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Abstract

Occupational Distribution of Job Stress in Korea

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Objectives: Although there is increasing concern about job stress, no published reports have addressed the basic characteristics of job stress (i.e. on various job stress domains), according to the Korean Standard of Job Categories. Therefore, this study was conducted to present epidemiologic data of common Korean workers on job stress domains, by using the self-reported Karasek's Job Content Questionnaire(JCQ.)

Methods: Data were gathered from many workers at various industries for 2 years, as a part of the workers' periodic health examinations, in Kyong-Gi and Kyong-Nam provinces, Korea.

Results: The total respondents were 1,866, male 1,658(88.9%) and female 208(11.1%), from 117 companies. The mean age was 35.05 years old, 1,315(70.4%) were married, 1,578(84.5%) were graduated from high school or above, and 380(20.4%) were managers at workplace. The mean scores of decision latitude, psychological job demand, social support, and job insecurity were 62.56(std 8.28, median 62), 31.45(std 3.83, median 32), 22.49(std 2.58, median 23) and 6.16(std 1.90, median 6), respectively. Construction workers belonged to the high strain group, and administrative managers and computer related experts belonged to the active group.

Conclusions: To more precisely evaluate job stress according to job categories, data could be gathered from a larger sample and detailed job categories should be adopted. Such a study would form an important foundation for research into job stress in Korea.

Key Words : Stress, Job strain model, JCQ

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* 1999 (KRF-99-003-F00093)

1994).

Karasek

(Kwon et

al., 1996; Ju et al., 1998; Choi, 2000).

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(person-

environment fit model) ; (effort-reward imbalance model) ; (job strain model) ;

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(job demand)

(decision lati-

tide),

(social support)

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(Karasek, 1979; Karasek & Theorell, 1990; Siegrist, 1996; Won et al., 2003).

Karasek (1985)

(Job Content

Questionnaire, JCQ)

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Karasek (1998)

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(Schnall et al.,

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 Karasek (Job Content
 Questionnaire, Revision 1.5., 1996)
 (Choi, 2000),

1.
 (, , ,), , (,
), 가 , 1,866 가 1,658
 (Skill Discre - (88.9%), 가 208 (11.1%) ,
 tion) 7 , (Decision 40 1314 70.4%
 Authority) 3 , (35),
 (Macro-level Decision Authority) 8 , 가 1,578 (84.5%) , 가 1,315
 (Psychological Job Demands) 9 (70.4%) . 57.5%,
 (Physical Job Dema- 71.5% , ' ,
 nds) 5 , (Job Insecurity) 6 380 20.4% .
 , (Supervisor Social 6.86 (Table 3).
 Support) 5 , (Coworker
 Social Support) 6 49 2.
 Table 1
 (job stress domains)

2) 62.56 (62) ,
 31.45 (32) ,
 22.49 (23) ,
 Table 2 ILO 6.16 (6) .
 (, Table 4 .
 2000) , 11 46
 , , ' 0(=
) ; ' 1(= 가) ; ' 2(=
 가) 가 64.15 ~ 66.77
 (median) X , ' 9(=) ' 57.56
 Y 2 , 가 .

Table 1. Formulate for job content instrument scale construction

Skill Discretion:	$[Q3+Q5+Q7+Q9+Q11+(5-Q4)] \times 2$
Decision Authority:	$[Q6+Q10+(5-Q8)] \times 4$
Decision Latitude=	Skill Discretion + Decision Authority
Psychological Job Demands:	$[(Q19+Q20) \times 3 + (15-(Q22+Q23+Q26)) \times 2]$
Supervisor Social Support:	$[Q48+Q49+Q51+Q52]$
Coworker Social Support:	$[Q53+Q54+Q56+Q58]$
Social Support=	Supervisor Social Support + Coworker Social Support
Job Insecurity:	$[Q33+Q36+(5-Q34)]$

