

Factors Affecting the Level of Work Fatigue in Workers at PT X

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Abstract: Work fatigue is a natural mechanism that prevents severe damage to workers but can also reduce their ability and efficiency at work. The issue of work fatigue has become an important matter that requires serious attention, as it can potentially diminish worker health, reduce productivity, and even increase the risk of workplace accidents. This study analyses the factors affecting work fatigue among workers at PT X, such as age, gender, length of service, and marital status. The research method used is a quantitative study with a cross-sectional design to analyse risk factors associated with work fatigue. The population and sample consisted of 57 respondents selected using random sampling techniques. Data was collected through observation, interviews, and questionnaires using the Work Fatigue Measurement Tool Questionnaire (KAUPK2) in digital form, conducted at PT X in April 2025. The analysis showed no significant relationship between gender and work fatigue ($p=0.723>0.05$). However, there was a significant relationship between age and work fatigue ($p=0.043<0.05$), marital status and work fatigue ($p=0.008<0.05$), as well as length of service and work fatigue ($p=0.013<0.05$). Workers aged 46-55 years had the highest level of severe fatigue, married workers showed a higher level of fatigue than unmarried workers, and workers with a longer duration of service (21-30 years) tended to experience severe fatigue. Age, marital status, and length of service influence work fatigue among workers at PT X, while gender did not show a relationship. Age, marital status, and length of service affect work fatigue among workers at PT X, while gender does not show a significant relationship. The results of this work fatigue study can be used as a basis for developing interventions to cope with fatigue in the workplace.

Keywords: KAUPK2; occupational safety and health; work fatigue

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INTRODUCTION

Work fatigue is a natural body mechanism that prevents more serious damage. Although the symptoms of fatigue can vary among individuals, this condition generally leads to a decrease in ability and efficiency at work. There are two main types of work fatigue: general and muscle fatigue. General fatigue is usually characterised by a loss of motivation to work, which can be caused by a monotonous work routine, heavy physical activity, an unsupportive work environment, mental stress, poor nutritional status, and the health condition of workers can trigger it. Meanwhile, muscle fatigue tends to result in physical symptoms such as muscle tremors or pain. (Tarwaka, 2012). Work fatigue has become an important issue that needs serious attention, as it can potentially lower employee health, reduce productivity, and even increase the risk of workplace accidents. If it occurs continuously, fatigue can lead to various health disorders such as anxiety, heart disorders, diabetes, hypertension, digestive disorders, fertility issues, and depression. (Mustofani & Dwiyantri, 2019).

According to data from the National Safety Council (NSC), in 2017, about 13% of 2,010 workers in America experienced work-related accidents due to fatigue. In Indonesia, this condition is also one of the main factors in the high rate of work accidents. BPJS Ketenagakerjaan documented that the number of work accidents in the last 3 years has increased, where in 2019, there were 210,789 work accident cases; in 2020, there were 221,740 work accidents, and in 2021, there were 234,370 work accidents (BPJS Ketenagakerjaan., 2021). Data from the Directorate General of Labour Inspection (2022) states that 2021 there were 7,298 work accidents, and 9% of that total was caused by fatigue. (Kemenaker RI, 2022). Meanwhile, data from Binwasnaker in 2012 shows that 36% of the 847 work accidents in Indonesia were caused by excessive fatigue.

The factors causing work fatigue are divided into two categories: internal and external factors. Internal factors include age, gender, nutritional status, health history, and the individual's psychological condition. Meanwhile, external factors include work duration, work period, monotony of the job, work environment conditions, workload, and body position while working. (Frely et al., 2017). Fatigue can interfere with work performance by slowing down reactions, reducing work speed, complicating decision-making processes, and increasing the likelihood of errors. This condition increases the possibility of work accidents in an industrial environment. (Aldi, Y., & Susanti, 2019).

