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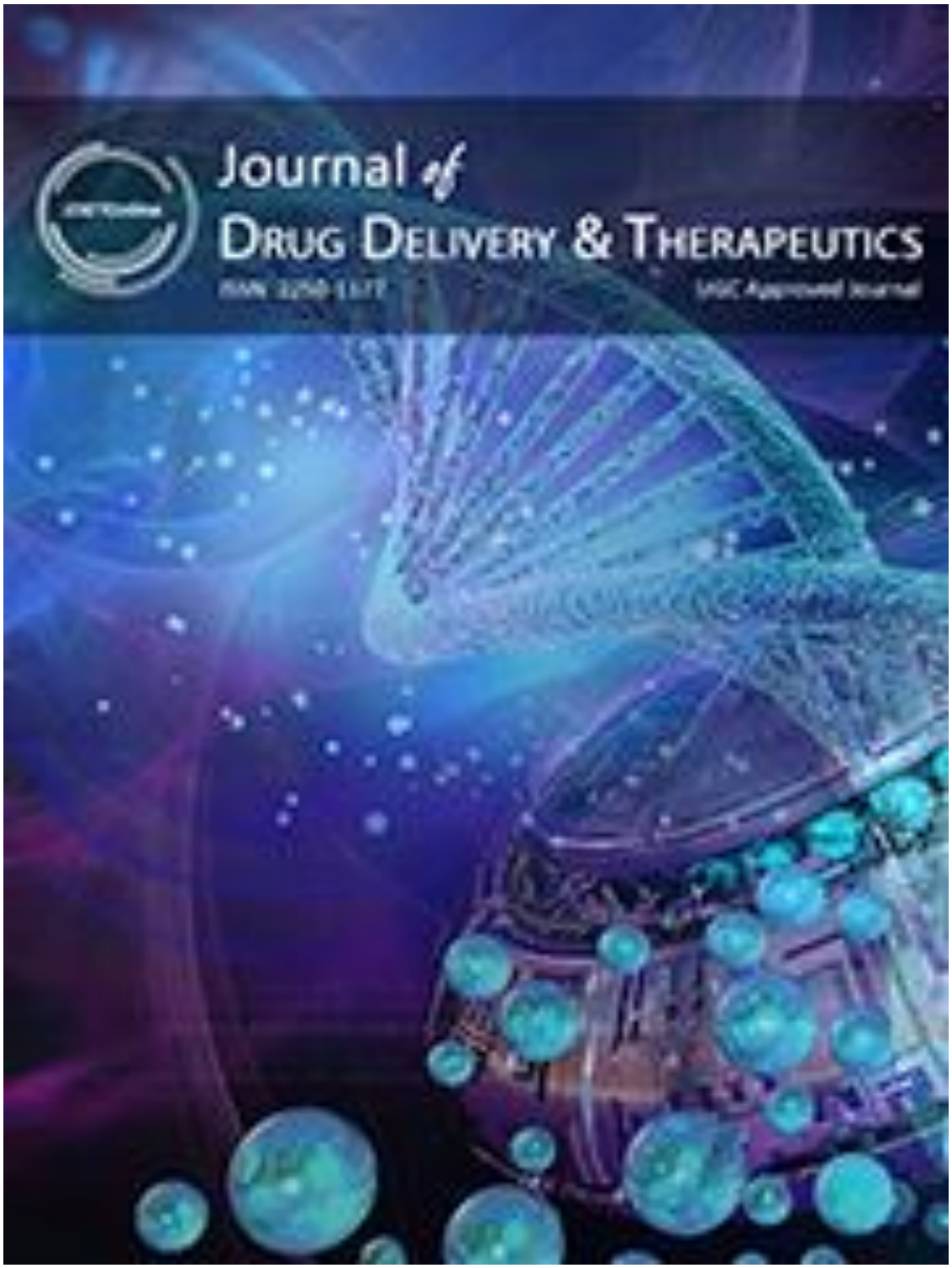

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LETTER TO EDITOR



CASE STUDIES

- View HTML

- WEST SYNDROME – INFANTILE SPASMS: A RARE PAEDIATRIC CASE REPORT

  Akila Murugan, P Umapathy, Sabitha Panchagiri

  Pages 6-8

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6009

- View HTML

RESEARCH

- EXPRESS METHOD FOR PARTICLE SIZE ANALYSIS IN SOLID, LIQUID, AND AMORPHOUS MATERIALS USING 3D CALIBRATION CURVE AND 2D-DLS DYNAMIC LIGHT SCATTERING

  Ekaterina Kolyabina, Tatyana Maksimova, Anton Syroeshkin

  Pages 9-12

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6029

- View HTML

- UNRAVELING THE MULTI-TARGET PHARMACOLOGICAL MECHANISM OF BRASSICA RAPA IN DIABETES TREATMENT: INTEGRATION OF NETWORK PHARMACOLOGY AND MOLECULAR DOCKING APPROACHES

  Gopal Suresh Kumar, Rangasamy Manivannan, Balasubramaniyan Nivetha, Dhanabalan Kamalakannan, Kannan Bhuvaneshwari, Ramamurthy Ammu, Arumugam Aravinthan, Kuppusamy Anitha, Vijayakumar Dinesh Kumar

