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## INTERNAL EMPLOYEE QUALIFICATION AFFECT ADAPTABILITY TO OPEN OFFICE LED TO WORKPLACE SATISFACTION

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**Abstract:** This study aims to understand the internal employee qualification and separated all external factors like acoustic, thermal comfort, layout, air quality, and lighting surrounding the employee when adapting to open office. The questionnaire distributed on-line purposive given to those working in an open office environment. Some snowballing effect is happening, and we get 138 respondents. Structured equation modeling used for the hypothesis test. Results show that external factors are more influential in terms of adaptation to the concept of open office compared to internal conditions such as age, gender, length of career, and length of service. Only the level of position had a strong influence on the adaptation to open office internally. Company management needs to pay attention to the design layout, airflow, and lighting to add an atmosphere that matches the current millennial conditions and liking. Considering position level have a significant impact on internal employee qualification, then someone in the top leadership position would be able to influence junior level of adaptation to open office.

**Keywords:** Internal employee qualification, Adaptive to open office, Workplace satisfaction

## INTRODUCTION

According to the February 28, 2019 report, Indonesia's labor force around 129,366,192 increased from 124,004,950 while unemployment decreased to 6,816,840 from 7,000,691 (<https://www.economy.com/indonesia/labor-force>) (November 18, 2019). Indonesia's unemployment ratio is 5.28% in August 2019, down from the third quarter of September 2018 of 5.34%. This data provides several illustrations that say Indonesia's employment conditions are getting better. It could be because there are many workforce needs to welcome industry revolution 4.0, or it could be because there are many startups that provide new jobs (<https://www.ceicdata.com/en/indicator/indonesia/unemployment-rate>) (November 18, 2019).

Sources from Hurun Report Inc., October 21, 2019, there is one Hectocorn (startup with a scale of US \$ 100 billion), 23 Decacorn (US \$ 10 billion), and 470 Unicorn (US \$ 1 billion) in the world today. Indonesia itself has one Decacorn, namely Gojek and four Unicorns, namely Tokopedia, Traveloka, Ovo, and Bukalapak (Dunia, U. 2019). However, the two main problems of Indonesian startups, according to the 2018 Bekraf and MIKTI surveys, are capital and human resources (Badan Ekonomi Kreatif Indonesia, 2019).

Price Waterhouse Cooper 2017, in their examination, expresses that worldwide business is overwhelmed by up to 50% In 2020 by millennials. From innovation to diversion, practically all fields of business. This generation cares about the freedom and ownership of their performance (PWC, 2011). Those born in the 1980s - 2000s, would-be future leaders. We call them millennials (Budiaty, I., Susianto, Y., Adi, W. P., Ayuni, S., Reagan, H. A., Larasaty, P., ... Saputri, V. G., 2018), who will bring startups to be more successful. The millennial, at that point, separated into two periods, to be specific senior millennial who was conceived between 1983 – 1990, and junior millennial who was conceived between 1991 - 1998 (IDN Research Institute, 2019). They also became the future leaders who shaped the sustainability of the company that was founded 100 years ago. To keep millennials in the company would be the most prominent talent challenge, according to CEOs (PWC, 2011). 100-year-old companies need to tidy up if they want to seize the interest of millennials in their company. Alternatively, one day no one will run the company, and eventually, the company will die.

## LITERATURE REVIEW

In this study, it is necessary to review an office environment that can attract millennial interest, without making generation X, ignored. The office condition that will be highlighted in this study is the concept of open office, where the sitting position is not based on the place or level specified in the organization but is free creatively as long as it does not interfere with the conditions of fellow employees. Nevertheless, contrasted with cell workplaces. Open office has more sick leave (Pejtersen, J. H., Feveile, H., Christensen, K. B., and Burr, H., 2011), decreased in the performance (Bergström, J., Miller, M., and Horneij, E. 2015) and well-being of employee-related to mental health (Blasio, S. Di, Shtrepi, L., Puglisi, G. E., and Astolfi, A., 2019). On the other hand, design fundamental and has an impact on morale and productivity (Walsh, J. 2015). External conditions such as environment of the acoustic, thermal comfort, layout, air quality, lighting correlated to work productivity (Kang, S., Ou, D., and Mak, C. M, 2017; Lou, H., & Ou, D. 2019).

