PREDICTING TALENT: INTERACTION BETWEEN POTENTIAL, COMPETENCIES, AND BIAS

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Abstract

The psychological attributes associated with both psychological potential and managerial competence are regarded as valuable assets for any company. Consequently, it is in the best interest of companies to actively search for the most potential candidates and develop their competencies. Organizations expend substantial resources to assess the potential of prospective employees during the recruitment process. This research aims to evaluate the extent to which employees’ potential can predict their competencies. We assessed candidates’ potential using self-report scales measuring grit and a growth mindset, while competencies in achieving results and managing change were evaluated through the assessment center method. The data was collected from 155 civil servants employed by the Makassar City Government. The findings reveal that potential does not significantly influence employees' competencies, whether it be Grit for results orientation or Growth mindset for change management competence. After conducting correlation tests between grit and growth mindset to social desirability bias, we found varied results with Grit (r= 0.1718, p = 0.03248) and growth mindset (r=0.0703, p-value = 0.3847), suggesting diverse correlations between the investigated variables. In light of these results, we recommend a re-evaluation of the practice of relying on potential as a predictor of competence.

Keywords: Assessment; Potential; Competencies; Response Bias

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1. Introduction

Human Resource Development is the main focus for organizational growth nowadays. Human resources are considered assets that can support organizations in achieving their goals and facing uncertainties. Therefore, in the face of increasingly tough competition, organizations strive to acquire potential candidates, while the required costs are also not negligible. According to data from (Snyder & Bottorff, 2023), the average cost required to hire a new employee is $1,400, and it takes about six months for a company to break even. Furthermore, (Allen, 2019) states that poor recruitment can cost organizations more than $100 million or around 30% of the first-year revenue.

Currently, some organizations also create a talent pool to form a group of potential leaders based on the employees' potential, including civil servants. The goal of talent management is to prepare the best talents to fill key leadership positions in the future or positions that support the core affairs of the organization. Additionally, talent management also encourages the improvement of job professionalism, competencies, and talent performance (Permen PAN & RB No. 3, 2020).

For civil servants, talent mapping is carried out through the measurement of performance appraisal results, potential assessment results, and the results of Competency Tests, which include the measurement of Technical Competence, Managerial Competence, and Socio-Cultural Competence (Permen PAN & RB No. 3, 2020). Potential assessment is one of the measurements often conducted in talent management. Research by Meyer et al., (2001) shows that psychological assessments have strong and compelling validity. Additionally, different assessment methods provide unique information and offer a more comprehensive overview. Other research results also support the idea that potential can enhance performance (Consultants, 2021; Stajkovic et al., 2009). This aligns with the research by (MacCann et al., 2020), stating that an individual's potential can predict their performance, although ability-based measurements have a stronger correlation with performance compared to self-report measurements.

However, some other research findings indicate a different perspective, potential assessments have a lower correlation to performance, compared to competency assessments. The correlation of potential to performance is only 0.29 or lower. On the other hand, competencies have a higher correlation, above 0.5 (Kolk et al., 2004; Taylor, 2007). The reason why competency has a higher correlation to performance is explained by Edenborough (2005) who states that competence is an individual's capacity to direct their behavior to meet job demands according to parameters set by the organization, thereby producing results in line with expectations. Sanghi (2007) declares that competence is a component of a job that can be reflected in the form of behavior in the workplace. Its elements include knowledge, skills, abilities, and personal suitability, all of which can impact work behavior. Thus, it can be concluded that competence has a greater influence on individual performance.

Several factors contribute to differences in performance outcomes between psychological assessments and competency assessments-. The initial factor lies in the source of rating,
particularly in psychological assessments where employees self-assess through self-report, introducing the possibility of response bias (Durraz et al., 2020; Furnham & Henderson, 1982). In contrast, competency assessments, especially those employing the assessment center method, involve multiple raters, thereby diminishing the potential for rater bias (Edenborough, 2005; Taylor, 2007). Another factor is that psychological assessments gauge individual tendencies to act, while competencies are evaluated based on observable behaviors in task completion. This aligns with longitudinal research conducted by Sturre et al. (2022), indicating that individual competencies evolve in tandem with professional development. Therefore, these differences can be attributed to measurement biases or because they indeed measure different aspects, each providing meaningful information in human resource development.

