The Antecedents of Psychological Empowerment and Its Impact towards General Physician Job Performance

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Abstract

BACKGROUND: Coronavirus disease 19 (COVID-19) creates a burden to the healthcare system especially to the frontliners such as medical doctors. The job performance (JP) of the general practitioners (GP) related to quality of care to COVID-19 patients.

AIM: The purpose of this study is to analyze the antecedents of psychological empowerment (PE) toward JP, mediated by service orientation (SO). These antecedents could be seen in hospital perspectives and professional life.

METHODS: This is a quantitative survey study, using a cross-sectional approach, with partial least square - structural equation modeling as data analysis method. The sample size for this study is 160 samples, purposively obtained from the GP who work at COVID-19 Reference Private Hospital in Jakarta and surrounding area. Data were collected using online questionnaires and analyzed by SmartPLS 3.3.3.

RESULTS: There are nine hypotheses supported in this research. The strongest predictor of PE is the training opportunities (TO), followed by relationships with fellow doctors and autonomy at work. PE has been proven to have a direct impact on JP, while SO has been found as a mediation in this relationship.

CONCLUSIONS: PE has been proven as an important construct to predict JP; therefore, hospital management has to pay more attention to PE for GP during the pandemic. TO should be prioritized by the board of directors of the hospitals, they should allocate time and the resources to facilitate the training opportunity.

Introduction

Human resource (HR) is a very crucial resource in any organization. It is very important to maintain this functional resource to have loyal and talented HRs to build a successful organization. There have been many ways the researchers try to explain job satisfaction [1]. Therefore, leads to a lot of ways to explain job satisfaction [1]. It is stated that employee loyalty builds trust; this is shown in the way the employees show their willingness to contribute to an organization [1].

The management of the healthcare sector is not as simple as the other business sector. The dynamic flow and various variables exist [2]. The human capital in this sector is medical professionals, general practitioners (GP), nurses, and many other ancillary medical professionals who are surely high-skilled people who have to undergo very extensive education and are supposed to be committed to their organization [2]. The autonomy to make any decisions of the medical professionals is given. As stated by the WHO; the motivation of healthcare professionals is the leading indicator of service quality [2]. Work motivation and the relationship between job motivation and individual performance are some of the key issues investigated in this study. Furthermore, the major and still growing proportion of healthcare funds is absorbed by in-patient hospital care. According to the WHO, almost 70% of overall healthcare costs can be attributed to in-patient services [2]. The available data indicate that the best approach to rationalize the costs of in-patient care is to improve the use of the available resources. However, without a clear HR strategy in healthcare management, the organization will face a serious threat called the instability of the employee that will lead to disturbance of the operational system [2].

The motivation model by F. Herzberg called the two-factor theory, is commonly applied and used in management. This is a two-dimensional approach with motivating factors that lead to job satisfaction and demotivating factors which cause job dissatisfaction [2]. There are also hygiene factors that should not be missed which can cause dissatisfaction at the workplace. Hygiene factors include the policy and administration, supervision, relationships with doctors, working conditions, salary, personal life, status, and security. A hospital should consider these factors to decrease work dissatisfaction [2], [19], [20].

The coronavirus disease 19 (COVID-19) pandemic has a huge effect on healthcare professionals [2]. Depression commonly occurred caused by stress at the workplace [2], [35], [36], [37], [38], [39], [40], [41], [42]. Organizational performance
is related in parallel to HR performance. This is very important to closely pay attention to employee well-being including mental health and job satisfaction to increase or maintain the job performance (JP) of the health care professionals [3], [43], [44], [45], [46], [47], [48], [49] [50], [51]. According to previous research, psychological empowerment (PE) affects JP. Previous literature has developed a similar framework without the mediation of service orientation (SO). Therefore, leads to this study aims to test if there will be a stronger path mediated by SO variables. The previous literature explained antecedents of PE [4], [21], [22], [24], [33].

In this study, the researchers developed a new point of view of two perspectives: First, hospital perspective which can be managed by the hospital and not directly connected to the employee; second, professional life which is the perspective that is directly felt by the employees. Professional life is very important for medical doctors. Being a doctor is a long-life learning process, the knowledge and treatment should always be updated, the skill of doctors needs to be trained and polished over and over to develop the experience. This is why it is important to look at two different aspects. There are three variables from the hospital perspective [1], [2], [3], [4] and three variables in the scope of professional life [1], [2], [4], [6], [25]. However, there has not been much literature that studies SO, especially as the mediating variable of PE and JP. This study wants to explore more about the effect of SO as the mediating variable. The previous literature also does not separate the two important aspects which are hospital perspectives and professional life.

