THE EFFECT OF INTERACTIVE BUDGETING ON INDIVIDUAL CREATIVITY THROUGH THE MEDIATION OF ROLE CLARITY

Tri Rahayu Saputri¹ and Grace Tianna Solovida²

Abstract: This study aims to analyze the effect of interactive budgeting on individual creativity through the clarity of roles as a mediating variable in export furniture companies in Jepara. This study uses interactive budget variables as independent variables, individual creativity as the dependent variable and role clarity as a mediating variable. The method used is quantitative, primary data obtained through distributing questionnaires and analyzed using Partial Least Square (PLS). The sampling technique used purposive sampling method and obtained a sample of 55 export furniture companies in Jepara Regency. The results showed that interactive budgeting had a positive and significant effect on individual creativity, interactive budgeting had a positive and significant effect on role clarity and role clarity had a positive and significant effect on individual creativity. Meanwhile, role clarity mediates the effect of interactive budgeting on individual creativity partially.

Keywords: Interactive Budget; Individual Creativity; Role Clarity

INTRODUCTION

Budgeting is a process of planning, controlling and decision making and can be used as a communication and coordination tool (Garrison et al., 2010). Budgets play both diagnostic and interactive roles. Diagnostic budgeting is a style of budget use that does not involve the role of top managers intensively (Chong & Mahama, 2014). Meanwhile, interactive budgets can stimulate the involvement of all levels of management in the decision-making process and improve overall performance (Curtis et al., 2017).

The use of interactive budgets can facilitate the information environment and motivate performance effectively (Chong & Mahama, 2014). In addition, interactive budgets emphasize communication and interaction between individuals so that they can generate new ideas that are useful through role clarity (Sitepu et al., 2020). Role clarity refers to communication in work plans, expected roles and instructions for doing tasks (Angrıawan, 2017). Individuals who understand their roles and responsibilities will encourage themselves to explore creative ideas from their subordinates in a company.

In previous studies, many uses of interactive budgets have had a positive impact on organizations. However, studies addressing the impact of interactive budgeting on individual creativity are rare (Chen, 2017; Sitepu et al., 2020; Spekle et al., 2017). Creativity in an organization is important as it is used as a potential driver of economic growth especially in developing...
countries (Van Uden et al., 2014). According to World Economic Forum, (2018) Indonesia's competitiveness is ranked 45th, due to its low creativity. Therefore, creativity is needed in Indonesia, especially during the covid 19 pandemic. The covid 19 pandemic is the spread of diseases caused by the corona virus throughout the world, resulting in a health crisis. This condition is not only a health crisis but also an economic crisis (Bedford et al., 2022).

Jepara is an area known as the center of furniture companies in Indonesia which has been affected by the Covid 19 pandemic. In 2019, furniture companies as the fifth company in Indonesia had the largest growth value of 8.35% and an increase in exports of USD 1.95 billion or an increase of 14.6% from 2018 (Anggraini, 2020). Based on Dataindustri.com, (2021) the export value of furniture companies in 2015 - 2019 has increased. However, in 2020 the export value has decreased due to the covid 19 pandemic factor. Many furniture industry have experienced a 70% decrease in sales (Erlangga, 2020). The decline in sales is due to the low creativity of individuals in a company. The individual referred to here is the financial manager. The low creativity of financial managers in exploring the creative potential possessed by staff, the production division and the marketing division.

According to Islamiyah & Suciptaningsih (2018) many furniture companies lack creativity in developing new products and low creativity in creating marketing strategies carried out by companies during the Covid 19 pandemic (Shihab, 2014). Sitepu et al., (2020) shows that it is not only the use of interactive budgets that can affect the individual creativity of an organization, but there are other variables, namely role clarity. In addition, according to Luft & Shields (2006) the relationship between management accounting practices and individual-level results is mediated by psychological variables, namely role clarity. Based on the above problems and previous research that has been described, this research needs to be done to answer the problem of whether interactive budgets can affect individual creativity, whether interactive budgets can affect role clarity, whether role clarity can affect individual creativity and whether the effect of interactive budgets on individual creativity can be mediated by role clarity.

