had completed two days of training in Phase II were approached and administered the survey again after at least two months. All those who were present were included in the research.

This study used a between group repeated measure design. The research design has been summarized in Table 2-1 :

Table 2-1 Research design of the study

	Pre Intervention	**Intervention**	**Post Intervention**	**Follow Up**
Experimental Group (n = 58)	**Baseline measures of:** n = 133 a. OCB b. CWB c. EL d. WE	**PsyCap Intervention**	**Retest measures of:** (n=58) a. OCB b. CWB c. EL d. WE	**Retest measures of:** (n = 37) a. OCB b. CWB c. EL d. WE
Control Group (n = 48)	Baseline measures of: n = 134 a. OCB b. CWB c. EL d. WE	Skill based Intervention	Retest measures of: (n = 48) a. OCB b. CWB c. EL d. WE	Retest measures of: (n = 23) a. OCB b. CWB c. EL d. WE

During the study, each organization was handled separately. The number of employees in each phase is given in parenthesis.

2.1.3 Classification of Variables

Independent Variable:

i. Psychological Capital

Categorical (Independent) Variables:

i. Type of Organization: Sector to which organizations belonged to
ii. Gender
iii. Age

iv. Years of work experience

Control Variables:

i. The Control group Employees and the experimental group Employees were from the same organization in order to control for the climate and culture of the organization

Dependent Variables:

i. Emotional Labor
ii. Organizational Citizenship Behavior
iii. Work Engagement
iv. Counterproductive Work Behavior

2.1.4 Sample

2.1.4.1 Population

The population for this study consisted of employees from different private sector organizations in and around Vadodara, Vapi and Mumbai.

2.1.4.2 Inclusion criteria

Permanent employees from the private sector organizations who had agreed to be part of the study.

2.1.4.3 Exclusion Criteria

Employees from the public sector organizations were not included in the research. Those employees who did not complete the survey in Phase I were excluded. Those employees who were invited for training but did not attend it or those who did not complete the stipulated training of two days were also excluded from the study.

2.1.4.4 Sampling Strategy

The strategy used for sampling for the present study is multistage sampling. In stage One, the organizations belonging to the private sector companies in Vadodara, Vapi and

surrounding industrial areas where the researcher had done previous work were written to for inclusion in the study. Some organizations where the researcher had a connect, were also approached in Mumbai. This supported the accessibility for the researcher. There were many organizations who showed willingness to participate in the study. But, when they realized the commitment of time that would be required from the employees, they shared that they could not spare the employees for that much amount of time. In stage Two, those organizations which showed a positive response and the HR department showed a willingness to make employees available for the study were included in the study. In stage Three, the employees from these organizations were surveyed. There was some drop out organizationally also, due to workplace exigencies. In stage Three of sampling, the organizations provided the employees and facilities to do training. Thus, a multi stage sampling method was used for the present study.

2.1.4.5 Sample Description

The employees were 535 working professionals from different industries in Vadodara, Halol, Karamsad, Vapi and Mumbai. The companies that participated in the survey, included Organization 1- an IT staffing solutions organization (n=42), Organization 2 – an engineering services organization (n=59), Organization 3 - a tyre manufacturing organization (n=49), Organization 4 - a multi-specialty hospital (n=139), Organization 5 - a transformer and inductor manufacturing organization (n = 10), Organization 6 – a manufacturer of printing inks (n = 97), Organization 7 - an organization providing coaching for civil service aspirants (n=41), Organization 8 - a human resource consultancy organization (n=16) and Organization 9 - a pharmaceutical research organization (n =81). (See Table 2-2). Thus, it was a heterogenous sample. The heterogenous nature of the sample provided the basis for application of the intervention to different industries and organizations.

