Development of Digital Instruments for Measuring the Effect of Open Selection, Job Satisfaction, Transformational Leadership, and Work Motivation on the Performance of Civil Servants

I Ketut Sukra Negara a, Anak Agung Gede Agung b, I Made Candiasa c, Kadek Rihendra Dantes d

Abstract

The state civil apparatus (SCA) is a state asset. SCA must be maintained, and its competence is developed to provide quality public services according to the times. The classic problem faced by several local governments is that many SCA is less than optimal in carrying out their service tasks to the community, arrive late, and are less productive. This study aims to develop a digital measurement instrument about the effect of open selection, job satisfaction, transformational leadership, and work motivation on the performance (OSTMonP) of civil servants. Several steps of instrument development are determining evaluation components, determining evaluation aspects, instrument items, testing instrument items, analyzing instrument items, and determining final items—data collection through questionnaires and documentation. The subjects of this research are two experts who pick the validity and 45 respondents as SCA in the reliability test. The analytical technique instrument through content validation uses the Gregory formula. The instrument reliability test used the Cronbach Alfa formula. The development of OSTMonP resulted in 133 items with very high validity and very high-reliability categories. OSTMonP can support the measurement of public services through several relevant factors.

Keywords
digital instruments; employee performance; job satisfaction; open selection; transformational leadership; work motivation;

International Journal of Health Sciences © 2022.
This is an open access article under the CC BY-NC-ND license
(https://creativecommons.org/licenses/by-nc-nd/4.0/).
1 Introduction

The performance of the State Civil Apparatus (SCA) is currently the focus of the government and society amid the high demands of the community to obtain quality public services (Engdaw, 2020). SCA is a state asset that must be maintained, and its competence developed so that it can provide services to the community by showing dedicated, disciplined, and competitive performance as mandated in the Act. The government issued Law No. 5 of 2014 concerning State Civil Apparatus stipulating that the filling of the primary high leadership position is carried out openly and competitively among SCA so that it is hoped that there will be an increase in SCA performance (Abbasi et al., 2020). SCA is also expected to carry out public service tasks, government duties, and certain development tasks. SCA employees must have professional and SCA management based on a merit system or a comparison between the qualifications, competencies, and performance of candidates in recruitment, promotion of positions that are carried out openly and competitively, and in line with good governance (Aurora, 2021; Boyd, 2021).

The classic problem faced by some local governments is that many SCA is less than optimal. There are in carrying out their service tasks to the community, arriving late, leaving assignments during working hours, doing less productive activities, creating long and convoluted bureaucracies, and other things that do not reflect effective and efficient performance (Mallari et al., 2020; Zhang et al., 2020). The position and role of SCA as elements of the state apparatus who serve as public servants must provide good service to the community based on loyalty and obedience to Pancasila and the 1945 Constitution. Employees need to receive guidance to carry out their duties properly. Employee coaching is directed at improving the quality of human resources so that they have attitudes and behaviors that can provide services according to the demands of community development (Deslatte et al., 2020). Thus, good performance can be achieved following the applied performance standards under the government’s vision and mission.

Employees’ work motivation strongly influences the increase in the performance of government employees both from internal and external factors (Paais & Pattiruhu, 2020). One of the motivations from outside the individual is leadership (Tran et al., 2021). The concept of leadership is generally interpreted as a key aspect in determining the success of an organization because leadership plays an important role in the management of employees, which helps to maximize their efficiency (producing the most output with the least input) and effectiveness to achieve their organizational goals. Leaders play a very important role in ensuring the good behavior of their employees (Kaluza et al., 2021). Leaders must have good decision-making skills in carrying out responsibilities for all processes, from procurement to evaluating work programs and the workforce (Alonso-Almeida & Llach, 2019). Leadership competence will lead to employee performance, showing how an employee completes his job duties.

Government Regulation No. 11 of 2017 concerning Management of Civil Servants aims to manage SCA to produce professional SCA, have basic values, and professional ethics, be free from political intervention, clean from practices such as collusion, corruption, and nepotism (Bass et al., 2003; Breaugh et al., 2018). However, in reality, there are still SCA who cannot manage themselves to change their mindset according to government policies (Love et al., 2020). Several previous research results show that the increase in employee performance is influenced by available selection and transformational leadership. The facts show that the quality of the relationship between leaders and subordinates is still less harmonious and relevant (Barnes et al., 2020; Harb et al., 2021). In some cases, efforts to find potential transformational leaders are less open and competitive (Donkor et al., 2021). In addition, job satisfaction and work motivation also determine the quality of employee performance. If there is an increase in job satisfaction, work motivation also increases by 66.3% (Afifah & Al Musadieq, 2017). This study aims to provide a digital measurement instrument for the effect of open selection, job satisfaction, transformational leadership, and work motivation on the performance of civil servants.
(OSTMonP) as field implementers in the government system (Ernawati et al., 2022). The research question is (1) how is the grand theory of the basis for compiling employee performance measurement instruments?; (2) what are the results of the validity and reliability of the OSTMonP measurement instrument?; and (3) How is the final item of the reliable OSTMonP measurement instrument used to measure the performance of civil servants?

2 Materials and Methods

Stages of Research

This research is instrument development research. The research description focuses on the study of product development of measurement instruments. The instrument developed is an instrument that refers to the quality of public services that can support the measurement of the effect of open selection, job satisfaction, transformational leadership, and work motivation on the performance of civil servants (OSTM). The stages of developing the instrument can be seen in Figure 1.

![Figure 1. Stages of Developing the OSTMonP Digital Measurement Instruments](image)

First, researchers carry out activities to determine measurement indicators. This stage determines the main purpose of the measurement indicator, namely employee performance. Several supporting variables are available selection, job satisfaction, transformational leadership, and work motivation (Gumusluoglu & Ilsev, 2009). Several indicators in the first stage serve as a reference for determining instrument items. Second, the researcher determines the items of the measurement instrument that will be used later as a measuring tool for activities in the field. Third, the researcher conducted a test of the instrument items to get an expert’s assessment and the results of the respondents’ measurements to show the quality of the item (Chua & Ayoko, 2021; Ciakaren, 2014). Fourth, the results of data from experts and respondents were analyzed so that the item of the instrument proved to be valid and reliable. Fifth, the Determination of the final measurement instrument product is ready to be used as a measuring tool in the assessment process in the field.