The purpose of this study was to test and analyze the effect of interactive budgets on individual creativity, the effect of interactive budgets on role clarity and role clarity on individual creativity and to test and analyze the effect of interactive budgets on individual creativity through role clarity in furniture companies in Jepara. The results of this study are expected to help furniture companies solve the problem of competitiveness and decreased sales during the covid 19 pandemic through interactive budgets, role clarity and individual creativity. In addition, it can be used to add to the management accounting literature related to budgeting by providing empirical evidence regarding the effect of interactive budget use on individual creativity through role clarity.

LITERATURE REVIEW

Self Determination Theory is a theory that suggests that people are motivated to make changes if they feel innate psychological needs in the form of autonomy, competence and relatedness needs (Ryan & Deci, 2000). Self-determination theory links the consequences of various positive behaviors to self-determination motivation, including individual creativity. Interactive budgets as a component of management control systems and self-determination theory have an effect on individual creativity (Pratadina et al., 2015). Self-determination theory is also related to the concept of psychological empowerment (Spekle et al., 2017), which is an individual's perception of self-determination regarding the extent to which individuals believe they can independently do their work and can exercise choice over how they work (Moulang, 2015). In addition, self-determination theory also supports that role clarity has a positive effect on individual creativity (Sitepu et al., 2020). Therefore, through self-determination theory, the management control system component, namely the interactive budget, is expected to positively affect role clarity and ultimately affect individual creativity.

Interactive Budget (X)

Interactive budgeting is a management control tool that involves interaction between superiors and subordinates in the decision-making process (Pratadina et al., 2015). In this interactive budget, top managers are directly involved in the decision-making process, so they better understand what middle managers need, as well as middle managers, with the involvement
of top managers in the decision-making process can arouse their motivation to develop better and lead to the creation of creativity. In accordance with research conducted Pratadina et al., (2015), the management control system, one of which is interactive control, can affect individual creativity. While research Sitepu et al., (2020) shows that interactive budgeting as a management control system can indirectly affect individual creativity.

Individual Creativity (Y)

Creativity is the effort of every individual in an organization that influences the emergence of motivation to create new ideas (Sitepu et al., 2020). Creativity arises when individuals have a strong sense of ownership, desire and control over their work. In addition, creativity is determined through personality factors, cognitive styles and abilities, relevant task domains, motivation, social and contextual influences. As a contextual factor, research conducted by Pratadina et al., (2015) showed that management control systems can influence creativity. According to Sitepu et al., (2020) individual creativity can be indirectly created through the use of interactive budgets.

Role Clarity (Z)

Role clarity is an individual's understanding of the procedures, objectives, criteria and consequences of work (Fried et al., 2003). Role clarity in management accounting research is used to investigate the relationship between role clarity and management control tools and is used as a mediating variable. Sitepu et al., (2020) showed that to test the effect of interactive budgeting on individual creativity using role clarity as a mediating variable. In addition, research conducted by Anggriawan (2017) shows that nonfinancial performance measurement has a significant positive effect on managerial performance through role clarity.

Hypothesis Development

Individuals of a company when carrying out management control are expected to use their creative spirit in exploring creative and innovative ideas owned by staff, subordinates and coworkers. For example, when individual companies plan budgets accompanied by creative and innovative programs, especially on the production or marketing department will encourage the department to generate new and creative ideas about the products to be offered and the strategies to be used in marketing the new products, then the idea will be proposed by the company's individuals to top-level managers for a decision. In self-determination theory, interactive budgeting is the same as the need for autonomy, where individuals have the freedom to control their own behavior and goals and remain subject to regulation (Deci & Ryan, 1987).

This shows that interactive budgeting is non-invasive and facilitative, individuals have the freedom to express opinions, thoughts and information so that each individual is motivated to produce new ideas. Therefore, interactive budgets and self-determination theory are expected to be able to produce creativity (Pratadina et al., 2015). In addition, Spekle et al., (2017) showed that interactive control with the presence or absence of empowerment can affect individual creativity. Based on the discussion above, this study proposes the following hypothesis.

H1: Interactive budgeting has a positive effect on individual creativity.

Self-determination theory states that individuals make changes when they feel an innate psychological need in the form of a need for competence (Deci & Ryan, 1987). The competence in question is the ability of individuals to understand their duties on predetermined controls. Individuals who carry out management control by involving continuous interaction and communication between superiors and subordinates can increase understanding of their roles, duties and responsibilities in an organization. This means that the more interactive the budget is used, the level of individual role clarity will increase.