Table 2-2 Sample breakup in different sectors

Sector wise distribution of Employees	**No of Employees**	**Median score on PsyCap Scale**
Industrial and commercial	n =158	
services sector	Organization 1 (n=42)	109
	Organization 2 (n=59)	108
	Organization 7 (n=41)	112
	Organization 8 (n=16)	109
Healthcare sector	n =139	113
	Organization 4 (n=139)	
Automobile and auto parts	n = 49	113
sector	Organization 3 (n=49)	
Chemical sector	n = 98	114
	Organization 6 (n=98)	
Industrial goods sector	n = 10	103.5
	Organization 5 (n=10)	
Pharmaceuticals and	n = 81	117
medical research sector	Organization 9 (n=81)	
Total	N = 535	

These were further classified into six different business sectors using the Thomson Reuters Business classification i.e. Industrial and commercial services sector (n=158), Healthcare sector (n=139), automobile and auto parts sector (n = 49), chemical sector (n=98), industrial goods (n = 10) and pharmaceuticals and medical research sector (n=81) (Thomson Reuters, 2012). (see Table 2-2) These have been further regrouped by the researcher into four

sectors i.e. Industrial and Commercial Services sector (n=158), Industrial, Automobile and Chemical Manufacturing sector (henceforth called manufacturing sector) (n= 157), Healthcare sector (n = 139) and Pharmaceutical manufacturing and research sector (n=81). The pie chart given in Figure2-1 shows the break-up of employees sector – wise.

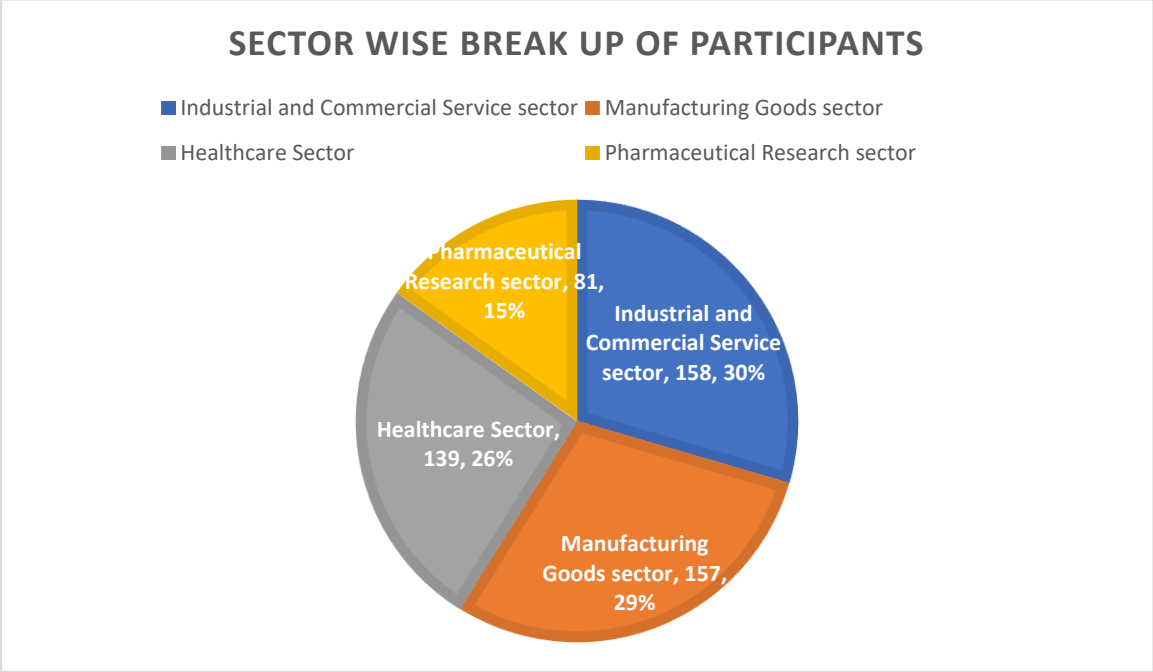

Figure2-1 Pie chart showing the distribution of employees across different sectors

2.1.4.6 Demographic details of the sample

The data regarding employees' age, sex, work experience in the current organization were collected during the survey. These are given in Figure 2-2.

2.1.4.6.1 Age

The employees' age ranged from 19 years to 72 years with a mean of 34.61 years and SD 9.10 years.