METHODS

This quantitative study uses a cross-sectional design to analyse risk factors (Age, Length of Service, Gender, and Marital Status) associated with work fatigue. The study was conducted at PT X in April 2025. The research is descriptive-analytic with a cross-sectional approach, which analyses data to identify correlations between risk factors and their effects at a single point in time (Muda et al., 2025). The study's population and sample consisted of 57 respondents, and the samples were taken using a random sampling technique. The data collection techniques used are observation, interviews, and questionnaires. The Work Fatigue Measurement Tool Questionnaire (KAUPK2) is used in a digital or Google form. Data was collected by distributing questionnaires to determine demographic factors such as gender, age, length of service, and marital status. Data analysis was carried out using SPSS 22.0 with univariate and bivariate tests.

RESULT AND DISCUSSION

Analysis Univariate

Table 1. Distribution of the Frequency of respondents based on the general characteristics of PT X respondents

Variabel	Category	PT X		Total
		N	%	
Gender	Male	53	93.0%	57
	Famele	4	7.0%	57
Age	17-25 years	11	19.3%	57
	26-35 years	10	17.5%	57
	36-45 years	20	35.1%	57
	46-55 years	16	28.1%	57
Marital Status	Marriage	43	75.4%	57
	not married	14	24.6%	57
Working Period	0-6 Month	1	1.8%	57
	1-10 years	24	42.1%	57
	11-20 years	23	40.4%	57
	21-30 years	9	15.8%	57

Univariate analysis was conducted on each variable to provide an overview of the research data. This depiction was carried out using the frequency distribution of each variable. The variables to be analysed using univariate analysis are work fatigue, gender, age, marital status, and length of service. Based on the frequency distribution of the respondents' gender characteristics, the majority of workers at PT. X is male, totalling 53 individuals (93.0%), while the number of female respondents is four individuals (7.0%). Based on age categories, the workers at PT. X are aged between 17-25 years, amounting to 11 individuals (19.3%); 26-35 years, totalling 10 individuals (17.5%); 36-45 years, totalling 20 individuals (35.1%); and 46-55 years, totalling 16 individuals (28.1%). Based on marital status categories, the workers at PT. X who are married total 43 individuals (75.4%), and those who are unmarried total 14 individuals (24.6%). Based on marital status categories, respondents at PT. X who are married amount to 43 people (75.4%), and those who are unmarried amount to 14 people (24.6%). Based on employment duration categories, respondents at PT. X with 6-12 months of work experience consists of 1 person (1.8%), 1-10 years consists of 24 people (42.1%), 11-20 years consists of 23 people (40.4%), and 21-30 years consists of 9 people (15.8%).

Analysis Bivariate

Bivariate analysis is used to examine the relationship between independent and dependent variables by conducting a chi-squared test. The variables analysed using bivariate analysis include work fatigue, gender, age, marital status, and length of employment. The basis for decision-making in the Chi-Square test is based on the

significance level (α) of 95%: If the probability value $> \alpha$ (0.05), then the research hypothesis (H_0) is accepted. If the probability value $\leq \alpha$ (0.05), then the research hypothesis (H_0) is rejected.

Table 2. Analysis of Chi-Square Statistical Test of the Relationship Between Gender and Work Fatigue

Variabel	category	Work Fatigue						Total		P Value
		Less Tired		Tired		very tired				
		N	%	N	%	N	%	N	%	
Gender	Male	32	60.4	15	28.3	6	11.3	53	100	0,723
	Famele	2	50.0	1	25.0	1	25.0	4	100	

Based on Table 2, it is known that there are male and female genders, where most male respondents have a work fatigue level of not tired, which is 32 people (60.4%), 15 people (28.3%), and six exhausted people (11.3%). Meanwhile, the female gender has a work fatigue level of not tired two people (50.0%), tired one person (25.0%), and fatigued one person (25.0%). The statistical test used is the Chi-Square test, with a p-value of 0.723 ($p > 0.05$), meaning no significant relationship exists between gender and work fatigue. The chi-square probability value is $0.723 > 0.05$. Therefore, H_0 is accepted, indicating that H_a is rejected, meaning there is no significant relationship between gender and work fatigue among workers at PT X.