Marginson et al., (2014) showed that budgets that are used interactively are effective in increasing individual understanding of their duties and responsibilities in the company. In addition, the use of interactive budgets can increase role clarity due to the availability of information to increase employees' understanding of what to do in their roles (Sitepu et al., 2020). Based on the explanation above, this study proposes the following hypothesis.

H2: Interactive budgeting has a positive effect on role clarity.
Self-determination theory supports that role clarity has a positive relationship to individual creativity (Sitepu et al., 2020). Role clarity is obtained when individuals get the availability of information and have a high understanding of their work role in an organization. The level of employee understanding of their role affects their ability to generate new and useful ideas in a company (Kundu et al., 2020).

Likewise, when role clarity is low, managers do not know what the company expects of them so that managers are not encouraged to create creativity (Lau, 2015). In addition, previous research shows that individuals are more creative when they have a choice in the best way to perform assigned tasks and duties (Sun et al., 2012). Thus, individuals who understand their role can increase their creativity. Based on the explanation above, this study proposes the following hypothesis.

**H3: Role clarity has a positive effect on individual creativity.**

The use of interactive budgets can improve role clarity through communication between superiors and subordinates, resulting in information that can be used to improve role clarity in the organization. Role clarity has a positive relationship with individual creativity. This is because the availability of adequate information causes individuals to have a high level of certainty about what to do in an organization so that it can affect the creation of creativity.

Moulang, (2015) found that creativity is enhanced by the use of interactive budgets through psychological empowerment in the form of role clarity so that it helps in managing creativity. This shows that role clarity can be used as a mediating variable to determine the effect of using interactive budgets on individual creativity. Many previous studies have used role clarity as a mediating variable, including research conducted by (Anggriawan, 2017; Sitepu et al., 2020; Spekle et al., 2017). Based on the discussion above, the hypothesis of this study is as follows.

**H4: The use of interactive budgets affects individual creativity through role clarity.**

Based on the development of the hypothesis above, the researcher proposes the following research model:

![Research Model](image)

**RESEARCH METHODS**

This research was conducted with a quantitative approach, using primary data obtained through distributing questionnaires to financial managers. Financial managers were chosen as appropriate respondents because financial managers when controlling using interactive budgets can encourage the creative potential of the production, operational and marketing fields.

The population in this study is a furniture company as one of the companies that contributes the largest economy in Jepara, totaling 314 companies (BPS Kabupaten Jepara, 2022). The sampling technique in this study used purposive sampling method, namely determining the sample based on certain criteria. The criteria used in determining the sample are as follows, (a) Export furniture companies that use wood as their main raw material, (b) Furniture companies with a minimum number of employees of 20 employees, (c) Medium - large class export furniture companies with more than 20 employees and SVLK certified.

Interactive budget is measured by seven performance measurement system instruments from Sitepu et al., (2020) which was previously developed by Henri (2006) and measured using a five-point Likert scale with anchors 1 "Strongly Disagree" and 5 "Strongly Agree".
Role clarity is measured using an instrument consisting of five process clarity items and five goal clarity items. This instrument is taken from Sitepu et al., (2020) which was adopted from Sawyer (1992) and measured using a five-point Likert scale with anchors 1 "Very Uncertain" and 5 "Very Certain".

Individual creativity was measured using eight instruments from Sitepu et al., (2020) which was previously developed by Moulang (2015) and measured using a five-point Likert scale with anchors of 1 "Almost Never" and 5 "Almost Always".

Descriptive statistics are used to collect respondent information such as gender, education, length of service, period of company operation and company size (number of employees). Meanwhile, the data analysis technique and hypothesis testing in this study is Partial Least Square (PLS) using SmarPLS 3.0 software. Partial Least Square is a data analysis technique based on structural model equations used to overcome problems in the relationship between variables. The PLS model is widely used in accounting research because PLS is able to analyze data with a small sample size without making data distribution assumptions (Juliandi, 2018). The stages in conducting data analysis in the PLS model consist of a measurement model (outer model) and a structural model (inner model).