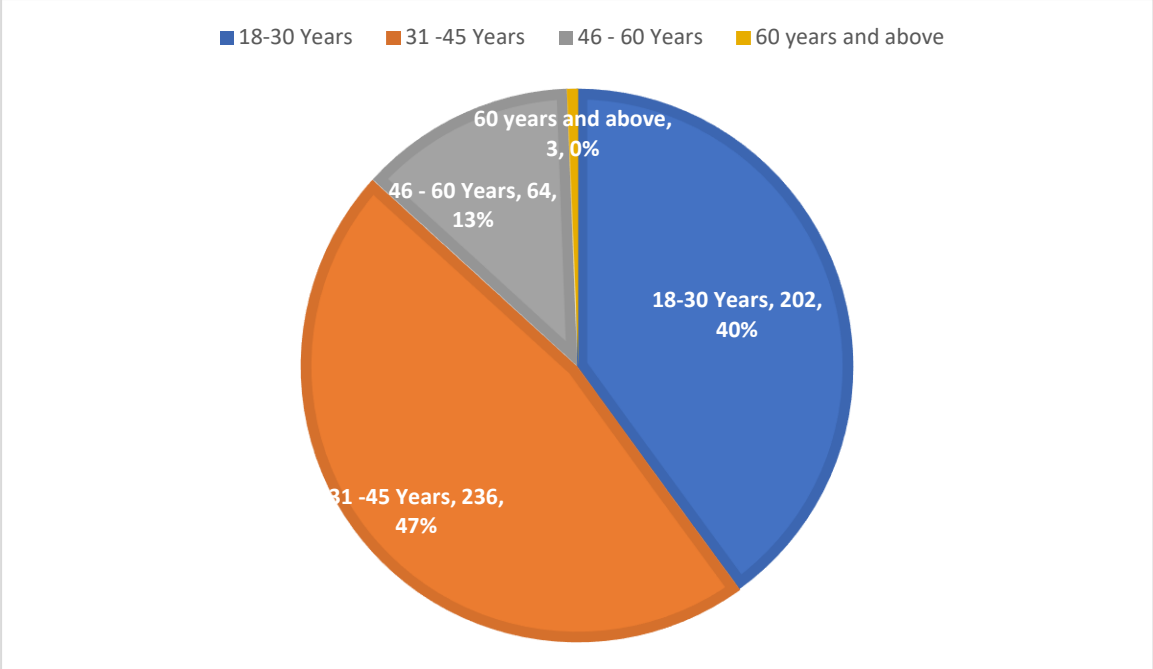

Figure 2-2 Pie chart showing age distribution of employees

Sector wise spread of age is given in Table 2-3. Table 2-3 suggests that youngest employees in the sample are working in the industrial and commercial services sector, whereas the manufacturing, healthcare and pharmaceutical research sectors employ people from a higher age group.

Table 2-3 Age wise distribution of employees in the sample

Sector	18- 30 years	31-45 years	46 – 60 years	61 years and above	Mean	SD
1. Industrial and commercial services sector	93	50	3	2	30.61	7.66
2. Manufacturing Goods Sector	51	80	22	1	35.12	9.60
3. Healthcare sector	58	41	27	0	34.95	10.24

Sector	18- 30 years	31-45 years	46 – 60 years	61 years and above	Mean	SD
4. Pharmaceutical research sector	0	65	12	0	40.18	5.29
Total	202	236	64	3		

2.1.4.6.2 Sex

There were 344 males (64.3 %) and 191 females (35.7 %) in the total sample. The profile for each sector is given in Table 2-4.

Table 2-4 Distribution of males and female employees in the different sectors in the sample

Sector	Male (%)	Female (%)
1. Industrial and commercial services sector	n = 118 (74.7 %)	n = 40 (25.3%)
2. Manufacturing Goods Sector	n = 150 (95.5 %)	n = 7 (4.5 %)
3. Healthcare sector	n =3 (2.2 %)	n = 136 (97.8 %)
4. Pharmaceutical research sector	n = 73 (90.1 %)	n = 8 (9.9 %)
Total	344 (64.30 %)	191 (35.70 %)

Table 2-4 suggests that participation of female employees is highest in the healthcare sector. Nursing as a profession is adopted by many more female employees than male employees. On the other hand, male employees are more in number in manufacturing and pharmaceutical research sector. Participation of female employees in the service sector is higher than in manufacturing or pharma research. This suggests that manufacturing sector is highly male dominated whereas healthcare sector is female dominated.

