

## **Depression and Interest Level of Office Workers in their 30s to 40s**

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### ***Abstract***

*This study investigated the relationship between depressive symptoms and interests of workers in their 30s to 40s. This study recruited 49 workers who fit the selection criteria. Descriptive, frequency, and regression analyses were performed. To describe participant characteristics and the classification of depression and interest, descriptive and frequency analyses were used. The effect of interest patterns on depressive symptoms was analyzed using a multiple regression analysis, specifying the significance level at 0.05. The results of this study showed that half of the respondents, who were in their 30s and 40s, experienced depression. In addition, this study indicated that interest of workers in their 30s to 40s in daily, cognitive, physical, and social activities in the present was lower than that in the past. This interest level affected depression in past and present interest ( $p < 0.05$ ). This study investigated the relationship between interest and depression of workers in their 30s to 40s and suggest that interest in various areas may help prevent depression.*

**Keywords:** *Depression, Depressive symptom, Interest, Relationship, Workers*

### **1. Introduction**

According to the World Health Organization (WHO), 5%–10% of the population receive professional care due to depression, and 8%–20% are at a high risk of developing depression. However, only 30% of the latter manage their depression effectively [1]. The age group of 30 to 40 years is the most active and productive in society given its high labor force participation and contribution to economic activities. The manifestation of depression is also observable in this group. However, managing the psychosocial factors, such as depression, is important as social and psychological factors, such as depression, are not controlled at this time, which can lead to costly social losses and loss of demographic resources [2–4]. Therefore, workers' mental health impacts not only the individual but also society. However, issues on mental health and depression are not discussed openly and concerned parties are also often unaware, making the evaluation and diagnosis practically difficult [3, 4]. Depression is either temporary or persistent, depending on the events occurring in the course of one's life. For cases of temporary depression, failure to receive the appropriate temporary care or control may lead to persistent or chronic depression.

Therefore, being aware of the degrees of mental health and depression early in life is important, because it

can be difficult to live with it and may involve other serious mental illnesses. Especially, it is necessary to take active measures and care for the depression of workers [3–5]. Depression has a high recurrence rate, and attention is focused on the fact that the number of recurrences increases as the number of recurrences increases [6, 7]. The major reason for experiencing depressive symptoms in the workplace is the psychosocial environment of the workplace. Low control over one's job, high motivation, and inconsistency between compensation and effort increase depressive symptoms. Previous studies have highlighted the importance of the prevention of depression; however, the prevention of relapse is equally important to prevent the recurrence. The occurrence and recurrence of these depressive episodes result in severe inhibition of job performance [8, 9]. Meanwhile, interest refers to choosing what you like or dislike or being indifferent. Previous research has suggested that interests are not only aspects of personality but also pleasant feelings. Interest has been defined as an automatic response to any behavior, observation, or thought without difficulty [10]. According to Kielhofner (1985), interest is a tendency to entertain a career. Raising or maintaining an interest improves the chances of enhancing an individual's mental and physical health. Interest also helps a person to participate actively in satisfying career activities [11]. Patterns of interest vary within life stage, and people must participate actively and continuously. To date, there is no study that investigates the relationship between depressive symptomatology and degree of work interest among workers, even though how the latter affects the former remains unclear. It is strongly suggested that depressive symptoms impact adult mental health significantly. We believe that it is possible to control the depressive symptoms if we participate in daily life with appropriate interest to the workers who experience the most critical depressive symptoms. Therefore, this study aims to investigate the effect of workers' level of interest on their level of depression.

## **2. Research methods**

### **2.1 Research design**

This cross-sectional study investigated the relationship between depression and level of work interest of office workers in their 30s and 40s.

### **2.2 Participants**

This study was conducted among workers in their 30s and 40s. The selection criteria included workers who were in the workplace, who were aged 30 to 40 years, without neurological damage or diagnosis, and who agreed to participate in this study. This study recruited 49 workers who fit the selection criteria. All participants provided demographic information and general characteristics and information of interest and depression. This study was approved by the Human Research Council of Cheongju University (1041107-201812-HR-029-01) and all participants provided written consent.