Table 3. Analysis of Chi-Square Statistical Test on the Relationship Between Age and Work Fatigue

Variabel	Category	Work Fatigue						Total		P Value
		Less Tired		Tired		Very Tired				
		N	%	N	%	N	%	N	%	
Age	17-25 Years	5	45.5	6	54.5	0	0.0	11	100	0.043
	26-35 Years	9	90.0	1	10.0	0	0.0	10	100	
	36-45 Years	11	55.0	6	30.0	3	15.0	20	100	
	46-55 Years	9	56.3	3	18.8	4	25.0	16	100	

Based on Table 3, it was found that workers aged 17-25 had a work fatigue level of not tired for five people (45.5%) and tired for six people (54.6%), workers aged 26-35 had a work fatigue level of not tired for nine people (90.0%) and tired for one person (10.0%), workers aged 36-45 had a work fatigue level of not tired for 11 people (55.0%), tired for six people (30.0%), and very tired for three people (15.0%), and workers aged 46-55 had a work fatigue level of not tired for nine people (56.3%), tired for three people (18.8%), and very tired for four people (25.0%). This analysis showed that the age group 46-55 had a very high work fatigue level. The statistical test used was the Chi-Square test, obtaining a p-value of 0.081 ($p < 0.05$), which means a relationship exists between age and work fatigue. The chi-square probability value is $0.043 < 0.05$. Thus, H_0 is rejected, meaning H_a is accepted, indicating a significant relationship between age and work fatigue among workers at PT X.

Table 4. Analysis of Chi-Square Statistical Test of the Relationship between Marital Status and Work Fatigue

Variabel	Category	Work Fatigue						Total		P Value
		Less Tired		Tired		Very Tired				
		N	%	N	%	N	%	N	%	
Marital status	Marriage	28	65.1	8	18.6	7	16.3	43	100	0.008
	Not Married	6	42.9	8	57.1	0	0.0	14	100	

Based on Table 4, it was found that workers with a married status have a workload fatigue level of not tired with 28 people (65.1%), tired with eight people (18.6%), and exhausted with seven people (16.3%). In comparison, workers with an unmarried status have a workload fatigue level of not tired with six people (42.9%) and tired with eight people (57.1%). The statistical test used is the Chi-Square test, which obtained a p-value of 0.008 ($p < 0.05$), indicating a relationship between marital status and work fatigue. The chi-square probability value is $0.008 < 0.05$. Therefore, H_0 is rejected, meaning H_a is accepted, which indicates a significant relationship between marital status and work fatigue among workers at PT X.

Table 5. Analysis of Chi-Square Statistical Test of Work Experience Against Work Fatigue

Variabel	Category	Work Fatigue						Total		P Value
		Less Tired		Tired		Very Tired				
		N	%	N	%	N	%	N	%	
Working Period	0-11 Month	1	100	0	0.0	0	0.0	1	100	0.013
	1-10 Years	14	58.3	10	41.7	0	0.0	24	100	
	11-20 Years	13	56.5	6	26.1	4	14.4	23	100	
	21-30 Years	6	66.7	0	0	3	33.3	9	100	

Based on Table 5, it was found that workers with a working period of 0-11 months have a work fatigue level of not tired consisting of 1 person (100%), workers with a working period of 1-10 years have a work fatigue level of not tired of 14 people (58.3%), tired 10 people (41.7%), workers with a working period of 11-20 years have a work fatigue level of not tired of 13 people (56.5%), tired six people (26.1%), and very tired four people (14.4%), workers with a working period of 21-30 years have a work fatigue level of not tired of 6 people (66.7%) and exhausted three people (33.3%). The statistical test used is the Chi-Square test, resulting in a p-value of 0.013 ($p < 0.05$), which means a relationship exists between the working period and work fatigue. The chi-square probability value is $0.0013 < 0.05$. Therefore, H_0 is rejected, meaning H_a is accepted, indicating a significant relationship between the working period and work fatigue among workers at PT X.

