

Satisfaction with life, psychological distress, and workplace bullying among construction workers

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Article Info

Article history:

Received May 10, 2021

Revised Aug 13, 2021

Accepted Aug 24, 2021

Keywords:

Bullying
Construction
Level of distress
Satisfaction with life

ABSTRACT

Construction workers are among workers who have to face a very dynamic work situation with a fixed deadline because they have to finish the work according to the target of completion as stated in the contract. The study aimed to compare Satisfaction with Life, Psychological Distress, and Workplace Bullying of the workers in two construction companies. This is a cross-sectional study using a questionnaire distributed to two groups of workers who work in two different companies with a total number of respondents of 588. Data collected were then processed using a frequency distribution table and compared using the Mann Whitney method to identify differences between the two groups. The study showed differences between the workers from the two companies in terms of negative behaviors, level of distress, and level of satisfaction with life. Workers in the Civil Engineering Contractor Company suffer more bullying and a slightly higher level of distress. The lowest level of satisfaction with life is also seen in this company when compared to that of the engineering procurement construction (EPC) contractor company. The result of study indicate that difference might link to more bullying actions and a higher level of distress in the construction civil engineering company, which trigger dissatisfaction with life among its workers. Thus, management should act promptly to eliminate negative behaviors as it will be crucial in preventing the increase in the number of bullying victims and the level of distress in the workplace will not increase.

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1. INTRODUCTION

Bullying can happen in all kinds of places [1] including in schools, public places, and even workplaces. Since Leymann studied bullying for the first time in 1980 [2], there have been many studies that prove the presence of bullying in workplaces during the last decade, which number tends to increase from time to time [3]. The exposure to bullying is associated with job health and wellbeing outcomes, such as mental/physical health problem, burnt out, increased intention to leave and reduced job satisfaction [4]. In addition, a debate is still ongoing regarding the influence of the work condition on bullying, since it may become the cause of severe stress experienced at work that will disturb productivity that will be worsen by the presence of other work-related stressors [5]. According to Daniel [4], bullying at the workplace is a "repeated persecution" towards a target individual that can take the form of verbal abuse, insults, threats, intimidation, or sabotage that disturb works or the combination of the three. Bullying can happen both from

the superior to their staff or vice versa and also at the same level of work position. Bullying may relate to position abuse, differences among groups, ethnicity, religion, educational background, or seniority [6], [7]. This condition may be considered as “normal” and tolerated because of the lack of concerns among the management [8].

Bullying at the workplace is usually seen in two forms. First, bullying that use inappropriate words or personal attack to the victim and, second, indirect bullying actions that isolate the victim, limit the victim’s movement, postpone promotion of the victim, and other similar actions [9]. In another study, it is also found that bullying at the workplace can also bring negative impacts on the witness of bullying because the impact of bullying is not only felt by the direct victim of bullying but also to others who are working in the same environment, this may slowly affect the culture of the company [10]. Bullying at the workplace is a significant stressor that can increase work anxiety and can lead to insomnia and lower satisfaction with life [11].

A study conducted in Australia on apprentices in construction industry has found bullying practices in workplace. According to several participants in the sample, these practices are normal and acceptable for people who has just started to work [7]. Meanwhile, another study performed in Indonesia has also proven that bullying that is performed based on different ethnicity has led the workers to quit from the company [12].

Bullying does not only bring negative impacts on satisfaction with life in terms of workers’ autonomy, competencies, and relatedness, as well as creating frustration regarding the three needs [13]. A study performed in Australia revealed that workers who have often experienced bullying in their workplace have a four times higher risk for psychological distress compared to those without bullying [14]. Bullying victims will experience a psychological distress with a possibility to become more severe (serious) due to double setbacks: (i) victims do not want to be stigmatized because of seeking for psychological help that they are not willing to utilize the psychological support service (if available in the company); and (ii) victims will experience worse condition because they do not have money to pay for mental health consultation services [15]. Diener *et al.* in 1985 has developed a scale that is referred to as the Satisfaction with Life Scale (SWLS) to measure subjective well-being assessment components [16]. This Satisfaction with Life Scale (SWLS) was developed to measure the overall respondent’s satisfaction with life and do not only assess satisfaction in a certain domain only, such as in health or financial aspect only, but it integrates and considers domains using anyway that the respondent chooses, and as this program has been widely uses and translated to many languages [17], [18]. The workplace stressors, bullying and supports related with health and well-being as it resulted a poor health habits, injury and pain, emotional exhaustion, although safety climate was good [19], [20].

In the latest study performed by Trepanier *et al.* in nurses in Québec, Canada, it is revealed that continuous psychologically poor treatment in the workplace will hinder satisfaction on the need for autonomy, competencies, and things that relates to satisfaction with life [13], and that intimidation in workplace brings negative impact to occupational health, satisfaction with work, psychological well-being, and creativity [21]–[23]. Work satisfaction level is a very important factor that can influence the health of the workers. Therefore, companies have to build a stress management policy system in their place to identify and eliminate work practices that creates dissatisfaction as a part of training that aims to improve the health of the workers [24], [25]. Construction industry is a very dangerous industry, if we look at the high number of work-related accidents and the number of victims due to such accidents [26]–[28]. The existence of the construction industry itself grows along with the economic growth of a country or region. This industry employs a high number of workers from various educational background, skills, and experience, including the manual workers with lower educational background who work on the field [29].