PE can be defined as intrinsic task motivation reflecting a sense of self-control about one’s work and active involvement with one’s work role [4], [6]. SO is the condition when you pay more attention to a customer’s needs and wants, might also feel the desire to help others and resolve their problem [5].

According to the previous empirical research, PE significantly affects the quality of work [4]. There are several paths in this research, which are hospital perspective to PE, personal life to PE, PE to SO, SO to JP, and PE to JP. SO is raised from HR attributions, trust in the organization, and affective commitment. Practitioners should explain the intentions behind HR practices applied to the employees by the management in the organization. HR practices are designed for service quality and employee well-being, they show better service performance by feeling higher trust in and commitment to their organizations [5], [26]. Another research stated that PE creates innovative behaviors and increases project performance. PE can be predicted by team autonomy [6], [27], [28].

Quality of medical treatment includes medical examination and treatment in the level of expected health improvement delivered to the community and individuals by healthcare services following the current services. Quality of medical examination and treatment is the attribute of healthcare activities that increase the patient’s chance of getting good health, the chance of avoiding harmful pitfalls, and chances of having good experience with the healthcare system [1], [2]. Safety and health conditions (SHC); as safety fulfills the human security needs, and time satisfies the psychological needs that a person has for himself or herself and their family after working hours. The nature of work and working environment should be safe, and the provision of protective equipment as working instruments is required to create a safe and healthy working condition [3], [4]. Hospital logistics (HL) is very important in supplying hospital requirements especially to support healthcare workers on duty. In the business environment today, successful companies heavily rely on the efforts of their talented employees. This fact is especially true in industries such as high technology, biotechnology, and medical healthcare. The level of job satisfaction can affect the GP retention rate when the GP makes decisions to leave or stay with the hospital-based on how satisfied they feel at work. The authors argue that to improve employee loyalty to the hospital, it is necessary to satisfy GP demands [1].

Autonomy at work (AW) is one of the important factors for doctors, and it is when the workplace gives freedom to them in terms of treating and giving treatments to their patients. With the presence of AW, this variable is a very important factor in encouraging doctors to feel trusted, accountable, and capable [1], [2]. As we know that relationships with colleagues and fellow doctors are combinations of relationships between individuals.

The research’s respondents characteristic can be seen from Table 1:

| Table 1: Respondents characteristic |
|------------------------------------|
| Demographic Variables | Sample (n) | Percentage |
| Gender | | |
| Male | 66 | 35.67 |
| Female | 119 | 64.32 |
| Age | | |
| <20 years | 0 | 0 |
| 21–30 years | 140 | 75.67 |
| 31–40 years | 26 | 14.05 |
| 41–50 years | 11 | 5.94 |
| 51–60 years | 8 | 4.32 |
| Domicile | | |
| Jakarta surrounding | 174 | 94.05 |
| Outside | 11 | 5.94 |
| Length of work in hospital | | |
| <3 months | 14 | 7.56 |
| 3–6 months | 75 | 40.54 |
| 7–9 months | 12 | 6.48 |
| 9–12 months | 14 | 7.56 |
| >12 months | 70 | 37.83 |
| Working duration per week | | |
| <35 h/week | 31 | 16.75 |
| 35–42 h/week | 96 | 51.89 |
| 43–50 h/week | 38 | 20.54 |
| >50 h/week | 20 | 10.81 |
| Employment status | | |
| Permanent employee | 102 | 55.13 |
| Honorary employee | 83 | 44.86 |
| Treating COVID-19 patients | | |
| Yes | 165 | 89.18 |
| No | 20 | 10.81 |
| Work placement in hospital | | |
| ICU | 3 | 1.62 |
| Isolation ward | 32 | 17.29 |
| Emergency unit | 60 | 32.43 |
| All three are correct | 90 | 48.64 |
| History of confirmed COVID-19 | | |
| Yes | 32 | 17.29 |
| No | 153 | 82.7 |

*ICU: Intensive care unit, COVID-19: Coronavirus disease 19.*
The research's reliability and validity can be seen from Table 2. This relationship is one of the important factors affecting employee engagement and attachment to the organization. In clinical practice, collaboration and cooperation among medical doctors are extremely important [1], [2], [4], [6]. Training opportunities (TO) develop certain skills that will be useful for the job. Training is very beneficial to update or gain new skills for the doctors, while also supporting JP. A lot of doctors seek opportunities for facilitated training in the workplace to expand their skills so that they can perform the job better [1], [29], [30], [31], [32].

