

UNDERLOAD WORK AND CHALLENGING WORK: OVERCOMING BOREDOM AMONG MILLENNIALS

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Received: 20th July 2022/ Revised: 18th October 2022/ Accepted: 19th October 2022

How to Cite: Rihhandini, D. O., & Parahyanti, E. (2023). Underload work and challenging work:
Overcoming boredom among millennials. *Humaniora*, 14(2), 131-140. <https://doi.org/10.21512/humaniora.v14i2.8758>

ABSTRACT

The research aimed to explore the moderation role of challenge in the relationship between underload work and boredom at work, especially among millennial employees. As part of the current productive age and some had even occupied essential positions in the company, millennials had characteristics that were easier to get bored than other generations, which could increase millennials' vulnerability to feeling bored at work. Therefore, a special strategy was needed to deal with boredom among millennials to maintain company productivity and psychophysical health in millennials. The research involved 327 millennials employee in Indonesia aged 23-40. Data were collected from December 2021 – January 2022 via a Google Form. The data were analyzed using simple moderation by PROCESS Hayes. The findings show that boredom can be predicted by three underload work variables: perception of underload work, the expectation of workload, and desire for the workload. The moderation role of challenge can only be found to reduce the effect of underload work perception on boredom but not on workload expectation or workload desire. Based on this result, it can be concluded that seeking challenges or adding responsibilities at work can prevent boredom among employees who perceive low workloads in their current state. As a result, organizations must provide employees with the opportunity and support to take on new challenges at work. Employees must also be proactive in seeking new challenges to avoid boredom.

Keywords: millennials, boredom, underload work, challenge

INTRODUCTION

The Central Bureau of Statistics in Indonesia estimates that 2020-2030 will be the peak of the demographic bonus in Indonesia, which is marked by the number of productive ages doubling compared to the age of children and the elderly. In 2020, as many as 25,8% of Indonesia's population was recorded as a millennial generation group (census.bps.go.id). As part of the productive age, the millennial generation's presence will certainly impact the industry in Indonesia. The urgency to research millennial employees in Indonesia is beneficial to find appropriate managerial strategies to manage millennial employees effectively.

Millennials are an age group born between 1982 and 2000 (Helmi et al., 2021). This generation has characteristics that distinguish it from other

generations. In a report from Deloitte Indonesia Perspectives 2019 (Hoeng et al., 2019), millennial workers tend to work fast, want to get feedback on work quickly, want challenges at work, and have a faster rate of boredom than previous generations.

Boredom at work is defined as boredom experienced by employees in the work context due to a non-stimulating or unchallenging work environment that causes employees to feel unwell, unmotivated, and dissatisfied (Oprea et al., 2019; Reijseger et al., 2013; van Wyk et al., 2016). Boredom can happen to anyone, but research about this concept is still relatively neglected (van Hooft & van Hooft, 2018), and organizational attention to this phenomenon is still limited compared to other psychological conditions (Teng et al., 2020; van Wyk et al., 2016). The concept of boredom in the workplace is different from burnout.

Burnout is caused by overstimulation of work; meanwhile, boredom is caused by low stimulation and unpleasant work (Reijseger et al., 2013).

Boredom at work has many impacts both on employees and on organizations, including turnover intentions (Seckin, 2018; Teng et al., 2020), cyberloafing (Husna, Silviandari, & Susilawati, 2020), low life satisfaction (Seckin, 2018), increased stress level, early retired, anxiety and depressive (Chao et al., 2020; Eid, 2018). Boredom at work can be caused by repetitive and monotonous tasks (Sharp, Sharp, & Young, 2020) and work underload (Pindek, Krajcevska, & Spector, 2018). Frankenhaeuser and Gardell distinguish workload into qualitative and quantitative (as cited in Naude, 2015). Qualitatively, low workload occurs when employees do not use their abilities optimally, which is related to perceived over-qualification. In the meantime, there is a quantitatively low workload because there is not enough to complete during a workday (underload). Therefore, the research will focus on low workload quantitatively. In addition, the transformation of daily work with technology can affect the amount of workload that individuals have, or in other words, technological transformation can lead to the emergence of perceptions of work underload on individuals (Agarwal, Swami, & Malhotra, 2022; Clemons, 2020).