Table 2. Korean standard of job categories

Major classification	Intermediate classification
0 ,	01
	02
	03
1 가	11 가
	12 가 가
	13 가
	14 가
	15 가
	16 , 가
	17 , 가
	18 , 가
2 가	21
	22 가
	23
	24 가
	25 가
	26 가 가
	27 가
	28 , 가
	29 , 가
3	31
	32
4	41
	42
	43
	44
5	51
	52
	53
6 ,	61
	62
	63
7	71
	72 ,
	73
	74 ,
	75
8 ,	81
	82
	83
	84
9	91
	92
	93
	94 ,
A	A1

가 (7.02), ' 2(= 가) 가 ' 26(= 가) ' 21(=) ') ' 가 (5.80) ' 7(=) ' ' 2(= 가) ' ' 9(=) ' ' 3(=) ' 208 106 (51.0%)

Tabel 3. General characteristics of all subjects

	Item	Person (n=1,866)	%
Sex	Male	1,658	88.9
	Female	208	11.1
Age	~29	648	34.7
	30~39	666	35.7
	40~49	411	22.0
	50~	141	7.6
	Mean(yr) ± Std	35.05 ± 9.12	
Education	Elementary school	44	2.4
	Middle school	215	11.5
	High school	1,049	56.1
	Junior college	246	13.2
	University	252	13.5
	Graduate school	31	1.7
	Missing	29	1.6
Marriage	Single	508	27.2
	Married	1,315	70.4
	Divorced	14	0.8
	Widow or widower	4	0.2
	Etc	1	0.1
	Missing	24	1.3
Smoking	None	454	24.3
	Quiting	188	10.1
	Current smoking	1,072	57.5
	Missing	152	8.1
Alcohol	None	284	15.2
	Quiting	71	3.8
	Current drinking	1,333	71.5
	Missing	178	9.5
Manager	No	1,486	79.6
	Yes	380	20.4
Tenure	Mean(yr) ± Std	6.86 ± 5.40	

Table 5. Scores of job stress domains according to major classification of job

Cate- gory	N	Age (mean ±std)	Sex	SD		DA		DL (SD+DA)		PJD		SSS		CSS (SSS+CSS)		JI			
				Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std		
0	345	39.26 ±8.54	M: 327 F: 18	32.46	3.83	34.03	5.67	66.49	8.31	31.76	4.14	11.38	1.97	11.38	1.20	22.76	2.62	6.21	1.97
1	120	33.02 ±8.63	M: 108 F: 12	33.70	3.83	33.07	4.33	66.77	6.65	31.76	4.22	11.38	2.17	11.38	1.38	22.75	2.93	6.38	2.13
2	91	31.93 ±8.40	M: 72 F: 19	31.41	4.52	32.75	5.36	64.15	8.17	30.87	3.44	10.65	2.45	11.51	1.66	22.15	3.73	7.02	2.10
3	227	30.45 ±7.56	M: 121 F: 106	29.45	4.13	30.89	5.17	60.34	7.71	31.02	4.08	10.87	1.57	11.17	1.28	22.04	2.37	6.09	1.73
4	64	35.27 ±6.44	M: 62 F: 2	30.88	3.54	28.19	4.64	59.06	6.53	31.50	3.61	10.67	1.84	11.28	1.19	21.95	2.70	6.67	2.23
5	32	37.03 ±9.80	M: 26 F: 6	28.69	3.92	30.75	5.51	59.44	8.23	30.66	3.40	10.81	1.96	11.28	1.42	22.09	3.03	6.22	1.64
6	-	-	M:- F:-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	392	36.49 ±9.19	M: 389 F: 3	31.20	4.14	30.60	5.52	61.80	7.91	31.61	3.86	11.03	1.57	11.73	1.23	22.76	2.24	5.80	1.74
8	554	33.10 ±7.92	M: 513 F: 41	30.20	4.78	31.12	5.06	61.33	8.08	31.47	3.49	10.91	1.71	11.61	1.24	22.52	2.45	6.10	1.85
9	41	48.68 ±11.86	M: 40 F: 1	28.29	4.37	29.27	4.60	57.56	7.09	30.17	3.48	10.41	1.80	10.68	1.51	21.10	2.56	6.98	1.65
A	-	-	M:- F:-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SD: Skill Discretion