Research subject

The subject of this study involved two administrative and management education experts who played a role in supporting the instrument’s validity. In addition, forty-five respondents were involved in supporting the instrument’s reliability. Respondents have status as SCA in the Bali Provincial Government, Indonesia.

Data collection instruments

The data in this study were obtained through a questionnaire. The questionnaire contains the items of the measurement instrument on the variables of the effect of open selection, job satisfaction, transformational
leadership, and work motivation on the performance of civil servants (Arshadi, 2010). Data collection is also supported by documentation in the form of photos of the validation process by experts. Reliability data were collected through response questionnaires. Additional authentic evidence is also equipped with photos of distributing questionnaires to respondents.

**Research data analysis techniques**

This study uses data analysis techniques based on content validity through expert data analysis using the Gregory formula. The reliability test of the measurement instrument uses Cronbach’s Alpha coefficient. The research data is based on a non-test instrument that uses a Likert scale. Information on the validity and reliability of the instrument in this study follows the Guilford classification. Table 1 shows the classification of validity and reliability scores (Divayana et al., 2019).

| Score Range | Validity Category | Reliability Category |
|-------------|-------------------|---------------------|
| \(0.80 < r_{xy} \leq 1.00\) | Very High | Very High |
| \(0.60 < r_{xy} \leq 0.80\) | High | High |
| \(0.40 < r_{xy} \leq 0.60\) | Enough | Enough |
| \(0.20 < r_{xy} \leq 0.40\) | Low | Low |
| \(0.00 < r_{xy} \leq 0.20\) | Poor | Poor |
| \(r_{xy} \leq 0.00\) | Invalid | Invalid |

### 3 Results and Discussions

#### 3.1 Results

Some of the findings that need to be discussed in more detail in this study follow the existing problems. Based on the research method used to solve these problems, the results of this study present several things as follows.

**Measurement indicator**

The first stage in this study presents the main objective of measurement variables, namely aspects of employee performance. Supporting factors, namely open selection, job satisfaction, transformational leadership, and work motivation, are also clearly described. The measurement indicators are arranged through a grand theory matrix on each variable. Grand theory refers to the literature review. The contents of the grand theory matrix can be seen in full in Table 2.

| Variable | Grand Theory | Characteristics | Indicator |
|----------|--------------|-----------------|----------|
| Employee Performance | Performance is the result of work that can be achieved by a Civil Servant in an organization following the authority and responsibility of a person both in quantity and quality in carrying out work optimally by utilizing existing resources within the specified time. | • Quantity  
• Quality  
• Proactive behavior  
• Work procedures  
• Organizational processes  
• Effectiveness  
• Behavior  
• Function  
• Attitude | Y1.1 Quality  
Y1.2 Quantity  
Y1.3 Effectivity  
Y1.4 Proactive Behavior  
Y1.5 Working Procedure  
Y1.6 Organizational Process  
Y1.7 Function |
Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. *International Journal of Health Sciences, 6*(2), 661–681. https://doi.org/10.53730/ijhs.v6i2.7580

| Variable           | Grand Theory                                                                                                                                                                                                 | Characteristics                                                                                   | Indicator                                                                                     |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Open Selection     | Open selection is a process or procedure for hiring the right SCA candidate for a High Leadership Position by assessing the suitability of the candidate by predicting the extent to which they will be able to carry out the role successfully. | • Planning  
• Implementation  
• Evaluation  
• Implementation using psychometric tests, presentations, case studies interviews                 | X1.1 Planning  
X1.2 Implementation  
X1.3 Evaluation and Monitoring                                                                                             |
| Job Satisfaction   | Job satisfaction is defined as a sense of achievement and success of a Civil Servant which is believed to be directly related to productivity and work performance in achieving personal well-being. | • Leadership style  
• Financial  
• Working hours  
• Stress level  
• Level of flexibility  
• Productivity  
• Work performance  
• Behavior at work  
• Wages  
• Career development  
• Relations between employees  
• Job placement  
• Type of work  
• Organizational structure  
• Quality control  
• Job design  
• Work environment                                              | X2.1 Productivity  
X2.2 Work Performance  
X2.3 Behavior at Work  
X2.4 Salary  
X2.5 Relations Between Employees  
X2.6 Quality Control  
X2.7 Work Environment                                                |
| Transformational Leadership | Transformational leadership is defined as a leadership style that inspires Civil Servants or followers to change beliefs, values, capabilities, and motives to improve their performance beyond personal interests for the benefit of the organization while building a sense of self-motivation in its employees. | • Ideal influence  
• Inspirational motivation  
• Intellectual stimulation  
• Individual considerations                                          | X3.1 Ideal Effect  
X3.2 Inspirational Motivation  
X3.3 Intellectual Stimulation  
X3.4 Individual Considerations                                         |
| Work Motivation    | Work motivation is the drive and desire that causes a Civil Servant to do an activity or job by giving his best to achieve the desired goal. | • Internal  
• External  
• Salary Safety benefits  
• Awards and praise  
• Retrieval system  
• Relationships with colleagues  
• Self-development  
• Extrinsic (additional incentives such as salary or promotion, some praise, and appreciation)  
• Intrinsic  
• Need for achievement  
• Need for affiliation  
• The need for power                                                  | X4.1 Internal  
X4.2 External  
X4.3 Extrinsic  
X4.4 Intrinsic  
X4.5 Achievement requirement  
X4.6 Need to affiliate  
X4.7 Need for power                                                      |