  Pages 13-27

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5783

- View HTML

- CAREER DEVELOPMENT AND PSYCHOPATHOLOGICAL SYMPTOMS ON FEMALE WORKERS

Lie Tanu Merijanti, Pusparini Pusparini, Meiyanti Meiyanti, Alvina Alvina, Monica Dwi Hartanti, Muljadi Tjahjadi

Pages 28-32

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6010

- View HTML

- NF-κB EXPRESSION IN ENDOMETRIOSIS INDUCED RAT UTERINE TISSUE

Işılay Sezen ERMİŞ, Engin DEVECİ, Fırat Aşır

Pages 33-36

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6011

- View HTML

- EFFECT OF EXPOSURE TO SOOT ON ACTIVITIES OF ALANINE TRANSAMINASE, GAMMA GLUTAMYL TRANSFERASE AND LIPASE AMONG COOKS IN NNEWI

Augustine Chinedu Ihim, Yusuf Habeeb, Patrick Onochie Manafa, Emmanuel Ikechukwu Nwobodo, Ukamaka Chima Edward, Patrick Chinedu Obi

Pages 37-41

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5793

- View HTML

- SEROPREVALENCE OF HEPATITIS B, ANTI-HEPATITIS C, HUMAN IMMUNODEFICIENCY VIRUSES AND TREPONEMA PALLIDUM AMONG RANDOM BLOOD DONORS AT SOMALI SUDANESE SPECIALIZED HOSPITAL (SSSH), MOGADISHU, SOMALIA

Motaz Obeidallah Hamad Mohamed, Mohamed Hassan Osman Ebar

Pages 42-45

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6028

- View HTML

- DIURETIC EFFECTS AND SUBACUTE TOXICITY OF TREMA ORIENTALIS LINN LEAVE EXTRACT IN WISTAR RATS

  Kpoti Tokou Labite, Komlatsè Togbenou, kossivi Dosseh, Kokou Idoh, Tchazou Kpatcha, Amégnona Agbonon

  Pages 46-53

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6027

- View HTML

- FORMULATION DEVELOPMENT AND EVALUATION OF SUSTAINED RELEASE RANOLAZINE MICROBEADS USING NATURAL POLYMER

  Shubham Dattarao Dhone, Nikita Suresh Kumawat, Dhanshree Raju Kharat, Komal Satish Parashar, Vilas Raghunat Jagatap, Raju Onkar Sonawane

  Pages 54-64

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5795

- View HTML

- ANALYSIS OF FACTORS CAUSING ANXIETY IN CHILDREN WITH CANCER EXPERIENCING HOSPITALIZATION

  Fenti Hasnani

  Pages 65-70

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5797

- View HTML

- PREPARATION AND EVALUATION OF CIPROFLOXACIN SOLID DISPERSION TABLETS DEVELOPED FROM STEARIC ACID, POLYETHYLENE GLYCOL 4000 AND SOLUPLUS

  Chukwuma Obumneme Agubata, Eugenia Chinyere Ogbonna, Jacob Okwuchukwu Onyechi, Calister Elochukwu Ugwu, Josephat Obasi, Adaobi Ukamaka Akudu, Innocencia Chidebelu, Njideka Ifeoma Ani

Pages 71-78

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5799

- View HTML

- SEROPREVALENCE AND RISK FACTORS OF TOXOPLASMOSIS IN CATS AND WOMEN UNDERGOING PRENATAL CONSULTATION IN COYAH, GUINEA

  Yacouba KONATE, Pé GOUMOU, Lanan Wassy SOROMOU, Alpha Oumar Sily DIALLO, Lancei KABA, Mohamed KEYRA, Mamadou Fodé. CAMARA, Youssouf SIDIME

  Pages 79-84

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5803

- View HTML

- QUALITATIVE AND QUANTITATIVE DETERMINATION OF SECONDARY METABOLITES OF SPHAERANTHUS INDICUS AND SPATHODEA CAMPANULATA FLOWERS EXTRACTS

  Madhvi Singh Chauhan, Swati Yadav

  Pages 85-89

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5824

- View HTML

REVIEW

- A SYSTEMIC REVIEW ON ANTIOXIDANT POTENTIAL OF BERRIES USED IN IMUUXANTH BY RENATUS

  Rajdeep Dutta Gopal Dutta, Gautam Kar, Surya Prakash Shukla

  Pages 95-100

- Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5802

- View HTML

- BUTEA MONOSPERMA (LAM.) TAUB: REVIEW ON ITS CHEMISTRY, MORPHOLOGY, ETHNOMEDICAL USES, PHYTOCHEMISTRY AND PHARMACOLOGICAL ACTIVITIES

  Sourabh Jain, P. K. Dubey

  Pages 137-144

  - Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5782

  - View HTML

- NON-SELECTIVE BETA-ADRENERGIC BLOCKER PROPRANOLOL: A LIFE SAVING DRUG FOR HOSPITALIZED PATIENT WITH TRAUMATIC BRAIN INJURY IN INTENSIVE CARE UNIT

  P Ashwathi, K Srinivas

  Pages 145-148

  - Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6025

  - View HTML

- HERBAL DRUG STANDARDIZATION: A SYSTEMIC REVIEW

  Suman Lamichhane, Bhargab Jyoti Sahariah, Bhaswati Das, Deepika Khatiwara, Piyong Sola, Rudra Prasad Adhikari, Bitu Gogoi, Tahid Alam