The influence of gender on work fatigue at PT X

Using the Chi-Square test, the research results in Table 2 show a p-value > 0.05 (0.723), meaning there is no significant relationship between gender and work fatigue. The chi-square probability value is $0.723 > 0.05$. Therefore, H_0 is accepted, meaning H_a is rejected; that is, there is no significant relationship between gender and work fatigue among workers at PT X. This research finding is in line with (Saptadi et al., 2022) study, which showed varied results regarding the relationship between gender and work fatigue among workers. Sada Wahyu from Bantul Regency found no significant relationship between gender and work fatigue ($p = 0.904 > 0.05$). In that study, although female workers tended to be 1.319 times more at risk of experiencing work fatigue than males, the difference was not statistically significant. Similar results were also found in the research by (Kusgiyanto et al., 2017), which stated that there is no relationship between gender and work fatigue among workers in the spring roll skin-making section in Kranggan Village, Semarang Tengah District, with a p-value of $(0.233) > \alpha (0.05)$.

Based on the researchers' assumptions, the lack of a relationship between gender and work fatigue is caused by differences in workload between men and women. Female employees at PT X are in administrative roles, while most men work in machinery and production areas that require physical strength. The absence of a significant relationship between gender and work fatigue may be due to individual adaptability in coping with work pressure.

The effect of age on work fatigue at PT X

Age is related to fatigue because increasing age is followed by the degeneration process of body organs, resulting in decreased organ capacity, which makes workers more susceptible to fatigue. (Rusila Yustika & Edward Kirana, 2022). According to the research results in Table 3 using the Chi-Square test, the p-value is < 0.05 (0.043), indicating a relationship between age and work fatigue. Therefore, H_0 is rejected, meaning H_a is accepted, which indicates a significant relationship between age and work fatigue among workers at PT X. The results of this study are consistent with research conducted by (Saptadi et al., 2022) at CV. Sada Wahyu, Bantul District, found a significant relationship between age and work fatigue. This study shows that older workers experience more work fatigue than younger workers, with older workers having a 6.53 times greater risk of experiencing fatigue. This study shows that older workers experience more work fatigue than younger workers, where older workers have a 6.53 times greater risk of experiencing work fatigue than younger workers. This is supported by other research, such as that conducted by Deyulmar et al. (2018) on workers making oak crackers, which found a significant relationship between age and work fatigue ($p = 0.006$), where workers in the older age category (≥ 40 years) experienced moderate levels of work fatigue more than those in the younger age category.

According to the researchers' assumptions, there is a relationship between age and work fatigue because workers over 36 begin to experience a decline in productivity. The Indonesian Ministry of Health (2003) states that physical or mental abilities gradually decrease as age increases. At an older age, connective tissue will shrink and replace muscle tissue. Muscle shrinkage causes a reduction in muscle elasticity. The ageing process is accompanied by a decreased ability to work due to changes in the body organs, the cardiovascular system, and the hormonal system.

The influence of marital status on work fatigue at PT X

The research results in Table 4 using the Chi-Square test show a p-value <0.05 (0.081), which means a relationship exists between age and work fatigue. The chi-square probability value is $0.043 < 0.05$. Therefore, H_0 is rejected, meaning H_a is accepted, which indicates that there is a significant relationship between age and work fatigue among workers at PT X. The findings of this study are in line (Aulia et al., 2024), which shows a significant relationship between marital status and work fatigue levels among workers. Research conducted at Hotel RKB Padang in 2023 revealed a significant relationship between marital status and work fatigue ($p = 0.002$), where married workers have a 28 times higher risk of experiencing work fatigue than single workers. This finding is supported by the research of (N. Agustin, 2018), who studied work fatigue among employees at PT. Adhi Persada Gedung Bekasi also showed a relationship between marital status and work fatigue.

