THE RELATIONSHIP BETWEEN MENTAL WORKLOAD AND WORK STRESS IN TEACHERS OF SCHOOLS OF DISABLED CHILDREN

HUBUNGAN BEBAN KERJA MENTAL DENGAN STRES KERJA PADA GURU SEKOLAH LUAR BIASA

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ABSTRACT
A profession as a teacher of schools of disabled children (SLB) is one of the jobs that can cause work stress. Teachers at SLB need more patience, attention, and special skills than teachers in ordinary schools. The purpose of this study was to determine the relationship between mental workload and work stress on SLB teachers in Jombang. This study was an analytical observational study with a cross sectional design. The samples in this study were three out of nine SLBs in Jombang that were chosen through random sampling. The data collection was done by using a questionnaire filled by 33 respondents. The questionnaire included the Subjective Workload Assessment Technique (SWAT) questionnaire to measure mental workload, and The National Union of Teacher (NUT) Stress Survey to measure work stress on SLB teachers in Jombang. The results showed that there was a strong relationship between mental workload and work stress (p-value = 0.049 and r = 0.360). In conclusion, most SLB teachers in Jombang are female and are in the age group of young adults. The Background Education of SLB teachers mostly comes from non-Special Education (PLB) department and the majority of them were new and had been teaching for years. According to the result of this study, the mental workload of SLB teachers in Jombang was at a moderate level, and their work stress was in the low category. Mental workload is one of the factors that can cause work stress on SLB teachers in Jombang.

Keywords: mental workload, SLB teachers, work stress

INTRODUCTION
Occupational health and safety science aims to protect every worker in order to work safely and healthily and achieve optimal productivity. A teacher in an SLB is considered as a worker according to Law Number 13 Year 2003 concerning Labor states that labor is anyone who is capable of doing work to produce goods and services both to meet their own needs and for the community.

The teacher has the risk of receiving a stressor from his/her work because it relates to his/her duties.
and responsibilities, including being a facilitator, having the ability to educate, guide, train his/her students to become superior and quality resources (Suparlan, 2006). A preliminary study that has been conducted showed that SLB teachers have a higher risk of experiencing work stress than ordinary teachers because they are required to have creativity, patience, teaching commitment and high physical and mental health to teach students who have different needs and need more attention (Haryanti, 2004). According to Sulsky and Smith (2005), one of the factors that cause work stress is the excessive mental workload.

As many as 81.2% of teachers in the UK experienced stress, depression, and anxiety in the workplace (NUT, 2013). In Indonesia, of 326 teachers 51.5% of them experienced work stress (Noviyanti, 2013). Furthermore, the study by Bahai (2015) stated that the level of work stress in one SLB in Jombang Regency is in the moderate category. Therefore, work stress on SLB teachers is an important topic to be studied because it can cause organizational impacts, among others, increase turnover and absenteeism of workers, increase compliance, low time management, decrease work ability, job performance, and productivity (Cox, Tom, Griffiths, Amanda, and Gonzales, 2002).

Table 1 shows the number of teachers and students in 3 (three) SLBs in Jombang where this study was conducted. A preliminary study that have been conducted showed that there were several stressors that have the potential to become stressors for SLB teachers in Jombang, including the number of teachers who are disproportionate to the students, difficulty in performing tasks, difficulty and confusion in applying the right teaching methods to be easily accepted by Children with Special Needs (ABK), difficulty in controlling student behavior, and the under pressure job because the demands from parents of students for the development of their children.

The description illustrates that being an SLB teacher in Jombang has many challenges because of the high workload and mental stress. This is evidenced by the turnover of one of the special schools in Jombang. The purpose of this study was to analyze the relationship between mental workload and work stress in SLB teachers in Jombang.

**METHOD**

This study was an analytic observational study with a cross sectional design conducted in February 2018 in 3 (three) SLBs in Jombang. The population in this study was all SLB teachers in Jombang. The sample of this study was all the teachers in the three SLBs in Jombang with a total of 33 teachers. The total number of SLBs in Jombang which were included in the one-roof integrated SLB had 9 levels of TKLB, SDLB, SMPLB, and SMALB. The selection of three SLBs was done through simple random sampling that each SLB had the same opportunity to become a research sample. The sampling procedure was done through random lottery.

The study was conducted in three SLBs in Jombang, namely SLB X, SLB Y, and SLB Z, all of which were located in different subdistricts. The data collection was carried out in February 2018.