The measurement model is used to test the validity and reliability of indicators consisting of convergent validity, discriminant validity and reliability. The structural model is used to show the results of the estimation strength between latent variables by testing the coefficient of determination (R-Square), significance test and hypothesis testing (Ghozali, 2016). Meanwhile, the mediation test was carried out using the Variance Accounted For (VAF) method. The step in conducting the mediation test is that the direct effect of the independent variable on the dependent variable is significant. Second, the indirect effect of the independent variable and the dependent variable must be significant. The final step is to calculate VAF with the following criteria (Hair et al., 2013): (a) VAF > 80% Full mediation, (b) VAF 20% - 80% Partial mediation, (c) VAF < 20% There is no mediation effect.

RESULTS AND DISCUSSION

Description of Research Objects

The population in this study were 314 furniture companies in Jepara Regency. The sampling technique used purposive sampling with the following criteria:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>An export furniture company whose main raw material is wood.</td>
<td>314</td>
</tr>
<tr>
<td>2.</td>
<td>Export furniture company with at least 20 employees.</td>
<td>166</td>
</tr>
<tr>
<td>3.</td>
<td>Medium - large export furniture company with more than 20 employees and SVLK certified.</td>
<td>148</td>
</tr>
<tr>
<td>4.</td>
<td>Number of samples used</td>
<td>148</td>
</tr>
</tbody>
</table>

Table 1. Sample Criteria Results

*Source: Processed primary data, 2022*

Table 1 shows that the number of samples used is 148 medium - large class export furniture companies with more than 20 employees and the company is SVLK certified. The number of questionnaires distributed to financial managers in export furniture companies in Jepara Regency was 148 questionnaires (100%). Of these, there were 93 questionnaires that were not returned (63%) and there were 55 questionnaires returned (37%) so that they could be used in this study.

Respondent Description

Respondents in this study were 55 financial managers of export furniture companies in Jepara Regency. The majority of respondents in this study were women, 34 people (62%). The majority of respondents’ education level is S1, totaling 46 people (84%). Based on the respondent's tenure, the majority of respondents have 5 - 10 years of work experience totaling 32 people (58%). Based on the company’s operating period, the majority of respondents work in companies that have been operating for 10-20 years with a total of 29 people (52%). Based on the number of employees, the majority of respondents work for companies classified as large companies with more than 100 employees, totaling 40 (73%) companies.
Descriptive Variable

The data obtained from distributing questionnaires shows that the interactive budget variable has an average value of 3.92, individual creativity has an average value of 3.94 and role clarity has an average value of 4.18. The results of the responses from 55 respondents were described using an index value, with a minimum score calculation of 1 and a maximum of 5 with the following formula:

\[
\text{Nilai indeks} = \frac{(F1 \times x1) + (F2 \times x2) + (F3 \times x3) + (F4 \times x4) + (F5 \times x5)}{5}
\]

Formula:
Highest score = \( \frac{(F5 \times 5)}{5} = \frac{(55 \times 5)}{5} = 55 \)
Lowest score = \( \frac{(F1 \times 1)}{5} = \frac{(55 \times 1)}{5} = 11 \)
Range (R) = 55 - 11 = 44
Interval = \( \frac{44}{3} = 14.6 \)

Based on these calculations, the respondent's answer has the lowest score of 11 and the highest score is 55 with a vulnerability of 44 and an interval of 14.6. The interval is used as the basis for interpreting the index value with the following criteria, (a) Low (11 - 25.6), (b) Medium (25.6 - 40.2) and (c) High (40.2 - 54.8). If the index value is low, the variable is considered poor, if the index value is medium, the variable is considered quite good and if the index value is high, the variable is considered good.

The average index value of all indicators of the interactive budget variable is 43.2. The indicator that has the highest index value is X1.6 or success factors with an index value of 48.8. The indicator that has the lowest index value is X1.2 or challenges and debates with an index value of 35.6.

The average index value of all individual creativity indicators is 43.3. The indicator that has the highest index value is Y1.3, which is rich in creative ideas and Y1.6, which is evaluation with an index value of 45. The indicator that has the lowest index value is Y1.7 or views on old problems with an index value of 41.2.