DA: Decision Authority

DL: Decision Latitude

PJD: Psychological Job Demands

SSS: Supervisor Social Support

CSS: Coworker Social Support

SS: Social Support

JI: Job Insecurity

Table 6. Scores of job stress domains according to intermediate classification of job

Category	Sub-category	N	DL (SD+DA)						PID				SS (SSS+CSS)				JI			
			SD		DA				Mean		Std		Mean		Std		Mean		Std	
			Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std
0	01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02	160	32.99	3.64	34.75	5.48	67.74	8.07	32.53	3.94	11.76	2.11	11.42	1.25	23.18	2.82	6.20	2.05		
	03	185	32.00	3.94	33.41	5.78	65.41	8.39	31.09	4.21	11.05	1.78	11.35	1.16	22.40	2.38	6.21	1.91		
1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	16	36.00	4.00	34.50	3.83	70.50	5.24	31.88	4.69	11.88	0.81	11.69	1.40	23.56	1.75	5.81	1.68		
	13	93	33.44	3.54	32.77	4.30	66.22	6.50	31.78	4.20	11.38	2.21	11.28	1.28	22.66	2.90	6.65	2.18		
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	11	32.55	4.99	33.45	5.15	66.00	8.39	31.36	4.06	10.64	3.01	11.73	2.10	22.36	4.34	5.00	1.73		
	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	21	19	28.95	3.01	30.95	6.09	59.89	7.79	29.63	3.48	8.89	3.75	10.37	1.86	19.26	5.15	8.84	2.52		
	22	3	34.00	2.00	34.67	2.31	68.67	4.16	33.00	1.73	8.33	1.53	13.00	1.73	21.33	3.21	5.33	0.58		
	23	59	32.10	4.78	33.22	5.10	65.32	7.87	31.12	3.51	11.15	1.58	11.68	1.42	22.83	2.71	6.58	1.63		
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	3	36.00	3.46	37.33	6.11	73.33	9.45	30.67	1.53	12.33	1.53	12.67	1.15	25.00	2.65	5.00	1.00		
	26	7	29.14	3.02	30.86	5.01	60.00	6.53	31.29	3.50	11.43	2.22	12.00	1.91	23.43	3.91	7.43	2.15		
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	31	155	30.18	3.98	31.48	5.41	61.66	7.95	31.05	4.31	10.94	1.54	11.25	1.33	22.19	2.43	5.92	1.65	
32		72	27.89	4.04	29.61	4.38	57.50	6.34	30.94	3.56	10.71	1.63	11.00	1.17	21.71	2.21	6.47	1.85		
4	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	42	1	32.00	-	32.00	-	64.00	-	34.00	-	10.00	-	11.00	-	21.00	-	7.00	-		
	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	44	63	30.86	3.57	28.13	4.65	58.98	6.55	31.46	3.62	10.68	1.86	11.29	1.20	21.97	2.72	6.67	2.25		

Table 6. Scores of job stress domains according to intermediate classification of job (continue)