  Pages 149-153

  - Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.6012

  - View HTML

- NOVEL APPLICATIONS OF HOT MELT EXTRUSION TECHNOLOGY

  Kumara Swamy Samanthula, Durgaprasad Kemisetti, Jithendar Reddy Mandhadi, Chandrashekar Thalluri, Biplab Kumar Dey

  Pages 154-158

  - Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5794

- View HTML

- ETHOSOMES: A VESICULAR CARRIER AS A NOVEL TOOL FOR TRANSDERMAL DRUG DELIVERY SYSTEM

  Jorapur Devaki, Satish Pavuluri, Naduvinamani Suma

  Pages 159-164

  - Abstract Download PDF View PDF DOI 10.22270/jddt.v13i4.5796

  - View HTML

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Research Article

# Career Development and Psychopathological Symptoms on Female Workers

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## Abstract

Women workers face a variety of challenges in the world of work. In addition to facing dual role conflicts for married female workers, they also face various stressors at their jobs. This will leave women vulnerable and have an impact on workers' emotional well-being. This study sought to ascertain the connection between female workers' propensity for psychopathological symptoms and occupational stressors. One hundred and thirty-four female office workers were recruited for this cross-sectional study. Subjects were questioned about age, education, marital status, and years of work for describing respondents' characteristics. The diagnostic stress survey and symptom checklist 90 were used for measuring work stressors and determining the tendency of psychopathological symptoms, respectively. Data were statistically analyzed using the chi-square test, the Fisher exact test, and logistic regression, where appropriate, with a meaningfulness level of $p < 0,05$. Results show that quantitative workload stressors, qualitative workloads, and career development are associated with psychopathological symptoms, but after continuing with The Logistic regression test found that career development stressors were mainly associated with the appearance of psychopathological symptoms ( p= 0.003; OR= 10,069.95 % CI 2,238 – 45,296). Female workers who experience barriers to career development have a 10-fold risk for the occurrence of psychopathological symptoms.

**Keywords:** Female Worker, work stressor, a psychopathological tendency

## INTRODUCTION

Female workers are potential human resources for strategic roles and positions in both family and society. Within this time, women start to give a contribution to the family economy, and many women even occupy important positions in various business fields. Based on data from the Central Bureau of Statistics in Indonesia in 2021, there are 36,20% of the total 140.15 million workers in Indonesia are women.[1] The improvement of human resources can be maximized by balancing the factors of workers, workloads, organizational system, and work environment. If these factors are not harmonized or even considered, they can cause various problems such as discomfort at work, burnout syndrome, physical problems, and also mental health problems, which will affect work performance and productivity.[2]

The tendency for psychopathological symptoms to arise in workers can be caused by stressors existing in their workplace, which are one of the potential hazards and need to be anticipated.[2] Work stressors can be classified into work content and work context. Stressors that are included in work content are the characteristics and type of work, workload, length of a working hour, control of personal work, and participation in teamwork. Meanwhile, work context contains career development, employee status including income and benefits, interpersonal relations at work, workplace organizational culture, as well as work-life balance.[2]

According to a survey by American Psychological Association, it was found that women experience higher and more frequent stress exposures than men. Women also have higher tendencies to feel various mental symptoms caused by this stress.[3] Based on Hayes's macro process model, there is a relationship between work stressors and mental health that is indirectly mediated by the social support that workers receive.[4] The higher social support workers have, the easier it is for them to protect themselves from work stress tension, and the following physical and mental problems.[5] Social support has a greater impact on reducing the level of job stress among female workers than male workers. Quantitative workload stressors have a significant relationship with higher work stress in men, whereas in female workers qualitative stressors have a higher significant relationship with work stress.[6]

Research on mental health researchers found that there is a strong relationship between mental health in them and psychosocial stressors in work organizations such as work influences, opportunities for career development, and also in work and life balance such as commitment to work, job uncertainty, work quality, job satisfaction, and both conflict inside and outside the work with others.[7] The career development process can be useful to find and set goals for the employee to improve worker welfare.[8] It was found that workers who experience stressors tend to remain silent and do not seek proper help from experts due to the stigma associated with work stress. If this is allowed to continue, it might get worse over time and affect larger populations.[9] High workload effect, especially on mental load, is found more common in female workers at the managerial level compared to non-manager workers, but female managers tend to have lower psychological stress than non-managers.[10] Research on university instructors in India also shows results that male workers tend to be more capable of managing their career in work and also the work stress than female workers.[11] Another research also found that there is no significant relationship between work activities and psychopathological problems caused by work.[12] Therefore, it is needed to find out whether there is any relationship between stressors in the workplace and the emergence of psychopathological disorders in female workers to find out the possible solutions for the problems.

## MATERIAL AND METHODS

Cross-sectional analytic observational research was used in this study. The study sample was selected by consecutive non-random sampling from the person who works in the West Jakarta area medium-scale company, who met the inclusion criteria: female, good mobility, still actively working, able to communicate, and willing to participate in research. The exclusion criteria were: history of mental illness. The Research Ethics Committee, Medical Faculty, Trisakti University No. 60/KER/FK approved this study protocol. The study included 134 female correspondences in total. All participants gave written informed consent.