### **2.3 Measurement**

This study assessed depressive symptoms using the Beck Depression Inventory (BDI), which meets the criteria for depression in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). The BDI consists of 21 statements. Each set is ranked in terms of severity and scored from 0 to 3. The BDI is a self-assessed measure that evaluates major symptoms of depression, including mood, pessimism, failure, self-dissatisfaction, guilt, punishment, self-repulsion, and self, insomnia, suicidal impulse, crying, hypersensitivity, social withdrawal, body image change, work difficulty, fatigue, loss of appetite, weight loss, somatic preoccupation, and loss of sexuality [12]. The BDI contains 10 positive statements and 10 negative statements. The patient at times feels confused. The total score ranges from 0 to 63. A higher score indicates greater severity of depression. The BDI consists of cognitive-emotional and somatization subscales. The BDI's

internal consistency was 0.73 to 0.92 and mean, 0.86 [13]. The BDI showed high internal consistency; the alpha coefficients were 0.86 and 0.81 for each of the psychiatric and non-psychiatric populations [14].

An Interest Checklist is used to collect information related to an individual's interest [15]. It aims to classify the intensity of interest for each of the 80 items. Interest is classified into occasional and frequent interest. The researcher ensured that participants could distinguish the choices. Interest patterns are categorized into four groups: daily activity, cognitive activity, physical activity, and social activity [15]. An Interest Checklist also examines past, present, and future durations and strengths in each area of interest. The two responses to strength (occasional and frequent) are considered important in determining the state of choice of an individual. In this study, occasional interest was coded as 1 point and frequent interest as 2 points.

### 2.4 Data analysis

Data analyses were performed using the IBM SPSS Statistics version. 24.0 (IBM Co., Armonk, NY, USA). To describe participant characteristics and the classification of depression and interest, descriptive and frequency analyses were used. The effect of interest patterns on depressive symptoms was analyzed using a multiple regression analysis, specifying the significance level at 0.05.

## 3. Research results

The all of participants was 49, average age of the subjects was  $40.39 \pm 4.72$  years old, 33 (67.3%) were male, and 16 (32.7%) were female. Among the participants, 3 (6.1%) were sleeping less than 5 hours, 28 (57.1%) were sleeping average 6 hours, and 18 (36.7%) were sleeping more than 7 hours. Thirty-four (69.4%) of the participants were exercising once or twice a week, 11 (22.4%) were exercising three or four times per week, and 4 (8.1%) were exercising five or six times per week. The mean score of BDI, which measured depression level among the participants, was  $8.76 \pm 8.54$  points. Of these, 31 (63.3%) had normal range without depression, 8 (16.3%) had mild depression, 3 (6.1%) had moderate depression, and 7 (14.3%) had serious depression (Table 1). Table 2 analyzed past, present and future interests in each area of interest. In the participants of this study, the interest in activities of daily living was  $1.33 \pm 0.26$  points in the past,  $1.23 \pm 0.20$  points in the present and  $1.33 \pm 0.30$  points in the future. The interest in cognitive activity was  $1.21 \pm 0.15$  points in the past,  $1.15 \pm 0.12$  points in the present and  $1.24 \pm 0.20$  points in the future. The interest in physical activity was  $1.16 \pm 0.14$  points in the past,  $1.10 \pm 0.09$  points in the present and  $1.25 \pm 0.23$  points in the future. The interest in social activity was  $1.30 \pm 0.20$  points in the past,  $1.18 \pm 0.17$  points in the present and  $1.34 \pm 0.24$  points in the future.

**Table 1. Classifications of depressive symptoms (N=49)**

Classification	Frequency (%)
No depression	31 (63.3)
Mild depression	8 (16.3)
Moderate depression	3 (6.1)
Slightly severe depression	7 (14.3)

**Table 2. Classification of interest degree (N=49)**

Interest Area	Mean $\pm$ Standard Deviation		
	Past interest	Current interest	Future interest
Activity daily living	1.33 $\pm$ 0.26	1.23 $\pm$ 0.20	1.33 $\pm$ 0.30
Cognitive activity	1.21 $\pm$ 0.15	1.15 $\pm$ 0.12	1.24 $\pm$ 0.20
Physical activity	1.16 $\pm$ 0.14	1.10 $\pm$ 0.09	1.25 $\pm$ 0.23
Social activity	1.30 $\pm$ 0.20	1.18 $\pm$ 0.17	1.34 $\pm$ 0.24

BDI: Beck Depression Inventory

Multiple regression analysis was performed on the area of interest patterns to investigate their effect on depression (Table 3). The analysis of interest patterns in daily activity showed that the degree of interest in the past and present affects the degree of depression ( $\beta=.505$ ,  $p<.05$ ;  $\beta=-.496$ ,  $p<.05$ ). The interest in cognitive activity showed that the degree of interest in the past and present affects the degree of depression ( $\beta=.519$ ,  $p<.05$ ;  $\beta=-.473$ ,  $p<.05$ ). The interest in physical activity showed that the degree of interest in the past and present affects the degree of depression ( $\beta=.536$ ,  $p<.05$ ;  $\beta=-.404$ ,  $p<.05$ ). The interest in social activity showed that the degree of interest in the past, present, and future affects the degree of depression ( $\beta=.527$ ,  $p<.05$ ;  $\beta=-.396$ ,  $p<.05$ ;  $\beta=-.377$ ,  $p<.05$ ).