The workload of construction workers is quite heavy due to the long work hours, rigid work pattern, and isolated workplace [30]. A construction work has a work schedule for a predefined duration as agreed in the work contract and the leaderships in a project or the company will try hard to achieve the target, even trying to finish the work earlier than the agreed schedule to gain more profits for the company. With such condition, the work pressure for construction workers become high and a high work pressure has been stated as one of the triggers of bullying at the workplace [31]. Currently not many available researches that was investigate specifically the bullying in construction industry in Indonesia, to study what the impact is caused by bullying in the workplace to the worker, is there is any impact to life satisfaction, and psychological condition. To understand the relationship between bullying and the level of satisfaction with life, psychological condition, and bullying events in workplaces in the construction sector, both in the office and on the field, this study was performed to compare the impact of bullying on the level of satisfaction with life and the psychological condition of the workers.

2. RESEARCH METHOD

This study used primary data collected using an online questionnaire. This was a quantitative study using a questionnaire that was distributed to 713 respondents, with 588 respondents returned the questionnaire with complete answers (82% of the total number of respondents). There was no direct contact between the researchers and respondents in the completion of the questionnaire. The respondents of this study consisted of construction workers in two different companies: an the engineering procurement construction (EPC) contractor and a construction civil engineering contractor. Both of them worked in the company's headquarter in Jakarta and those who worked in the project sites that were located in several areas in Indonesia. The respondents selected were those who have worked for the company of more than six months and data were collected during the period of September to October 2020.

2.1. Bullying measurement

Measurement was performed on bullying variables using a questionnaire developed by Einarsen, Hoel & Notelaers in 2009, which is referred to as the Negative Acts Questionnaire-Revised (NAQ-R) [16]. This questionnaire consists of 22 Likert-scale questions with a scale from 1 to 5 with 1=never, 2=once in a while, 3=every month 4=every week, and 5=every day. The interpretation of the score was as follows: A total score of ≤ 33 was categorized as not bullied, $33 \leq 45$ was categorized as occasionally bullied, and ≥ 45 was categorized victims. The 22 items in the questionnaire have been translated to Indonesian and has pass the ethical test from the Commission of Research Ethics and Community Health Works of the Faculty of Public Health, Universitas Indonesia.

2.2. Psychological condition measurement (psychological distress)

The questionnaire used in this study also includes items from the Kessler Psychological Distress Scale [28], [32] to measure the distress level by asking ten questions related to the experience of the workers in order to detect symptoms of depression and anxiety. For each item, the respondents were guided to choose an answer based on the Likert scale of "always", "frequently", "sometimes", "rarely", and "never". A score of ≤ 20 means that the respondent is in a good psychological condition and a score of 20-24, 25-29, and ≥ 30 represents a mild, moderate, and severe mental disorders, respectively.

2.3. Satisfaction with life measurement

To measure the satisfaction with life of the workers, a satisfaction with life scale using a cognitive approach was used by asking the respondents to answer using the Likert scale of "strongly agree", "agree", "somehow agree", "neutral", "somehow disagree", "disagree", and "strongly disagree". The score for satisfaction with life measurement referred to [16], [29] with a score of 31-35 represents extremely satisfied, 26-30 represents satisfied, 21-25 represents slightly satisfied, 20 represents neutral, 15-19 represents slightly dissatisfied, 10-14 represents dissatisfied, and 5-9 represents extremely dissatisfied.

2.4. Data analysis

This study was cross-sectional study using the company where the workers work as the independent variable and bullying, distress level, and satisfaction with life as the dependent variables. The validity and reliability of the instrument used in this study refer to the results of the validity and reliability testing in a study entitled "Identification of Bullying in Workplaces in Indonesia" by Erwandi *et al.* [16]. It showed that from the total number of respondents ($n=3,140$), the negative action (bully) revealed a validity score of 0.43-0.60 and reliability score of 0.897. For the psychological condition (distress), the validity is 0.46-0.73 and the reliability is 0.881. Meanwhile, for the satisfaction with life, the validity score is 0.34-0.76 and the reliability is 0.841.

In addition to the validity and reliability testing that was taken from the calculation from all respondents as mentioned above, a data distribution testing using the Kolmogorov-Smirnov with an error rate or alpha (α) of 5% was performed using the following hypotheses: H0: Data are distributed normally; H1: Data are not distributed normally.

2.5. Ethical consideration

This study was approved by Commission of Research Ethics and Community Health Works of the Faculty of Public Health, Universitas Indonesia (No.583/UN2.F10.D11/PPM.00.02/2020). *Informed consent*: All participants provided informed consent for taking part prior filling the online form of questionnaire in this study. *Registry and the Registration No. of the Study/Trial*: N/A. *Animal Studies*: N/A.