Naude (2015) has defined underload work as a condition where employees perceive that they do not have enough work to complete. The expectations and desires of employees regarding workloads contribute to perceptions related to underload. Based on this, Naude (2015) and Clemons (2020) have divided three dimensions of underload, (1) perception of underload work, which is defined as an individual's view of their current workload quantitatively, (2) workload expectations, defined as the expectations employee have regarding the workload they will have at their current job, and (3) desire of workload, defined as the individual's desire to have more workloads than they currently have. These dimensions proposed by Naude (2015) and Clemons (2020) are based on the person-environment fit theory and cognitive appraisal theory. According to person-environment fit, it will occur when individual characteristics match work environment characteristics. More specifically, need-supplies fit (one type of person-environment fit theory) occurs when employee characteristics (such as needs and desires) are encountered by the job they perform. So, employees who desire or prefer more work but cannot be fulfilled by the organization will experience a lack of needs-supplies fit (Naude, 2015). Another theory, the cognitive appraisal of stress theory by Lazarus (Clemons, 2020; Naude, 2015), also has a role in understanding the underload concept. Cognitive appraisal theory starts with an individual evaluation of an event, whether the event is harmful or not, and continues with determining what action needs to be taken. Naude (2015) has argued that this theory is appropriate to understand the underload concept because it emphasizes that individuals perceive an

event (such as stress) differently. Naude (2015) has stated that these three dimensions are needed because understanding the process underlying and measuring underload work should involve employee perception of underload, individual expectations, and desire related to workload.

Previous research has found that underload work is positively correlated with job boredom (Clemons, 2020; Naude, 2015; Pindek, Krajcevska, & Spector, 2018; van Wyk et al., 2016). Van Wyk et al. (2016) have mentioned that when employees have little to do during work time, and the work is not in accordance with their abilities, they will feel that their current job is not challenging and will get bored. Clemons (2020) has also found that each dimension of underload work (perception, expectation, and desire) is significantly related to boredom.

Previous research has stated that job crafting can be a strategy to reduce boredom in the workplace (Clemons, 2020; Knight et al., 2021; Naude, 2015). Job crafting is defined as a behavior that is carried out and initiated by individuals on the demands and resources of their own work to achieve their work goals (Costantini et al., 2022; Ok & Lim, 2022; Oprea, Miulescu, & Iliescu, 2022; Tims, Bakker, & Derks, 2012). Tims, Bakker, and Derks (2012); Oprea, Miulescu, and Iliescu (2022) have divided four categories of job crafting, (1) increasing structural job resources, which refers to variations in job resources, opportunities for development and autonomy in work, (2) increasing social job resources, refers to social resources such as support, coaching, and feedback on current work performance, (3) increasing challenging job demands, refers to seeking challenges or job responsibilities, and (4) decreasing hindering job demands, which refers to employees' proactive actions to reduce work demands when they feel overwhelmed. Based on the research objective, work boredom happens when employees' workload is low; therefore, decreasing and hindering job demands will not be used in the research. This is also in line with Maulina's research (2018) that job crafting is a mechanism to fulfill person-job fit in a situation where there is an imbalance between the individual and work due to lack of work to do; decreasing hindering job demands is considered inappropriate to reduce boredom.

Furthermore, Tims, Bakker, and Derks (2012); and Harju, Hakanen, and Schaufeli (2016) have mentioned that under-stimulation or under challenge work will cause boredom and increasing challenging job demands can be a strategy to eliminate the effects of boredom in the future. Another research by Knight et al. (2021) has also found that increasing challenging job demands can be used as a strategy to reduce boredom due to low workloads. Therefore, the research aims to explore the moderating role of increasing challenging job demands to reduce the negative impact of underload work on job boredom. Another argument of researchers in using increasingly challenging job demands is based on Bakker and Demerouti (2007); Knight et al. (2021); and Parker, Morgeson, and Johns

(2017), which states that demands refer to aspects of work that require physical or psychological effort such as workload, while resources are aspects of work that help individuals to achieve work targets or reduce work demands, such as autonomy and feedback.