Therefore, we would like to investigate the correlation between potential and competence, specifically, we intend to examine the correlation of grit with results orientation competence and Growth Mindset toward change management competence. We also include social desirability bias to control for response bias that may be caused by filling out the self-report inventory.

2. Literature Review

2.1. Assessment

As a means of inquiring, analyzing, and processing information, assessment holds immense power and potential (Hanson et al., 2023). To harness that potential, an organization should provide the relevant resources it possesses. In psychology, assessment relates to a testing method that uses various techniques to form hypotheses on individuals about their behavior, capability, and personality (Humboldt, Rolo, Leal, 2022). This is in line with Gallagher & Yalch’s (2023) definition of assessment, which is a process of gathering information to describe an individual’s experience, understanding, and purpose.

Assessment as a psychological evaluation could be conducted in the form of a questionnaire or self-report, projective test, interview, observation, and assessment center. The latter is the most popular form lately used by organizations at the managerial level (Humboldt, Rolo, Leal, 2021; Gallagher & Yalch, 2023; Edenborough, 2005; Taylor, 2007). In this research, we focus on psychological tests in the form of questionnaires or self-report, and assessment centers. Self-report is a type of psychological test used for evaluating an individual’s attitude, characteristics, or personality through individual subjective perception (Cherry, 2023). The assessment center is a method that involves a series of simulations using multi-method and multi-assessor to measure a certain competency (Edenborough, 2005; Taylor, 2007).

2.2. Potential

APA Dictionary of Psychology (2018) defines potential as the capacity to grow or come into being. Meanwhile, the Regulation of the Minister of Administrative and Bureaucratic
Reform (Permen PAN & RB No. 3, 2020) on Civil Servant Talent Management, defines potentials measured in talent management as intellectual ability, interpersonal skills, self-awareness, critical and strategic thinking abilities, problem-solving skills, emotional intelligence, fast learning and self-development (growth mindset), as well as motivation and commitment (grit). In this study, we focus on two psychological potentials defined by the National Civil Service Agency: grit and growth mindset.

Grit is defined as an individual’s perseverance and passion to achieve long-term goals (Duckworth et al., 2007). Individuals with grit tend to exert consistent effort to attain established long-term goals and demonstrate a higher commitment to their work compared to those with low grit. Grit consists of two dimensions: persistence of interest, which is an individual’s enduranc e in holding onto long-term goals despite challenges, and perseverance of effort, which is the unwavering determination to not abandon tasks even when faced with obstacles or challenges. Individuals will strive to navigate through obstacles and explore alternatives to achieve their goals.

The second psychological potential we discuss in this study is the growth mindset. Dweck (2009) identifies two mindsets that individuals may have regarding their talent and abilities. Someone with a fixed mindset believes that their abilities are inherent and unchangeable, while someone with a growth mindset believes that their abilities can be developed through effort, practice, or instruction.

2.3. Competencies

Competency is a rather modern form of dimension, criteria, trait, or behavioral theme (Edenborough, 2005). Competency is further explained as the capacity that guides people’s behavior to fulfill their employer’s expectations. Competency can also be defined as a basic characteristic that leads people to become effective or superior in their work. Measured aspects of competency based on the Regulation of the Minister of Administrative and Bureaucratic Reform include managerial competencies such as integrity, collaboration, communication, results orientation, public service, self and others development, change management, and decision-making (Permen PAN & RB No. 38, 2017).