3. RESULTS

Below is the table that presents the socio-demographics of the respondents in both EPC contractor and Civil Engineering Contractor company populations. From the answers to the questionnaire as shown in Table 1, it was noted that 86.6% or 509 of the employees who worked in the construction companies who became the respondents in this study were males. This study involved 97 whose age was below 25 years old (16.5%), 135 respondents who were 25-29 years old (23.0%), 86 respondents who were 30-34 years old (14.6%), 119 respondents who were 35-40 years old (20.2%), and 151 respondents who were above 40 years old (25.7%); thus, more than a half of the total respondents were more than 30 years old.

Table 1. Participant distribution

| Respondent | Company 1 | | Company 2 | | Total | |
|------------------------------------|-----------|------|-----------|------|-------|------|
| | n | % | n | % | n | % |
| Gender | | | | | | |
| Male | 242 | 79.6 | 267 | 94.0 | 509 | 86.6 |
| Female | 62 | 20.4 | 17 | 6.0 | 79 | 13.4 |
| Age Category | | | | | | |
| < 25 years old | 35 | 11.5 | 62 | 21.8 | 97 | 16.5 |
| 25-29 years old | 54 | 17.8 | 81 | 28.5 | 135 | 23.0 |
| 30-34 years old | 46 | 15.1 | 40 | 14.1 | 86 | 14.6 |
| 35-40 years old | 69 | 22.7 | 50 | 17.6 | 119 | 20.2 |
| > 40 years old | 100 | 32.9 | 51 | 18.0 | 151 | 25.7 |
| Position | | | | | | |
| Implementer/Operator/Admin | 15 | 4.9 | 191 | 67.3 | 206 | 35.0 |
| Staff | 136 | 44.7 | 65 | 22.9 | 201 | 34.2 |
| Supervisor | 13 | 4.3 | 4 | 1.4 | 17 | 2.9 |
| Assistant manager | 60 | 19.7 | 0 | 0.0 | 60 | 10.2 |
| Manager | 49 | 16.1 | 16 | 5.6 | 65 | 11.1 |
| Others | 31 | 10.2 | 8 | 2.8 | 39 | 6.6 |
| Employment status | | | | | | |
| Permanent employee | 108 | 35.5 | 47 | 14.3 | 155 | 24.5 |
| Contract employee | 157 | 51.6 | 53 | 16.1 | 210 | 33.2 |
| Third-party employee (outsourcing) | 38 | 12.5 | 47 | 14.3 | 85 | 13.4 |
| Daily worker | 1 | 0.3 | 182 | 55.3 | 183 | 28.9 |
| Education | | | | | | |
| Elementary school | 0 | 0.0 | 66 | 23.2 | 66 | 11.2 |
| Junior high school | 0 | 0.0 | 91 | 32.0 | 91 | 15.5 |
| Senior high school | 23 | 7.6 | 57 | 20.1 | 80 | 13.6 |
| Diploma 3 | 29 | 9.5 | 5 | 1.8 | 34 | 5.8 |
| Diploma 4/Undergraduate | 218 | 71.7 | 64 | 22.5 | 282 | 48.0 |
| Master | 34 | 11.2 | 1 | 0.4 | 35 | 6.0 |
| Doctoral | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Most of the respondents were in the position of the implementer/operator/admin (n=206, 35.0%) and staff (n=201, 34.2%) with the remaining was in the Supervisor (n=17, 2.9%), Assistant Manager (n=60, 10.2%), Manager (n=65, 11.1%), and other (n=39, 6.6%) positions. A total of 155 employees (24.5%) were permanent employees while 210 employees (33.2%), 85 employees (13.4%), 183 employees (28.9%) were contract employees, third-party employees (outsourcing), and daily workers. Most workers have an education below Diploma 4/undergraduate (n=271, 46.1%) and 282 workers (48.0%) were graduated from Diploma 4/undergraduate level. In terms of the respondents who admitted that they had experienced bullying as shown in Table 2. The majority was classified into the "Not Bullied" category (n=396, 67.3%) and the remaining were in the category of "Occasionally Bullied" (n=172, 29.3%) and "Victims" (n=20, 3.4%).

Table 2. Bullying acts

| Variable | Indicator | EPC contractor | | Construction civil engineering contractor | | Total | % |
|-------------------------|----------------------|----------------|--------|---|--------|-------|-----|
| | | n | % | n | % | | |
| Total negative behavior | Not bullied | 258 | 84.87 | 168 | 59.15 | 426 | 72 |
| | Occasionally bullied | 41 | 13.49 | 101 | 35.56 | 142 | 24 |
| | Victim | 5 | 1.64 | 15 | 5.28 | 20 | 3 |
| Total | | 304 | 100.00 | 284 | 100.00 | 588 | 100 |

When asked about the experience of bullying as shown in Table 3, respondents who answered "No" comprised the majority of the respondents (n=537, 91.3%) and the remaining were categorized into "Yes,

but rarely" (n=40, 6.8%), "Yes, sometimes" (n=10, 1.7%), and "Yes, almost every day" (n=1, 0.2%). The majority of the respondents had a level of distress in the category of as shown in Table 4 "Fine" with 331 respondents (56.3%) while the remaining were in the category of "Mild Mental Disorder" (n=167, 28.4%), "Moderate Mental Disorder" (n=67, 11.4%), and "Severe Mental Disorder" (n=23, 3.9%).