The respondents filled out a questionnaire relating to demographic data including age, education, marriage status, and years of work. Work stress was measured using a stress diagnostic survey questionnaire consisting of 30 questions, for each question there was a choice of answers valued by a scale of one to seven. Respondents chose one answer that was considered most appropriate to them. The assessment will include six job stressors named role ambiguity, role conflict, quantitative overwork, qualitative overwork, career development, and personal responsibility that are tested with related questions. Therefore, the assessment scores will be carried out to find out the degree of stress the female workers had. The degree of stress is low if the total score is less than 10, moderate if the score is between 10-24, and high if the score is more than 24.[13]

The tendency for mental disorders was obtained using the Symptom Checklist 90.[14] This questionnaire consists of 90 questions, each question consisting of a choice of answers with a scale of 0 to 4. Respondents chose a value scale that was considered most representative according to the symptoms they have experienced in the past month. If the total score shown by this test is less than 60, it is considered normal, whereas if it is more than or equal to 61 it is considered a mental health disorder or psychopathology.

Categorical variables were summarized using frequencies and percentages. Chi-square and Fisher's tests were used to analyze the correlation between the categories of work stressors and tendencies of psychopathological problems. The tests were continued by doing logistic regression analysis to find the dominant work stress factor that might be the most threatening factor of mental health problems. Statistical significance was set at $p < 0,05$.

## RESULTS

There were 134 female workers in the company who met the inclusion and exclusion criteria. The following table shows the data related to the age distribution, education level, and marital status of the 134 female workers (Table 1.)

**Table 1: Characteristics of Female Worker Respondents in Company X (n=134)**

| Respondent Characteristics | n ( %) |
|---|---|
| **Age (years)** | |
| <30 | 14 ( 10,4 %) |
| 31– 50 | 115 ( 85,8 %) |
| >50 | 5 ( 3,8%) |
| **Education** | |
| SMA (Senior High School) | 26 ( 19,4 %) |
| Diploma 3/ Bachelor | 108 ( 80,6 %) |
| **Marital Status** | |
| Single | 48 ( 35,8 %) |
| Married | 86 ( 64, 2 %) |
| **Years of Work** | |
| 0 - 5 year(s) | 49 ( 36,6 %) |
| >5 years | 85 (63,4 %) |

In Table 1, it can be seen that most of the respondents were aged between 31-50 years, with the highest level of education being diploma 3 or bachelor's degree graduates. From marital status, it can be seen that 86 respondents were married. Most of the respondents (63,4%) have worked for this company for more than 5 years.

To analyze the impact of different work stressors, we can see the degree of each stressor in Table 2.

**Table 2: Types of Stressors in Work and Degree of Work Stress. (n= 134)**

| Work Stressors | Degree of Works Stress | |
|---|---|---|
| | Low<br>n (%) | Medium / High<br>n (%) |
| Role Ambiguity | 65 (48,5%) | 69 (51,5 %) |
| Role Conflict | 59 (44%) | 75 (56%) |
| Quantitative Overwork | 33 (24,6%) | 101 (75,4%) |
| Qualitative Overwork | 16 (11,9%) | 118 (88,1%) |
| Career Development | 48 (35,8%) | 86 (64,2%) |
| Personal Responsibility | 12 (8,95%) | 122 (91,05%) |

Table 3 shows the association between the types of job stressors (role ambiguity, role conflict, quantitative overwork, qualitative overwork, career development, and personal responsibility) with the presence of psychopathological symptoms.

**Table 3: Types of stressors in work and psychopathological tendencies.**

| Work Stressors | Mental and Emotional State | | |
|---|---|---|---|
| | Normal (n) | Psychopathological (n) | p |
| Role Ambiguity | | | |
| Low-stress degree | 52 | 13 | 0,165# |
| Medium to a high-stress degree | 48 | 21 | |
| Role Conflict | | | |
| Low-stress degree | 48 | 11 | 0,112# |
| Medium to a high-stress degree | 52 | 23 | |
| Quantitative Overwork | | | |
| Low-stress degree | 31 | 2 | 0,003* |
| Medium to a high-stress degree | 69 | 32 | |
| Qualitative Overwork | | | |
| Low-stress degree | 16 | 0 | 0,012* |
| Medium to a high-stress degree | 84 | 34 | |
| Career Development | | | |
| Low-stress degree | 46 | 2 | 0,000# |
| Medium to a high-stress degree | 54 | 32 | |
| Personal Responsibility | | | |
| Low-stress degree | 11 | 1 | 0,295* |
| Medium to a high-stress degree | 89 | 33 | |

#Chi square Test *Fisher Test p < 0,05

From the analysis conducted on the six types of stressors found in work, it was found that three types of job stressors have significant relationships with the tendency of psychopathological symptoms, which are quantitative overwork (p= 0,003, OR 7,188; 95 % CI 1,620 – 31,898), qualitative overwork (p=0,012, OR 1,405; 95% CI 1,252 – 1,576) and career development (p = 0,000, OR 13,630; 95 % CI 3,097 – 59,976). From these three types of job stressors that have significant relationships with the tendencies of psychopathological symptoms, logistic regression analysis was carried out to determine the stressors that play the most role in causing psychopathological symptoms. The results can be seen in Table 4.