Most of the study conducted focusing on the external environment, while gender against noise being study by Danielsson, C. B., Bodin, L., Wulff, C., and Theorell, T. (2015) is something personal within oneself. People will argue that personal adaptability would be a challenge for an employee to be successful. So, Connell, D. J. O., Mcneely, E., and Hall, D. T. (2008) had given some individual characteristics such as age and race aside from gender. In their study, there are some factors of human capital included, such as tenure, occupational status, contractor experience, education, and employability. They also Including work environment as external factors like work demand, personal control, managerial support, and communication. These things all form a factor to adaptability to be success.

In this study, we aim to understand the internal employee qualification and separated all external factors like acoustic, thermal comfort, layout, air quality, and lighting surrounding the employee when adapting to open office model. We also excluded the work environment

from this study and explicitly asking. Does employee age, gender, level of education, length of career since completing formal education, length of service at the company, and level of position influence how well we adapt to open office concept? Does the level of adaptation to the concept of open office increase workplace satisfaction? Moreover, does someone's internal qualification increase his/her workplace satisfaction?.

## **RESEARCH METHODS**

### **Data**

The questionnaire distributed on-line purposive given to those working in an open office environment, and then some snowballing effect is happening. We ended up with 138 respondents, where there are 49 female and 79 male respondents. Most of the respondents working in Jakarta city, and we need to disregard those from another city. It is not significant enough to represent the different condition of the city where they live. We are using structured equation modeling (SEM) in this study because it allows exploration of relationships between several variables at once (Rowley, J., 2014). Furthermore, the tools to do statistical analysis is Smart PLS.

### **Analytical Framework**

#### **Internal Employee Qualification**

##### **Age**

Changing conditions in the workplace encourage people to adapt to their environment. Do generation boomer, X or millennials will be the most adaptable? (Connell, D. J. O., et al., 2008). Human motor skills will decrease when aging (Wild, P., Gilles, M. A., and Gu, J., 2017). Nevertheless, motor adaptation does not decrease with age (Vandevoorde, K., and Xivry, J. O. De., 2019). When modifying the divergence difference system, this ability does not depend on age (Alvarez, T. L., Kim, E. H., Yaramothu, C., and Granger-donetti, B., 2017). Our priorities also behavior change and adapt when we age, but to ignore the issues entirely on that basis would be a mistake (PWC, 2011).

##### **Gender**

What about gender? Different gender has a different approach to climate change in rural Kenya (Ngigi, M. W., Mueller, U., and Birner, R., 2017). While respond to economic stresses in some countries like India, by examining gender as sex, it cannot explain differences. The different will occurs when integrating with class and power (Colwell, J. M. N., Axelrod, M., Salim, S. S., and Velvizhi, S., 2017). Researchers also have not found differences in gender responses to the health of those who work in space (Mark, S., 2006). However, the concern about gender bias remains for female Millennials in the workplace (PWC, 2011).

##### **Higher Education**

Higher education level will grant more access to strategic processes and, as a result, less susceptible to age-related associative memory deficits (Peterson, D. J., Gargya, S., Kopeikin, K. S., and Naveh-benjamin, M., 2017). How we can improve cognitive labor level is by positive externality effect of education. Education has a strong positive external effect on socio-economic development (Shen, J., Ye, C., and Zhu, Y., 2018). The relationship between gender and education in latent structures does not show relevant differences due to gender in

perception. On the contrary, in knowledge, differences are found, in particular, how they obtain core information (Pinto, M., Sales, D., and Fernández-pascual, R., 2019).

### **Tenure**

In the new millennium, some shifting occurs when employee seeking for longer tenure jobs. Which might happen because of the recessions (Hyatt, H. R., and Spletzer, J. R., 2016), and adaptability to career and longer tenure strong when employee working in the lower level (Jiang, Z., Hu, X., and Wang, Z., 2017). Nevertheless, millennials do not think that way. For the high achievers and show the potential, they value results more than tenure and will be frustrated with the amount of time to climb the career ladder (PWC, 2011). Employee increasing in performance during first-year tenure due to the accumulation of learning and working with experienced colleagues (Grip, A. De, Sauermann, J., and Sieben, I. J. P., 2016). Job satisfaction of a newcomer is described as a U-shaped curve, where it will decrease after joining and increasing after some time (Son, J., and Ok, C., 2018).

### **Position**

Positions represent fair hierarchy and one of the essential elements for everyday activity of an organization. To this end, specific places/ranks are assigned (Sîrbu, J., Fodor, D. L., & Pinte, F. R., 2014). Those with higher positions seek more self-actualization and need more autonomy in deciding their work, whereas if we look at safety, social and appreciation factors do not show a fundamental difference between levels in the hierarchy of positions (Porter, L. W., 1963).