2.1.4.6.3 Work Experience of employees in their current organization

The employees' mean work experience in their current organization ranged from 5 months to 30 years with a mean of 8.17 years and SD 7.19 years. Since the employees belonged to different sectors, sector wise spread of work experience is given below in Table 2-5.

Table 2-5 Sector wise distribution of work experience of employees in their current organization

Sector	0 to 2.99 Years	3 to 6.99 Years	7 to 9.99 Years	10 Years and more	Mean	SD
1. Industrial and commercial services sector	56	66	22	11	4.92	4.66
2. Manufacturing Goods Sector	44	38	10	62	8.43	6.50
3. Healthcare sector	31	39	7	57	10.54	9.24
4. Pharmaceutical research company	15	11	16	39	10.00	6.30

Table 2-3 and Table 2-5 suggest that lower mean age in the Industrial and commercial services sector and the shorter work experience are explained by Super's life and career development theory (Super, Savickas, & Super, 1990). These employees are still probably in the career exploratory stage. The researcher also experienced it during the icebreaker of training particularly the experimental group. The drop out rate of employees from the industrial and commercial services sector was high. In the follow up stage of the study, there

were many employees had left the organization. This also matches with the turnover rates found in an online survey of Indian industries where the service industry like BPO is 16.3% and manufacturing industry is 6.7 % (www.statista.com/statistics/737996/average-voluntary-staff-turnover-by-industry-india/, 2018).

The employees with the higher mean age in the other three sectors are probably in the establishment and/or maintenance stage of life and career development. Hence their experience in the current organization is significantly longer than the work experience of employees from the industrial and commercial services sector.

2.1.4.6.4 Departmental Background of the employees

Following are the organizations from the *commercial and industrial services sector*. The IT staffing solutions company Employees consisted of 42 employees from their accounting department. Since the company provides staffing solutions, they need the accounting specialists who form a part of accounts receivable department, a support department. All the employees belonged to this department. The sample included Employees from billing, accounts receivable, accounts & finance and accounting timesheet departments.

The engineering design and engineering consultancy provides services to refinery, petrochemical and oil and gas sector. The sample included engineers from mechanical engineering, project development, project engineering, piping engineering, civil engineering, instrumentation engineering, administration and human resources (HR) department.

The next group consisted of employees from a company providing coaching for civil service aspirants in Mumbai, Nashik, Kolhapur, Nagpur, Solapur and Pune with headquarters in Mumbai. The sample included employees from Teaching (8), accounts department (3), desk top publishing (DTP) (7), IT (1), Administration department (4) and graphic designing department (1) from different locations. Their designations were faculty (8), marketing (1),

counselor (2), librarian (1), office in charge or manager of a location (4), office boy (2), staff member (1) and marketing (1).

The next group of employees was from a human resource consultancy. The sample included employees from HR department (1), training department (4), marketing department (2), recruitment department (2), administration (3), business development (1) and GATE marketing department (3).

Following are the organizations from the *manufacturing sector*. The tyre manufacturing plant produces radial tyres for cars, sports utility vehicles (SUVs), light commercial vehicles (LCVs) and trucks in their plant near Halol. The sample included employees working in engineering (3), stock mechanical maintenance (1), curing mechanical engineering (1), taxation (1), utility (5), technical (1), electrical department (3), Mixing department (2), Stock department (3), Passenger car radial (PCR) department (1), PCR FF department (1), PCR cutter department (1), truck body radial (TBR) department (4), (TBR) Final finishing(FF) department (4)TBR curing department (1), quality assurance (QA) department (1), triplex department (2), fischer cutter department(1), project purchase department (1), stock roll department (1), drawing department (1), IT department (1) and HR department (3).

The sample also included a transformer and inductor manufacturing company. The sample included employees from production department (2), marketing department (3), quality control (QC) department (2), QC – raw material department (1), design department (1) and purchase department (1).