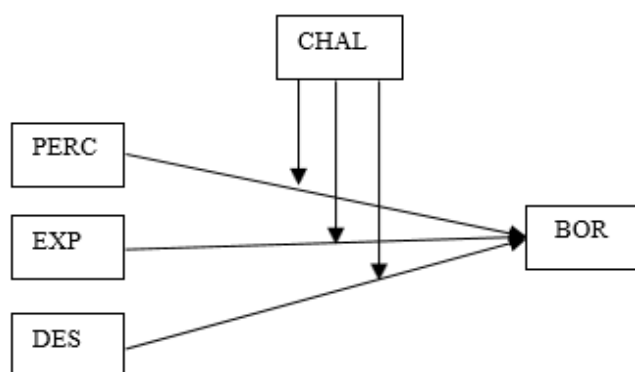
Research related to workload and boredom has been done before. However, as far as researchers review, the workload that is widely studied is high, and there are still quite a few who discuss underload work and boredom at work, including Azizah and Setyawati (2019). In addition, the use of the underload concept with three dimensions, namely perceptions, expectations, and desires, which is developed by Naude (2015) and Clemons (2020), as far as researchers review has never been carried out in Indonesia, so this is expected to be a novelty in the research. Figure 1 shows the research model of the research. Based on these explanations, the hypotheses proposed in this research are:

H1: Perception of underload work, expectations of workload, and desire of workload significantly related to boredom at work.

H2: Increasing challenging job demands moderates the relationship between perceived workload and boredom.

H3: Increasing challenging job demands moderate the relationship between expectation of workload and boredom.

H4: Increasing challenging job demands moderate the relationship between the desire for workload and boredom.



Note: BOR = Boredom, PERC = Perception of Underload, EXP = Expectation of Workload, DES = Desire of Workload, CHAL = increasing challenging job demands

Figure 1 Research Model

METHODS

This is a quantitative research with a cross-sectional study design (Leavy, 2017). The sampling technique used is purposive sampling with the characteristic that the respondent is an employee in

Indonesia that is born from 1982 to 1999 and has already worked at their current job minimum for six months. The respondents in the research are voluntary, and the researchers have stated that the data provided by the respondents is kept confidential in accordance with the psychological code of ethics and will not affect any job appraisal. In addition, the research has also gone through the ethical review of the Faculty of Psychology, University of Indonesia, and is declared feasible.

The research uses five variables, boredom at work as the dependent variable, underload work as an independent variable, which consists of three dimensions, namely perceptions, expectations, and desires, and dimensions of increasingly challenging job demands on job crafting as a moderator variable. The measuring instrument used for boredom at work is the Dutch Boredom Scale (DUBS) developed by Reijseger et al. (2013); Marri, Jamshaid, and Aqdas (2021); Sutarto and Izzah (2022) that consists of six items. This scale has been translated into Indonesian by Maulina (2018) and used the Likert scale from 1 (never) to 5 (always). An example of an item for this scale is “There is not much to do at work”. As for the underload variable, the instrument used is the Naude Underload Work Scale (NUWS) developed by Naude (2015); Clemons (2020), which consists of three dimensions, namely perception (6 items), desire (7 items), and expectations (5 items). This scale from Naude is later adapted by the researcher using back-translation and a pilot study to test the readability. An example of an item for this scale is “I feel like I have nothing to do”. The third measuring instrument used in this research is the Job Crafting Scale developed by Tims, Bakker, and Derks (2012) especially increasing challenging job demands scale, which consists of five items (an example of an item is “When an interesting project comes along, I offer myself proactively as project co-worker”). This scale has been translated into Indonesia by Maulina (2018) and used in this research. NUWS scale and increasingly challenging job demands measurements are distributed to the respondent using Likert scale type 1 (strongly disagree) to 5 (strongly agree) to make participant easier to respond. All measurements are distributed to respondents in Indonesia via Google Forms. Before being administered, this scale is tested for reliability and validity using IBM SPSS 26.0. To minimize careless responses, three attention checker items are used.

