

# A Study on Employee's Psychological Well Being in Medium and Large Scale Manufacturing Industries

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## ABSTRACT

Well-being in general is a dynamic concept that includes subjective, social, and psychological dimensions as well as health-related behaviors. It refers to optimal psychological functioning and experience. Well-being of employees is an important issue in every work environment. This study examines the perception of employees about their psychological well being and its impact on demographic factors among medium and large scale manufacturing industries. The research design adopted for the study is descriptive in nature. Samples used were 354. Independent sample t-test and One-way ANOVA are the tools used for analysis to achieve the objectives. Findings of the study is that overall psychological well being of the employees are moderate and demographic factors such as age, education, family size and monthly income differs with their psychological well being where as gender, marital status and work experience has no any significant difference for the employees working in the manufacturing industries. An employee-centered organisation will maintain better quality of work life and to improve their employee's psychological well being.

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## 1. Introduction

Employee well-being, an important aspect in human psychology also frequently observed and is increasingly chosen in emerging countries. Ryan and Deci (2001), state "well-being refers to optimal psychological functioning". Employee's lower order needs such as food, health, safety etc., has to be met in order to achieve better well being (Harter, Schmidt & Keyes, 2002). Fulfilling the fundamental needs can be carried out by providing a sufficient amount of wages, a secure working atmosphere and chances for professional growth. By satisfying these basic needs the well being of the employees can be met. Therefore workers will be satisfied about their job and personal life totally (Seligman, 2002; Veenhoven, 2003). It is the responsibility of the organisation and the society to improve the well being of the human being. Working place is a crucial factor which combines the survival of the individual and the welfare of the society. Employees who have an increased level of well-being are found to be highly supportive, shows less absence, on-time and proficient, and can have better longevity at work for a company (Harter et al., 2002). When one has a good psychological well-being, they function properly (Ryff, 1989). Most of employees spend eight hours a day at work approximately. This situation ends up revealing a fact that a worker spends more of his day at work place. Work place turns out to become a place of communal meeting to talk, exchange thoughts, convene and share experiences with others (Harter et al., 2002).

Well-being in general is a dynamic concept that includes subjective, social, and psychological dimensions as well as health-related behaviors. It refers to optimal psychological functioning and experience. Well-being of employees is an important issue in every work environment. Psychological problems among employees were earlier reported in Western

societies but are now becoming evident in the Indian context too.

As a developing country, India requires productive workers. It is important to bear workers to improve the quality of services to align with the developed countries. Human resource management plays an important role to enhance workers to be qualified and productive, so that any issues relating to employment issues such as mental disorders, stress, fatigue, burnout, dissatisfaction and turnover can be overcome (Chen, Chang & Yeh, 2004). Most of workers spend an average of eight hours a day at work. This condition causes most of the time a worker spent at work. Work environment become a social gathering to chat, exchange ideas, meet and exchange experiences with colleagues (Harter et al., 2002). Thus, employee psychological well-being is essential in achieving the organization's success.

## 2. Literature Review

Parasuraman, Purohit, Godshalk and Beutell (1996) examined the influence of work and family variables on the career success and psychological well-being of 111 men and women entrepreneurs. The results show that work-domain variables account for significant variation in time commitment to work, whereas family-domain variables explain substantial variation in time commitment to family. Time commitment to work and time commitment to family play an important role in mediating the effects of gender, work and family characteristics, and role demands on work-to-family conflict and family-to-work conflict. These two types of work-family conflict in turn mediate the effects of time commitment to work and family and selected work and family variables on entrepreneurs' career success and life stress.