Each competency has its definition and indicators. In this study, we focus on two of them: result orientation and change management competency. Result orientation competence is defined as the ability to maintain a high personal commitment to task completion, being reliable and responsible, and systematically identifying risks and opportunities while considering the interconnection between planning and outcomes for organizational success (Permen PAN RB Nomor 38, 2017). Referring to the grit potential definition in section 2.2., individuals with grit presumably have high results orientation competence. Meanwhile, change management competence is the ability to adapt to new or changing situations without overly relying on old methods and processes, taking actions to support and implement change initiatives, leading change efforts, and taking personal responsibility to ensure that changes are effectively implemented (Permen PAN RB Nomor 38, 2017). Based on the growth mindset potential definition discussed in section
2.2. we predict that individuals with a growth mindset will have a high change management competency.

2.4. Response Bias

Response bias is defined as the tendency to provide an incorrect response consistently to a certain statement indicator/question resulting in a systemic error in prediction (McGrath et al., 2010). Response bias occurs when an individual has the motive to provide a dishonest response and modify his/her answer based on what is deemed appropriate by society. Social appropriateness may cause response error due to an individual’s tendency to choose extreme options to score highly on statements that demonstrate individual strengths based on social norms (Widhiarso, 2011). This bias typically occurs in questionnaires that measure people’s competency and tend to be influenced by societal appropriateness (Blair & Coyle, 2005; Campbell, Campbell, & Goh, 1999). This bias hinders people from giving an objective questionnaire/self-report response.

3. Method

3.1. Participant

A total of 155 civil servants in Makassar City participated in this research, with an average age of 45 years, ranging from 25 to 56 years (SD = 7.193). The respondents consisted of 52% males and 48% females.

3.2. Research Design

This study is quantitative research with a cross-sectional study design that tested two hypotheses:

The first hypothesis examined the relationship between potential and employee competence. Specifically, it tested whether Grit (attitudinal potential) can predict competence in outcome orientation and whether the potential aspect of Growth Mindset can predict competence in managing change.

The second hypothesis examined the correlation between potential scales (Grit and Growth Mindset) and social desirability. It assessed whether both Grit and Growth Mindset have correlations with social desirability.

3.3. Research Instrument

Potential was measured using two self-report scales: a) Grit, using the Grit Scale developed by Duckworth et al. (2007). This scale consists of 12 items and has two dimensions: persistence of interest and perseverance of effort. The resulting model demonstrated favorable fit indices, including RMSEA = .076 (90% CI = .066–.086), and CFI = .96, supporting the validity of our measures. While Internal consistency estimates for Grit-S were α=0.84. b) Growth Mindset, using The Mindset Survey developed by (Dweck, 2006). The Mindset Survey is an eight-item measurement assessing beliefs about the malleability of abilities. Mindset survey also had shown the best fitting, Chi-square = 356.645, RMSEA = 0.054, CFI = 0.958, SRMR = 0.036 (Chen et al., 2021)
**Competence** in this research included outcome orientation and change management competencies based on Permen PAN & RB No. 38, 2017. Both competencies were assessed using the assessment center method, a competency assessment approach utilizing multiple methods and multiple assessors Taylor (2007). This method includes Behavioral Event Interview (BEI), role-play using video, and in-tray exercises.

**Social desirability.** The measurement of social desirability bias utilized the short version of The Marlowe-Crowne Social Desirability Scale (M-CSDS), specifically MC-2, developed by Strahan & Gerbasi (1972). This scale comprises 10 items. MC-2 demonstrates adequate validity and reliability, with an internal consistency of 0.63 and RCFIs > .90, indicating that MC-2 is sufficiently fit for assessing social desirability as a unidimensional construct (Barger, 2002; Celume & Maoulida, 2022).

### 4. Results

#### 4.1. **Hypothesis 1**

For hypothesis 1, we assumed that potential could influence employee competence. We conducted two logistic regression analyses to determine the role of potential in relation to competence.

The first logistic regression analysis examined the relationship between Grit (attitudinal potential) and Result Orientation competence within a binomial distribution context. The results of this analysis are presented in the table below:

| Estimate | Std. Error | z value | Pr(>|z|) |
|----------|------------|---------|----------|
| Intercept | -0.39103 | 1.17045 | -0.334 | 0.738 |
| Grit | 0.01203 | 0.02617 | 0.460 | 0.646 |

*Source: Research results*

The results shown in Table 1 indicate that there is no significant relationship between Grit and Result Orientation (z = 0.460, p = 0.646).