Table 3. Bullying act

| Variable | Indicator | EPC contractor | % | Construction civil engineering contractor | % | Total | % |
|--------------|-------------|----------------|--------|---|--------|-------|--------|
| Felt bullied | Never | 274 | 90.13 | 263 | 92.61 | 537 | 91.33 |
| | Sometimes | 25 | 8.22 | 15 | 5.28 | 40 | 6.80 |
| | Every month | 4 | 1.32 | 6 | 2.11 | 10 | 1.70 |
| | Every day | 1 | 0.33 | 0 | 0.00 | 1 | 0.17 |
| | Total | 304 | 100.00 | 284 | 100.00 | 588 | 100.00 |

Table 4. Level of distress

| Variable | Indicator | EPC contractor | % | Construction civil engineering contractor | % | Total | % |
|-------------------------|--------------------------|----------------|--------|---|--------|-------|--------|
| Level of distress score | Fine | 230 | 75.66 | 154 | 54.23 | 384 | 65.31 |
| | Mild mental disorder | 39 | 12.83 | 75 | 26.41 | 114 | 19.39 |
| | Moderate mental disorder | 26 | 8.55 | 41 | 14.44 | 67 | 11.39 |
| | Severe mental disorder | 9 | 2.96 | 14 | 4.93 | 23 | 3.91 |
| | Total | 304 | 100.00 | 284 | 100.00 | 588 | 100.00 |

Next, in the measurement of the satisfaction with life as shown Table 5, most respondents were in the category of "Satisfied" (n=134, 22.8%) while the remaining were in the "Extremely Satisfied" (n=39, 6.6%), "Slightly Satisfied" (n=122, 20.7%), "Neutral" (n=42, 7.1%), "Slightly Dissatisfied" (n=133, 22.6%), "Dissatisfied" (n=94, 16.0%), and "Extremely Dissatisfied" (n=24, 4.1%) categories. When the mean of the three variables was observed as shown in Table 6 the highest level of satisfaction with life was seen in the employees of the civil engineering contractor workers of 4.87, These employees also had the highest total negative (act) score and level of the distress with 1.46 and 1.70, respectively.

Table 5. Level of satisfaction with life

| Variable | Indicator | EPC contractor | % | Construction civil engineering contractor | % | Total | % |
|-----------------------|------------------------|----------------|--------|---|--------|-------|--------|
| Level of satisfaction | Extremely satisfied | 36 | 11.84 | 3 | 1.06 | 39 | 6.63 |
| | Satisfied | 113 | 37.17 | 21 | 7.39 | 134 | 22.79 |
| | Slightly satisfied | 89 | 29.28 | 33 | 11.62 | 122 | 20.75 |
| | Neutral | 21 | 6.91 | 21 | 7.39 | 42 | 7.14 |
| | Slightly dissatisfied | 37 | 12.17 | 100 | 35.21 | 137 | 23.30 |
| | Dissatisfied | 6 | 1.97 | 88 | 30.99 | 94 | 15.99 |
| | Extremely dissatisfied | 2 | 0.66 | 18 | 6.34 | 20 | 3.40 |
| | Total | 304 | 100.00 | 284 | 100.00 | 588 | 100.00 |

Table 6. Means of observed variables

| Variable | Company | n | Mean | Std. Deviation | p-value |
|----------------------------|---|-----|------|----------------|---------|
| Total negative (act) score | EPC contractor | 304 | 1.17 | 0.416 | 0.000 |
| | Construction civil engineering contractor | 284 | 1.46 | 0.596 | |
| Score level distress | EPC contractor | 304 | 1.39 | 0.767 | 0.000 |
| | Construction civil engineering contractor | 284 | 1.70 | 0.893 | |
| Level of Satisfaction | EPC Contractor | 304 | 2.79 | 1.283 | 0.000 |
| | Construction civil engineering contractor | 284 | 4.87 | 1.388 | |

To see the distribution of the data of respondents, a normality test using Kolmogorov-Smirnov approach was performed, resulting in a p-value of 0.000, which was less than α (5%). Hence, H_0 was rejected because the distribution of data on negative actions, level of distress, and level of life satisfaction were not distributed normally. To determine whether there were differences in the negative behavior, level of distress, and level of satisfaction with life, a mean variance analysis was performed. From the result of the Mann Whitney testing using p-value statistics (the possibility to not reject H_0), it was revealed that the p-values from the result of the Mann-Whitney test for negative action, level of distress score, and level of satisfaction were all less than α of 5% (0.05), thus H_0 was rejected. In conclusion, there are difference in the negative act scores, level of distress scores, and level of satisfaction score between the two company populations.