According to the researchers' assumptions, marital status and work fatigue are related because married workers have dual responsibilities as employees and heads of families. The burden of family economic responsibilities can lead to psychological pressure that affects work fatigue. In addition, married workers generally have additional activities at home, such as taking care of families and children, which can reduce rest time and potentially increase work fatigue. On the other hand, a spouse's social support can help manage work-related stress.

The influence of work experience on work fatigue at PT X

The length of service is the duration of work from the first time one enters the job until the research is conducted. It is an accumulation of time someone invests in their work. The longer someone works, the more information and skills they acquire about the professional world they are engaged in, and they will become familiar with their job and work environment (William & Mahacandra, 2023). The research results in Table 5 using chi-square show a p-value <0.05 (0.013), indicating a relationship between years of service and work fatigue. Therefore, H_0 is rejected, meaning H_a is accepted, which indicates a significant relationship between years of service and work fatigue among employees at PT X. This research is in line with the study conducted by Aminah et al. (2024) at PT Batik X which showed a significant relationship between years of service and work fatigue levels. The study found that employees with less than 5 years of service mainly experienced mild fatigue (83.3%), while employees with 5 years or more of service were predominantly at moderate fatigue levels (86.4%). Statistical analysis using the chi-square test yielded a p-value = 0.000 (<0.05), indicating a statistically significant relationship between years of service and work fatigue. This finding is supported by the research of (Atiqoh et al., 2014) on workers in the garment industry, which found a significant relationship between length of service and work fatigue ($p=0.0001$), where a tenure of >10 years contributes to fatigue due to stress accumulated over a long period.

According to the researchers' assumptions, there is a relationship between length of employment and work fatigue, as the longer someone's length of employment, the more they are exposed to factors causing fatigue at work, such as repetitive workloads, exposure to suboptimal working environments, and the accumulation of work stress over a long period. Workers with longer employment durations are also likely to experience a decline in motivation and job boredom (burnout), which can affect their level of fatigue. However, workers with a very long employment duration (>20 years) may have developed good adaptation mechanisms to manage fatigue more effectively.

CONCLUSION

Based on the results of the research analysis regarding the factors that influence the level of work fatigue among workers at PT X, it can be concluded that out of the four factors analysed, only three factors show a significant relationship with work fatigue, namely age, marital status, and length of service. The age factor has a significant relationship with work fatigue ($p=0.043<0.05$), where older workers experience more work fatigue than younger workers because workers over 36 have declining productivity. Marital status also shows a significant relationship with work fatigue ($p=0.008<0.05$), where married workers have higher fatigue levels than unmarried workers because married workers have dual responsibilities as workers and heads of families. The burden of the family's economic responsibilities must cause psychological pressure that can affect work fatigue. Length of service shows a significant relationship with work fatigue ($p=0.013<0.05$), where workers with 21-30 years of service tend to experience severe fatigue, indicating that long-term exposure to factors causing fatigue in the workplace can accumulate negative impacts on workers' physical and mental conditions. Furthermore, gender does not show a significant relationship with work fatigue ($p=0.723>0.05$), which may be caused by differences in workload between men and women. Female workers at PT X are in administrative roles, while most male workers are in machine and production roles that demand physical strength. These work fatigue research results can be used to understand the risk factors for work fatigue in the work environment. It can then serve as a foundation for improving work fatigue control that is more targeted and effective in enhancing occupational health and safety.

DECLARATION OF GENERATIVE AI

The authors declare that no generative AI or AI-assisted technologies were used in the writing process of this manuscript.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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APPENDIX

QUESTIONNAIRE ANALYSIS OF WORK FATIGUE LEVELS AMONG WORKERS AT PT X

Instructions:

Choose the statement that best reflects your opinion and aligns with what you felt while working, by crossing one of the categories to the right of the statement.