Brad Gilbreath (2004) identified that supervisors support has impact on employee's well-being and found the associations between supervisor behaviour and employee psychological well-being. Hypothesis for the study was that supervisor behaviour can contribute to the prediction of psychiatric disturbance beyond the contribution of other influential variables. A new questionnaire-based instrument to measure supervisor behaviour has been created. Hypothesis tested using stepwise regression with a convenience sample of 167 men and women working in a variety of organizations, occupations, and industries in the USA. Results supported that hypothesis supervisor behaviour made a statistically significant contribution to the prediction of psychiatric disturbance beyond a step-one variate comprised of age, health practices, support from other people at work, support from home, stressful life events, and stressful work events.

Erlandson and Williams (2006) studied health and well being among women working in different complex patterns. He found that women working in high complex pattern possess poor health and well being compared to women working in medium complex pattern who possess poor well being compared to low complex pattern. He also found that level of education had an impact on women's health and well being.

Bhardwaj and Srivastava (2008) examined the effects of overall occupational health on psychological well-being in a sample of 150 line-staff operating in a production organization. The analyses revealed that occupational health positively correlates with employees' mental health. The employees who perceived their work and its physical and psycho-social environment as to be adequate and healthy maintained relatively better overall mental health.

James (2010) recognized core construct of psychological capital (consisting of the positive psychological resources of efficacy, hope, optimism, and resilience) has been demonstrated to be related to various employee attitudinal, behavioral, and performance outcomes. However, to date, the impact of this positive core construct over time and on important employee well-being outcomes has not been tested. This study meets this need by analyzing the relationship between a broad cross-section of employees' level of psychological capital and two measures of psychological well-being over time. The results indicated that employees' psychological capital was related to both measures of well-being and, importantly, that psychological capital explained additional variance in these well-being measures over time.

Srimathi (2010) examined the level of psychological well being among 325 working women in different professions industries, hospitals, banks, educational institutions and in call centers/BPOs. Results revealed that women employees working in industries had least psychological well being followed by women working in health organizations. Women employees working in banks had medium level whereas women teachers had highest total Psychological Well Being scores.

Brad Shuck (2014) identified that poor workforce engagement can be detrimental to organizations because of the ensuing decrease in employee well-being and productivity and

investigated the degree to which psychological workplace climate was associated with personal accomplishment, depersonalization, emotional exhaustion, and psychological wellbeing, and whether employee engagement moderated these relations. A sample of 216 health care employees from the United States, Canada, and Japan completed an online survey. Regression results suggested that psychological workplace climate was significantly related to each outcome variable and engagement moderated relations between workplace climate and each of the four dependent variables. ANOVA results revealed that high engagement group employees demonstrated higher psychological well-being and personal accomplishment, whereas low engagement group employees exhibited higher emotional exhaustion and depersonalization.

### 3. Objective of the study

The aim of the study is to examine the employee's psychological well being and its impact on their demographic factors among medium and large scale manufacturing industries.

### 4. Methodology

Research design adopted for the study is descriptive, which is chosen based on the objective of the study (i.e) to investigate and explain the existing nature of manufacturing industries with regards to quality of work life and psychological well being context.

A field survey was conducted for data collection from a sample size of 354 employees from medium and large scale manufacturing industries in Puducherry. Through simple random sampling, 5 per cent of employees from each companies and totally 354 employees' from both sectors, covering 189 from medium and 165 from large scale companies are considered for the study. Therefore the sample size for the study has been determined as 354, using formula given by Cochran, 1963.

For the research work both primary and secondary data has been used. Primary data pertaining to the profile of manufacturing firms, quality of work life related variable has been gathered using the survey method by giving a well structured questionnaire to the employees of the manufacturing firms located in the Puducherry. Questionnaire includes questions related to socio-economic profile of employees and questions related to psychological well being developed by Ryffs with 18 items relating to autonomy, environmental mastery, personal growth, positive relations, purpose in life and self acceptance with five point Likert scale where the respondents were asked to give their agreement or disagreement towards the statement. A pilot study was conducted to check the validity of the questionnaire and to verify the possibility of the study. Thus the questionnaire was distributed among 50 employees working in medium and large scale manufacturing industries to perform the pilot test. Cronbach's Alpha test was performed to check the reliability. The value obtained is 0.843 thus proves the reliability of the instrument.