4. DISCUSSION

This study was intended to identify the differences in the incidence of bullying in the work place between a construction EPC contractor company and the construction civil engineering contractor by using the NAQ-R questionnaire that consists of 22 questions [16]. The questionnaire was distributed to two worker groups in the two companies and demonstrated a mean of 1.17 (SD=0.416) in the EPC contractor company and 1.46 (SD=0.596) (p-value=0.000) workers experienced negative acts. In the civil engineering contractor company, 72% of workers did not feel that they experienced bullying in their workplace while 24% and 3% stated that they were sometimes bullied and become the victims of the bullying, respectively. When we look at the two companies separately, 84.87% or 258 workers in the EPC Company declared that they were not bullied compared to 59.15% employees in the civil engineering contractor company. Meanwhile, 13.49% or 41 employees of the EPC contractor stated that they sometimes experienced bullying while 35.56% or 101 workers in the civil engineering contractor company stated the same. The remaining 1.64% or 5 workers in the EPC contractor company and 5.28% or 15 workers in the civil engineering company claimed to be the victim of bullying in their workplace. Based on the percentage of between 1.64 to 5.28%, the number might not be big but this should rise a concern among the employers because the act of bullying may not happen to this specific employee only, but also to other employees in the same workplace, creating uncomfortable atmosphere that may trigger employees to leave their job [33].

In terms of the level of distress score, the construction civil engineering contractor has an average level of distress of 1.70 (SD=0/893) or higher in the EPC contractor with a score of 1.39 (SD=0.767). The p-value of both cores was 0.000. When we look at the details of each indicator, it is demonstrated that a total of 65.31% of (384) all respondents, consisting of 75.66% (230) and 54.23% (154) in each group, feel that they are fine while a total of 19.39% (114) respondents, consisting of 12.83% (39) in the EPC contractor and 26.41% (114) in the civil engineering contractor, suffer from mild mental disorders. Furthermore, a total of 11.39% (67) workers, consisting of 8.55% (26) in the EPC contractor and 14.44% (41) in the civil engineering contractor experience moderate mental disorder while a total of 3.91% (23) of the respondents (2.96% (9) and 4.93% (14) in the EPC contractor and civil engineering contractor, respectively) suffer from severe mental disorder. With respect to the mean and percentage of workers who experienced severe mental disorders (3.91%) or experience bullying every day, serious attention is needed from the management since a previous study revealed that the level of distress significantly leads to fatigue, anxiety, depression, and hostility [34], [35]. The effects of bullying will be accumulated and the stress symptoms will appear in several years [36]. Bullying at the workplace will highly increase the distress level and the condition will make the vulnerability of the workplace increases as the subjective dimension on the workplace condition associated with a sense of fear of losing a job or a worsening of work condition [37].

Bullying at the workplace triggers strong social stress with consequences similar to or even more severe than the effects of the other stress sources in the organization, thus needs to be prevented and managed effectively [38], [39]. By paying attention to the consequences for the victim of bullying and the number of bullying in the two companies, the companies should act immediately to prevent bullying and to ensure that the detected bullying victims can be managed immediately to prevent worse consequences and more severe consequences because bullying can affect the health of the victims [40], [41]. A previous study has demonstrated the relationship between bullying at the workplace and mental health problems, urge to quit the job, and low work satisfaction level [4]. By referring to Table 6, it is observed that the average level of satisfaction in the EPC contractors is 2.79 (SD=1.283) and 4.87 (SD=1.388) in the civil engineering contractor company with a P-Value of 0.000. Therefore, the average level of satisfaction in the EPC contractor company is higher when compared to that of the civil engineering contractor. In terms of the percentage of workers who satisfy with their life (which is the sum of extremely satisfied, satisfied, and slightly satisfied) in the two companies, the percentage reaches 50.17% (295). This composition should be changed because 6.91% of workers in the EPC contractor and 7.14% of workers in the civil engineering contractor declare neutral feeling and they may shift into satisfied or dissatisfied with their work condition. If they become dissatisfied, the level of distress will increase in the company [24]. Although the frequency is low, a relationship between bullying and declining engagement and satisfaction of life is observed among workers in the two companies. This will have an impact on the mental health and well-being of the workers [14], [42].

In the questionnaire used in this study we asked whether workers had report illness or other reasons than being sick as the reason for not coming to work. The responses showed that an average of 1.58 of workers in EPC contractor and 1.95 of workers in civil engineering contractor had missed work due to illness and 1.80 of the workers in the EPC contractor and 1.64 workers in the civil engineering contractor had missed work due to reasons other than illness. This figure warrants a more in-depth study to identify whether the reason for not coming to work is illness or it is due to other reasons related to bullying at workplace. A study in Australia on the absence caused by depression-related illness found that depression caused by

bullying is associated with loss of productivity in the form of absence due to illness, showing depression as a potential mediator [43], and the unique contribution of bullying on the differences in absence due to illness.