**Table 3. Effect of area of interest on depression**

Independent variable		R <sup>2</sup>	B	SE	$\beta$	p
ADL	Past interest	.450	16.272	3.643	.505	.000
	Current interest		-20.281	5.872	-.496	.001
	Future interest		-2.534	3.918	-.091	.521
Cognitive activity	Past interest	.369	29.428	7.110	.519	.000
	Current interest		-32.318	9.974	-.473	.002
	Future interest		-3.761	5.777	-.091	.518
Physical activity	Past interest	.310	32.493	8.090	.534	.000
	Current interest		-35.862	11.871	-.404	.004
	Future interest		-5.076	4.560	-.140	.272
Social activity	Past interest	.378	22.008	5.576	.527	.000
	Current interest		-19.667	6.618	-.396	.005
	Future interest		-13.048	4.699	-.377	.008

Dependent variable: Beck Depression Inventory,  
ADL: Activity daily of living, SE: Standard Error

#### 4. Discussion

We investigated the relationship between depressive symptoms and workers' level of interests in their work. Previous studies have suggested that depressive symptoms impact adult mental health significantly. As such, if you participate in everyday life with the proper attention to workers who experience the most critical depressive symptoms, you will be able to control their depressive symptoms. We investigated the effect of level of work interest on the level of depression of workers in their 30s to 40s. The results of this study showed

that half of the respondents, who were in their 30s and 40s, experienced depression. Workers in their 30s and 40s not only play a critical role in their workplace but also perform important tasks in life for personal fulfillment, such as marriage. In addition, workers are also significant in the economy [3–5]. Therefore, almost half of the workers in their 30s and 40s experience depressive symptoms. In this study, interest level was analyzed according to four areas: daily activity, cognitive activity, physical activity, and social activity. Interest patterns change as life goes along, and individuals must engage actively and consistently in various areas of their interests [16]. In all areas of interest, the interest level was high in the past and became lower in the present. This finding suggests that interest in cognitive, physical, and social activities was reduced because workers in their 30s and 40s had to do work most of the time. We showed that a high BDI score, which indicates the degree of depression, is associated with greater participation in the past interest and reduced participation in the present interest. The depressive symptom was influenced by the decrease in the pattern of interest level compared with the past. Especially, the level of interest in daily, cognitive, and physical activities was lower in the present than the past. The level of interest in the future was relevant only in social activities, implying that depressive symptoms are experienced when the current level of interest is lower than the past experience.

The number of participants in this study was small and no comparison was made according to gender. Another limitation of this study is that its research results are not generalizable because the participants were not randomly selected. Future studies should address these limitations.

## 5. Conclusion

We investigated the relationship between depressive symptoms and interests of workers in their 30s to 40s. We recruited 49 workers who fit the selection criteria. Descriptive, frequency, and regression analyses were performed. The results of this study showed that half of the respondents, who were in their 30s and 40s, experienced depression. In all areas of interest, the interest level was high in the past and became lower in the present. We showed that a high depressive symptom, is associated with greater participation in the past interest and reduced participation in the present interest. The depressive symptom was influenced by the decrease in the pattern of interest level compared with the past. Especially, the level of interest in daily, cognitive, and physical activities was lower in the present than the past. Finally, we investigated the relationship between interest and depression among workers in their 30s and 40s. We suggest that interest in various areas may help prevent depression. Therefore, participating in activities that interest a worker may improve his/her mental health.

## References

- [1] World Health Organization, "Conquering depression: You can get out of the blues," WHO Regional Office for South-East Asia, World Health Organization, 2001.
- [2] T. Izutsu, A. Tsutsumi, N. Asukai, H. Kurita, N. Kawamura, "Relationship between a traumatic life event and an alteration in stress response," *Stress and Health*, Vol. 20, No. 2, pp. 65-73. Apr. 2004.  
DOI: <https://doi.org/10.1002/smi.997>
- [3] C. J. Hobson, L. Delunas, D. Kesic, "Compelling evidence of the need for corporate work/life balance initiatives: results from a national survey of stressful life-events," *J Employ Couns*, Vol. 38, No. 1, pp. 38-44. Mar. 2001.  
DOI: <https://doi.org/10.1002/j.2161-1920.2001.tb00491.x>
- [4] P. Bech, M. B. Andersen, G. Bech-Andersen, S. Tønnesen, E. Agnarisdottir, V. Borg, "Work-related stressors, depression and quality of life in Danish managers," *Eur Psychiatry*, Vol. 20, No. Suppl 3, pp. S318-325. Oct, 2005.  
DOI: [https://doi.org/10.1016/S0924-9338\(05\)80183-X](https://doi.org/10.1016/S0924-9338(05)80183-X)
- [5] C. Y. Heo, J. O. Park, "An Empirical Study on Job Stress Preventive Management Strategies; As A Moderator in