Based on the calculation results, for the Dutch Boredom Scale, one item is eliminated due to factor loading below 0.4. The Cronbach alpha number for this measurement is 0,71, and the corrected total item correlation for all items is above 0,3 ($CFI = 0,99$; $NFI = 0,97$; $RMSEA = 0,03$; $GFI = 0,99$). This number indicates that five items on Dutch Boredom Scale have good internal consistency and item validity. As for Naude Underload Scale, the analysis is carried out on each dimension. Three items are eliminated from the perception dimension (Cronbach Alpha 0,74,

$CFI = 1,00$, $NFI = 1,00$, $RMSEA = 0,00$, $GFI = 1,00$), two items are eliminated from the desire dimension (Cronbach Alpha 0,85, $CFI = 0,98$, $NFI = 0,97$, $RMSEA = 0,08$, $GFI = 0,98$) and one item is eliminated from expectation dimension (Cronbach Alpha 0,79, $CFI = 1,00$, $NFI = 0,99$, $RMSEA = 0,00$, $GFI = 1,00$). The corrected total item correlation for all items is above 0,3, and all factor loading is above 0,4. The last measuring instrument used is increasing challenging job demands. There are no eliminated items from this scale (Cronbach Alpha 0,83, $CFI = 0,98$, $NFI = 0,98$, $RMSEA = 0,07$, $GFI = 0,98$). All the data fit on the goodness of fit (Meyers, Gamst, & Guarino, 2005; Vieira, 2011), and it can be concluded that the model proposed fits the actual condition. The data that have been collected are then analyzed further using model 1 simple moderation PROCESS Hayes (Hayes, 2013) that can be seen in Figure 2.

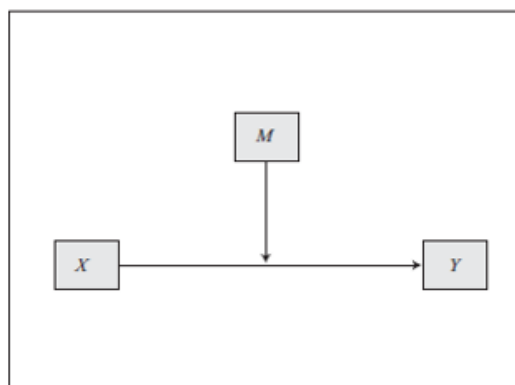


Figure 2 Model 1 Simple Moderation PROCESS Hayes

RESULTS AND DISCUSSIONS

The total number of respondents who participated in the research amounted to 420 respondents, but not all data can be used. A total of 93 respondents are not included in the data analysis process because they do not meet the criteria or do not pass the attention checker; therefore, only 327 respondents will be included in the data analysis. Out of 327 respondents, the age range is 23-40 years ($M = 28,45$; $SD = 4,330$). Respondents are dominated by women (64,2%) than men (35,8%). In addition, it is also found that most of the respondents work in staff positions (70,6%) and the least work as consultants (1,2%), the tenure of most of the respondents ranged from 2-10 years (53,2%), and the least is more than ten years (5,8%). Most of the respondents work in the government sector (22,9%). The data distribution also shows that respondents mainly come from DKI Jakarta (11,0%).

Table 1 shows the correlation between items. It can be concluded that most variables correlate significantly, either positively or negatively.

The results in Table 1 show that the three dimensions of underload work correlate significantly

with boredom at work. This result is in line with previous research (Clemons, 2020; Naude, 2015). The strongest correlation is found in perceptions of underload work and work boredom ($r = 0,33$, $p = 0,05$), followed by desired workload ($r = -0,18$, $p = 0,05$) and workload expectations ($r = 0,16$, $p = 0,05$). The correlation between perception and expectation is found to be positively significant with boredom, whereas the correlation between desire and boredom at work was negatively correlated. This result indicates that H1 is supported.