Table 4: Results of Logistic Regression Analysis using Model of Job Stressors

| | B | p | OR | 95% CI |
|---|---|---|---|---|
| Quantitative Overwork | 0,958 | 0,242 | 2,607 | 0,523 – 12,991 |
| Qualitative Overwork | 19,019 | 0,998 | 1,819 | 0,000 |
| Career Development | 2,309 | 0,003 | 10,069 | 2,238 – 45,296 |

In Table 4. above, it is known that the stressor of career development mainly causes psychopathological symptoms with p 0,003; OR adjusted 10,069; 95% confidence interval 2,238 – 45,296. Female workers who have stressors related to career development are ten times more likely to experience psychopathological symptoms when compared to female workers who do not have stressors related to career development.

## DISCUSSION

In this study, it was found that out of the six job stressors, career development plays a major role in psychopathological problems in workers from this workplace. Respondents involved in this study are female workers in medium-scale companies located in the West Jakarta area, working from 8 AM to 5 PM every day, getting off on Sundays and national holidays with a range of salaries following the regional minimum wage in Jakarta. A total of 85 people have worked for more than five years, but with a constant job role from the beginning until now. Career development is a process to increase individual achievements in the desired career. Every employee must be allowed to develop their abilities and provide the best results for the company where they work. Career development is influenced by the training system, motivation, and performance review at work.[15] Poor job promotion opportunities, excessive workload, and feelings of insecurity at work are strongly associated with work stress in small and medium-sized companies.[16]

According to Fiori, et al., the ability of workers to manage development and career challenges will affect the increase in job satisfaction to reduce work stress, which is mediated by the individual's affective state. Workers with higher career adaptability will experience higher job satisfaction and lower job stress level when compared to those with lower adaptability. Career adaptability is a source of self-regulation in which individuals evaluate their potential to cope with the demands of the work environment while at the same time forming their affective state in evaluating the work done.[17] Research conducted by Pratiwi and Lo states that the opportunity to develop a career in the workplace has a positive relationship with job satisfaction and reduces the intention to quit or change jobs.[18] Idris and Lusiyani's study, on the other hand, found no connection between workplace stress and the emergence of psychopathological symptoms in Indonesian Air Force military pilots. Possibly even though they were working in an environment with high work stressors, most of the workers found ways to adapt on focusing ways to solve problems, then to be able to suppress emotion when dealing with problems.[19]

The results of this study indicated that 34 workers (25,4%) experienced a tendency toward psychopathological symptoms. Of the 134 workers, 86 are married female workers who face conflicting roles as career women and housewives. In the realm of Indonesian culture, women have highly demanded their role as good and righteous housewives, so career women might feel guilty when they choose to work. Feelings of guilt that were coupled with demands from both household and work tasks might let working married women to experience more stress.[20]

The integrated biological circuit of the central nervous system, neuroendocrine systems, and immunological systems, which control and regulate genes and gene expression by many receptors, regulates homeostatic stress adaptation mechanisms.[21] After activation of the Hypothalamic Pituitary Adrenal axis and the sympathetic system, corticotropin-releasing hormone (CRH) and adrenaline are the primary factors that modulate the stress response. Specifically, CRH-R1 and CRH-R2 are the two receptors that control the CRH response. While CRH-R2 receptors control emotional, affective, and cognitive behavior, CRH-R1 receptors are involved in sensory information processing and motor control.[22,23] Workload stressors are associated with greater physical and psychological tension. If they are not properly managed, they will not be able to strike a balance between their personal and professional obligations, leading them to feel guilty and emotionally exhausted.[24] Research by Hill et al., conducted on groups of researchers found that 27 workers (13,4%) with severe distress, even to the point where there were suicidal ideations. [7] Studies investigating the mediating role of self-criticism and self-confidence as a link between stress, depression, and anxiety found that feelings of self-uselessness contribute to the development of depression.[25,26,27] The impact of injustice and low self-control on stressors at work is stronger in causing distress to workers with low cognitive levels than those with high cognitive levels.[28]

In addition, interpersonal relationships are very important in the workplace. Support from fellow workers, managers or subordinates, family, and also non-workplace friends is believed to prevent and reduce stress from occurring. Thus, the management team should show empathy and care for the workers so a harmonious and healthy working environment is always created. Employees usually have various expectations in their career life, which are aimed to fulfill their self-actualization needs. If the company cannot support the hope of the employees, for example, the promotion system is not clear, there are no opportunities to increase income, employees will feel hopeless, and feelings of uncertainty will grow which can lead to stressful behavior. Some steps that can be taken to reduce work stress for workers are increasing income, providing opportunities and training for career advancement, creating a support system from senior staff, and balancing work and personal problems.[29]

This research study hasn't used the comparison and evaluation of other possible risk factors, such as personality type, individual coping mechanisms to stress, and important life events. The SCL 90 instrument also works only as a screening tool and not a diagnostic tool, and on the positive results obtained, no further examination is carried out in the form of a physical or mental examination with a psychiatrist. In addition, we can implement this study as a reference to study the female worker problems within other risk factors included.

## CONCLUSION

As a conclusion of this study, we found that the prevalence of mental and emotional problem symptoms exists in female workers with high career development stressors (25,4% of all stressors) and these were significantly related to the occurrence of the psychopathological symptoms.