PE is a psychological state rooted in four cognitions: Meaning, competence, self-determination, and impact that reflect an individual's orientation to his or her job [9]. Job satisfaction is a key contributor to the creative performance of employees. Moreover, each of the four dimensions of PE shows an increasing relationship with job satisfaction [10]. PE support employees in their decision-making and problem-solving thus providing independence and control. These results are of great significance as they give understanding into how employees or individuals may affect other individuals' psychological insights, learning, and vitality at work, which in turn influence their behavior. Although past researches had not provided ample evidence for the linkage between PE and proactive personality, we advanced the literature of proactive personality as a moderator [11].

Similar research has been done quite a lot before. However, there are two main problems, there were several previous research not carried out during a pandemic, so it is not yet known whether during a pandemic these factors appeared [1], [2], [4], [5], [6], [7]. Moreover, there is still little research that looks at professional life [1], [2], [4], [6]. Second, the research model does not include intrinsic factors; service motivation, even though this is an important thing [1], [2], [3], [6], [7]. Therefore, this study has to do a new approach to fulfill the aim of this study. This research model aims to predict GP's JP, mediated by SO. The purpose of this study is to be beneficial by giving new insight from the empirical test result on the conceptual framework model of the study. This research model conceptual framework as see in
Methods

The main objective of this study is to analyze the JP of GP in the COVID-19 era. PE, its relationship with hospital perspective, and professional life are the independent variables. SO is the intervening variable. JP is the dependent variable. The study uses a quantitative survey approach with cross-sectional data. The conceptual framework of the study will be empirically tested on the population obtained from GP who work at COVID-19 Reference Private Hospital in Jakarta and the surrounding area in 2021.

This research's method is a quantitative study with a survey, using a cross-sectional approach, with Partial Least Square–Structural Equation Modeling (PLS-SEM) as the data analysis method. The research model contains nine variables, six independent variables as the antecedent of PE variable were tested to find the impact on JP, mediated by SO variable. The unit analysis in this study is individual which is health care professionals, in this case, the GPs. The population of this study is all GPs those directly treating COVID-19 patients. The sample size for this study is 160 samples. Based on the literature, the number of samples required is 160 samples [13]. The sampling technique is purposive sampling with criteria of GPs those directly treating COVID-19 patients in COVID-19 referral private hospitals in Jakarta and all surrounding areas. Measurements of these variables using indicators adopted from the primary

Table 3: Discriminant Validity HT/MT Ratio

| Variables                        | AW  | HL  | JP  | PE  | Quality of Medical Treatment | Relationship with Fellow Doctors | SHC   | SO   | TO  |
|----------------------------------|-----|-----|-----|-----|-------------------------------|---------------------------------|-------|------|-----|
| Autonomy at Work                 | 0.630 |     |     |     |                               |                                 |       |      |     |
| Hospital Logistic                |     | 0.706 | 0.770 |     |                               |                                 |       |      |     |
| Job Performance                  | 0.706 | 0.770 |     |     |                               |                                 |       |      |     |
| Psychological Empowerment        | 0.818 | 0.709 | 0.880 |     |                               |                                 |       |      |     |
| Quality of Medical Treatment     | 0.883 | 0.798 | 0.686 | 0.796 |                               |                                 |       |      |     |
| Relationship with Fellow Doctors | 0.867 | 0.817 | 0.750 | 0.867 | 0.748                         |                                 |       |      |     |
| Safety and Healthy Condition     | 0.775 | 0.813 | 0.743 | 0.813 | 0.784                         | 0.855                          |       |      |     |
| Service Orientation              | 0.581 | 0.587 | 0.847 | 0.719 | 0.576                         | 0.500                          | 0.534 |      |     |
| Training Opportunities           | 0.748 | 0.870 | 0.707 | 0.862 | 0.755                         | 0.798                          | 0.881 | 0.555 |     |