Table 1 Correlation Analysis

Var.	1	2	3	4	5
BOR	1				
PERC	0,33**	1			
DES	-0,18**	0,12*	1		
EXP	0,16**	0,09	0,21**	1	
CHAL	-0,24**	-0,002	0,49**	0,17**	1

Note: BOR = Boredom, PERC = Perception of Underload, EXP = expectation of workload, DES = desire of workload, CHAL= increasing challenging job demands

N = 327

*correlation are significant at 0,01

**correlation are significant at 0,05

In line with Clemons (2020), the correlation between perceived underload and expectation of workload with boredom at work is found to be positive, which means the higher the individual's perception of a perception of underload, the higher the work boredom experienced. Individuals with a low level of workload or have little to do during the given working time so that the work is deemed too simple and not challenging and makes the individual feel bored at work (Pindek, Krajcevska, & Spector, 2018; van Wyk et al., 2016). Perception items (for example, "I feel there is nothing I can do during work hours") align with the sentences above. Therefore, a result that shows a positive correlation means the higher the score indicates that the individual increasingly feels that his current workload is low (underload) and can lead to boredom.

Likewise, the higher the individual's expectations regarding the workload, the higher the work boredom experienced. The expectation of workload explores whether individuals expect a higher workload than they currently have. The expectation item explores whether there is a gap in individual expectations of work with their current work, for example, "I think there will be a lot of work that I have to do in this job". Thus, the higher the score individual got indicates the individual perceived gap between expectations and his current job, the higher the boredom experienced. This finding is in line with Clemons (2020) and Naude (2015). Furthermore, Naude (2015) has explained that this expectation gap contributes to the formation of

individuals' perceptions that their current workload is low and will lead to work boredom.

Based on the analysis result, the correlation between the desire for workload and work boredom is found to be negative. This indicates that the lower the desire for workload, the higher the boredom individuals feel. This result is in line with Clemons's study (2020). The desire for workload can be explained using the theory of person-environment fit (Naude, 2015; Clemons, 2020). This theory states that when there is a mismatch between individual characteristics, such as the desire for workloads, with organizational characteristics, such as the workload given, individuals will feel that their current workload is low. De Cooman et al. (2019) have stated that when work demands and individual abilities are fully matched (fit), it can lead to a lack of perceived challenge at work and increased job boredom. When viewed from the items on this dimension (for example, I would prefer to have a high workload), the lower the individual's score (for example, which means they do not want a high workload), the more fit the current workload is and the likelihood of experiencing boredom increases.

Table 2 shows the results of a moderating analysis of increasingly challenging job demands on the relationship between perceived underload work and boredom at work, which the graphics can be seen in Figure 3. Table 3 shows the results of the moderating analysis of increasingly challenging job demands on the relationship between the expectation of workload and boredom at work, which the graphics can be seen in Figure 4. While Table 4 shows the results of the moderating analysis of increasingly challenging job demands on the relationship between the desire for workload and boredom at work, which the graphics can be seen in Figure 5. Based on these results, it can be seen that increasingly challenging job demands only moderate the relationship between perceived underload work and job boredom, and the role of this moderator reduces work boredom due to the perception of underload work. Moderation roles are not found in the relationship between expectation of workload and boredom, as well as between desire of workload and boredom at work. This result indicates that H2 is supported; meanwhile, H3 and H4 are not supported.

Table 2 Moderation Analysis of Perception and Boredom

Variables	β	SE B	t	p
Constant	15,9 [15,44, 16,51]	0,27	58,71	0,00
PERC	0,62 [0,41, 0,82]	0,10	5,91	0,00
CHAL	-0,30 [-0,43, -0,17]	0,06	-4,60	0,00
PERC x CHAL	0,05 [0,01, 0,1]	0,02	2,37	0,01