The average index value of all indicators of role clarity variables is 46.02. The indicator that has the highest index value is Z1.1, namely duties and responsibilities with an index value of 49.2. The indicator that has the lowest index value is Z1.9, namely the accuracy of the procedure with an index value of 41.8.

Outer Model

In the first outer model test, there are indicators of the interactive budget variable (X), namely X1.1, X1.2, X1.5 and X1.6 and indicators of the role clarity variable (Z), namely Z1.5, Z1.6, Z1.9 and Z1.10 must be eliminated from the measurement model because the value is less than 0.70. In the second outer model test, three interactive budget indicators (X), namely X1.3, X1.4 and X1.7 can be used for further analysis. Meanwhile, for the role clarity variable (Z) in the second outer model test, there are six indicators that can be used for further analysis, namely Z1.1, Z1.2, Z1.3, Z1.4, Z1.7 and Z1.8. Meanwhile, of the eight indicators of the individual creativity variable (Y), all indicators have met, which is more than 0.70. The following are the results of testing the two outer models:

![Figure 2. Outer Model (PLS Algorithm)](image-url)
Validity Test

Convergent Validity
Based on the convergent validity test, it is known that each indicator in this study has an outer loading value > 0.70 so that all indicators are declared valid and can be used in further analysis. Meanwhile, the AVE value of all variables is > 0.5, so that the variable indicators connected to the variable itself are acceptable. Thus, all variables in this study are valid.

Descriminant Validity
Based on the discriminant validity test, the cross loading value for latent variable indicators has a cross loading value greater than the cross loading value on other latent variables. Thus, it shows that the latent variables in this study have good discriminant validity in the preparation of each variable.

Reliability Test

Cronbach's Alpha and Composite Reliability
Based on the reliability test, the Cronbach's alpha value of each variable is > 0.70. This shows that all variables in this study have a high level of reliability. Meanwhile, the composite reliability value of each variable > 0.70, it can be stated that the indicators used in this study are reliable, meaning that the respondents' responses to the statements listed on the questionnaire are consistent and reliable.

Inner Model
The inner model is carried out to test the relationship between latent variables. The following is an image of the inner model scheme:

[Image of inner model]

R-Square Test
Based on the coefficient of determination test, the R-square value of the individual creativity variable is 0.629 or 62.9%. This shows that individual creativity can be explained by the independent variables by 62.9%. While 37.1% is explained by other factors outside the research variables. The R-square value of the role clarity variable is 0.394 or 39.4%. This shows that role clarity can be explained by the independent variables by 39.4%. Meanwhile, 60.6% is explained by other factors outside the research variables.

Hypothesis Test
Hypothesis testing is carried out using a p-value with a significance level of 5% or 0.05. If the p-value < 0.05, the research hypothesis is accepted and if the p-value > 0.05, the research hypothesis is rejected. The following is the p-value for each hypothesis:
Table 2. Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Formulation</th>
<th>Original Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>IB =&gt; IC</td>
<td>0.541</td>
</tr>
<tr>
<td>H2</td>
<td>IB =&gt; RC</td>
<td>0.627</td>
</tr>
<tr>
<td>H3</td>
<td>RC =&gt; IC</td>
<td>0.333</td>
</tr>
<tr>
<td>H4</td>
<td>IB =&gt; RC =&gt; IC</td>
<td>0.209</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-Statistics</th>
<th>P-Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.584</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>7.758</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>3.135</td>
<td>0.002</td>
<td>Accepted</td>
</tr>
<tr>
<td>2.687</td>
<td>0.007</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022

Mediation Test

The following are the direct and indirect effect values for each hypothesis:

\[
VAF = \frac{\text{Indirect Effect}}{\text{Indirect Effect} + \text{Direct Effect}}
\]

\[
VAF = \frac{0.209}{(0.209 + 0.541)} = 0.279
\]

Based on the above calculations, it is known that the mediation test value using the VAF formula is 0.279 or 27.9%. This shows that role clarity is able to partially mediate the relationship between interactive budgets and individual creativity.