**Measuring Instrument Items**

The second stage produces a measurement instrument that has not been judged. The items of the measuring instrument are derived from each of the indicators described in Table II. The items of the measuring instrument can be seen in Table 3.
Table 3
Items of Ostmonp Measurement Instruments

| Variable                 | Indicators                                      | Positive items | Quantity (Statement Number) |
|--------------------------|-------------------------------------------------|----------------|----------------------------|
| Employee Performance (N=28) | Y1.1 Quality                                    | ✓              | 5 (1,2,3,4,5)              |
|                          | Y1.2 Quantity                                   | ✓              | 5 (6,7,8,9,10)             |
|                          | Y1.3 Effectiveness                              | ✓              | 3 (11,12,13)               |
|                          | Y1.4 Proactive Behavior                         | ✓              | 6 (14,15,16,17,18,19)      |
|                          | Y1.5 Working Procedure                          | ✓              | 3 (20,21,22)               |
|                          | Y1.6 Organizational Process                     | ✓              | 3 (23,24,25)               |
|                          | Y1.7 Function                                   | ✓              | 3 (26,27,28)               |
| Open Selection (N=26)    | X1.1. Open Selection Planning                   | ✓              | 8 (1,2,3,4,5,6,7,8)        |
|                          | X1.2. Implementation of Open Selection          | ✓              | 7 (9,10,11,12,13,14,15)    |
|                          | X1.3. Evaluation and Monitoring of Open Selection| ✓              | 11 (16,17,18,19,20,21,22,23,2)|
|                          | Open Selection                                  | ✓              | 4,25,26                    |
| Job Satisfaction (N=22)  | X2.1. Productivity                              | ✓              | 3 (1,2,3)                  |
|                          | X2.2. Work Performance                          | ✓              | 4 (4,5,6,7)                |
|                          | X2.3. Behavior at Work                          | ✓              | 3 (8,9,10)                 |
|                          | X2.4. Salary                                    | ✓              | 3 (11,12,13)               |
|                          | X2.5. Relations Between Employees               | ✓              | 3 (14,15,16)               |
|                          | X2.6. Quality Control                           | ✓              | 3 (17,18,19)               |
|                          | X2.7. Work Environment                          | ✓              | 3 (20,21,22)               |
| Transformational Leadership (N=35) | X3.1. Ideal Effect                          | ✓              | 7 (1,2,3,4,5,6,7)         |
|                          | X3.2. Inspirational Motivation                  | ✓              | 8 (9,10,11,12,13,14,15)    |
|                          | X3.3. Intellectual Stimulation                  | ✓              | 9 (16,17,18,19,20,21,22,23,24) |
|                          | X3.4. Individual Considerations                 | ✓              | 11 (25,26,27,28,29,30,31,32,3) |
|                          |                                                |                | 3,34,35                    |
| Work Motivation (N=29)   | X4.1. Internal                                  | ✓              | 3 (1,2,3)                  |
|                          | X4.2. External                                  | ✓              | 3 (4,5,6)                  |
|                          | X4.3. Extrinsic                                 | ✓              | 4 (7,8,9,10)               |
|                          | X4.4. Intrinsic                                 | ✓              | 6 (11,12,13,14,15,16)      |
|                          | X4.5. Achievement requirement                   | ✓              | 5 (17,18,19,20,21)        |
|                          | X4.6. Need to affiliate                         | ✓              | 5 (22,23,24,25,26)        |
|                          | X4.7. Need for power                            | ✓              | 3 (27,28,29)               |

Test instrument

The results in stage three are tested instrument items. The measurement instrument was tested through two forms of trials. The tests carried out were the content validity test of the instrument and the instrument’s reliability test. The content validity test involved two experts. The instrument reliability test is 45 respondents as SCA. The complete data from the content validity test results are in Table 4. The experimental data are then presented in a cross-tabulation. A complete description of the cross-tabulation process is as follows.

Table 4
Data Cross Tabulation of Test Results for OSTMonP Measurement Instruments Performed by Two Experts

| Variable                  | Expert  | Less Relevant | Expert I  | Very Relevant | Validity |
|---------------------------|---------|---------------|-----------|---------------|----------|
| Employee Performance      | Expert I| 12 (1)        | B (0)     | 1,2,3,4,5,6,7,8,9,10,11,13,14,15,16,17,18,19,20,21,22,23,24,25,26 | .96      |
| Work Motivation           | Expert I| 12 (1)        | B (0)     | 1,2,3,4,5,6,7,8,9,10,11,13,14,15,16,17,18,19,20,21,22,23,24,25,26 | .96      |

IJHS Vol. 6 No. 2, August 2022, pages: 661-681
Table 4 describes the results of validation by experts using the Gregory formula (Divayana et al., 2019) with the formula \( \frac{D}{A+B+C+D} \). The validation results show the value of the instrument variable for employee performance is .96, the instrument variable for available selection is .92, the instrument variable is job satisfaction .95, the instrument variable is transformational leadership .97, and the instrument variable is work motivation .93. After the validation of the contents of the instrument is known, the next step is to determine the instrument’s reliability. Table 5 shows the complete data on the results of reliability trials using SPSS.

| Variable                  | Expert Relevant | Less Relevant | Expert II | Very Relevant | Validity |
|---------------------------|-----------------|---------------|-----------|---------------|----------|
| Open Selection            | Expert II       | C (0)         | D (27)    |               |          |
|                           | Less Relevant   | 6             | A (1)     | B (0)         |          |
|                           | Very Relevant   | 21            |           | 1,2,3,4,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,22,23,24,25,26 | .92     |
| Job Satisfaction          | Expert II       | C (0)         | D (24)    |               |          |
|                           | Less Relevant   | 14            |           | B (0)         |          |
|                           | Very Relevant   | A (1)         | 1,2,3,4,5,7,8,9,10,11,12,13,15,16,17,18,19,20,21,22 | .95     |
| Transformational Leadership| Expert II       | C (0)         | D (21)    |               |          |
|                           | Less Relevant   | 33            |           | B (0)         |          |
|                           | Very Relevant   | A (1)         | 1,2,3,4,5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,34,35 | .97     |
| Work Motivation           | Expert II       | 10,25         | A (2)     | B (0)         | .93      |
|                           | Less Relevant   |               |           | 1,2,3,4,5,7,8,9,11,12,13,14,15,16,17,18,19,20,21,22,23,24,26,27,28,29 |          |
|                           | Very Relevant   |               |           | C (0)         |          |

Table 5

| Variable               | N  | Cronbach’s Alpha | Description |
|------------------------|----|------------------|-------------|
| Employee Performance   | 28 | .93              | Reliable    |
| Open Selection         | 26 | .94              | Reliable    |
Table V shows the results of the reliability test. There are open selection variable data with 26 statements, Cronbach’s Alpha value is .94, job satisfaction is obtained with 22 statements, Cronbach’s Alpha is .94, transformational leadership is obtained with 35 statements, Cronbach’s Alpha is .97, work motivation is 29 statements. Cronbach’s Alpha value was obtained at .94, and performance with 28 statements obtained Cronbach’s Alpha value at .93.