R² = 0,18

Note: PERC = Perception of underload,

CHAL= increasing challenging job demands, N = 327

*correlation is significant at 0,01

**correlation is significant at 0,05

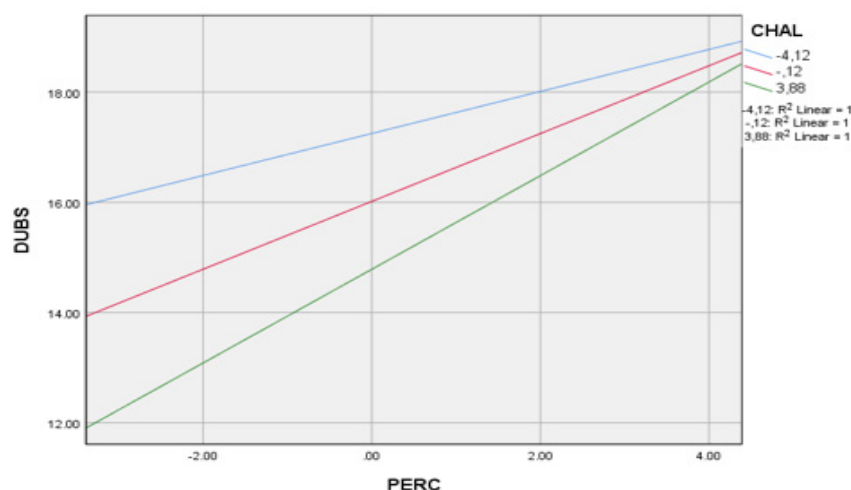


Figure 3 Interaction Graphic Moderation Analysis on Perception and Boredom by Challenging Job Demands

Table 3 Moderation Analysis on Expectation and Boredom

Variables	β	SE B	t	p
Constant	16,00 [15,43, 16,57]	0,28	55,47	0,00
EXP	0,34 [0,17, 0,52]	0,08	3,95	0,00
CHAL	-0,36 [-0,50, -0,22]	0,07	-5,13	0,00
EXP x CHAL	-0,01 [-0,05, 0,02]	0,01	-0,66	0,50

R² = 0,10

Note: EXP = expectation of workload, CHAL= increasing challenging job demands

N = 327

*correlation is significant at 0,01

**correlation is significant at 0,05

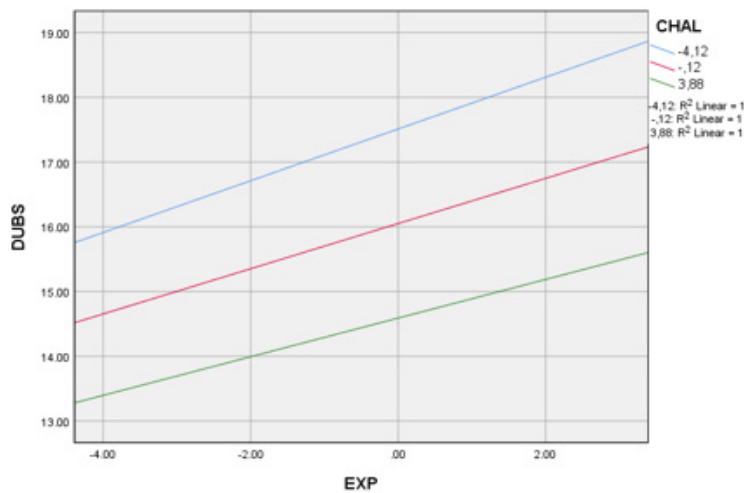


Figure 4 Interaction Graphic Moderation Analysis on Expectation and Boredom by Challenging Job Demands

Table 4 Moderation Analysis of Desire and Boredom

Variables	β	SE B	t	p
Constant	16,13 [15,51, 16,75]	0,31	51,04	0,00
DES	-0,10 [-0,26, -0,05]	0,08	-1,29	0,19
CHAL	-0,27 [-0,43, 0,11]	0,08	-3,34	0,00
EXP x CHAL	-0,01 [-0,04, 0,01]	0,01	-1,25	0,20