I. Respondent Identity

- Name	:.....
- Age	:.....Years
- Work Period	:Years
- Gendernnnnn	: Female/Male
- Marital status	: Married/Not Married

II. Questionnaire for the Work Fatigue Measurement Tool (KAUPK2)

NO	QUESTION	Yes, rarely	Yes, often	No
1.	Do you find it hard to think?			
2.	Do you feel tired of talking?			
3.	Do you feel nervous about facing something?			
4.	Do you feel like you never concentrate when facing a task?			
5.	Do you feel like you have no attention for something?			
6.	Do you tend to forget about something?			
7.	Do you feel less confident in yourself?			
8.	Do you feel that you are not diligent in carrying out your work?			
9.	Do you feel reluctant to look people in the eye?			
10.	Do you feel reluctant to work efficiently?			
11.	Do you feel uneasy at work?			
12.	Do you feel tired all over your body?			
13.	Do you feel like you're acting sluggish?			
14.	Do you feel too weak to walk?			
15.	Do you feel tired before starting work?			
16.	Do you feel your thinking ability declining?			
17.	Do you feel anxious about something?			

Coding and categorisation of observation results

Age	Gander	Marital Status	Work Period	Category
Late Adolescence (17-25 Years) = 1	Male = 1	Married = 1	6-11 months = 0	Less Tired = <23
Early Adulthood (26-35 Years) = 2	Female = 2	Not Married = 2	1-10 years = 1	Tired = 23-31
Late Adulthood (36-45 Years) = 3			11-20 years = 2	Very Tired = >31
Early Elderly (46-55 Years) = 4			21-30 years = 3	
			31-40 years = 4	

Master Table of the Questionnaire for the Work Fatigue Measurement Tool

No	Initial	Age	Work Period	Gender	Marital Status	Work Fatigue																	Score	Category
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1	Tn. R	3	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	19	Less Tired
2	Tn. P	1	1	1	2	3	1	2	1	1	2	2	1	2	1	2	1	1	1	1	2	1	25	Tired
3	Tn. A	4	3	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	19	Less Tired
4	Tn. W	3	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	18	Less Tired
5	Tn. F	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
6	Ny. D	3	1	2	2	1	1	1	2	1	3	1	2	2	1	1	1	3	1	1	2	1	25	Tired
7	Tn. S	3	2	1	1	1	1	2	1	1	2	1	1	1	1	1	1	2	1	1	1	1	20	Less Tired
8	Tn. T	1	1	1	2	1	1	1	1	1	2	1	1	2	1	1	2	1	1	1	1	2	21	Less Tired
9	Tn. D	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
10	Ny. S	2	1	2	2	1	1	2	1	1	2	1	1	2	1	1	1	2	1	1	1	1	21	Less Tired
11	Tn. S	4	3	1	1	1	1	2	1	1	2	2	1	1	1	1	2	1	1	1	1	1	21	Less Tired
12	Tn. I	4	3	1	1	1	3	2	1	2	2	1	2	3	2	2	2	2	1	2	2	2	32	Very Tired
13	Tn. I	3	2	1	1	1	2	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	20	Less Tired
14	Tn. Y	3	2	1	1	3	3	3	3	3	3	2	3	3	3	3	1	1	1	1	2	3	41	Very Tired
15	Ny. A	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
16	Tn. H	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
17	Tn. R	1	0	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	Less Tired
18	Tn. Y	4	2	1	1	3	3	3	3	2	3	2	3	3	2	2	3	3	2	3	3	3	46	Very Tired
19	Tn. A	3	2	1	1	3	1	3	2	1	2	3	1	3	1	3	3	2	2	1	3	2	36	Very Tired
20	Tn. B	3	2	1	1	1	2	1	1	1	2	2	1	1	1	2	2	1	1	3	2	2	26	Tired
21	Tn. R	1	1	1	2	1	2	1	2	2	2	1	1	1	1	2	2	1	2	1	1	2	25	Tired
22	Tn. A	3	2	1	1	3	2	1	2	1	2	1	1	1	1	1	3	2	1	3	2	2	29	Tired
23	Tn. A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
24	Tn. W	4	2	1	2	3	2	2	3	1	2	1	1	1	1	1	1	1	1	1	2	2	26	Tired
25	Tn. F	2	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	1	1	1	1	2	21	Less Tired
26	Tn. B	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	19	Less Tired