The data collection technique was carried out through filling out questionnaires distributed to SLB teachers in Jombang. The mental workload measurement questionnaire used the SWAT questionnaire developed by Reid & Nygren cited by Asdyanti (2011) and validity and reliability tests have been carried out. The Cronbach’s Alpha reliability showed a value of 0.730. The work stress on SLB teachers was measured by using a questionnaire developed by National Union of Teacher (NUT) in 2011 and has been revised with Health Safety Environment (HSE) management standards for work-related stress categories. The NUT Stress Survey questionnaire has 47 questions.

The data collected were analyzed by using data processing software and then narrated. The data analysis was carried out through univariate and bivariate analysis. Univariate analysis was used to show a picture of the distribution of SLB teachers in

<table>
<thead>
<tr>
<th>Name of School</th>
<th>Number of Teacher</th>
<th>Number of Student</th>
<th>Education Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLB X</td>
<td>12</td>
<td>60</td>
<td>TKLB, SDLB, SMPLB, and SMALB</td>
</tr>
<tr>
<td>SLB Y</td>
<td>11</td>
<td>35</td>
<td>TKLB, SDLB, SMPLB, and SMALB</td>
</tr>
<tr>
<td>SLB Z</td>
<td>10</td>
<td>41</td>
<td>TKLB, SDLB, SMPLB, and SMALB</td>
</tr>
</tbody>
</table>
each variable including gender, age, years of service, educational background, mental workload, and work stress. Bivariate analysis was used to determine the relationship between mental workload and work stress.

RESEARCH RESULT

An overview of the Research Location

This research was conducted in three schools of disabled children (SLB) in Jombang Regency. SLB X, SLB Y, SLB Z are included in the type of schools of disabled children that the levels of education are integrated in one roof, so that it can be interpreted that the schools are under one roof. There are levels ranging from TKLB, SDLB, SMPLB, and SMALB led by a Principal. In addition, the three SLBs where this study took place are included in private SLBs managed by a foundation. The status of the three SLBs has been accredited by the government.

General Description of SLB Teachers at the Research Location

The number of teachers in SLB X, Y, and Z are 12, 11, and 10, respectively. The teachers at the SLBs also teach compulsory subjects such as mathematics, natural knowledge, and social knowledge. Furthermore, they also teach self-development and Special Personal Development Programs and Social in accordance with the needs of students such as teaching cooking, fashion, music, dance, batik or making other crafts.

The effective days for Teaching and Learning Activities (KBM) at the SLBs are almost the same as public schools, from Monday to Saturday, but the time or duration of teaching is shorter. SLB X starts its teaching and learning activities at 08.00–12.00 WIB, SLB Y starts it at 07.30–12.30 WIB, and SLB Z starts it at 07.30–12.00 WIB.

The teachers at the SLBs did not only come from the Department of Special Education. Some teachers were graduated from universities with other majors such as Mathematics Education, Primary School Teacher Education (PGSD), Early Childhood Education (PAUD), and others.

The distribution of SLB Teachers based on the Gender

Table 2 shows that the majority of the respondents of this study was female, 69.7%. This shows that a job as an SLB teacher tends to be more favored by women; where women are more likely to have a more friendly and loving nature.

<table>
<thead>
<tr>
<th>Educational Background</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education Department</td>
<td>9</td>
<td>27.3</td>
</tr>
<tr>
<td>Non Special Education Department</td>
<td>24</td>
<td>72.7</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The Distribution of SLB Teachers based on Age Group

Table 3 shows that the majority of the respondents of this study was in the range of 21–40 years old, 54.5%. This shows that the majority of SLB teachers in Jombang are in the young adult age group.

The Distribution of SLB Teachers based on Educational Background

Table 4 shows that the most recent education major taken by the respondents of this study was Non Special Education Department, 72.7%. This shows that to become SLB teachers, they do not always have to have a background in Special Education major. In fact, the majority of the respondents came from non-Special Education
majors such as Mathematics Education, Primary School Teacher Education (PGSD), Early Childhood Education (PAUD), and others.

The Distribution of SLB Teachers based on Working Period

Table 5 shows that the majority of the respondents of this study has been working as SLB teachers for less than or equal to 5 years and also more than 10 years which showed a percentage of 39.4%. This shows that most SLB teachers in Jombang have varied SLB teaching experiences, both new or have been teaching for a long working period.

The Distribution of Mental Workload of SLB Teachers

Table 6 shows that of 33 SLB teachers in Jombang, the majority had a moderate mental workload, 66.7%. This shows that most SLB teachers have job demands that are not too disruptive to their performance but need to be considered so that there is no increase in mental workload (Wulandari, 2017).