R² = 0,06

Note: DES = desire of workload, CHAL= increasing challenging job demands

N = 327

*correlation is significant at 0,01

**correlation is significant at 0,05

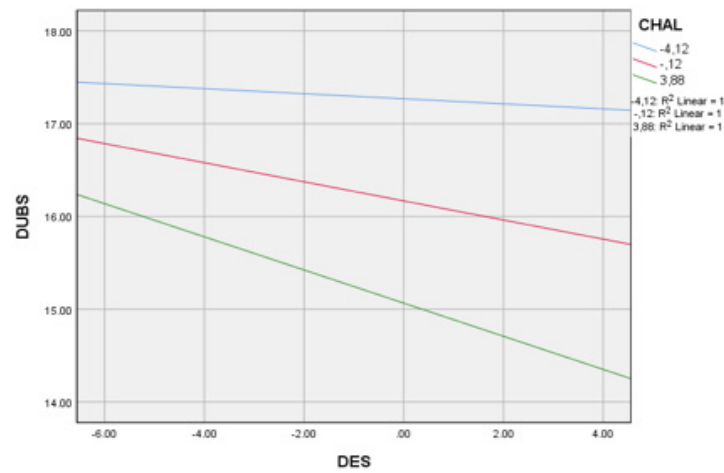


Figure 5 Interaction Graphic Moderation Analysis on Desire and Boredom by Challenging Job Demands

Table 5 Conditional Indirect Effect of Moderation

Mediator	Level	β	SE B	<i>p</i>
Increasing Challenging Job Demands	Low	0,38 [0,62, 0,69]	0,16	0,02
	Moderate	0,61 [0,41, 0,82]	0,10	0,00
	High	0,84 [0,60, 1,15]	0,12	0,00

This can be further explained through Naude's research (2015), which states that the perception of underload work is a condition when the employees feel like there is nothing to do during working hours and there is still plenty of time left after finishing the job. Therefore, increasingly challenging job demands become an appropriate moderator (Harju, Hakanen, & Schaufeli, 2016; Knight et al., 2021; Tims, Bakker, & Derks, 2012; van Hooff & van Hooff, 2014). Harju, Hakanen, and Schaufeli (2016) have argued that increasingly challenging job demands can make work more interesting, meaningful, and satisfying, so it is a strategy that can be used for bored employees. Increasingly challenging job demands are the right strategy considering the characteristics of respondents who want challenges in their work (Devina & Dwikardana, 2019).

Furthermore, the results demonstrate a conditional effect, indicating which conditions significantly increased challenging job demands and acted as a moderator. Therefore, from Table 5 can be concluded that challenging job demands at any level can play a significant role in reducing boredom at work in an individual. In more detail, the relationship between perceived underload work and job boredom will be further decreased in line with the increase in challenging job demands, or other words, the more often individuals experience challenging job demands, the lower the boredom experienced by individuals will be.

As for expectation dimensions, it is found that it does affect job boredom, but the role of increasing challenging job demands is insignificant. Naude (2015) later has discussed the theory to explain expectations, namely cognitive appraisal theory. Therefore, when reviewing further on these dimensional items, it appears that this dimension explores the gap between the expectations that employees have when accepting this job compared to the actual workload. Naude (2015) has also argued that this expectation contributes to employee perception of the current workload. This unmet expectation can be solved in two ways, before and after employees join the company. Previous research by Clemons (2020) and Naude (2015) has suggested that before employees develop an underload perception because of unrealistic expectations, a realistic job preview is important. However, if the employee has already joined, it is possible to handle the unmet expectations by managing future job expectations (Maden, Ozcelik, & Karacay, 2016, as cited in Domurath, Taggar, & Patzelt, 2022). Future job expectation is started by the employee themselves to make a plan, and the organization can support them by giving them a chance to develop themselves. As a result, increasing challenging job demands may not be appropriate for this because it does not require employee needs but rather managing workload expectations first. If an organization assigns an additional job or responsibilities, the employee job expectation (how much load they want) is likely to be

unclear, and this is not the best solution.