The next group in the sample included employees from a plant which manufactures printing inks for various applications like coatings and press chemicals. The sample included employees from resin and varnish (R&V) manufacturing department (5), HR department (6), Quality Assurance(QA) ink and flush lab (3), commercial department (2), resin department

(1), engineering department (9), energy cell (1), raw material(RM) stores (1), production department (3), excise department (6), Festo Manufacturing (2), manufacturing flush (1), safety department (4), QA (R&D), Engineering store department (1), technology R&D department (1), Beta Blue plant (1), ECC (1), pigment production (5), utility department (2), R&V Laboratory (4), Flush and ink laboratory (1), Flush and instrumentation department (2), electrical department (2), paste ink export oriented unit(EOU) (1), finished goods (FG) QA laboratory (1), pigment lab (1), raw material (RM) pigment lab, ink plant (1), planning (4), ISC (2), RM stores(2), manufacturing department (2), BRITO lab (4), quality control(QC) lab (1), BRITO production (4), SIP (1), engineering projects (3), pigment EOU unit (4), QA laboratory (1) and accounts department(1).

The Employees from the *Healthcare sector* consisted of 139 nurses working in a multi- specialty hospital in Karamsad, Gujarat. The hospital is run by a trust providing medical services. The sample included nurses from Neonatal ICU, surgery, cardiac unit, pediatric ward, chest ward, ENT ward, medicine ward, oncology, operation theatre and the nursing office. There were 96 staff nurses and 39 Nurse-in-charges.

Following are the organizations from the *Medical and Pharmaceutical Research sector*.

The last group of employees belonged to a pharmaceutical research and drug discovery company. The sample included employees from Maintenance department (1), organic synthesis department (4), FDD (3), Environment, Health and Safety (EHS) department (1), Operations department (1), CRA department (1), FDD- solid oral (3), pharmacokinetic department (4), FDD- NDDS (4), analytical development (5), ADD (10), RQA (1), Formulation Development(2), Regulatory Affairs department (1), Central Analytical Laboratory (CAL) (3), PKD (2), R&D (Organic Synthesis) (1), CPU (1), Biopharmaceuticals department (1), Packaging Development department (3), commercial

department (1), IRA (1), ADD Analytical R&D (1), Organic Synthesis department (1), Regulatory Affairs department (3), Corporate Quality department (3), OS (1), ICR (1), GPZT (1), CPU – Bioequivalence (1), Distribution (1), Biotechnology department (1), Accounts and Finance (1), ADD DM-EH (1), PMO (1), Formulation Development (R&D) department (1), Analytical Development department (1), Research QA department (1), IT department (2) and CQC (1).

2.1.4.6.5 Educational Background of the employees

The educational qualifications of the employees ranged from 10^{th} standard pass to Ph. D. and other professional qualifications. There were many employees with two degrees to their credit and some with three degrees too. The sector wise break up of employees' educational back ground is given in Table 2-6.

Table 2-6 Educational background of the employees in the study

Sector	ITI	10^{th}	12^{th}	Under graduate	Dip	Grad	PG Dip	PG Deg	Prof	Ph.D	Other
Industrial and commercial services sector	0	1	4	5	0	57	5	41	3	1	2
Manufacturing Goods Sector	1	1	0	0	49	81	3	21	2	1	0
Healthcare sector	0	0	0	2	96	24	0	0	0	0	0
Pharmaceutical research company	0	0	0	0	1	18	5	64	0	5	1
Total	1	2	4	7	146	180	13	126	5	7	3

Majority of the employees were either graduates, post graduates or diploma holders.

2.1.5 Tools

2.1.5.1 Psychological Capital

To measure PsyCap, Psychological Capital questionnaire (PCQ) was used. PCQ is a self-report 24-item scale proposed by (Luthans, Youssef, & Avolio, 2007) and consists of items adopted from the already established scales including efficacy scale (Parker, 1998), hope scale (Snyder, et al., 1996), resilience scale (Wagnild & Young, 1993), and optimism scale (Scheier & Carver, 1987). Luthans and colleagues have used this scale in various studies and found that it produces reliable results (Luthans, Youssef, & Avolio, 2007; Luthans, Avey, & Patera, 2008). To facilitate the state-like framing, the PCQ asks the respondent to describe how you think about yourself right now. Cronbach's alpha for the efficacy scale was .73, for the hope scale was .75, for resilience scale was .62 and for optimism scale was .24. Cronbach's alpha for the PCQ was .69.