Secondary data pertaining to the break up details of number of manufacturing industries, production index in the UT of Pondicherry and India have been collected from India statistics, Central Statistical Organization, National Statistical Survey Organization, Department of Industries and commerce, Government of Pondicherry and Pondicherry Economics and Statistics department.

## 5. Statistical Analysis

354 samples were used for the study. Respondents were lower level employees from medium and large scale manufacturing industries. Demographic profile of the respondents is given in the table 1. 55% of respondents were male and 45% were female. 107 % belong to age group 41-50, 31% of them were married and 43% were unmarried. 41% of employee's family size is up to 3. 94% of respondents completed higher secondary level of education. 29% of respondents were receiving monthly income below 10,000 and majority of employees (i.e) 31% with 11-20 years of experience. Statistical tools used for the study is independent sample t-test, chosen based on the hypothesis framed and for testing the same.

**Table 1**  
Demographic Profile of Respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	196	55.4
Female	158	44.6
Age ( in years)		
21-30	64	18.1
31-40	85	24.0
41-50	107	30.2
51-60	98	27.7
Education		
Below SSLC or SSLC	57	16.1
HSC	94	26.6
Diploma/Certificate	89	25.1
Graduate	75	21.2
Post graduate	39	11.0
Marital status		
Single	111	31.4
Married	155	43.8
Others	88	24.9
Family size		
Up to 3	148	41.8
4 to 6	119	33.6
More than 6	87	24.6
Work experience ( in years)		
1-10	72	20.3
11-20	110	31.1
21-30	92	26.0
More than 30	80	22.6
Income (in Rupees)		
Below 10,000	104	29.4
10,001-15,000	95	26.8
15,001-20,000	77	21.8
More than 20,000	78	22.0

Employee's psychological well-being is an important aspect for both employees and employers. Mental illness will create both physical and psychological problems. In this study, Ryff's

scale on psychological well being has been used, which deals eudemonic approach of well being. The following table 2 shows employee's perception about their psychological well being.

**Table 2**  
Employee's perception about their psychological well being

Variable	Mean	Standard Deviation
Psychological well being	3.0621	0.53645

Source: Field survey

The above table 2 gives the mean value and standard deviation of psychological well being which is 3.06 and 0.536 respectively. It can be inferred that employees perceive their overall psychological well being as moderate. It indicates that people with better psychological well being will be more creative, unique and adjustable, react better to adverse criticism, make more optimistic judgments about others, show higher levels of commitment, will be more helpful, likely to live longer and have happy work and family life.

Hypothesis for the study has been framed and the tools such as independent sample t-test and One-way ANOVA have been used.

H1: Employee's perception about psychological well being has no significant difference with their gender in medium and large scale manufacturing industries.

**Table 3**  
Employee's perception about Psychological well being Vs Gender

Variable		t	Df	Sig (2 tailed)
Psychological well being	Equal variances assumed	-1.541	163	0.125
	Equal variances not assumed	-1.564	161.156	0.120

\*Significant at 5% level

From the above table 3 it is inferred that in medium and large scale manufacturing industries the p-value for Psychological well being is 0.125 which is greater than 0.05, it shows that gender doesn't play any significant role on psychological well being. So null hypothesis is confirmed i.e., employee's gender has no significant difference with their psychological well being in medium and large scale manufacturing industries.

H2: Employee's perception about psychological well being has no significant difference with their age group in medium and large scale manufacturing industries.