The last dimension, the desire for workload, can also affect boredom at work. The moderating role of increasing challenging job demands is also not found in this relationship. Desire can be explained by the person-environment fit theory (Naude, 2015). According to this theory, a match between employee characteristics (such as needs and desires) and organizational characteristics is needed. Therefore, if employees desire or prefer to have the amount of workload but are not given enough by the organization, they will experience a lack of needs-supplies fit, likely leading to a perceived quantitative workload. However, before adding a number of workloads, it is important to consider the employee's character. Naude (2015) has stated that there is a possibility that personality traits as individual characteristics influence the desire of an employee. Thus, increasing challenging job demands might not be suitable because employees might want a high workload, but characteristics do not support it, such as neuroticism and perceived workload related to perceived frustration (Rose et al., 2002). Khan, Kaewsang-On, and Saeed (2019) have also stated that the impact of workload on employee performance is determined by the employee's personality; for example, extraversion individuals may handle heavy workloads due to characteristics such as aggressiveness, optimism, and a desire to complete tasks on time.

Another statement has cited by Holman and Hughes (2021) is that individuals who perform effectively in higher workloads must be diligent and consistent. This effect of personality traits on workload management can be understood as having additional job demands may cause stress for some individuals, and how these individuals perceive this stress may be affected by personality traits (Kural & Özyurt, 2018).

The result of the research contributes theoretically to industrial and organizational psychology research, company and employee themselves, especially on boredom and underloaded work among millennials. Millennials, as noted, have some unique characteristics, such as having a faster rate of boredom than previous generations (Hoeng et al., 2019) and wanting challenges in their work (Devina & Dwikardana, 2019). This result indicates that when millennials perceive that their workload is low, it could lead to boredom experience. However, if added challenge to their work, it could reduce the possibility of boredom at work. This result also provides insight into factors that can affect boredom, namely the perception of underload work, the expectation of workload, and the desire for workload, and how challenges can act as a buffer to boredom, especially for millennials. This result can be used as a reference for further research related to organization management to identify and manage employee boredom, especially among millennials.

The research has some limitations. First, research methods that use self-reporting can lead to a tendency for social desirability, although to minimize

this, researchers already use an attention checker item. Second, regarding the research review, Naude Underload Scale has never been used in Indonesia. Therefore, further research is needed to improve its validity and reliability. It is recommended for future research to investigate the relationship between underload dimensions and other variables, such as personality traits, to learn more about individual characteristics that are more susceptible to experiencing underload and how job crafting strategies, particularly increasing challenging job demands, differ from one personality trait to another in mitigating boredom caused by an underload work situation. Researchers also recommended further investigation regarding leadership style in Indonesia, whether it can be affected by boredom, perceived underload, workload expectation, or desire for workload among millennial employees. This is in line with Naude's statement (2015) that there is a possibility of an impact of leadership style that can make employee experience underload work. The researchers also have to consider that Indonesia holds collectivistic culture more than an individualistic one; this can be interesting to research whether this culture or leadership style can affect the possibility or the encouragement or the proactive behavior of employees to seek challenges in work. Lastly, the research discovers that increasing challenging job demands can decrease boredom due to the perceived underload of work in any given situation; the more often individuals experience challenging job demands, the lower the boredom experienced by individuals will be. This can be investigated further by determining how frequently or at what intensity challenging job demands are met in order to create conditions that effectively reduce work boredom.

CONCLUSIONS

The research aims to explore the moderation role of challenge in the relationship between underload work and boredom at work, especially among millennial employees. The findings reveal that increasing challenging job demands are only significant in the relationship between perception and boredom and that increasing challenging job demands lower this relationship. Furthermore, this result also shows that in any situation, challenging job demands can significantly reduce boredom caused by perceived underload work; the more often individuals experience challenging job demands, the lower the boredom experienced by individuals will be.

The research offers some implications for organizations and employees to be aware of the cause of boredom in the workplace, especially related to workload. Employee proactive behavior to change work demands, such as seeking challenges from new projects or taking on additional job responsibilities to use their time and capabilities during work, can prevent feeling bored at work. Organizations and employees can assess whether employees feel

bored with the current workload and find a solution to overcome it. Organizations need to provide job realistic previews or support employees to manage their future job expectations to prevent employees from developing a perceived underload that can lead to boredom. Organizations can also use the result of personality traits in the selection test to better understand employee desire for workload and place them in the right place. Further research is needed considering that organizations change dynamically, so it is necessary to examine boredom in the workplace, especially in an increasingly automated era that can reduce workload.

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