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## Conflict of interest

Lie Tanu Merijanti, Pusparini, Meiyanti, Alvina, Monica Dwi Hartati and Muljadi Tjahjadi declare no conflicts of interest in this study.

## Author Contribution

Lie Tanu Merijanti prepared research designs, collected data analyzed data, and wrote the manuscript. Pusparini, Meiyanti, Alvina, Monica, and Muljadi Tjahjadi were involved in collecting and analyzing data.

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Research Article

# Career Development and Psychopathological Symptoms on Female Workers

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## Abstract

Women workers face a variety of challenges in the world of work. In addition to facing dual role conflicts for married female workers, they also face various stressors at their jobs. This will leave women vulnerable and have an impact on workers' emotional well-being. This study sought to ascertain the connection between female workers' propensity for psychopathological symptoms and occupational stressors. One hundred and thirty-four female office workers were recruited for this cross-sectional study. Subjects were questioned about age, education, marital status, and years of work for describing respondents' characteristics. The diagnostic stress survey and symptom checklist 90 were used for measuring work stressors and determining the tendency of psychopathological symptoms, respectively. Data were statistically analyzed using the chi-square test, the Fisher exact test, and logistic regression, where appropriate, with a meaningfulness level of $p < 0,05$. Results show that quantitative workload stressors, qualitative workloads, and career development are associated with psychopathological symptoms, but after continuing with The Logistic regression test found that career development stressors were mainly associated with the appearance of psychopathological symptoms ( p= 0.003; OR= 10,069.95 % CI 2,238 – 45,296). Female workers who experience barriers to career development have a 10-fold risk for the occurrence of psychopathological symptoms.

**Keywords:** Female Worker, work stressor, a psychopathological tendency

## INTRODUCTION

Female workers are potential human resources for strategic roles and positions in both family and society. Within this time, women start to give a contribution to the family economy, and many women even occupy important positions in various business fields. Based on data from the Central Bureau of Statistics in Indonesia in 2021, there are 36,20% of the total 140.15 million workers in Indonesia are women.[1] The improvement of human resources can be maximized by balancing the factors of workers, workloads, organizational system, and work environment. If these factors are not harmonized or even considered, they can cause various problems such as discomfort at work, burnout syndrome, physical problems, and also mental health problems, which will affect work performance and productivity.[2]

The tendency for psychopathological symptoms to arise in workers can be caused by stressors existing in their workplace, which are one of the potential hazards and need to be anticipated.[2] Work stressors can be classified into work content and work context. Stressors that are included in work content are the characteristics and type of work, workload, length of a working hour, control of personal work, and participation in teamwork. Meanwhile, work context contains career development, employee status including income and benefits, interpersonal relations at work, workplace organizational culture, as well as work-life balance.[2]

According to a survey by American Psychological Association, it was found that women experience higher and more frequent stress exposures than men. Women also have higher tendencies to feel various mental symptoms caused by this stress.[3] Based on Hayes's macro process model, there is a relationship between work stressors and mental health that is indirectly mediated by the social support that workers receive.[4] The higher social support workers have, the easier it is for them to protect themselves from work stress tension, and the following physical and mental problems.[5] Social support has a greater impact on reducing the level of job stress among female workers than male workers. Quantitative workload stressors have a significant relationship with higher work stress in men, whereas in female workers qualitative stressors have a higher significant relationship with work stress.[6]

Research on mental health researchers found that there is a strong relationship between mental health in them and psychosocial stressors in work organizations such as work influences, opportunities for career development, and also in work and life balance such as commitment to work, job uncertainty, work quality, job satisfaction, and both conflict inside and outside the work with others.[7] The career development process can be useful to find and set goals for the employee to improve worker welfare.[8] It was found that workers who experience stressors tend to remain silent and do not seek proper help from experts due to the stigma associated with work stress. If this is allowed to continue, it might get worse over time and affect larger populations.[9] High workload effect, especially on mental load, is found more common in female workers at the managerial level compared to non-manager workers, but female managers tend to have lower psychological stress than non-managers.[10] Research on university instructors in India also shows results that male workers tend to be more capable of managing their career in work and also the work stress than female workers.[11] Another research also found that there is no significant relationship between work activities and psychopathological problems caused by work.[12] Therefore, it is needed to find out whether there is any relationship between stressors in the workplace and the emergence of psychopathological disorders in female workers to find out the possible solutions for the problems.

## MATERIAL AND METHODS

Cross-sectional analytic observational research was used in this study. The study sample was selected by consecutive non-random sampling from the person who works in the West Jakarta area medium-scale company, who met the inclusion criteria: female, good mobility, still actively working, able to communicate, and willing to participate in research. The exclusion criteria were: history of mental illness. The Research Ethics Committee, Medical Faculty, Trisakti University No. 60/KER/FK approved this study protocol. The study included 134 female correspondences in total. All participants gave written informed consent.

