

A Study to Assess Mental Health among IT Professionals in Selected Company, Kancheepuram District, Tamil Nadu

S. Ranjith¹, K. Rosely¹, V. Shalini¹, Rogina J.S. Savarimuthu²

¹B.Sc. (Nursing) IIIrd Year Students, Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, Kancheepuram District, Tamil Nadu, ²R.N.R.M., M.Sc.(N) (Psychiatry), M.S. (Psychotherapy & Counselling), M.Sc. (Psychology), CAFÉ, Professor & HOD Mental Health Nursing Department, Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, Kancheepuram District, Tamil Nadu, India

Abstract

Software industry is a human capital intensive industry. A study was conducted to assess mental health among IT professionals. The objectives were 1). To assess the mental health among IT profession and 2). To find out the association between IT profession's mental health and their selected demographic variables. Majority of the clients who scored positive for social dysfunction, anxiety & depression and loss of confidence were between 20-30 years of age, females, software engineers, had undergraduate education, had total work experience in software between 4-7 years and in the current company, followed Hindu religion, were married, residing in urban locality and had job satisfaction. Age and experience in the current company were associated with anxiety and depression.

Keywords: Mental health, IT professionals, software, company, stress, depression, distress.

Introduction

Software industry is a human capital intensive industry. IT professionals fulfill the demands of industry and provide customized software according to the need and requirements of the client organizations, by using latest available technology and skills in the market^{3,2}.

Science and technology is changing at a rapid pace that it is becoming difficult for the professionals to keep abreast with the upcoming technology along with the daily chores of the workplace. Routine hassle contributing to occupational stress is the major cause of stress. IT professionals experience a lot of stress, anxiety, depression and loneliness pertaining to their work environment and reveal feelings of inadequacy, lowered self-esteem and dissatisfaction, which results in social, marital and sexual problems^{3,4}.

IT professionals experience numerous stressors related to work including quantitative work overload, time pressure, qualitative work load, speed and diffusion of technological innovation and technological divergence, low discretionary power, underdeveloped career pattern, low earnings/reward from jobs, difficulties in managing a project team for software development and establishing support system, difficulties in customer relations and personality characteristics³.

Naveen, Bobby, Pretesh et al., (2016), reported that majority of the samples were between 26 - 30 years of age (44.96%), men (74.5%) and were with 1-5 years of work experience (45%). Minority of them had moderate stress (8.72%) and majority had no stress (91.27%). And none were stressed needing immediate intervention. The researchers reported that majority of the software engineers (62%) had mental complaints and 31% mental ill-health. The researchers reported of depressive symptom (32% - 43.4%), professionally stressed (51.2%), psychological distress (23%), fatigue (20%), job dissatisfaction (44%), intentions to leave (35%), adjustment disorders (19%), major affective disorders (6%), psychological factors affecting physical condition (5%) and dysthymic disorder (3%) among

Corresponding Author:

S. Ranjith

B.Sc. (Nursing) IIIrd Year, Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, Kancheepuram District, Tamil Nadu

software engineers. Career and future ambiguity were the most important predictor of the subjective health status. Insufficient evaluation systems and poor supervisor's support were important predictors of productive behavior. Age and experience was associated with the overall stress and depression experienced. IT professionals experience severe mental stress and health issues¹. Nurses should be knowledgeable and skillful in handling health issues among IT professionals at primary, secondary and tertiary level of preventive care.

Objectives:

- To assess the mental health among IT profession
- To find out the association between IT profession's mental health and their selected demographic variables.

Method

Research Approach: Non-experimental research approach was used.

Research Design: A Descriptive research design was used.

Research Setting: The study was conducted at a private IT company, Kanchipuram District.

Population: IT professionals employed in a private IT company, Kanchipuram District.

Sample Technique: A convenience sampling technique was employed to select 100 samples for the study.

Sample Size: Sample size was calculated using the formula $N = 4pq/d^2$. With $p = 31\%$ and $d = 9$. The calculated sample size was 106. The estimated range was 97 to 115. The final sample size was 100.

Data Collection Instruments: Demographic variables proforma and The twelve-item General Health Questionnaire (GHQ-12) were used. GHQ12 was used to assess the mental health among IT profession. The GHQ-12 is a standard tool which has been widely validated and found to be reliable. The GHQ-12 was modelled to measure the three correlated dimensions of psychiatric disturbance: *social dysfunction*, *anxiety* and *depression*.

Scoring and Interpretation: The GHQ 12 consists of 12 items, each assessing the severity of a mental problem over the past few weeks using a 4-point scale (from 0 to 3).

Sum of the items 1, 3, 4, 7, 8 and 12 loaded on social dysfunction, sum of items 2, 5, 6 and 9 on anxiety and depression and sum of items 10 and 11 on loss of confidence.

The score was used to generate a total score ranging from 0 to 36.

Table 1: Scoring and interpretation

Mental Health	Score
Distress	12-24
Severe problems and psychological distress	25-36

Data collection procedure: Data was collected over one week.

Ethical Issues: Department clearance was obtained from Department of Mental Health Nursing, Chettinad College of Nursing. UG committee clearance was obtained from UG Research Screening Committee. Institutional Human Ethics Committee clearance was obtained from Chettinad University. Formal permission was obtained from the Principal, Chettinad College of Nursing. Formal consent was obtained from the study samples before collecting the information. Confidentiality of the study was maintained.

Statistical Method: Descriptive statistics like frequency distribution, percentage and inferential statistics chi-square test was used to analyze the data.

Results

Majority of the clients were between 20-30 years of age (67%), females (61%), software engineers (37%), had undergraduate education (78%), had total work experience in software between 4-7 years (41%) and in the current company (37%), followed Hindu religion (59%), were married (53%), residing in urban locality (74%) and had job satisfaction (89%).

Discussion

Clients scored positive for social dysfunction, anxiety & depression and loss of confidence. The causes are extreme diverse, may be due to change in technology, communication, fear of uselessness, poor family support, long working hours, work overload, stress, work pressure, frequent changes of shift, lack of sleep, heavy work demand, peer pressure, performance appraisal, more time spent on technology and virtual media, threat to job security and imposter syndrome.

Limitation: Data collection is limited to one week. And the sample size is small. In future studies larger sample size should be studied for generalizability.

Conclusion

Higher rates of professional stress pose risk to mental health. Compromising of mental health on the long run can negatively influence the individual's personal, family, occupational and social life and significantly increase the incidence of psychiatric disorders. Hence nurses should be equipped to promote mental health among IT professionals. Concurrently the managing members of the IT industry should develop stress management strategies and training program to aid their employees cope with stress and promote mental wellbeing.

Conflict of Interest: Nil

Source of Funding: Self

Reference

1. Darshan MS, Raman R, Rao TS, Ram D, Annigeri B. A study on professional stress, depression and alcohol use among Indian IT professionals. *Indian journal of psychiatry*. 2013 Jan;55(1):63.
2. Ramesh N, Joseph B, Kiran PR, Kurian J, Babu AT. Perceived Professional Stress Levels among Employees in an Information Technology Company, Bangalore. *Stress*. 2016;9(10):11-2.
3. Nayak RD. Anxiety and mental health of software professionals and mechanical professionals. *International Journal of Humanities and Social Science Invention*. 2014;3(2):52-6.
4. Ahuja MK, Thatcher JB. Moving beyond intentions and toward the theory of trying: effects of work environment and gender on post-adoption information technology use. *MIS quarterly*. 2005 Sep 1;29(3):427-59.