Category	Sub-category	N	DL (SD+DA)						PID			SS (SSS+CSS)			JI				
			SD		DA				Mean	Std		Mean	Std		Mean	Std	Mean	Std	
			Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	
5	51	32	28.69	3.92	30.75	5.51	8.23	59.44	8.23	30.66	3.40	10.81	1.96	11.28	1.42	22.09	3.03	6.22	1.64
	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	71	177	31.01	4.43	30.87	5.62	61.88	8.34	32.18	3.74	11.06	1.73	11.69	1.33	22.75	2.54	5.96	1.76	
	72	174	31.36	3.75	30.28	5.63	61.63	7.58	31.26	3.78	10.91	1.52	11.78	1.13	22.69	2.03	5.57	1.79	
	73	30	31.33	4.79	30.80	4.48	62.13	7.39	30.13	3.36	11.43	0.94	11.70	0.99	23.13	1.43	6.07	1.31	
	74	11	31.45	3.80	30.91	5.09	62.36	8.04	32.00	6.34	11.18	1.08	11.82	1.83	23.00	2.24	6.09	1.58	
75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	81	29	30.62	3.82	31.17	5.28	61.79	6.55	29.41	3.56	11.00	1.63	11.69	1.51	22.69	2.49	6.34	1.61	
	82	180	29.71	5.56	30.78	5.06	60.49	9.10	31.11	3.07	11.10	1.41	11.57	1.13	22.68	2.08	6.46	1.90	
	83	319	30.67	4.30	31.40	4.97	62.07	7.45	31.84	3.59	10.56	1.87	11.63	1.28	22.39	2.64	5.83	1.78	
	84	26	27.38	4.45	30.15	5.90	57.54	8.34	31.77	4.09	11.27	1.59	11.46	1.10	22.73	2.38	6.54	2.25	
9	91	41	28.29	4.37	29.27	4.60	57.56	7.09	30.17	3.48	10.41	1.80	10.68	1.51	21.10	2.56	6.98	1.65	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	A1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

SD : Skill Discretion DA : Decision Authority DL : Decision Latitude
 PID : Psychological Job Demands SSS : Supervisor Social Support CSS : Coworker Social Support
 SS : Social Support JI : Job Insecurity

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(Ju et al., 1998; Karasek & Theorell, 1990).

Quadrant term)

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(Landsbergis et

. Karasek

(Job

al., 1994).

Content Questionnaire, Revision 1.5., 1996)

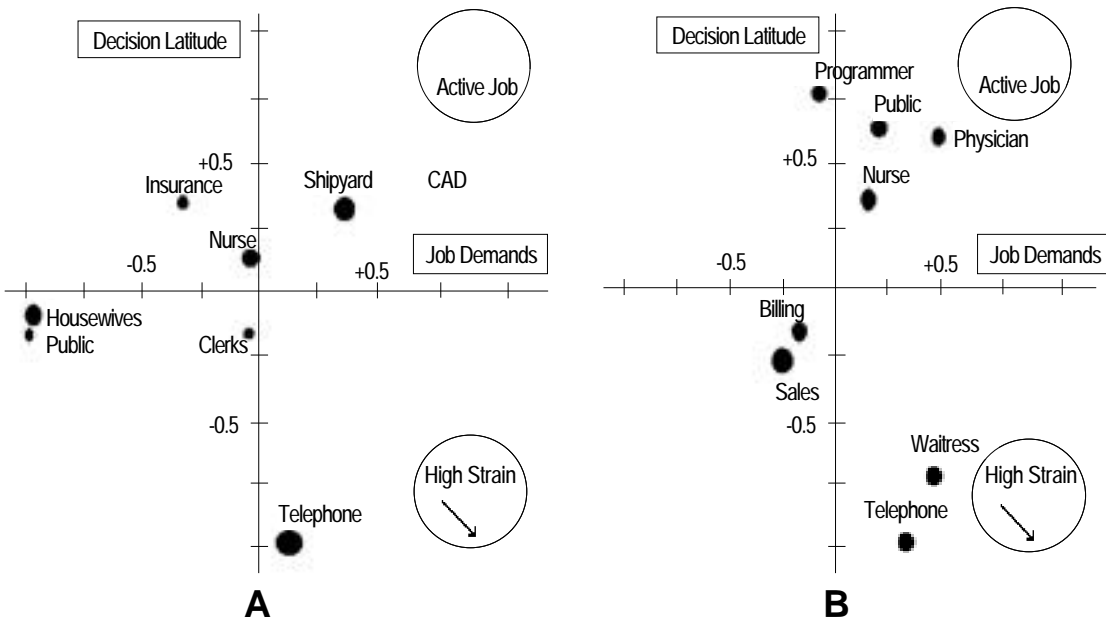


Fig. 3. Distribution of job demands and decision latitude according to some occupations

A: Data from Ju et al. (1998) in Korea,

B: Karasek & Theorell, Healthy Work, 1990. Data from Quality of Employment Surveys(1962,1972,1977) in U.S.A.

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