*Instruments item analysis*

Based on the results of the calculation of the instrument's content validity, the value of content validity is obtained, which indicates that, in general, the contents of the instrument are classified as very high validity. This category can be identified according to the Guilford classification in the range of 0.80 < rxy 1.00. Based on Table 5, several items must be discarded because they are not relevant to the expert's judgment. Some of the items that were wasted on the variables of employee performance, open selection, job satisfaction, transformational leadership, and work motivation, respectively, were one item, two items, one item, and two items. Based on the value of Cronbach’s alpha, the reliability value is obtained, which indicates that the reliability of the instrument items is classified as very high reliability. Cronbach’s alpha is used to measure the reliability of the indicators used in the research questionnaire. The final shows 133 item analysis results based on the results of the validity and reliability tests. For more details about the form of digital instruments can be seen in the following Figure 2.
Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. International Journal of Health Sciences, 6(2), 661–681. https://doi.org/10.53730/ijhs.v6n2.7580
Final digital instruments

The following descriptions are statements as the final digital instrument items that lead to each measurement indicator.

Table 6
Digital instruments for employee performance

| No | Statements                                                                 |
|----|---------------------------------------------------------------------------|
| 1. | The employee concerned completes the work following his/her duties and responsibilities |
| 2. | The employee works optimally throughout working hours                    |
| 3. | The employee concerned analyzes each type of work for which he is responsible |
| 4. | The employee concerned completes the work according to the proportion of his duties |
Table 7
Digital instruments for open selection

| No | Statements |
|----|------------|
| 1.1 | Planning for the selection of positions is announced openly |
| 1.2 | Explanation and description of the type of work held before the open selection |
| 1.3 | The selection process is carried out to fill vacant positions |
| 1.4 | To take part in the open selection, a candidate must meet certain requirements |
| 1.5 | The selection process must go through several objective stages |
| 1.6 | Interview test required during the selection process *(wasted)* |
| 1.7 | A health test is required in the selection process |
| 1.8 | Candidates must also take a written test that has been prepared |

**X1.2 Implementation of Open Selection**

| No | Statements |
|----|------------|
| 1.9 | The implementation of an open selection is accompanied by a description and job description |
| 1.10 | The selection process through a clear mechanism and the results can be accounted for |
Having work experience is very important. The tests carried out are related to the work in the selected position. Each stage of the selection is announced openly. Announcement of the election results is also carried out through mass media and social media. After the selection, it is necessary to have a performance contract between the leadership and staff.

**X1.3 Evaluation and Monitoring**

The selection planning process contains requirements that are following competencies and job positions. The selection process also involves an independent selection monitoring team. Educational background following the chosen field of work. The selection process does not discriminate between ethnicity, religion, and race.

Each stage of the assessment has its score. The evaluation process at each stage is announced publicly (wasted). Evaluation of the selection results is carried out by a competent team/committee. The Selection Team involves elements from the external government.

Skill tests are carried out to support the open selection of high leadership positions. Monitoring after the selection is carried out for employee performance evaluation material. Psychological tests and interviews are carried out by different selection teams/committees.

### Table 8
**Digital Instruments for Job Satisfaction**

| No | Statements                                                                 |
|----|---------------------------------------------------------------------------|
| 1  | I produce work that fits the task with minimal resources                  |
| 2  | I can improve my work                                                    |
| 3  | I feel my work results have improved based on the time allotted           |
| 4  | I show achievement in my work                                            |
| 5  | I improve my work                                                        |
| 6  | I can finish the quantity according to the set time limit                 |
| 7  | I do my job according to my abilities and skills                          |
| 8  | I act according to the organization’s rules at work                       |
| 9  | The organization I work for has written rules that govern my work         |
| 10 | I behave according to religious norms, respected local culture            |
| 11 | I get a salary that fits my job                                          |
| 12 | The salary given by the organization is in accordance with my job         |
| 13 | The payroll system is very open in my organization                       |
| 14 | I have a good relationship with subordinates (wasted)                     |
| 15 | I have a good communication relationship with co-workers                 |
| 16 | I have a good relationship with the boss where I work                     |
| 17 | My boss does regular monitoring                                          |
| 18 | My work is evaluated regularly                                           |
| 19 | The results of monitoring and evaluation of my work are communicated openly|
| 20 | Access to my work environment supports my work                            |
| 21 | The atmosphere of my workplace is very comfortable to work               |
| 22 | My work environment is very supportive of my work                         |
Table 9
Digital instruments for transformational leadership