2.1.5.2 Organizational Citizenship behavior

To measure Organizational Citizenship behavior a scale using a 14-item measure developed by Podsakoff and MacKenzie (1994)was used. The scale uses a 7-point scale ranging from (1) strongly disagree to (7) strongly agree. Sample items are: 'Willingly gives of his or her time to help other agents who have work-related problems,' 'Attends functions that are not required but help the agency/company image,' and 'Consumes a lot of time complaining about trivial matters' (reverse-scored). Based on the findings and recommendations of LePine, Erez and Johnson (2002), these items were aggregated to create an overall measure of OCB. Cronbach's alpha for this scale was 0.88 in the current study. The Cronbach's alpha for the subscales were .94 for helping, .85 for civic virtues and .38 for sportsmanship.

2.1.5.3 Counterproductive Work Behaviors

To measure Counterproductive Work Behaviors, Bennett and Robinson (2000)'s Workplace Deviance scale was used. It is one of the initial and most frequently used assessments. It consists of 19 items out of which 12 items measure organizational deviance (α

= .81) and remaining 7 items assess interpersonal deviance (α = .81), Employees indicated the extent to which people did participate in the activity by indicating it on a 5-point Likert scale as follows: 1= "Never" 2 = once or twice a year 3 = several times a year 4 = once or twice a month 5 = weekly. The Cronbach's alpha for the composite scale was found to be .88 in the current study. The CWB I Cronbach's alpha was .75 and CWB O Cronbach's alpha was .88. This scale was selected because it has wide application as far as types of organizations and occupations are concerned. This was particularly important as the sample consisted of employees from different organizations and different professions.

2.1.5.4 Work Engagement

To measure Work Engagement Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2003), a 17- item scale was used. The UWES items are scored on a 7 – point frequency scale ranging from 1 never to 7 always. It is a three-dimensional questionnaire including vigor, dedication and absorption. Meta-analyses of the original and short version of the UWES indicated very good internal consistency for vigor, dedication and absorption. 33 samples (Total N=19940) from eight different countries revealed that sample weighted value for Cronbach's alpha for all three scales of UWES exceeded .80. Cronbach's alpha for the composite score exceeded .90 (Schaufeli & Bakker, 2010). In this study, the Cronbach's alpha was found to be .75 for the composite score and .69 for vigor, .75 for dedication and .35 for absorption.

2.1.5.5 Emotional Labor

To measure Emotional Labor, Naring, G Britt, M. and Brouwers, A. (Näring, Briët, & Brouwers, 2007)'s Dutch Questionnaire on Emotional Labor was used. It consists of 13 items with 5 items assessing surface acting (SA), 3 items assessing deep acting (DA), 2 items assessing emotional consonance (EC) and 3 items assessing emotional suppression (ES). The items are scored on a 7-point scale ranging from 1 to 7 with 1= "Very untrue of me"; 2=

"Untrue of me" 3= "Somewhat untrue of me"; 4 = neutral; 5 = "Somewhat true of me"; 6="True of me" and 7 = "Very true of me". In the present study, the Cronbach alpha scores were .59 for SA, .72.for DA, .73 for EC and .76 for ES. The overall composite Cronbach's alpha for EL scale was .77 in the present study.

Table 2-7 Description of tools used in the study

Variable	**Dimension/Facet of variable**	**Tool**	**No. of Items**	**Mini Score**	**Max Score**	**Cronbach alpha**
PsyCap		PsyCap	24	4	124	.69
	Efficacy	Questionnaire	6	1	36	.73
	Hope	by Luthans,	6	1	36	.75
	Resilience	Youssef &	6	1	36	.62
	Optimism	Avolio (2007)	6	1	36	.24
OCB		Organizational	14	14	98	.88
	Helping	Citizenship	7	7	49	.94
	Sportsmanship	scale by	4	4	28	.85
	Civic virtue	Podsakoff and	3	3	9	.38
		MacKenzie				
		(1994)				
CWB		Workplace	19	19	95	.88
	Interpersonal	Deviance	7	7	35	.75
	Organizational	scale by (2000	12	12	60	.88
		)				
WE			17	17	119	.75
	Vigor	Utrecht Work	6	6	42	.69
	Dedication	Engagement	5	5	35	.75