**Table 4**  
Employee's perception about Psychological well being Vs Age group

Variable		Sum of Squares	df	Mean Square	F	Sig.
Psychological well being	Between Groups	1.660	3	0.553	12.780	0.003*
	Within Groups	99.925	350	0.286		
	Total	101.586	353			

\*Significant at 5% level

From the above table 4 it can be inferred that in medium and large scale manufacturing industries the p-value for Psychological well being is 0.003 which is less than 0.05, therefore the hypothesis is rejected (i.e) age groups has significant variation on employee's perception about their psychological well being in medium and large scale manufacturing industries. This shows age plays significant role in determining their psychological well being. Duncan's Post Hoc test is done to find the significant difference among the group.

21 – 30	2.63 (I)
31 – 40	3.99 (I)
41 – 50	3.57 (I)
51 – 60	4.63 (II)

By applying Duncan's post hoc test it was found that significant difference exist between 21 – 30 years, 31- 40 years, 41 – 50 years and 51- 60 years. It shows that employees in age group 51 – 60 years differ from others (i.e) aged people gave better psychological well being compared to younger and middle age people.

**Table 4.1**  
**Duncan's Post Hoc Test for Employee's perception about Psychological well being Vs Age group**

Age	Psychological well being (Mean)
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H3: Employee's perception about psychological well being has no significant difference with their education in medium and large scale manufacturing industries.

**Table 5**  
**Employee's perception about Psychological well being Vs education**

Variable	Sum of Squares	df	Mean Square	F	Sig.	
Psychological well being	Between Groups	1493.644	5	298.729	13.830	0.003*
	Within Groups	25683.633	348	73.804		
	Total	27177.277	353			

\*Significant at 5% level

From the above table 5 it can be inferred that the p-value for employee's psychological well being in medium and large scale is 0.003 which is less than 0.05, which means education has significant difference on the employee's perceptions about

psychological well being irrespective of sector, hence the hypothesis is rejected. It can also be stated that employee's education play any significant influence on their psychological well being.

**Table 5.1**  
**Duncan's Post Hoc Test for psychological well being Vs education**

Education	Psychological well being (Mean)
Below SSLC or SSLC	2.55 (I)
HSC	2.79 (I)
Diploma/Certificate	3.18 (II)
Graduate	3.30(II)
Post graduate	3.60 (II)

By applying Duncan's post Hoc test it can be noted that the significant difference exist between the groups below SSLC or SSLC, HSC, Diploma/certificate and graduate, post graduated which can be stated as significant difference exist between less educated and highly educated employee groups.

H4: Employee's opinion about psychological well being has no significant difference based on marital status in medium and large scale manufacturing industries.

**Table 6**  
**Employee's perception about Psychological well being Vs Marital status**

Variable	Sum of Squares	df	Mean Square	F	Sig.	
Psychological well being	Between Groups	1493.644	5	298.729	0.212	0.809
	Within Groups	25683.633	348	73.804		
	Total	27177.277	353			

In medium scale and large scale the p-value for psychological well being is 0.809 which is higher than 0.05, therefore the assumption is accepted (i.e) marital status has no significant difference on employee's perception about their psychological well being in medium and large scale

manufacturing industries. Therefore marital status doesn't play any role in determining their psychological well being.

H5: Employee's opinion about psychological well being has no significant difference with their family size in medium and large scale manufacturing industries.

**Table 7**  
**Employee's perception about Psychological well being Vs Family size**

Variable		Sum of Squares	df	Mean Square	F	Sig.
Psychological well being	Between Groups	1493.644	5	298.729	11.382	0.000*
	Within Groups	25683.633	348	73.804		
	Total	27177.277	353			

\*Significant at 5% level

From the above table 7 it can be inferred that the p-value for Psychological well being is 0.000 which is less than 0.05, therefore the hypothesis is rejected (i.e) family size has significant difference on employee's perception about their

psychological well being among different groups of employees in both industries. This shows family size play significant role in their psychological well being.

**Table 7.1**  
**Duncan's Post Hoc Test for Psychological well being Vs family size**

Education	Psychological well being (Mean)
More than 6	2.84 (I)
4 to 6	3.42 (II)
Upto 3	3.53 (III)

Post hoc test reveals that significant difference exists between up to 3, 4 to 6, More than 6 which mean difference exist between each groups individually. It can also be understood from the above table that the difference exists between less family size and more family size.