| No | X3.1 Ideal Effect                                                                 | Statements                                                                 |
|----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 1  | I have confidence and confidence in getting the job done                           | X3.1 Ideal Effect                                                         |
| 2  | I can convince subordinates that the interests of the organization must come first | X3.1 Ideal Effect                                                         |
| 3  | I set high work goals and standards                                                | X3.1 Ideal Effect                                                         |
| 4  | I provide beliefs and values in the organization as things that must be done by subordinates | X3.1 Ideal Effect                                                         |
| 5  | I convince subordinates of the work standards that must be followed and completed  | X3.1 Ideal Effect                                                         |
| 6  | I make sure the work of the subordinates is completed on time                      | X3.1 Ideal Effect                                                         |
| 7  | I encourage subordinates to work creatively                                         | X3.1 Ideal Effect                                                         |
| 8  | X2.2 Inspirational Motivation                                                      | X3.1 Ideal Effect                                                         |
| 9  | I can influence co-workers to participate in completing work                       | X3.1 Ideal Effect                                                         |
| 10 | I inspire my subordinates with ways of looking at problems that were very difficult for me at first | X3.1 Ideal Effect                                                         |
| 11 | I create a work environment that can provide work motivation to subordinates       | X3.1 Ideal Effect                                                         |
| 12 | I allow subordinates to see problems as learning opportunities                      | X3.1 Ideal Effect                                                         |
| 13 | I express important goals in a simple way                                           | X3.1 Ideal Effect                                                         |
| 14 | I show and acknowledge the achievements of subordinates                             | X3.1 Ideal Effect                                                         |
| 15 | I allow subordinates to work according to their own work methods                   | X3.1 Ideal Effect                                                         |
| 16 | I inspire my subordinates with ways to look at problems that are very difficult at first | X3.1 Ideal Effect                                                         |
| 17 | X2.3 Intellectual Stimulation                                                      | X3.1 Ideal Effect                                                         |
| 18 | I allow subordinates to state the problem                                          | X3.1 Ideal Effect                                                         |
| 19 | I can manage work teams in creating innovations in carrying out work               | X3.1 Ideal Effect                                                         |
| 20 | I make sure there is some kind of agreement between what is expected with what is done and what is obtained from his efforts | X3.1 Ideal Effect                                                         |
| 21 | I give awards for the work performance of subordinates                              | X3.1 Ideal Effect                                                         |
| 22 | I give freedom to my subordinates to complete work in their way                      | X3.1 Ideal Effect                                                         |
| 23 | I tell my subordinates how I do my job                                              | X3.1 Ideal Effect                                                         |
| 24 | I give opportunities to subordinates that mistakes are learning opportunities       | X3.1 Ideal Effect                                                         |
| 25 | I allow subordinates to work according to their own work methods                   | X3.1 Ideal Effect                                                         |
| 26 | I treat subordinates as individuals                                                | X3.1 Ideal Effect                                                         |
| 27 | I am satisfied with the performance of subordinates as long as it is built with a work plan | X3.1 Ideal Effect                                                         |
| 28 | X3.4 Individual Considerations                                                     | X3.1 Ideal Effect                                                         |
| 29 | I can direct subordinates in completing work                                        | X3.1 Ideal Effect                                                         |
| 30 | I understand the psychological and emotional conditions of subordinates            | X3.1 Ideal Effect                                                         |
| 31 | I consider subordinates as individuals who have biological, psychological, social, and spiritual needs | X3.1 Ideal Effect                                                         |
| 32 | I provide mental and emotional support for subordinates who are having problems     | X3.1 Ideal Effect                                                         |
| 33 | I use my qualifications to provide job technical guidance                            | X3.1 Ideal Effect                                                         |
| 34 | I use my knowledge in training the ability of subordinates to complete the job      | X3.1 Ideal Effect                                                         |
| 35 | I know the desires of subordinates and help to get them                              | X3.1 Ideal Effect                                                         |
| 36 | I emphasize the use of intelligence to overcome obstacles                            | X3.1 Ideal Effect                                                         |
| 37 | I avoid interfering with the work of subordinates unless they fail to achieve their goals (wasted) | X3.1 Ideal Effect                                                         |
| 38 | I don't hesitate to praise my subordinates if they do a good job                    | X3.1 Ideal Effect                                                         |
| 39 | I cultivate respect among employees                                                | X3.1 Ideal Effect                                                         |

Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. International Journal of Health Sciences, 6(2), 661–681. https://doi.org/10.53730/ijhs.v6n2.7580
The final digital instruments are determined based on the results of the validity of the instruments' content and the results of the instruments' reliability. Items considered relevant from the expert validation results are still used, while items that are not valid are discarded. This study's final measurement instrument item is based on the results of the instrument content validation by experts shown in Table 4 and the reliability results from the respondents in Table 5. The final instrument item was used for the variables of employee performance, open selection, job satisfaction, transformational leadership, and work motivation in general. Sequentially are 27 items, 24 items, 21 items, 34 items, and 27 items. A total of 133 final items received a "very relevant" assessment from experts and a very reliable category from the respondents' results.
3.2 Discussion

This research produces a digital instrument for measuring the performance of state-owned civil servants. Available selection, job satisfaction, transformational leadership, and work motivation affect employee performance—the indicators in detail through the grand theory matrix on each measurement variable in Table 2. Several employee performance indicators are supported by research results using role-based employee performance measurement.

Table 2 is supported by research results that use a role-based employee performance measurement that integrates socio-emotional selectivity theory and a future time perspective. Several employee functions in an organizational system are applied to productive and non-productive ages, which indicates some challenges that employees with potentially poor qualities (Pahos et al., 2021). Indicators on employee performance variables are relevant to redesigning the diversity of performance measurement systems that add a person-organization fit (P-O fit) point of view (Wei et al., 2019). This measurement emphasizes the congruence of goals between employees and the company. Innovations in measuring employee performance have also been developed, showing human resources as an important key in supporting measurement maturity (Sardi et al., 2020). The indicator on the available selection variable is relevant to the results of a review of the principles of open and competitive recruitment in government employee positions under the auspices of the law. The law on local government employees forms the basis for an open selection of employees (Côté et al., 2021; Triguero-Sánchez et al., 2018). Such rules can be in the form of rules for rehiring employees and general rules for recruitment for official positions (Wiącek-Burmańczyk, 2020). Table II also shows several indicators of other variables in the OSTMonP measurement instrument, namely job satisfaction, transformational leadership, and motivation. Job satisfaction variables are also closely related to productivity, motivation, achievement, and life satisfaction, meaning that job satisfaction also affects a sense of security and satisfaction in working well in the organization (Abuhashesh et al., 2019). Staff inspired by transformational leadership are more likely to engage in work and produce helpful behavior (Lai et al., 2020).

This study also presents in detail the items of the OSTMonP measurement instrument in Table 3. Quality and quantity indicators state that employees complete work according to the proportion of their duties and their position in the task (Jann & Veit, 2021). Items in the Effectiveness indicator show employees were documenting in writing the duties, authorities, and responsibilities of workers in policies, procedures, and job descriptions. Employees’ proactive behavior is shown by adapting to technological changes and providing feedback to the organization (Bartsch et al., 2020). Employees’ proactive efforts are also faced with the emergence of industry 4.0, which raises interest in work-life balance and work quality. The results of the study highlight job quality as a driving factor for innovative performance in technology startup organizational systems (Choi et al., 2020). The instrument’s items in the other indicators are planning, implementation and evaluation. In planning, prospective employee participants who participate in the open selection must meet certain requirements objectively according to the state civil apparatus recruitment regulations (Gadowska, 2018). Announcement of the selection results stage is also carried out through mass media and social media. In the final selection process, monitoring is carried out for evaluation materials. SCA employees act as planners, implementers, and supervisors to implement general government duties through the implementation of policies and professional public services. Productivity can be demonstrated by producing work appropriate to the task with minimal resources. In addition to productivity, the behavior of government employees is also following respected local norms and culture. The positions of government employees have their respective roles (Unsworth et al., 2021). The position of the leader has the authority to provide intellectual stimulation by providing opportunities for subordinates to state their problems (Pollermann et al., 2020). Extrinsically, the superior’s leadership style supports the employee’s work. Intrinsically, employees have a desire to succeed in their work.