SHC: Safety and health conditions, HL: Hospital logistics, AW: Autonomy at work, TO: Training opportunities, PE: Psychological empowerment, SO: Service orientation, JP: Job performance.
| Hypothesis                           | Standard Coefficient | T Statistics | Results                        |
|------------------------------------|----------------------|--------------|--------------------------------|
| H1: Quality of medical treatment→PE | 0.150                | 2.212        | Hypothesis supported            |
| H2: SHCs→PE                        | 0.059                | 0.686        | Hypothesis not supported        |
| H3: HL→PE                          | 0.126                | 1.788        | Hypothesis supported            |
| H4: Autonomy of work→PE            | 0.125                | 1.618        | Hypothesis not supported        |
| H5: RFD→PE                         | 0.314                | 3.263**      | Hypothesis supported            |
| H6: TO→PE                          | 0.345                | 4.288**      | Hypothesis supported            |
| H7: PE→SO                          | 0.059                | 0.985**      | Hypothesis supported            |
| H8: SO→JP                          | 0.418                | 6.012**      | Hypothesis supported            |
| H9: PE→JP                          | 0.536                | 6.604**      | Hypothesis supported            |

| Sig. at P<0.05, **Sig. at P<0.01, SHC: Safety and health conditions, HL: Hospital logistics, AW: Autonomy at work, TO: Training opportunities, PE: Psychological empowerment, SO: Service orientation, JP: Job performance, RFD: Relationships with fellow doctors. |

The first part is outer model evaluation obtained from the PLS algorithm calculation. The result of outer loading shows the value >0.708 as it is required by the literature [15], except one indicator, namely SO4 (Item: I feel like I am called to be COVID-19 doctor). Construct reliability that is shown by Cronbach’s alpha and composite reliability are acceptable since the values are >0.7 for all constructs, as recommended [15]. The construct validity is evaluated by the average variance extracted value that resulted in all the values above 0.5 [15]. This means all the constructs have acceptable construct validity.

Further validity evaluation by assessing the discriminant validity of the model. As seen in Table 3 all the HT/MT Ratio found below 0.90, as it requested by the literature [18], which means all the indicators are well-discriminated to measure its particular constructs. Based on this outer model evaluation, it could be concluded that the indicators in the outer model are reliable and valid. Therefore, it can be proceeded to evaluate the structural model.

R² results indicate that there is strong predictive accuracy. The ability to predict JP includes strong predictive accuracy. In this study, the Q² result of JP is 0.564, which means that the Q² test refers to large predictive relevance. This model has strong data analytic capabilities [12], [15].

As seen in Tables 4 and 5, there are seven hypotheses that have been supported with T statistics >1.645 and p ≤ 0.05 as required and standard coefficient found to be positive in coherent with the hypotheses. There are two not supported hypotheses which are SHC and AW. From seven supported paths, there are two important variables. PE has a significant direct effect toward JP, with R² that has a large effect. PE also has a significant effect through SO variables. From the independent variables, TO is the strongest variable and followed by RFD. TO that have the highest standardized coefficient should be prioritized by the board of directors of the hospitals. This research has a positive direction, meaning that if the PE indicator increases, it will eventually result in good JP.

Table 5: Specific indirect effect

| Hypothesis                           | Standardized Coefficient | T Statistics |
|------------------------------------|-------------------------|-------------|
| Quality of Medical Treatment→PE→JP | 0.081                   | 2.290       |
| HL→PE→JP                           | 0.068                   | 1.777       |
| Autonomy of work→PE→JP             | 0.007                   | 1.667       |
| RFD→PE→JP                          | 0.169                   | 2.711       |
| TO→PE→JP                           | 0.185                   | 3.407       |
| Quality of Medical Treatment→PE→SO→JP | 0.041               | 1.647       |
| RFD→PE→SO→JP                       | 0.087                   | 2.802       |
| TO→PE→SO→JP                        | 0.095                   | 3.071       |

| SHC: Safety and health conditions, HL: Hospital logistics, AW: Autonomy at work, TO: Training opportunities, PE: Psychological empowerment, SO: Service orientation, JP: Job performance, RFD: Relationships with fellow doctors.

The majority of the respondents coming from GP age younger than 30 years old (75%), most are women, with average already working 3–6 months (40%). Most of them work in the intensive care unit, isolation ward and emergency unit of COVID-19. Working load is moderate, <45 h/week. Most of them are permanent employees at the hospital (55%). Almost all of them directly facing COVID-19 patients (89%).

References [1], [2], [3], [4], [5], [6], [7] were translated to the local language and reviewed by a translator. The respondents filled in the questionnaire with a Likert scale of 1-5, which that distributed online at week II of June 2021. Data were analyzed using the PLS-SEM method in SmartPLS 3.3.3™ [12], [16]. According to the literature, when researchers use SmartPLS 3.3.3™, the data must undergo two stages of evaluation [8], [14]: First, the Outer model to test validity and reliability. Second, evaluation of the structural model/inner model. In this structural model, the results of hypothesis testing can be found. Further, a mediation analysis will be conducted to evaluate the variables that act as mediators in this model. This is in accordance with the recommendations [17]. In addition, more advanced PLS techniques, for example, researchers use the IPMA menu to get more specific managerial implications [12], [15].