The second logistic regression analysis examined the relationship between Growth Mindset (attitudinal potential) and Change Management competence within a binomial distribution context. The results of this analysis are presented in the table below:

| Estimate | Std. Error | z value | Pr(>|z|) |
|----------|------------|---------|----------|
| Intercept | -0.97935 | 0.76435 | -1.281 | 0.200 |
| Growth Mindset | 0.04052 | 0.02475 | 1.637 | 0.102 |

*Source: Research results*

The results shown in Table 2 indicate that there is no significant relationship between Growth Mindset and Change Management (z = 1.637, p = 0.102).

Based on both logistic regression analyses conducted for Grit's relationship with Result Orientation competence and Growth Mindset's relationship with Change Management...
competence, the results were not significant. This suggests that the potential aspects do not significantly impact the related competency areas.

4.2. Hypothesis 2

For hypothesis 2, we assumed that self-reported potential would positively correlate with social desirability. We conducted Pearson correlation analysis to explore the relationship between self-reported potential and social desirability.

Table 3. Correlation Analysis Results for Grit, Growth Mindset, and Social Desirability

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grit</td>
<td>-</td>
<td>0.003</td>
<td>0.17*</td>
</tr>
<tr>
<td>Growth Mindset</td>
<td>0.003</td>
<td>-</td>
<td>0.07</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>0.17*</td>
<td>0.07</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: *p<0.05; Source: Research results

The Pearson correlation analysis examined the relationship between Grit and Social Desirability. The results shown in table 3 indicated a significant correlation between Grit and Social Desirability, $r(153) = 0.1718$, $p = 0.03248$. Table 3 also showed a non-significant correlation between Growth Mindset and Social Desirability, $r(153) = 0.0703$, $p$-value = 0.3847.

5. Discussion, and Conclusions

This study was conducted on civil servants at the staff and supervisory levels to understand how employees' potential influences their current competencies. Additionally, the research aims to explore the correlation between potential measurements using self-report and biases that may occur in questionnaire completion. Contrary to our expectations, the study found that potential does not have a significant impact on the competencies of employees. After conducting correlation tests between the completion of the self-report scale and bias, we found that the correlations of social desirability are varied, with Grit ($r = 0.1718$, $p = 0.03248$) and growth mindset ($r = 0.0703$, $p$-value = 0.3847).

The findings of this research align with several previous studies. Taylor (2007) stated that personality inventories have a low correlation with employee job performance, where the correlation is below 0.29. Meanwhile, structured interviews such as the Behavioral Event Interview (one of the methods in assessment centers) show correlations above 0.5. This is also consistent with the research conducted by Kolk et al. (2004), which explains the low correlation between competency assessments and personality inventories. Kolk et al. (2004) explained this using three methodological factors: (i) rating source (other versus self), (ii) rating domain (general versus specific), and (iii) rating format (multi- versus single item). Based on their research results, a significant portion of inventory and assessment center outcomes showed insignificant correlation results.

However, several research studies indicate the opposite. Some psychological theories explain that potential can predict an individual's abilities. Consultants (2021) state that an
inventory with good validity and reliability can predict employee job performance. This is also consistent with research findings from Stajkovic et al. (2009), which indicate that potential correlates with group performance.

Contrary to our expectations, Grit does not significantly contribute to the Result Orientation competency, even though previous studies indicate otherwise. Cormier et al. (2019) suggest that grit can be conceptualized and measured both as a global construct and as a specific domain. Additionally, Southwick et al. (2019) state that grit has a positive correlation with goal achievement, job performance, and persistence in task completion. This is in line with the definition of results orientation competency, which involves maintaining a high personal commitment to task completion, being reliable and responsible, systematically identifying risks and opportunities, and considering the interconnection between planning and outcomes for organizational success (Permen PAN & RB No. 38, 2017). Some research findings indicate a strong relationship between grit and conscientiousness, as well as an individual's dedication to completing tasks according to expected demands (Duckworth & Quinn, 2009; Southwick et al., 2019; Von Culin et al., 2014). These findings stand in contrast to the results of this study, where grit does not predict results orientation competency.