Although the findings of this study may have promising contribution to explanations regarding bullying reaction, there are still several limitations in this study, which may be addressed in further studies using different methods and data triangulation because this study only relies on cross-sectional questionnaire results. This limits the ability to conclude the cause-and-effect relationships between the results of observation. It is expected that future studies can collect longitudinal data to infer causality because there is a possibility that the satisfaction of work plays a potential role in work satisfaction. Thus, workers with high work satisfaction might not see any negative actions in their workplace because they are able to overcome it. We are also fully aware as this study was done during pandemic of COVID-19 which caused we only rely on online questionnaire that could be impacted to quality of respond when the respondent filling the questionnaire, we are expect in the future study there is a forum group discussion or direct conversation with respondent to reduce bias and subjectiveness.

5. CONCLUSION

This study revealed bullying victims in the company, albeit in low number. However, it is expected that the management at both companies take immediate actions to deal with this matter. More than half (63.1%) of the total number of respondents in companies feel fine, despite differences are seen in terms of bullying behavior, psychological condition (level of distress), and satisfaction with life between the two companies) ($p=0.000 \leq \alpha=0.05$).

The observed work environment in both companies have produced a quite high level of satisfaction with life among workers, and this is a good starting point because the climate is clearly affected by the satisfaction towards the need for competencies and relatedness. It is expected that the companies can maintain and take action and resolve problems within the organization, not only on the basic psychological needs (recognition and support for people assessment of competencies) but also for the work climate itself, such as in the procedure for human resource management and work relationship between individuals and the team.

The management is expected to immediately understand the condition and identify the types of bullying that occur in their workplace, especially those related to the cultural and social identities, as indicated in previous studies as one of the reasons for the acts of bullying at the workplace. The act of bullying can be influence by the lack of cultural sensitivity, such as jokingly use the words that may be seen as bullying in the western culture, but may not necessarily mean the same in the Eastern Asia culture. Thus, management should act promptly to eliminate negative behaviors, which will need policies from the leaderships of the company or organization, to be able to create a workplace that is free from negative/bullying acts. This will prevent the increase in the number of bullying victims and the level of distress in the workplace will not increase and can even be controlled or reduced because the company is able to identify the source of bullying and apply the appropriate anti-bullying programs.

ACKNOWLEDGEMENTS

The authors would like to thank for two companies (Engineering Procurement Construction (EPC) Workers and Construction Civil Engineering Contractor) that participated in our study, Occupational Health and Safety Department, Faculty of Public Health, Universitas Indonesia (UI) and Disaster Risk Reduction Center UI for the support during completing this study.

REFERENCES

- [1] E. Field, "*Strategies for surviving bullying at work/Evelyn M. Field,*" Bowen Hills, Qld: Australian Academic Press, 2011.
- [2] P. D'Cruz, "*Depersonalized Bullying at Work: From Evidence to Conceptualization,*" Bowen Hills, Qld: Australian Academic Press, 2011.
- [3] D. Salin, and H. Hoel, "Workplace bullying as a gendered phenomenon," *J. Manag. Psychol.*, vol. 28, no. 3, pp. 235–251, 2013, doi: 10.1108/02683941311321187.
- [4] M. B. Nielsen and S. Einarsen, "Outcomes of exposure to workplace bullying: A meta-analytic review," *Work Stress*, vol. 26, no. 4, pp. 309–332, 2012, doi: 10.1080/02678373.2012.734709.
- [5] L. J. Hauge, A. Skogstad, and S. Einarsen, "Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others?," *Work Stress*, vol. 23, no. 4, pp. 349–358, 2009.
- [6] T. A. Daniel, "*Stop Bullying at Work : Strategies and Tools for HR & legal Professionals,*" Alexandria, Va: Society for Human Resource Management, 2009.
- [7] M. Riggall, J. Skues, and L. Wise, "Apprenticeship bullying in the building and construction industry," *Educ.*