27	Tn. P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	19	Less Tired
28	Tn. H	2	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	19	Less Tired
29	Tn. M	1	1	1	2	1	2	2	1	1	2	1	1	1	1	2	1	1	1	1	1	21	Less Tired
30	Tn. W	3	1	1	1	1	1	1	1	2	1	1	3	1	1	2	1	1	1	1	1	21	Less Tired
31	Tn. R	1	1	1	2	1	2	3	2	1	2	3	1	2	1	3	1	1	3	1	3	31	Tired
32	Tn. A	4	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19	Less Tired
33	Tn. E	3	1	1	1	1	1	2	1	2	2	2	2	2	1	2	1	1	1	2	1	26	Tired
34	Tn. A	4	1	1	1	3	1	2	1	1	1	1	1	1	1	2	1	1	1	1	2	22	Less Tired
35	Tn. D	4	2	1	1	1	1	1	2	2	2	2	1	1	1	2	1	1	2	1	2	24	Tired
36	Tn. J	3	2	1	1	3	2	3	3	1	2	2	1	2	2	2	1	2	1	1	2	32	Very Tired
37	Tn. R	2	2	1	1	3	1	1	1	1	2	1	1	1	1	2	1	1	1	2	1	22	Less Tired
38	Tn. P	2	1	1	2	1	1	2	1	1	1	1	1	1	1	3	1	1	2	2	1	22	Less Tired
39	Tn. H	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
40	Tn. R	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	18	Less Tired
41	Tn. F	1	1	1	2	1	2	2	2	2	2	2	2	2	1	1	2	2	1	3	2	31	Tired
42	Tn. W	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	19	Less Tired
43	Tn. I	1	1	1	2	3	2	1	1	1	2	1	2	1	1	2	2	1	1	2	1	25	Tired
44	Tn. A	2	2	1	1	3	2	2	1	1	2	2	1	2	1	2	2	2	1	2	2	30	Tired
45	Tn. N	1	1	1	2	1	2	3	2	1	2	2	2	1	2	1	2	2	1	1	2	29	Tired
46	Tn. R	4	3	1	1	3	2	3	2	2	2	3	2	3	2	3	2	2	2	2	2	39	Very Tired
47	Tn. H	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
48	Tn. W	3	2	1	1	1	2	1	1	1	2	2	2	1	2	2	2	2	1	1	2	27	Tired
49	Tn. S	3	1	1	1	3	2	2	2	2	2	2	1	1	1	2	2	1	1	1	1	27	Tired
50	Tn. S	4	1	1	1	1	2	2	2	2	2	2	1	1	1	2	1	1	1	2	2	27	Tired
51	Tn. Y	3	2	1	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	20	Less Tired
52	Tn. S	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	Less Tired
53	Tn. I	4	3	1	1	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	1	20	Less Tired
54	Tn. F	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	Less Tired
55	Tn. S	4	3	2	1	3	2	2	2	1	3	2	1	2	1	3	3	2	2	3	3	36	Very Tired

56	Tn. K	3	2	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	20	Less Tired
57	Tn. A	1	1	1	2	1	1	1	2	1	2	2	1	1	1	1	2	1	1	1	1	2	22	Less Tired