The Relationship between Mental Workload and Work stress of SLB Teachers

From Table 8, it can be seen that SLB teachers in Jombang who experienced moderate mental workload, of 22 respondents, experienced the most work stress at a low level that was equal to 54.5%. From the results of the statistical test to determine the relationship between mental workload and work stress, a significance value (p-value) = 0.049 with a contingency coefficient of (r) = 0.360 were obtained. Thus, mental workload and work stress have a significant relationship.

DISCUSSION

Gender

Most of the respondents of this study were female. Working as an SLB teacher in Jombang is more attractive to women because it requires patience, friendliness, patience and compassion in educating the students, Children with Special Needs (ABK). These traits are more likely to be owned by a woman. According to Gunarsa (2008), the characteristics possessed by women include calm, soft, willing to sacrifice, and more patient than men who tend to be impatient, aggressive and like dynamic work.
According to Yu-chi and Keng-yu (2010) gender differences have a relationship with the level of work stress. Men who have masculine personalities tend to be better to deal with the source of stress they experience without feeling emotional and overly anxious. Unlike women who have a negative awareness of stress. Women who experience conflict or depressed conditions tend to be more susceptible to stress (Brizedine, 2007).

Age Group

Most SLB teachers in Jombang were in the age group of 21-40 years. This is because the Head of SLB in Jombang expected teachers to have a high morale in educating and teaching Children with Special Needs (ABK). The principal of SLBs were more likely to recruit SLB teachers who are classified as young adults. Young adulthood is the right time to have roles and responsibilities of work that grow to be even greater (Santrock, 2002).

Age is related to one’s tolerance level in accepting the stress they face. A person who is an adult is more able to control the stress they experience. The increase age shows the maturity of the person which is characterized by a more rational attitude, wiser, more able to control emotions, increasingly shows intellectually and psychologically intelligence, and increasingly tolerant with views and behaviors that are different from one’s principles. (Gatot and Adisasmito, 2005).

Educational Background

Educational background can be interpreted as the last education level the respondents achieved. Educational background meant in this study can be grouped into two, namely from the Department of Special Education or from the Department of Non-Special Education such as Mathematics Education, Primary School Teacher Education (PGSD), Early Childhood Education (PAUD), and others.

The results of the study showed that most SLB teachers in Jombang were from the Department of Non-Special Education. In addition, the results of the interview indicated that in approximately 5 years there were 6 teachers who resigned. The presence of SLB teachers who left or resigned as teachers of Children with Special Needs (ABK) caused the Head of SLBs not to be too strict in recruiting new teachers, such as requiring them to come from the Department of Special Education. This will make it difficult to get SLB teaching staff which results in the lack of teachers in the SLBs.

Years of Service

The results of the study revealed that the majority of the respondents have been working as SLB teachers for less than or equal to 5 years (new working period) and also more than 10 years (long working period). A new working period or a long working period can trigger work stress. Lath (2010) stated that inexperienced teachers have a higher stress level because of the interaction with the students who are low, resulting in more workload. According to Munandar (2001), the level of work stress of workers who have a service period of over 5 years is higher so that it can cause work stress.

The Mental Workload of SLB Teachers in Jombang

The interaction between task demands, work environment, skills, behavior and perception of a job can create workload. Every worker has a different level of stress, especially a mental workload that always involves the dominant elements of perception, interpretation, and mental processes. The factors that influence mental workload include work organization, work environment, task demands, somatic and psychological factors (Tarwaka, 2015).

The results of the study showed that most SLB teachers in Jombang have a moderate mental workload. This is because of the existence of individual internal factors, namely psychological factors that can affect the level of one’s mental workload. This psychological factor is in the form of trust and perception of SLB teachers in Jombang who considered the work to be a moral responsibility so they must be able to accept and deal with it. The SLB teachers in Jombang also feel satisfied and proud because they can educate ABK students who have different needs from ordinary students and not all teachers can do it. This perception made the demands of the task which became the mental workload of the SLB teacher not too heavy.