The respondents filled out a questionnaire relating to demographic data including age, education, marriage status, and years of work. Work stress was measured using a stress diagnostic survey questionnaire consisting of 30 questions, for each question there was a choice of answers valued by a scale of one to seven. Respondents chose one answer that was considered most appropriate to them. The assessment will include six job stressors named role ambiguity, role conflict, quantitative overwork, qualitative overwork, career development, and personal responsibility that are tested with related questions. Therefore, the assessment scores will be carried out to find out the degree of stress the female workers had. The degree of stress is low if the total score is less than 10, moderate if the score is between 10-24, and high if the score is more than 24.[13]

The tendency for mental disorders was obtained using the Symptom Checklist 90.[14] This questionnaire consists of 90 questions, each question consisting of a choice of answers with a scale of 0 to 4. Respondents chose a value scale that was considered most representative according to the symptoms they have experienced in the past month. If the total score shown by this test is less than 60, it is considered normal, whereas if it is more than or equal to 61 it is considered a mental health disorder or psychopathology.

Categorical variables were summarized using frequencies and percentages. Chi-square and Fisher's tests were used to analyze the correlation between the categories of work stressors and tendencies of psychopathological problems. The tests were continued by doing logistic regression analysis to find the dominant work stress factor that might be the most threatening factor of mental health problems. Statistical significance was set at $p < 0,05$.

## RESULTS

There were 134 female workers in the company who met the inclusion and exclusion criteria. The following table shows the data related to the age distribution, education level, and marital status of the 134 female workers (Table 1.)

**Table 1: Characteristics of Female Worker Respondents in Company X (n=134)**

| Respondent Characteristics | n ( %) |
|---|---|
| **Age (years)** | |
| <30 | 14 ( 10,4 %) |
| 31– 50 | 115 ( 85,8 %) |
| >50 | 5 ( 3,8%) |
| **Education** | |
| SMA (Senior High School) | 26 ( 19,4 %) |
| Diploma 3/ Bachelor | 108 ( 80,6 %) |
| **Marital Status** | |
| Single | 48 ( 35,8 %) |
| Married | 86 ( 64, 2 %) |
| **Years of Work** | |
| 0 - 5 year(s) | 49 ( 36,6 %) |
| >5 years | 85 (63,4 %) |

In Table 1, it can be seen that most of the respondents were aged between 31-50 years, with the highest level of education being diploma 3 or bachelor's degree graduates. From marital status, it can be seen that 86 respondents were married. Most of the respondents (63,4%) have worked for this company for more than 5 years.

To analyze the impact of different work stressors, we can see the degree of each stressor in Table 2.

**Table 2: Types of Stressors in Work and Degree of Work Stress. (n= 134)**

| Work Stressors | Degree of Works Stress | |
|---|---|---|
| | Low n (%) | Medium / High n (%) |
| Role Ambiguity | 65 (48,5%) | 69 (51,5 %) |
| Role Conflict | 59 (44%) | 75 (56%) |
| Quantitative Overwork | 33 (24,6%) | 101 (75,4%) |
| Qualitative Overwork | 16 (11,9%) | 118 (88,1%) |
| Career Development | 48 (35,8%) | 86 (64,2%) |
| Personal Responsibility | 12 (8,95%) | 122 (91,05%) |

Table 3 shows the association between the types of job stressors (role ambiguity, role conflict, quantitative overwork, qualitative overwork, career development, and personal responsibility) with the presence of psychopathological symptoms.

**Table 3: Types of stressors in work and psychopathological tendencies.**

| Work Stressors | Mental and Emotional State | | |
|---|---|---|---|
| | Normal (n) | Psychopathological (n) | p |
| Role Ambiguity | | | |
| Low-stress degree | 52 | 13 | 0,165# |
| Medium to a high-stress degree | 48 | 21 | |
| Role Conflict | | | |
| Low-stress degree | 48 | 11 | 0,112# |
| Medium to a high-stress degree | 52 | 23 | |
| Quantitative Overwork | | | |
| Low-stress degree | 31 | 2 | 0,003* |
| Medium to a high-stress degree | 69 | 32 | |
| Qualitative Overwork | | | |
| Low-stress degree | 16 | 0 | 0,012* |
| Medium to a high-stress degree | 84 | 34 | |
| Career Development | | | |
| Low-stress degree | 46 | 2 | 0,000# |
| Medium to a high-stress degree | 54 | 32 | |
| Personal Responsibility | | | |
| Low-stress degree | 11 | 1 | 0,295* |
| Medium to a high-stress degree | 89 | 33 | |

#Chi square Test *Fisher Test p < 0,05

From the analysis conducted on the six types of stressors found in work, it was found that three types of job stressors have significant relationships with the tendency of psychopathological symptoms, which are quantitative overwork (p= 0,003, OR 7,188; 95 % CI 1,620 – 31,898), qualitative overwork (p=0,012, OR 1,405; 95% CI 1,252 – 1,576) and career development (p = 0,000, OR 13,630; 95 % CI 3,097 – 59,976). From these three types of job stressors that have significant relationships with the tendencies of psychopathological symptoms, logistic regression analysis was carried out to determine the stressors that play the most role in causing psychopathological symptoms. The results can be seen in Table 4.

Table 4: Results of Logistic Regression Analysis using Model of Job Stressors

| | B | p | OR | 95% CI |
|---|---|---|---|---|
| Quantitative Overwork | 0,958 | 0,242 | 2,607 | 0,523 – 12,991 |
| Qualitative Overwork | 19,019 | 0,998 | 1,819 | 0,000 |
| Career Development | 2,309 | 0,003 | 10,069 | 2,238 – 45,296 |

In Table 4. above, it is known that the stressor of career development mainly causes psychopathological symptoms with p 0,003; OR adjusted 10,069; 95% confidence interval 2,238 – 45,296. Female workers who have stressors related to career development are ten times more likely to experience psychopathological symptoms when compared to female workers who do not have stressors related to career development.