H6 : Employee's opinion about psychological well being has no significant difference with work experience in medium and large scale manufacturing industries.

**Table 8**  
**Employee's perception on Psychological well being Vs work experience**

Variable		Sum of Squares	df	Mean Square	F	Sig.
Psychological well being	Between Groups	2.113	3	0.704	2.478	0.061
	Within Groups	99.473	350	0.284		
	Total	101.586	353			

In medium and large scale the p-value for Psychological well being is 0.061 which is higher than 0.05, therefore the assumption is accepted (i.e) work experience has no significant difference on employee's perception about their psychological well being in medium and large scale manufacturing industries.

Work experience doesn't play any role in determining their psychological well being.

H7 : Employee's perception about psychological well being has no significant difference with monthly income in medium and large scale manufacturing industries.

**Table 9**  
**Employee's perception on Psychological well being Vs monthly income**

Variable		Sum of Squares	df	Mean Square	F	Sig.
Psychological well being	Between Groups	3.852	3	1.284	4.598	0.004*
	Within Groups	97.734	350	0.279		
	Total	101.586	353			

\*Significant at 5% level

In medium scale and large scale the p-value for psychological well being is 0.004 which is smaller than 0.05, therefore the hypothesis is rejected (i.e) monthly income has significant difference on employee's perception about their

psychological well being in medium and large scale manufacturing industries. Monthly income plays significant role in determining their psychological well being.

**Table 9.1**  
**Duncan's Post Hoc Test for Psychological well being Vs monthly income**

Monthly income	Psychological well being (Mean)
Below 10,000	3.03 (I)
10,001 - 15,000	3.10 (I)
15,001 - 20,000	3.45 (II)
More than 20,000	3.59 (III)

By applying Duncan's post Hoc test the significant difference exist between (Below 10,000, 10,001 - 15,000) and (15,001 - 20,000, More than 20,000). The above table 4.4.14a shows that the significant difference exists between low income (below 15,000 and high income (more than 15,000) level employees.

## 6. Findings

Employees perceive their overall psychological well being with mean value 3.06 as moderate. It indicates that people with better psychological well being will be more adaptable and creative, react better to adverse criticism, make more optimistic judgments about others, show higher levels of commitment, will be more helpful, likely to live longer and have happy work and family life. Employee's demographic factors such as gender, marital status and work experience has no any significant difference with their psychological well being which means employees irrespective of gender, whether they are married or unmarried and with different work experience perceive psychological well being in the same manner. Other factors such as age, education, family size and monthly income has significant difference with psychological well being of the employees. This is because elder people had better psychological well being whereas younger and middle aged people's well being is poor. Based on education, highly educated will respond better to unfavorable feedback, make positive judgements about others. Psychological well being is

better among smaller family compared to bigger family size because in small family stress and expectation will be less both financially and non-financially. In case of psychological well being, monthly income plays a major role because income is necessary for solving lot of problem like to run a family, to face the society, higher the income higher the well being and vice versa. The significant difference exists between low income (below 15,000 and high income (more than 15,000) level employees.

## 7. Suggestions and Conclusions

The success of an organisation depends on the well being of its employees' and not merely profit maximization. Today's organisation is in need of fast, flexible, dynamic, enthusiastic, motivated, creative and fully self expressed employees' marching at the forefront and record growth with excellence. In such a context employee satisfaction of job through better quality of work life is an essential factor for better psychological well being. Psychological well being denotes all organizational inputs which aim at employees' satisfaction and enhancing organizational effectiveness. So irrespective of sectors, organisation's immense care and attention is needed on all work parameters for the betterment of employees' to maintain conducive environment in the organisation. An employee-centered organisation will maintain better quality of work life in turn better psychological well being.

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