The mental workload on SLB teachers in Jombang can be identified from the difficulties complained of because of the expertise of SLB teachers that are not adjusted to the needs or abilities possessed by ABK. There are additional administrative tasks that often take SLB teacher break to take a rest, and excessive demands from parents. SLB teachers experienced fatigue and easy emotional reactions which if not controlled can trigger work stress.
The mental workload of SLB teachers in Jombang was influenced by the conditions of the task demands as SLB teachers who have the obligation and responsibility to educate ABK with the right method. Teaching ABK required SLB teachers to be caring, compassionate, patient, and highly creative to teach subjects matter so that the students can receive the knowledge. The teaching and learning process are divided into several levels ranging from kindergarten, elementary, junior high school, to senior high school. Each level has classes that contain ABK with different types of disabilities ranging from mental retardation, deafness, speech, and autism. However, this condition was not accompanied by a sufficient number of teachers. It was proven that there was one SLB teacher who had to teach 2 classes. This condition could cause mental workload for SLB teachers because it is not easy to teach varied material to students who have limitations.

Students with special needs need a caregiver who is loving and tough to assist the optimal development process for the child (Desiningrum, 2016). Therefore, SLB teachers need a strategy or provision to educate Children with Special Needs (ABK) in order to be able to face the demands that can be mental workload.

**Work Stress on SLB Teachers in Jombang**

Work stress can be identified from physiological, psychological, behavioral, and somatic symptoms arising from the incompatibility of one’s skills, talents, and personality and environment, resulting in an inability to effectively respond to a claim against him (Munandar, 2001).

The results of the study showed that most SLB teachers in Jombang have low levels of work stress. The sources of stress found in SLB teachers in Jombang included facing children with special needs (ABK) who are difficult to control, concern about the future, complaint and demand from parents, difficulty in applying appropriate learning methods for teaching ABK. The presence of these stressors affected individual: irritability, feeling tired, headache and also the effect on the organization, which is a decrease in work morale such as lack of discipline and frequent absences, or resignation/turnover. Wahyuni, Yulvi, and Ruslin (2014) stated that resignation can occur due to various factors, including incentives/salaries, training, development, selection, promotion, dissatisfaction, job design, problems with the superiors, career development, lack of commitment, and group cohesiveness.

The presence of these stressors can be balanced with the strategies carried out by SLB teachers in Jombang to reduce the level of stress by periodically have refreshing activities such as recreation among fellow SLB teachers at one school. According to Sukadiyanto (2010), recreation can release fatigue both psychologically and physically and improve relationships and harmonious communication so as to reduce stress levels. In addition, the curriculum provided by SLB teachers adjusted the conditions of the students at that time, so that it tended not to cause target demands for SLB teachers. The awareness of the SLB teachers’ moral responsibilities was also high, as evident from some SLB teachers who revealed that the work as an SLB teacher was a soul calling, noble work, and for a more grateful person.

Some of these conditions indicated that the perception of most SLB teachers in Jombang about work stress tended to be low. This is in accordance with the statement of Tarwaka (2015) that each person has a varied and different body reaction to the source of stress in his environment.

**The Relationship between Mental Workload and Work Stress on SLB Teachers in Jombang**

The statistical test that was conducted showed that there was a significant relationship between mental workload and work stress on SLB teachers in Jombang. The SLB teachers in Jombang who experienced moderate category of mental workload experienced the most work stress at low levels. The relationship of mental workload with work stress that occurred on SLB teachers in Jombang was a unidirectional relationship which means that if the level of mental workload increases, then the level of work stress will also increase as well. If the level of mental workload decreases, work stress will also decrease.

The results of this study are in line with the research of Pertiwi, et al (2017) which stated that there is a relationship between mental workload and work stress, which means that the causes of mental work become one of the factors that cause work stress. In addition, the research conducted by Amalia, et al (2017) also stated that there was a relationship between mental workload and work stress on SLB teachers in Semarang. In addition, a study by Ghani, et al (2014) that was conducted in Malaysia concluded that workload factor is one of the factors that caused work stress in SLB teachers.

Mental workload on SLB teachers is indicated by the demands of the task of educating students
who have different needs that require patience, more attention, and special skills from SLB teachers. This shows that the demands of SLB teachers are dominated by mental demands. The existence of a mental workload is one of the factors causing work stress. Therefore, it is important to adjust the demands of the task to individual capacity, for example by giving the task of teaching severely mentally retarded children to teachers from the Department of Special Education (PLB) because they are considered to be more understand on how to teach ABK with the right method.

CONCLUSION

The conclusion from the results of this study is that most SLB teachers in Jombang were female and were in the age group of young adults. The educational background of the SLB teachers is mostly non-Special Education (PLB) and has a new and long service period. Most SLB teachers in Jombang had a moderate level of mental workload. Most them had low work stress category. Moreover, there was a relationship between mental workload and work stress on SLB teachers in Jombang.

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