Table 4 presents some items of the OSTMonP measurement instrument that are less relevant based on expert evaluations. In the employee performance variable, there is an indicator that has one less relevant item. In the effectiveness indicator, a statement in number 12 is discarded; namely, the employee and other employees utilize the organizational resources provided. These items are less relevant to represent effectiveness indicators because effectiveness includes elements of adaptability, work performance, and job satisfaction (Davidescu et al., 2020). In the open selection variable, two indicators have one less relevant item.

Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. International Journal of Health Sciences, 6(2), 661–681. https://doi.org/10.53730/ijhs.v6n2.7580
A statement in number 6 is discarded; namely, an interview test is needed during the selection process. These items are less relevant to represent indicators of open selection planning because planning leads to a logical thinking process and rational decision-making before taking action. A statement in number 21 is discarded; namely, the evaluation process at each stage is announced openly. These items are less relevant to representing evaluation and monitoring indicators because open announcements about the evaluation process do not fully represent objectivity (Gadowska, 2018). However, the evaluation results need to be publicly announced to support the transparency of the assessment. There are indicators about the relationship between employees in the job satisfaction variable, which have one less relevant item. The statement in number 14 is discarded: A good relationship with subordinates. This point is not relevant because the statement of good relations with subordinates tends to be a function of leadership. There are indicators about individual considerations in the transformational leadership variable, which have one less relevant item. The statement in number 33 is discarded that avoids interfering with the work of subordinates unless it fails to achieve the goal. This item is less relevant because, as a leader, it is necessary to monitor the work of subordinates who succeed and fail to achieve their goals (Sun et al., 2021). In the work motivation variable, two indicators have one less relevant item. A statement at number 10 is discarded; namely, the work environment is very comfortable helping in work. In the indicator of the need for affiliation, a statement at number 25 is discarded, namely mutual respect between co-workers. This item is not relevant because this item has been represented by another item, namely interaction with co-workers. Interaction means a form of communication, cooperation, or affinity between two parties (Kranz et al., 2020).

Table 5 shows that the OSTMonP measurement instrument is reliable. A reliable instrument indicates how much a measuring instrument can be trusted. When an instrument is used repeatedly to measure the same thing, the results are relatively consistent. The reliability of the OSTMonP measurement instrument is thought to be in line with several underlying studies. A survey showed that the average job satisfaction level of the three indices was 63.7% based on conditions, salary, and relationship with superiors (Dziuba et al., 2020). Salary and job security are factors that individuals significantly influence job satisfaction. Achievement of performance requires motivation to achieve achievement, carry out tasks with responsibility, and always work with colleagues to support performance (Narasuci et al., 2018). The transformative leadership style has a positive nature and does not significantly affect employee performance, while work motivation has a significant positive effect on employee performance. This study also proves that work motivation successfully mediates the effect of transformational leadership on employee performance from insignificant positive to positive significant (Martha et al., 2020). The OSTMonP measurement instrument was supported by a relevant study involving 504 employees. The employee as nurses uses hierarchical linear regression analysis. The analysis showed that after controlling for several relevant variables (e.g., leader-member exchange, role-based self-efficacy, and transactional leadership and some participant demographic variables (for example, gender, age, and education). It was found that work involvement still mediates a positive relationship between transformational leadership, job performance, and mutually helpful behavior (Lai et al., 2020). Some of the results of this study are quite relevant to be used as literature and sources in support of the reliability of research instruments, especially in assessing the relationship between variables supporting employee performance.

An instrument is a tool used to measure an object or collect data from a variable. This study resulted in 133 OSTMonP measurement instruments for all variables—a visualization of the number of final instrument items, namely a reliable instrument in Figure 3. Reliable instruments meet valid and reliable criteria (Erlina et al., 2018). Valid instruments are needed to obtain correct data to support conclusions following the actual situation. The criteria for the acceptance of the value of the reliability coefficient is very dependent on the researcher’s reference in choosing the opinions of the experts used. The higher the criteria used, the more consistent the data results obtained (Divayana et al., 2019).

4 Conclusion

The digital instruments for OSTMonP measurement are suitable to be used as a measuring tool to support the measurement of public services through several relevant factors. The digital instruments for OSTMonP measurement included instruments for measuring open selection, job satisfaction, transformational...
leadership, and work motivation as the basic factors that influence employee performance in the state civil apparatus (James & Kane, 2008). Planning, Implementation, Evaluation, and Monitoring are indicators of open selection variables. Several indicators that support job satisfaction variables are productivity, work performance, behavior at work, salary, relations between employees, quality of supervision, and work environment. Several indicators that support transformational leadership variables are ideal influence, inspirational motivation, intellectual stimulation, and individual considerations. Several indicators that support work motivation variables are internal, external, extrinsic, intrinsic, need for achievement, affiliation, and need for power. The development of digital instruments for OSTMonP measurement resulted in 133 items with very high validity and very high-reliability categories to measure employee performance with indicators showing quality, quantity, effectiveness, proactive behavior, work procedures, organizational processes, and functions. Employee development is directed at improving the quality of human resources so that they have attitudes and behaviors that can provide services according to the demands of community development. Employee development was effective in carrying out their duties properly. The results of this study will provide practical implications for improving employee performance (Güngör, 2011; Eliyana & Ma’arif, 2019). Several factors need to be improved to achieve good performance, namely implementing an objective, and open selection. In addition, employee job satisfaction needs to be fulfilled through transformational leadership. Thus, work motivation can be formed both internally and externally (Raziq & Maulabakhsh, 2015).