Discussion

The Effect of Interactive Budget on Individual Creativity

Based on the results of testing the first hypothesis shows that the effect of interactive budget on individual creativity can be accepted positively and significantly. That is, the more interactive the budget is used, the level of individual creativity of a company will increase. This is in accordance with the theory of self-determination (Deci & Ryan, 1987) that with the freedom to express opinions, exchange of ideas and information in the use of interactive budgets carried out by developing terms that are easy to understand can encourage individuals to increase creative ideas and can evaluate a problem that occurs in each division of the company. The results of this study are in line with research conducted by Pradadina et al., (2015) which states that, the interactive control system used as a coordination tool in an organization has shown positive results on individual creativity. This result is different from the research conducted by Sitepu et al., (2020) which states that interactive budgets have no direct effect on individual creativity.

The Effect of Interactive Budgeting on Role Clarity

Based on the results of testing the second hypothesis, it shows that the effect of interactive budgeting on role clarity is positively and significantly accepted. This means that the more interactive the budget is used, the clearer the role that individuals have in a company. This is in accordance with the theory of self-determination (Deci & Ryan, 1987) that with the freedom to express opinions, exchange of ideas and information in the use of interactive budgets carried out by developing terms that are easy to understand can encourage individuals to increase understanding of job duties and responsibilities, so that role clarity can be achieved. The results of this study are in line with research conducted by Sitepu et al., (2020) which shows that, the use of interactive budgets can improve role clarity by increasing employees' understanding of what they have to do in their roles. In addition, Marginson et al., (2014) showed that, the use of budgets when used interactively, is effective in increasing role clarity.

The Effect of Role Clarity on Individual Creativity

Based on the results of testing the third hypothesis, it shows that the effect of role clarity on individual creativity is positively and significantly accepted. The clearer the role of individuals in a company, the more the level of individual creativity increases. This is in accordance with the theory of self-determination that individuals who understand their job duties and responsibilities in a company indicate that these individuals have the ability to carry out their duties at a predetermined level of control (Deci & Ryan, 1987). Therefore, it is able to encourage individuals to increase creative ideas and be able to make evaluations for new problems that arise in the company division. The results of this study are in line with research conducted by Sitepu et al., (2020) which shows that self-determination theory can affect the level of individual
understanding of their role in a company so as to increase their ability to generate new ideas that are useful for the company. Sun et al., (2012) showed that, with an understanding of the tasks that individuals have, it can increase the flow of new challenging ideas and encourage individuals to create and evaluate every problem that arises in the company.

**The Effect of Interactive Budgeting on Individual Creativity Through Role Clarity**

Based on the results of testing the fourth hypothesis and mediation test using the VAF method, the interactive budget can affect individual creativity through partial role clarity mediation. This means that the presence or absence of understanding the duties and responsibilities of individuals regarding their work has no effect on the interactive budget in influencing individuals to increase creative ideas and be able to make evaluations for new problems that arise in the company division. This is in accordance with the theory of self-determination that with the freedom to express opinions, exchange of thoughts and information (Deci & Ryan, 1987) in the use of interactive budgets can directly increase individual creativity. The results of this study are not in line with research conducted by Sitepu et al., (2020) which shows that role clarity can fully mediate the effect of interactive budgets on individual creativity. Burkert et al., (2011) showed that role clarity can fully mediate a comprehensive performance measurement system and the influence of control principles on managerial performance.

**CONCLUSIONS AND SUGGESTIONS**

Based on the results of data analysis and hypothesis testing, this study produces several conclusions, namely the more interactive the budget is used, the level of individual creativity in a company will increase, the more interactive the budget is used, the clearer the role of individuals in a company, the clearer the role of individuals in a company, the level of individual creativity will increase and the presence or absence of role clarity has no effect on interactive budgets in increasing individual creativity.

The limitation in this study is that the process of distributing questionnaires was hampered due to the difficulty of getting responses from respondents so that the number of returned questionnaires was only 55 respondents. In addition, the use of questionnaires makes respondents' answers more subjective, that is, they do not give answers that actually happen to them.

The suggestions for future research are as follows. First, future research in management accounting could investigate the effect of interactive budget use on other individual-level psychological factors, such as empowerment and internal motivation. This is important because the understanding of how individual psychological factors influence the relationship between contemporary management control systems and individual behavioral outcomes is still very limited (Franco-Santos et al., 2012). Second, future research should pay more attention to the level of difficulty in obtaining respondents responses and add data collection methods in the form of direct interviews, so that respondents answers are more complete and can describe the actual conditions.

**REFERENCES**


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