- Train.*, vol. 59, no. 5, pp. 502–515, 2017
- [8] M. O'Moore and N. Crowley, "The clinical effects of workplace bullying: A critical look at personality using SEM," *Int. J. Work. Heal. Manag.*, vol. 4, no. 1, pp. 67–83, 2011, oi: 10.1108/17538351111118608.
- [9] M. B. Nielsen, N. Magerøy, J. Gjerstad, and S. Einarsen, "Workplace bullying and subsequent health problems," *Tidsskr. Nor. Laegeforen.*, vol. 134, no. 12–13, pp. 1233–1238, Jul. 2014, doi: 10.4045/tidsskr.13.0880.
- [10] A. K. Samnani and P. Singh, "20 Years of workplace bullying research: A review of the antecedents and consequences of bullying in the workplace," *Aggress. Violent Behav.*, vol. 17, no. 6, pp. 581–589, 2012, doi: 10.4045/tidsskr.13.0880.
- [11] S. Nauman, S. Z. Malik, and F. Jalil, "How workplace bullying jeopardizes employees' life satisfaction: The roles of job anxiety and insomnia," *Front. Psychol.*, vol. 10, no. oct, pp. 1-13, 2019, doi: 10.3389/fpsyg.2019.02292.
- [12] T. Haniefia and A. L. Riani, "The moderating role of cultural intelligence on the effect of ethnic harassment experience on employees' intention to leave in Indonesia," *Int. J. Bus.*, vol. 24, no. 3, pp. 296–307, 2019.
- [13] S. G. Trépanier, C. Fernet, and S. Austin, "Longitudinal relationships between workplace bullying, basic psychological needs, and employee functioning: a simultaneous investigation of psychological need satisfaction and frustration," *European Journal of Work and Organizational Psychology*, vol. 25, no. 5, pp. 690–706, 2016, doi: 10.1080/1359432X.2015.1132200.
- [14] N. M. Steele, B. Rodgers, and G. J. Fogarty, "The relationships of experiencing workplace bullying with mental health, affective commitment, and job satisfaction: Application of the job demands control model," *Int. J. Environ. Res. Public Health*, vol. 17, no. 6, pp. 1-14, 2020, doi: 10.3390/ijerph17062151.
- [15] C. M. H. Chan, J. E. Wong, L. L. Yeap, L. H. Wee, N. A. Jamil, and Y. Swarna Nantha, "Workplace bullying and psychological distress of employees across socioeconomic strata: A cross-sectional study," *BMC Public Health*, vol. 19, no. Suppl 4, pp. 1–8, 2019, doi: 10.1186/s12889-019-6859-1.
- [16] D. Erwandi, A. Kadir, and F. Lestari, "Identification of workplace bullying: Reliability and validity of Indonesian version of the negative acts questionnaire-revised (NAQ-R)," *Int. J. Environ. Res. Public Health*, vol. 18, no. 8, 2021, doi: 10.3390/ijerph18083985.
- [17] P. Vera-Villarroel, A. M. Urzua, P. Celis-Atenas, and J. Silva, "Evaluación del Bienestar subjetivo: Análisis de la Escala de Satisfacción con la Vida en población chilena," *Univ. Psychol.*, vol. 11, no. 3, pp. 719–727, 2012.
- [18] E. A. McMahan and D. Estes, "Measuring Lay Conceptions of Well-Being: The Beliefs About Well-Being Scale," *J. Happiness Stud.*, vol. 12, no. 2, pp. 267–287, 2011, doi: 10.1007/s10902-010-9194-x.
- [19] T. Bodner, M. Kraner, B. Bradford, L. Hammer, and D. Truxillo, "Safety, health, and well-being of municipal utility and construction workers," *J. Occup. Environ. Med.*, vol. 56, no. 7, pp. 771–778, 2014, doi: 10.1097/JOM.0000000000000178.
- [20] E. Chipps, S. Stelmashuk, N. M. Albert, L. Bernhard, and C. Holloman, "Workplace bullying in the OR: Results of a descriptive study," *AORN J.*, vol. 98, no. 5, pp. 479–493, 2013, doi: 10.1016/j.aorn.2013.08.015.
- [21] A. Arenas *et al.*, "Workplace bullying in a sample of Italian and Spanish employees and its relationship with job satisfaction, and psychological well-being," *Frontiers in Psychology*, vol. 6, no. dec. 2015, doi: 10.3389/fpsyg.2015.01912.
- [22] G. Giorgi, J. M. Leon-Perez, and A. Arenas, "Are Bullying Behaviors Tolerated in Some Cultures? Evidence for a Curvilinear Relationship Between Workplace Bullying and Job Satisfaction Among Italian Workers," *J. Bus. Ethics*, vol. 131, no. 1, pp. 227–237, 2015, doi: 10.1007/s10551-014-2266-9.
- [23] S. Lee, S. Yun, and A. Srivastava, "Evidence for a curvilinear relationship between abusive supervision and creativity in South Korea," *Leadersh. Q.*, vol. 24, no. 5, pp. 724–731, 2013, doi: 10.1016/j.leaf.2013.07.002.
- [24] O. N. E. Kjell, D. Daukantaitė, K. Hefferon, and S. Sikström, "The Harmony in Life Scale Complements the Satisfaction with Life Scale: Expanding the Conceptualization of the Cognitive Component of Subjective Well-Being," *Soc. Indic. Res.*, vol. 126, no. 2, pp. 893–919, 2016, doi: 10.1007/s11205-015-0903-z.
- [25] Y. Navarro-Abal, L. C. Sáenz-De la Torre, J. Gómez-Salgado, and J. A. Climent-Rodríguez, "Job satisfaction and perceived health in Spanish construction workers during the economic crisis," *Int. J. Environ. Res. Public Health*, vol. 15, no. 10, pp. 1-14, 2018, doi: 10.3390/ijerph15102188.
- [26] A. Pinto, I. L. Nunes, and R. A. Ribeiro, "Occupational risk assessment in construction industry - Overview and reflection," *Safety Science*, vol. 49, no. 5, pp. 616–624, 2011, doi: 10.1016/j.ssci.2011.01.003
- [27] M. Niu, R. M. Leicht, and S. Rowlinson, "Developing Safety Climate Indicators in a Construction Working Environment," *Pract. Period. Struct. Des. Constr.*, vol. 22, no. 4, 2017, doi: 10.1061/(ASCE)SC.1943-5576.0000340.
- [28] Q. Li, C. Ji, J. Yuan, and R. Han, "Developing dimensions and key indicators for the safety climate within China's construction teams: A questionnaire survey on construction sites in Nanjing," *Saf. Sci.*, vol. 93, pp. 266–276, 2017, doi: 10.1016/j.ssci.2016.11.006.
- [29] C. Naiduwa-handi and N. De Silva, "Factors Influencing Safety Behaviours of Construction Workers," *Conf. Pap.*, no. June 2014, pp. 45–54, 2017.
- [30] M. F. Coetzer, M. H. R. Bussin, and M. Geldenhuys, "Servant leadership and work-related well-being in a construction company," *SA J. Ind. Psychol.*, vol. 43, no. 1, pp. 1–10, 2017.
- [31] R. Mckay, "How to Manage a Bully: Workplace Bullying in Construction," *Advances in Social Sciences Research Journal*, vol. 2, no. 12, pp. 198–206, 2015, doi: 10.14738/assrj.212.1752.
- [32] M. A. Ferro, "The Psychometric Properties of the Kessler Psychological Distress Scale (K6) in an Epidemiological Sample of Canadian Youth," *Can. J. Psychiatry*, vol. 64, no. 9, pp. 647–657, 2019, doi: 10.1177/0706743718818414.