- Relation Between Job Stressors and Job Stress Consequences,” *Journal of Human Resource Management Research*, Vol. 15, pp. 197-224. Jun, 2015.
- [6] W. Katon, C. Rutter, E. J. Ludman, M. Von Korff, E. Lin, G. Simon, T. Bush, E. Walker, J. Unützer, “A randomized trial of relapse prevention of depression in primary care,” *Arch Gen Psychiatry*. Vol. 58, No. 3, pp. 241-247. Mar, 2001. DOI: <https://doi.org/10.1001/archpsyc.58.3.241>
- [7] J. R. Geddes, S. M. Carney, C. Davies, T. A. Furukawa, D. J. Kupfer, E. Frank, G. M. Goodwin, “Relapse prevention with antidepressant drug treatment in depressive disorders: a systematic review,” *Lancet*. Vol. 361, No. 9358, pp. 653-661. Feb, 2003. DOI: [https://doi.org/10.1016/S0140-6736\(03\)12599-8](https://doi.org/10.1016/S0140-6736(03)12599-8)
- [8] E. R. Blackmore, S. A. Stansfeld, I. Weller, S. Munce, B. M. Zagorski, D. E. Stewart, “Major depressive episodes and work stress: results from a national population survey,” *Am J Public Health*, Vol. 97, No. 11, pp. 2088-2093. Nov, 2007. DOI: <https://doi.org/10.2105/AJPH.2006.104406>
- [9] D. Jurado, M. Gurpegui, O. Moreno, M. C. Fernández, J. D. Luna, R. Gálvez, “Association of personality and work conditions with depressive symptoms,” *Eur Psychiatry*, Vol. 20, No. 3, pp. 213-222. May, 2005. DOI: <https://doi.org/10.1016/j.eurpsy.2004.12.009>
- [10] M. W. Fisher, A. R. Bray, P. D. Johnstone, “Implications of removing or altering the testicles of ram lambs on the financial returns from carcasses,” *Newzeal J Agr Res*, Vol. 53, No. 2, pp. 135-143. Jun, 2010. DOI: <https://doi.org/10.1080/00288231003777673>
- [11] J. P. Muñoz, M. Lawlor, G. Kielhofner, “Use of the model of human occupation: A survey of therapists in psychiatric practice,” *The Occupational Therapy Journal of Research*, Vol. 13, No. 2, pp. 117-139. Mar, 1993. DOI: <https://doi.org/10.1177/153944929301300204>
- [12] A. T. Beck, D. Guth, R. A. Steer, R. Ball, “Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care,” *Behav Res Ther*, Vol. 35, No. 8, pp. 785-789. Aug, 1997. DOI: [https://doi.org/10.1016/S0005-7967\(97\)00025-9](https://doi.org/10.1016/S0005-7967(97)00025-9)
- [13] A. T. Beck, R. A. Steer, J. S. Beck, C. F. Newman, “Hopelessness, depression, suicidal ideation, and clinical diagnosis of depression,” *Suicide Life Threat Behav*. Vol. 23, No. 2, pp. 139-145. Summer, 1994. DOI: <https://doi.org/10.1111/j.1943-278X.1993.tb00378.x>
- [14] A. T. Beck, N. Epstein, G. Brown, R. A. Steer, “An inventory for measuring clinical anxiety: psychometric properties,” *J Consult Clin Psychol*, Vol. 56, No. 6, pp. 893-897. Dec, 1988. DOI: [https://doi.org/10.1016/0272-7358\(88\)90050-5](https://doi.org/10.1016/0272-7358(88)90050-5)
- [15] J. P. Klyczek, N. Bauer-Yox, R. C. Fiedler, “The interest checklist: A factor analysis,” *Am J Occup Ther*, Vol. 51, No. 10, pp. 815-823. Mar, 1997.
- [16] G. Kielhofner, K. Forsyth, “The model of human occupation: An overview of current concepts,” *Br J Occup Ther*, Vol. 60, No. 3, pp. 103-110. Mar, 1997. DOI: <https://doi.org/10.1177/030802269706000302>