Therefore, our hypothesis will appear logical:

H1: Internal employee qualification does not give a higher impact to employee adaptive level to open office.

### **Adaptive to Open Office**

Researcher found that to increase the level of employee adaptation, it can be done with career development, improving employee abilities, or work schedules that are quite flexible, especially to those who work in a dynamic environment (Kim, P. B. C., Kim, S., Kim, S. S., and Kim, J., 2017). The ability to adapt has become the ability possessed by workers. They must be flexible and tolerant of changes and uncertainties (Pulakos, E. D., Dorsey, D. W., White, S. S., Dorsey, D. W., Ployhart, R. E., and Bliese, P. D., 2006). Ironically, although there is agreement between researchers and practitioners about the importance of adaptability, there is no systematic and explicit research on this matter. the focus is on conceptual aspects, psychometric properties such as situational assessments or more specific contexts, for example, adaptation of newcomers (Chan, D., 2014), therefore:

H2: The more adaptive to open office, the higher workplace satisfaction.

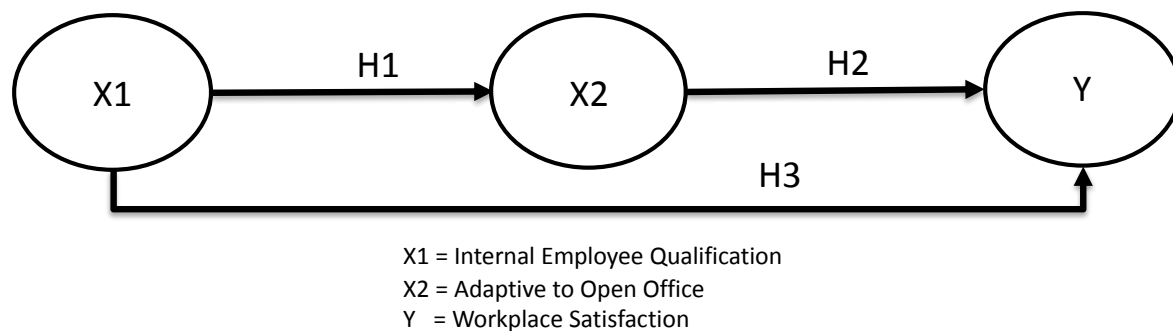
### **Workplace Satisfaction**

The office environment has an impact on satisfaction, and this supports productivity. On the open office model, employees are more satisfied with communication, but noise is still one of the obstacles (Banbury, S. P., and Berry, D. C., 2005; De Been, I., and Beijer, M., 2014; Haapakangas, A., Hongisto, V., Varjo, J., and Lahtinen, M., 2018). Psychologically reduce employee privacy and reduce job satisfaction. Open Office can also worsen interpersonal

relationships. Besides, with distances that are too close between workstations, provide cognitive workload (de Croon, E. M., Sluiter, J. K., Kuijer, P. P. F. M., and Frings-Dresen, M. H. W., 2005). Other studies have shown that open offices can provide satisfaction to employees with different levels depending on the physical environment. Another thing to note is the factors that employees complained about, such as noise levels (Hongisto, V., Haapakangas, A., Varjo, J., Helenius, R., and Koskela, H., 2016). Since the aim of this study to understand whether internal employee qualification have any effect on workplace satisfaction, thus:

H3: Internal employee qualification, does not give higher impact on workplace satisfaction

The conceptual model raised is shown in figure 1.



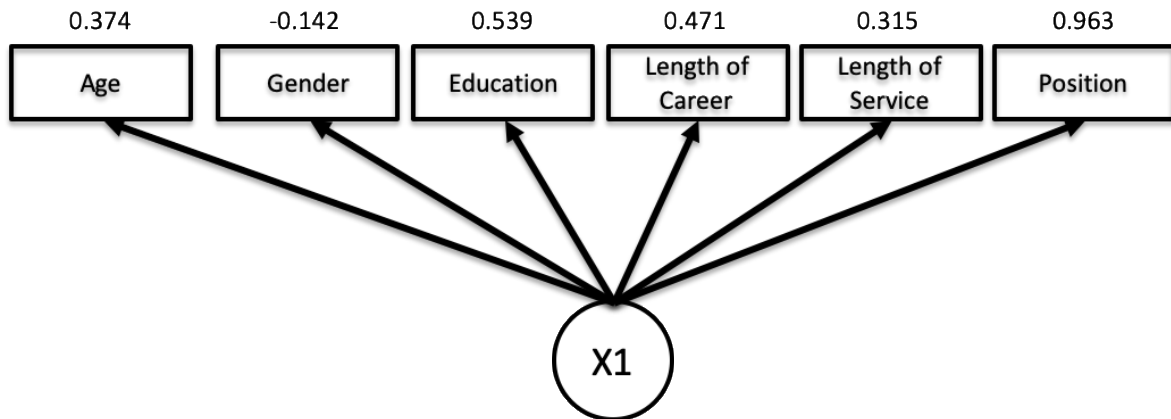
**Figure 1. Conceptual model of the relationship between internal employee qualification, adaptive to open office and workplace satisfaction**