Acknowledgments

The authors would like to thank the Principals and teachers of Elementary Schools in West Denpasar who have helped the smooth running of this research. In addition, the authors would like to thank the supervisor for their input in writing this article. Hopefully, this article can be useful to improve teacher performance in Denpasar.
References
Abbasi, S. G., Tahir, M. S., Abbas, M., & Shabbir, M. S. (2020). Examining the relationship between recruitment & selection practices and business growth: An exploratory study. *Journal of Public Affairs*, 2(438).
Abuhashesh, M. (2019). Rand al-Dmour & Ra’ed Masa’deh.(2019).”. Factors that Affect Employees Job Satisfaction and Performance to Increase Customers’ Satisfactions” in *Journal of Human Resources Management Research*, 2019.
Afifah, T., & Al Musadieq, M. (2017). The effect of job satisfaction on work motivation and its impact on performance (study on employees of PT Pertamina Geothermal Energy Jakarta head office). *JurnalAdministrasiBisnis*, 47(1), 122–129.
Alonso-Almeida, M. D. M., & Llach, J. (2019). Socially responsible companies: A re they the best workplace for millennials? A cross-national analysis. *Corporate Social Responsibility and Environmental Management*, 26(1), 238-247.
Arshadi, N. (2010). Basic need satisfaction, work motivation, and job performance in an industrial company in Iran. *Procedia-Social and Behavioral Sciences*, 5, 1267-1272. https://doi.org/10.1016/j.sbspro.2010.07.273
Audenaert, M., Decramer, A., & George, B. (2021). How to foster employee quality of life: The role of employee performance management and authentic leadership. *Evaluation and Program Planning*, 85, 101909. https://doi.org/10.1016/j.evalprogplan.2021.101909
Aurora, S. (2021). Mechanism of filling the position of high madhya leadership through the office auction system according to Law No. 5 Of 2014 concerning the state civil apparatus. *International Journal of Social Sciences Research*, 1(2), 26–50. https://journal.epistemikpress.id/index.php/IJSRR/article/view/52
Barnes, C. M., Awtrey, E., Lucianetti, L., & Spreitzer, G. (2020). Leader sleep devaluation, employee sleep, and unethical behavior. *Sleep Health*, 6(3), 411-417. https://doi.org/10.1016/j.sleh.2019.12.001
Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2020). Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic. *Journal of Service Management*.
Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of applied psychology*, 88(2), 207.
Boyd, N. M. (2021). The continued call and future of administrative reform in the United States. *Public Management Review*, 23(1), 2-9.
Breau, J., Ritz, A., & Alfes, K. (2018). Work motivation and public service motivation: disentangling varieties of motivation and job satisfaction. *Public Management Review*, 20(10), 1423-1443.
Choi, D. S., Sung, C. S., & Park, J. Y. (2020). How does technology startups increase innovative performance? The study of technology startups on innovation focusing on employment change in Korea. *Sustainability*, 12(2), 551.
Chua, J., & Ayoko, O. B. (2021). Employees’ self-determined motivation, transformational leadership and work engagement. *Journal of Management & Organization*, 27(3), 523-543.
Ciaikaren, H. E. (2014). Analisis Transformational Leadership Terhadap Financial Performance Melalui Employee Engagement dan Job Satisfaction Pada Perusahaan Perbankan Di Surabaya. *Business Accounting Review*, 2(2), 224-233.
Côté, K., Lauzier, M., & Stinghamber, F. (2021). The relationship between presenteeism and job satisfaction: A mediated moderation model using work engagement and perceived organizational support. *European Management Journal*, 39(2), 270-278. https://doi.org/10.1016/j.emj.2020.09.001
Davidescu, A. A., Apostu, S. A., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management. *Sustainability*, 12(15), 6086.
Deslatte, A., Hatch, M. E., & Stokan, E. (2020). How can local governments address pandemic inequities?. *Public Administration Review*, 80(5), 827-831.
Divayana, D. G. H., Adiarta, A., & Sudirtha, I. G. (2019). Instruments Development of Tri Kaya Parisudha-Based Countenance Model in Evaluating the Blended Learning. *Int. J. Eng. Pedagog.*, 9(5), 55-74.
Divayana, D. G. H., Suyasa, P. W. A., & Abadi, I. B. G. S. (2019). Digital library Evaluation Application Based on Combination of CSE-UCLA with Weighted Product. *Journal of Engineering and Applied Sciences*, 14(4), 1318–1330. https://doi.org/10.36478/jesci.2019.1318.1330
Donkor, F., Appienti, W. A., & Achaiah, E. (2021). The Impact of Transformational Leadership Style on Employee Turnover Intention in State-Owned Enterprises in Ghana. The Mediating Role of Organisational Commitment. *Public Organization Review*, 1-17.

Dziuba, S. T., Ingaldi, M., & Zhuravskaya, M. (2020). Employees’ job satisfaction and their work performance as elements influencing work safety. *System Safety: Human-Technical Facility-Environment*, 2(1).

Eliyana, A., & Ma’arif, S. (2019). Job satisfaction and organizational commitment effect in the transformational leadership towards employee performance. *European Research on Management and Business Economics*, 25(3), 144-150. https://doi.org/10.1016/j.erie2019.05.001

Engdaw, B. D. (2020). The impact of quality public service delivery on customer satisfaction in Bahir Dar city administration: The case of Ginbot 20 Sub-city. *International journal of public administration*, 43(7), 644-654.

Erlina, N., Susantini, E., Wicaksono, I., & Pandiangan, P. (2018). The Effectiveness of Evidence-Based Reasoning in Inquiry-Based Physics Teaching to Increase Students’ Scientific Reasoning. *Journal of Baltic Science Education*, 17(6), 972-985.

Ernawati, K., Nugroho, B. S., Suryana, C., Riyanto, A., & Fatmaawi, E. (2022). The advantages of digital applications in public health services on automation era. International Journal of Health Sciences, 6(1), 174-186. https://doi.org/10.53730/ijhs.v6n1.3684

Forrest, K., & McKimm, J. (Eds.). (2019). *Healthcare simulation at a glance*. John Wiley & Sons.

Gadowska, K. (2018). Constitutional values and civil servant recruitment: The principles for filling revenue service positions in Poland. *Communist and Post-Communist Studies*, 51(3), 257-271.

Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of business research*, 62(4), 461-473. https://doi.org/10.1016/j.jbusres.2007.07.032

Güngör, P. (2011). The relationship between reward management system and employee performance with the mediating role of motivation: A quantitative study on global banks. *Procedia-Social and Behavioral Sciences*, 24, 1510-1520. https://doi.org/10.1016/j.sbspro.2011.09.029

Harb, B., Hachem, B., & Hamdan, H. (2021). Public servants’ perception of leadership style and its impact on organizational commitment. *Problems and Perspectives in Management*, 18(4), 319.