Results

This research has been conducted on 185 GP who work at COVID-19 Referral Private Hospital in Jakarta and the surrounding area. There are 25 responses deemed to be invalid because they do not include inclusion criteria. Consequently, there are 160 valid responses accounted for 86.48% distributed questionnaires.

As seen in Tables 4 and 5, there are seven hypotheses that have been supported with T statistics >1.645 and p ≤ 0.05 as required and standard coefficient found to be positive in coherent with the hypotheses. There are two not supported hypotheses which are SHC and AW. From seven supported paths, there are two important variables. PE has a significant direct effect toward JP, with R² that has a large effect. PE also has a significant effect through SO variables. From the independent variables, TO is the strongest variable and followed by RFD. TO that have the highest standardized coefficient should be prioritized by the board of directors of the hospitals. This research has a positive direction, meaning that if the PE indicator increases, it will eventually result in good JP.

Figure 2 can be divided into four quadrants. This is a tool to direct the hospital manager to be able to give more attention to required areas of improvement.

This graphic illustrates two indicators that suggest to be noticed on which hospital management must pay more attention.
attention to these indicators. TO 5 (TO 5, in questionnaire: I was included in the national medical seminar) shown to be the less performing variable; however in this study, this variable is considered quite important which is why the hospital management should pay more attention to it, by supporting GPs to enroll in national medical seminars and workshops. These might increase GPs competencies especially in the pandemic era. RFD 2 (relationship with fellow doctors 2, in questionnaire: I get support from colleagues in this hospital) is the most important variable from the total effect. This variable has already been performing, while this must be maintained by making formal and informal events, such as scientific meetings, and morning reports to increase trust and support between GPs, that will have a positive effect on improving GPs’ JP.

As seen in the data analysis from SmartPLS 3.3.3™, the empirical model can be described as the following Figure 3. JP has substantial predictive accuracy. Therefore, this research model can be suggested for research on JP of GPs in the hospital.

**Discussion**

The findings in this study are mostly in line with previous empirical research [1], [2], [3], [4], [5], [6], [7]. In this study, the characteristics of the respondents were different; the majority of the respondents were young GPs. This study was conducted during the COVID-19 pandemic, where there were higher stressors for GPs in the workplace that affected the psychological aspect of the healthcare professionals. Align with this study, RFD as part of the professional life of the GPs play a big role in motivation and job satisfaction that will lead to a better attitude at work and improve JP [1], [2]. The other part of professional life in this study is TO that have proven as a great factor that increase job satisfaction and resulted in better JP [1], [2], [5]. Align with previous studies, this study revealed that AW which is also part of the professional life of the GPs positively affecting PE [1], [6]. The aspect of the hospital perspective that is aligned with the previous study is SHC that positively affect PE [4]. According to a previous study, SO affects JP [5] as in this study also proven as the mediating variable. PE as the highlight of the study is aligned with the previous study shown to be related to JP [7]. Different from previous
studies, this study brought the newest condition during the COVID-19 pandemic exclusively in the COVID-19 referral hospital, meanwhile, other previous studies were taken from samples in the hotel and other various industries [3], [5], [6]. In comparison with previous studies, this one focus more on GP, while other studies were more focused on nurses and other medical professionals [2], [4], [7]. This study revealed the antecedents of the PE affected JP that could offer new insight into HR hospital management. The mediating variable SO is significant, which is useful for improving human capital in the healthcare industry during the pandemic. The influence of the hospital perspective variables is smaller than professional life. To improve the performance of GPs, hospital management and stakeholders must pay more attention to the professional life of general practitioners.

Conclusions

This research objective is to analyze the antecedent of psychological empowerment toward general practitioner job performance in private hospital settings during COVID-19 pandemic. These research findings revealed that psychological empowerment has a direct impact on job performance, while service orientation has been found as a mediation in this relationship. Psychological empowerment has been proven as an important construct to predict job performance; therefore, hospital management has to pay more attention to psychological empowerment for general practitioners during the pandemic. Training opportunities should be prioritized by the board of directors of the hospitals, they should allocate time and the resources to facilitate the training opportunity.

Limitations of this research are the limited and short period of time and scope of respondents. Suggestions for further research include; the method of collecting data through direct interviews to the general practitioners to get more accurate facts and researchers can discuss directly with the respondents. It is also necessary to conduct research with a larger scope of respondents, for example, general practitioners who work in Java or even data collection from all around Indonesia.

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Author Contribution

All authors equally contributed to this work.

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