### Measurement

From the explanation above, the primary variable is internal employees' qualification, where we see age and gender, level of education, length of service, and position as factors to consider. Adaptive to open office, functioning as a moderating variable, and workplace satisfaction is a dependent variable. Likert scale was used in compiling this questionnaire, 1 = strongly disagree until 5 = strongly agree. Then with reference of several journals (Lee, S. Y., and Brand, J. L., 2005; Kim, J., and de Dear, R., 2013; Kim, J., Candido, C., Thomas, L., and de Dear, R., 2016; Withagen, R., & Caljouw, S. R., 2016). We built a questionnaire that can be used to bring out the intention of this study.

### FINDINGS AND DISCUSSION

When we are looking into Figure 2, this explaining that loading factors for internal employee qualifications, age, gender, level of education also length of career, and length of service are below 0.7. Data presents an insignificant relationship to internal employee qualifications from these factors. Nevertheless, the initial research loading factor between 0.5 - 0.6 are acceptable (Ghozali, I. and Latan, H., 2015). In that case, we accept the level of education as a factor significant enough to internal employee qualification.



X1 = Internal Employee Qualification

**Figure 2. Value loading factor of internal employee qualification**

Before starting with an in-depth explanation, a validity test needs to be done.

**Table 1. Validation Results**

Variable	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Internal employee qualification	0.855	0.743	0.609
Adaptive to open office	0.929	0.938	0.601
Workplace satisfaction	0.963	0.965	0.682

There are two ways the reliability of a construct with reflex indicators can be measure. Using Cronbach's Alpha and Composite Reliability. However, Cronbach's Alpha will give a lower value on the reliability test. So, it is often recommended to use Composite Reliability (Ghozali, I. and Latan, H., 2015). Table 1 shows the Composite Reliability values of all variables above 0.7, while the Average Variance Extracted none below 0.5 indicates that the data obtained has permissible requirements.

**Table 2. Collinearity Statistics (VIF)**

	Internal employee qualification	Adaptive to open office	Workplace satisfaction
Internal employee qualification		1.000	1.131
Adaptive to open office			1.131
Workplace satisfaction			

Table 2 presents the values of 1,000 - 1,131, where this value is not more than 5,000, which shows that this data is free from multicollinearity.



**Table 3. R-square**

	<b>R-Square</b>	<b>R Squared Adjusted</b>
Adaptive to open office	0.116	0.109
Workplace satisfaction	0.656	0.650

Goodness-fit test of the model by reading the amount of R square reported that Internal employee qualification had an impact on the adaptive to open office of 11.6%. The same table also shows that internal employee qualification and adaptive to open office influence workplace satisfaction by 65.6%.

**Table 4. Total Indirect Effects**

<b>Relationship</b>	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Std. Deviation (STDEV)</b>	<b>t-Statistic (O/STEDEV)</b>	<b>p Values</b>
X1 → X2 → Y1	0.281	0.292	0.061	4.586	0.000

The indirect effect of internal employee qualification to workplace satisfaction through adaptive to open office is 28.1% and has a significant effect where it shows *p values* 0.000, which is below the value of 0.05.