James, K. R., & Kane, B. (2008). Precision digital instruments to measure dynamic wind loads on trees during storms. *Agricultural and Forest Meteorology*, 148(6-7), 1055-1061. https://doi.org/10.1016/j.agrformet.2008.02.003

Jann, W., & Veit, S. (2021). Politics and administration in Germany. *Public Administration in Germany*, 145.

Kaluza, A. J., Weber, F., van Dick, R., & Junker, N. M. (2021). When and how health-oriented leadership relates to employee well-being—The role of expectations, self-care, and LMX. *Journal of Applied Social Psychology*, 51(4), 404-424.

Kranz, A. M., DeYoreo, M., Esthete-Roesler, B., Damberg, C. L., Totten, M., Escarce, J. J., & Timbie, J. W. (2020). Health system affiliation of physician organizations and quality of care for Medicare beneficiaries who have high needs. *Health services research*, 55, 1118-1128.

Lai, F. Y., Tang, H. C., Lu, S. C., Lee, Y. C., & Lin, C. C. (2020). Transformational leadership and job performance: The mediating role of work engagement. *Sage Open*, 10(1), 2158244019899085.

Love, P. E., Ika, L., Luo, H., Zhou, Y., Zhong, B., & Fang, W. (2020). Rework, failures, and unsafe behavior: Moving toward an error management mindset in construction. *IEEE Transactions on Engineering Management*.

Mallari, E., Lasco, G., Sayman, D. J., Amit, A. M. L., Balabanova, D., McKee, M., & Palafox, B. (2020). Connecting communities to primary care: a qualitative study on the roles, motivations and lived experiences of community health workers in the Philippines. *BMC health services research*, 20(1), 1-10.

Martha, A. R., Rahardjo, K., & Prasetya, A. (2020). The effect of transformational leadership style on employee performance with work motivation as a mediating variable. *Profit: jurnaladministrasibisnis*, 1-13.

Narasuci, W., Setiawan, M., & Noermijati, N. (2018). Effect of work environment on lecturer performance mediated by work motivation and job satisfaction. *Jurnal Aplikasi Manajemen*, 16(4), 645-653.

Pais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics, and Business*, 7(8), 577-588.

Pahos, N., Galanaki, E., Van der Heijden, B. I., & de Jong, J. (2021). The moderating effect of age on the association between high-performance work systems and employee performance in different work roles. *Work, Aging and Retirement*, 7(3), 214-228.

Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. *International Journal of Health Sciences*, 6(2), 661–681. https://doi.org/10.53730/ijhs.v6n2.7580
Pollermann, K., Aubert, F., Berriet-Solliec, M., Laidin, C., Lépicier, D., Pham, H. V., ... & Schnaut, G. (2020). LEADER as a European policy for rural development in a multilevel governance framework: A comparison of the implementation in France, Germany and Italy. *European Countryside, 12*(2), 156-178.

Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance, 23*, 717-725. https://doi.org/10.1016/S2212-5671(15)00524-9

Sardi, A., Sorano, E., Garengo, P., & Ferraris, A. (2020). The role of HRM in the innovation of performance measurement and management systems: a multiple case study in SMEs. *Employee Relations: The International Journal*.

Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. *Psychological management of individual performance, 23*(1), 3-25.

Sun, M., Chen, Z., & Yang, Q. (2021). Servant leadership and civil servants' service attitude: The role of basic needs satisfaction. *Social Behavior and Personality: an international journal, 49*(9), 1-9.

Tran, H. N., Ha, X. V., Le, V. A., & Nguyen, A. N. (2021). Principal Leadership and Teacher Professional Development in a Vietnamese High School for Gifted Students: Perspectives into Practice. *European Journal of Educational Research, 10*(4), 1839-1851.

Triguero-Sánchez, R., Peña-Vinces, J., & Guillen, J. (2018). Como melhorar o desempenho da empresa por meio da diversidade de colaboradores e da cultura organizacional. *Revista Brasileira de Gestão de Negócios, 20*, 378-400.

Unsworth, K. L., Davis, M. C., Russell, S. V., & Bretter, C. (2021). Employee green behaviour: How organizations can help the environment. *Current Opinion in Psychology, 42*, 1-6. https://doi.org/10.1016/j.copsyc.2020.12.006

Wei, J. T., Chang, Y. W., Zhang, X., Wu, H. H., & Tang, Y. T. (2019). Performance measurement systems, TQM and multi-level firm performance: a person–organisation fit perspective. *Total Quality Management & Business Excellence, 30*(15-16), 1578-1595.

Wiacek-Burmańczuk, A. (2020). The Principle of Open and Competitive Recruitment to Official Posts in Local Government Units in Poland. *Lex Localis, 18*(3), 523-536.

Wiradendi Wolor, C. (2019). The Effect of Work Stress, Compensation and Motivation on the Performance of Sales People. *International Journal of Innovation, Creativity and Change*.

Zhang, X. A., Liao, H., Li, N., & Colbert, A. E. (2020). Playing it safe for my family: Exploring the dual effects of family motivation on employee productivity and creativity. *Academy of Management Journal, 63*(6), 1923-1950.
Biography of Authors

I Ketut Sukra Negara
is a Doctorate Program Student on Educational Science at Universitas Pendidikan Ganesha.
Email: negara.sukra1@gmail.com

Anak Agung Gede Agung
is a Professor at Educational Administration Department of Universitas Pendidikan Ganesha. His last education is Educational Management at Universitas Negeri Malang.
Email: agungtps2056@gmail.com

I Made Candiasa
is a Professor at Mathematics Education Department of Universitas Pendidikan Ganesha. His last education is Educational Technology at Universitas Negeri Jakarta.
Email: candiasaimade@undhiksa.ac.id

Kadek Rihendra Dantes
is an Associate Professor at Educational Administration Department of Universitas Pendidikan Ganesha. His last education is Educational Management at Universitas Negeri Jakarta.
Email: rihendra-dantes@undiksha.ac.id

Negara, I. K. S., Agung, A. A. G., Candiasa, I. M., & Dantes, K. R. (2022). Development of digital instruments for measuring the effect of open selection, job satisfaction, transformational leadership and work motivation on the performance of civil servants. International Journal of Health Sciences, 6(2), 661–681. https://doi.org/10.53730/ijhs.v6n2.7580