Similar results were also discovered in our investigation regarding the relationship between Growth Mindset and Change Management competence. Contrary to our predictions, Growth Mindset does not contribute to Change Management competence, which contradicts previous study suggestions. Dweck (2016) asserts that an individual with a growth mindset believes their abilities can develop through hard work, good strategies, and accepting input from others. They are less concerned with appearing intelligent but invest energy in continuous learning. In an organizational setting, individuals with a growth mindset are likely to feel more adaptable and committed, capable of collaborating and innovating. This aligns with the definition of managing change competency, involving the ability to adapt to new or changing situations without overly relying on old methods and processes, taking actions to support and implement change initiatives, leading change efforts, and taking personal responsibility to ensure that changes are effectively implemented (Permen PAN & RB No. 38, 2017). Other research findings also indicate the significant role of a growth mindset in adapting to a dynamic work environment, embracing learning, welcoming challenges, and understanding one's role in talent development (Dennis, 2016; Dweck, 2009, 2016). Once again, these previous results suggest a difference from the findings of this study.

We propose the non-significant contribution of Grit and Growth Mindset to Result Orientation and Change Management competence may be due to several factors. The first factor is the influence of bias when employees fill out self-reports. Several previous studies show social desirability bias can affect the validity and accuracy of a measurement, which can be observed by the correlation of social desirability to research variables (Durmaz et al., 2020; Furnham & Henderson, 1982; Robins et al., 2009). However, the results of this study show varied outcomes. Grit and social desirability are significantly correlated, although the correlation coefficient is small. In contrast, the growth mindset
scale in this study indicates no correlation with social desirability. We propose that this may be due to the statements or wording of items on each scale. In the Grit scale, for example, one item may be "I am a hard worker" or "I finish whatever I begin," so there is a possibility that participants may not truly understand themselves, or there may be instances of faking good or faking bad. In contrast, items on the growth mindset scale such as "Your intelligence is something very basic about you that you can’t change very much" or "You can do things differently, but the important parts of who you are can’t be changed" minimize the possibility of faking good or faking bad.

Another factor we presume is the lack of a direct influence between psychological potential and managerial competence. Based on the results of behavioral interviews in competence assessments, it can be concluded that the environment, organizational support, and experience are key factors in determining employee competence. This is supported by several previous studies indicating that organizational culture, organizational support, and training correlate positively with performance and competence (Asbari et al., 2020; Astuty & Udin, 2020; Esthi & Savhira, 2019). In other words, psychological potential may not contribute to competence development if the job environment does not support psychological potential development.

Due to the non-significant correlation between psychological potential and managerial competence, we propose a re-evaluation of the use of psychological potential aspects, particularly in self-report assessments, as predictors of future job performance. Furthermore, organizations should recognize that achieving organizational success extends beyond identifying potentially talented candidates; it also entails supporting and facilitating employees to enable them to optimally develop their potential.

This study aims to understand the interaction between potential and competence in the talent management of civil servants. The results indicate that both Grit toward Result Orientation competence and Growth Mindset toward Change Management competence show no significant correlation. Even after controlling Grit and Growth Mindset with social desirability bias, the study reveals that the Grit scale has a significant but relatively low correlation, while the mindset survey has no significant correlation with social desirability. Therefore, we conclude that the nonsignificant correlation between psychological potential assessments through self-report and specific competencies is not due to response bias. We suspect that there may be no direct influence between potential and employee competence, but rather the role of experience, current tasks, and the organizational environment.

Through this research shed some light on the correlation between potential and competency. The result may serve as an insight for organizations in improving their talent management program and to help determine their preferable assessment method to fit their organisational demands.

This study is limited on civil servant as our main focus; therefore, the study has not accommodated workers in private sector which may have different work culture. Furthermore, the competence measurement is limited to local regulatory context. We
encourage further research to examine other factors that may have a significant impact on talent management in employees.

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References