Variable	Dimension/Facet of variable	Tool	No. of Items	Mini Score	Max Score	Cronbach alpha
	Absorption	Scale (Schaufeli & Bakker, 2003)	6	6	42	.35
EL		Dutch	13	13	91	.77
	Surface Acting	Questionnaire	5	5	35	.59
	Deep acting	on Emotional	3	3	21	.72
	Emotional consonance	Labor (Näring, Briët, &	2	2	14	.73
	Emotional suppression	Brouwers, 2007)	3	3	21	.76

The above tools were used in the present study in English, Hindi and Marathi. The questionnaire was in English Hindi format or Hindi Marathi format. The Hindi and Marathi versions were prepared using the back-translation method. The tools were sent to an independent translator who had not seen the tools before. After the translation was done, they were sent to another independent translator who was blind to the tools. This translator translated them back to the source language. The two source language versions were compared by the researchers and another member of the department.

2.2 Procedure

In phase I different private sector organizations in and around Vadodara, Vapi and Mumbai were approached. The HR departments of these organizations were sent a request to be part of the study. A presentation related to the research was shared or sometimes the presentation was done in person (See Appendix A). Once they agreed to be part of it, the different departments of the organization were approached by HR department and it was

agreed that on a predefined day the researcher would be present to collect the data from the employees. The timing of data collection was identified so that maximum number of would be employees could be tapped. e.g. for the hospital it was decided to do the data collection when the first shift nurses would have completed their shift and the second shift nurses would be starting their shift. This was worked out so that data could be collected efficiently.

2.2.1 Phase I

It involved a survey of employees belonging to the identified organizations (n=535). The employees attended the prescheduled meetings during working hours to complete the survey. The employees were given the survey both in English and Hindi except the educational institute where the survey was in English and Marathi. The employees could opt for answering the survey in either of the languages. The responses were collected by the researcher. Each group was handled independently. Data was collected in nine different organizations described earlier. The researcher had collected the data and it was not shared with the HR department. On the basis of the survey, a median split was conducted dividing employees into High PsyCap and Low PsyCap. The employees above the median were considered as high PsyCap and the employees equal to or below the median were considered as low PsyCap. Employees with Low PsyCap were invited to be part of the phase II of the study. Median values for each of the organization are given in Table 2-2. The employees were matched for PsyCap scores and were assigned either to the experimental group or the control group.

To understand the difference between employees with high PsyCap and low PsyCap, they were compared on workplace behaviors and workplace emotions i.e. OCB, CWB, WE and EL. This phase of the study told us whether employees differ significantly in terms of OCB, CWB, EE and EL across sectors.

2.2.2 Phase II

This part of the study employed between group Pre-Post intervention design where the low PsyCap employees were assigned to either an experimental or a control group. The experimental group was then administered an intervention carefully designed to promote PsyCap variables, whereas the control group was administered a skill-based intervention spanning the same time frame. Both these programs were delivered in the organizational premises. The programs were administered by the researcher herself who has professional training experience of fifteen years at the time of delivery of the modules. These two training programs are described in detail in the chapter on module to the employees. Each training program was 16 hours long, spanning two simultaneous working days of eight hours each. Each day comprised of four sessions of two hours each. In case of intervention module, the employees approximately had one hour of icebreaking and three and a half to four hours of each of the dimensions of PsyCap. For the control group module, it involved one hour of icebreaking and three and a half hours to four hours of each skill. At the end of the program, the employees completed the Post training survey, the feedback for the training program and the actions plans to be implemented after the training. The employees were invited to attend the respective programs by their HR department or the owner/ manager of the establishment where the HR department was not there.

2.2.3 Phase III

After a minimum gap of three months and as per the availability of the employees, the follow up survey was also administered to the employees who underwent Phase II. Appropriate statistical procedures were applied. Figure 2-3 describes the flow of employees through the study.

Figure 2-3 Flowchart of steps in the procedure in the present study