**Table 5. Path Coefficient and Hypothesis Testing**

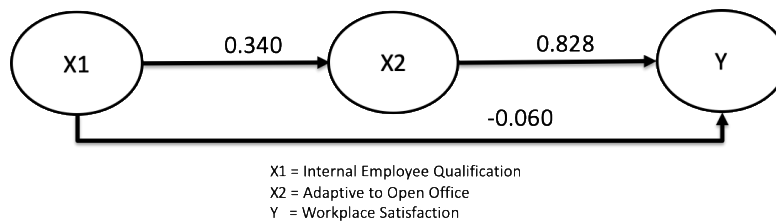
<b>hypothesis</b>	<b>Relationship</b>	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Std. Deviation (STDEV)</b>	<b>t-Statistic (O/STEDEV)</b>	<b>p Values</b>
<b>H1</b>	X1→X2	0.340	0.351	0.069	4.904	0.000
<b>H2</b>	X2→Y1	0.828	0.832	0.036	23.249	0.000
<b>H3</b>	X1→Y1	-0.060	-0.057	0.055	1.092	0.276

Table 5 explains the relation between internal employee qualification to adaptive to open office have a strong influence ( $b = 0.340$ , *p values* 0.000). This strong relationship is only happening from the factor of the level of education and position. At the same time, other factors such as age, gender, length of career, and length of service are not significant to be considered in the first place.

Adaptive to open office shows a strong relationship ( $b = 0.828$  *p values* 0.000). There are only 17.2% of the influence of factors not examined here that affect the relationship between the two. Nevertheless, the effect of internal employee qualification on workplace satisfaction turned out to provide a negative relationship ( $b = -0.060$  *p values* 0.276) and not significant.

t-table from this examination was assembled by seeing at one independent variable, and the number of respondents, 138 employees. The results obtained are 1.9774. Then by looking at the results of table 5, where the t-statistic internal employee qualification relationship to the adaptive to open office is higher than the t-table indicates a significant relationship between the two. The relationship between internal employee qualification and workplace satisfaction is not significant, which also has a negative relationship, which means the higher the position and education, the more dissatisfied with the open office conditions. While adaptive to open

office provides a substantial relationship to workplace satisfaction. It can be concluded that the higher the position and the higher education if it can adapt to the open office, job satisfaction will also increase.



**Figure 3. Summary of the relationship between internal employee qualification, adaptive to open office, and workplace satisfaction**

**Table 6. Hypothesis Test Results**

	Hypothesis Proposition	Result
H1	Internal employee qualification does not give higher impact to employee adaptive level to open office.	Accepted
H2	The more adaptive to open office, the higher workplace satisfaction.	Accepted
H3	Internal employee qualification does not give higher impact on workplace satisfaction	Accepted

### Contributions and Directions for Future Research

This study confirms that being adaptive to open office is considered an essential factor in employee satisfaction when working in companies that adopt open office systems. An employee's internal conditions such as age, gender, length of career, and length of service do not affect the level of adaptive to open office. However, the level of education and position still has quite a positive influence on the level of adaptation. So as to widen and validate current research. The effect of education levels and employee position need to be more explored by literature reviews and further research. Also, considering position level have a significant impact on internal employee qualification, is there any influence of one's leadership towards adaptive level to the environment, which in this case to open office. If the top position in a company is also in the same open environment, can it increase the level of adaptation from subordinates?

### Managerial Contribution

This research has detected that internal qualification factors do not have much influence on the level of adaptation. On the contrary, many previous studies have shown that environmental layout and external atmosphere factors such as acoustics, thermal comfort, layout, air quality, and lighting around employees when adapting to the model open offices have more influence. For that, as management of the company, it is necessary to pay attention to the design layout, airflow, and lighting to add an atmosphere that matches the current millennial conditions and liking.



## CONCLUSION AND SUGGESTION

At the beginning of this study, we considered open office to attract millennial interest to come and work with the company. Throughout this study, it shows that internal employee qualification does not have a positive impact on workplace satisfaction directly. It can even be concluded that the more significant education level and the position of employees within the company, the more dissatisfied with the open office conditions. To improve workplace satisfaction, the ability to adapt to the open office is vital and has a more significant influence. Previous studies show a lot of use of external conditions to provide comfort to employees. Acoustics and privacy, lighting, ventilation and temperature strongly affected satisfaction (Leder, S., Newsham, G. R., Veitch, J. A., Mancini, S., and Charles, K. E., 2016; Tanabe, S. Ichi, Haneda, M., and Nishihara, N., 2015; Varjo, J., Hongisto, V., Haapakangas, A., Maula, H., Koskela, H., and Hyönä, J., 2015). Design of office layout it-self influence organizational culture, which led to job satisfaction (Zerella, S., Treuer, K. Von, & Albrecht, S. L., 2017). Then, in conclusion, external factors are more influential in terms of adaptation to the concept of open office, compared to internal conditions such as age, gender, level of education, length of career, and length of service. Only level of position had strong enough to influence the adaptation to open office internally.

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