- [33] M. Houshmand, J. O'Reilly, S. Robinson, and A. Wolff, "Escaping bullying: The simultaneous impact of individual and unit-level bullying on turnover intentions," *Hum. Relations*, vol. 65, no. 7, pp. 901–918, 2012, doi: 10.1177/0018726712445100.
- [34] S. Geldart, L. Langlois, H. S. Shannon, L. M. Cortina, L. Griffith, and T. Haines, "Workplace incivility, psychological distress, and the protective effect of co-worker support," *Int. J. Work. Heal. Manag.*, vol. 11, no. 2, pp. 96–110, 2018, doi: 10.1108/IJWHM-07-2017-0051.
- [35] G. E. Mathisen, S. Einarsen, and R. Mykletun, "The Relationship Between Supervisor Personality, Supervisors' Perceived Stress and Workplace Bullying," *J. Bus. Ethics*, vol. 99, no. 4, pp. 637–651, 2011, doi: 10.1007/s10551-010-0674-z.
- [36] M.B. Nielsen, J. Hetland, and S. B. Matthiesen "Longitudinal relationships between workplace bullying and psychological distress," *The Scandinavian Journal of Work , Environment & Health* , vol. 38, no. 1, pp. 38–46, 2012, doi: 10.2307/41508862.
- [37] E. Ansoleaga, M. Ahumada, and A. G. S. Cruz, "Association of workplace bullying and workplace vulnerability in the psychological distress of Chilean workers," *Int. J. Environ. Res. Public Health*, vol. 16, no. 20, pp. 1–14, 2019, doi: 10.3390/ijerph16204039.
- [38] A. Maqsoom, A. Mughees, U. Safdar, B. Afsar, and B. ul Ali Zeeshan, "Intrinsic psychosocial stressors and construction worker productivity: impact of employee age and industry experience," *Econ. Res. Istraz.*, vol. 31, no. 1, pp. 1880–1902, 2018, doi: 10.1080/1331677X.2018.1495571.
- [39] S. Wales, "Psychosocial hazards and risks in the construction industry in new," *Proceedings of the 9th World Construction Symposium*, 2021, pp. 483–491.
- [40] F. Ashraf and M. A. Khan, "Does emotional intelligence moderate the relationship between workplace bullying and job performance?," *Asian Bus. Manag.*, vol. 13, no. 2, pp. 171–190, 2014.
- [41] P. Desrumaux, D. Lapointe, M. Ntsame Sima, J. S. Boudrias, A. Savoie, and L. Brunet, "The impact of job demands, climate, and optimism on well-being and distress at work: What are the mediating effects of basic psychological need satisfaction?," *Rev. Eur. Psychol. Appl.*, vol. 65, no. 4, pp. 179–188, 2015, doi: 10.1016/j.erap.2015.06.003.
- [42] W. P. McTernan, M. F. Dollard, and A. D. LaMontagne, "Depression in the workplace: An economic cost analysis of depression-related productivity loss attributable to job strain and bullying," *Work Stress*, vol. 27, no. 4, pp. 321–338, 2013, doi: 10.1080/02678373.2013.846948.
- [43] M. B. Nielsen, A. M. R. Indregard, and S. Øverland, "Workplace bullying and sickness absence: A systematic review and meta-analysis of the research literature," *Scand. J. Work. Environ. Heal.*, vol. 42, no. 5, pp. 359–370, 2016, doi:10.5271/sjweh.3579.