## DISCUSSION

In this study, it was found that out of the six job stressors, career development plays a major role in psychopathological problems in workers from this workplace. Respondents involved in this study are female workers in medium-scale companies located in the West Jakarta area, working from 8 AM to 5 PM every day, getting off on Sundays and national holidays with a range of salaries following the regional minimum wage in Jakarta. A total of 85 people have worked for more than five years, but with a constant job role from the beginning until now. Career development is a process to increase individual achievements in the desired career. Every employee must be allowed to develop their abilities and provide the best results for the company where they work. Career development is influenced by the training system, motivation, and performance review at work.[15] Poor job promotion opportunities, excessive workload, and feelings of insecurity at work are strongly associated with work stress in small and medium-sized companies.[16]

According to Fiori, et al., the ability of workers to manage development and career challenges will affect the increase in job satisfaction to reduce work stress, which is mediated by the individual's affective state. Workers with higher career adaptability will experience higher job satisfaction and lower job stress level when compared to those with lower adaptability. Career adaptability is a source of self-regulation in which individuals evaluate their potential to cope with the demands of the work environment while at the same time forming their affective state in evaluating the work done.[17] Research conducted by Pratiwi and Lo states that the opportunity to develop a career in the workplace has a positive relationship with job satisfaction and reduces the intention to quit or change jobs.[18] Idris and Lusiyani's study, on the other hand, found no connection between workplace stress and the emergence of psychopathological symptoms in Indonesian Air Force military pilots. Possibly even though they were working in an environment with high work stressors, most of the workers found ways to adapt on focusing ways to solve problems, then to be able to suppress emotion when dealing with problems.[19]

The results of this study indicated that 34 workers (25,4%) experienced a tendency toward psychopathological symptoms. Of the 134 workers, 86 are married female workers who face conflicting roles as career women and housewives. In the realm of Indonesian culture, women have highly demanded their role as good and righteous housewives, so career women might feel guilty when they choose to work. Feelings of guilt that were coupled with demands from both household and work tasks might let working married women to experience more stress.[20]

The integrated biological circuit of the central nervous system, neuroendocrine systems, and immunological systems, which control and regulate genes and gene expression by many receptors, regulates homeostatic stress adaptation mechanisms.[21] After activation of the Hypothalamic Pituitary Adrenal axis and the sympathetic system, corticotropin-releasing hormone (CRH) and adrenaline are the primary factors that modulate the stress response. Specifically, CRH-R1 and CRH-R2 are the two receptors that control the CRH response. While CRH-R2 receptors control emotional, affective, and cognitive behavior, CRH-R1 receptors are involved in sensory information processing and motor control.[22,23] Workload stressors are associated with greater physical and psychological tension. If they are not properly managed, they will not be able to strike a balance between their personal and professional obligations, leading them to feel guilty and emotionally exhausted.[24] Research by Hill et al., conducted on groups of researchers found that 27 workers (13,4%) with severe distress, even to the point where there were suicidal ideations. [7] Studies investigating the mediating role of self-criticism and self-confidence as a link between stress, depression, and anxiety found that feelings of self-uselessness contribute to the development of depression.[25,26,27] The impact of injustice and low self-control on stressors at work is stronger in causing distress to workers with low cognitive levels than those with high cognitive levels.[28]

In addition, interpersonal relationships are very important in the workplace. Support from fellow workers, managers or subordinates, family, and also non-workplace friends is believed to prevent and reduce stress from occurring. Thus, the management team should show empathy and care for the workers so a harmonious and healthy working environment is always created. Employees usually have various expectations in their career life, which are aimed to fulfill their self-actualization needs. If the company cannot support the hope of the employees, for example, the promotion system is not clear, there are no opportunities to increase income, employees will feel hopeless, and feelings of uncertainty will grow which can lead to stressful behavior. Some steps that can be taken to reduce work stress for workers are increasing income, providing opportunities and training for career advancement, creating a support system from senior staff, and balancing work and personal problems.[29]

This research study hasn't used the comparison and evaluation of other possible risk factors, such as personality type, individual coping mechanisms to stress, and important life events. The SCL 90 instrument also works only as a screening tool and not a diagnostic tool, and on the positive results obtained, no further examination is carried out in the form of a physical or mental examination with a psychiatrist. In addition, we can implement this study as a reference to study the female worker problems within other risk factors included.

## CONCLUSION

As a conclusion of this study, we found that the prevalence of mental and emotional problem symptoms exists in female workers with high career development stressors (25,4% of all stressors) and these were significantly related to the occurrence of the psychopathological symptoms.

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## Conflict of interest

Lie Tanu Merijanti, Pusparini, Meiyanti, Alvina, Monica Dwi Hartati and Muljadi Tjahjadi declare no conflicts of interest in this study.

## Author Contribution

Lie Tanu Merijanti prepared research designs, collected data analyzed data, and wrote the manuscript. Pusparini, Meiyanti, Alvina, Monica, and Muljadi Tjahjadi were involved in collecting and analyzing data.

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PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5