

Conscientiousness And Agreeableness In The Context Of Information Variability: Does Leniency Still Exist? (An Experimental Study of Lecturers in Ambon State of Polytechnic, Indonesia)

Audry Leiwakabessy

Accounting Department, Ambon State of Polytechnic, Indonesia

Corresponding author: leiwakabessyody@gmail.com

Monika Handojono

Accounting Department, Ambon State of Polytechnic, Indonesia

E-mail: monika2handojono@gmail.com

Article History: Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 4 June 2021

Abstract

Cognitive Dissonance Theory (CDT) has been employed to analyze the behavioral issues in the performance evaluation for a long decade. However, using Cognitive Dissonance Theory (CDT) to explain the evaluation performance process is still rarely conducted. By applying the Cognitive Dissonance Theory (CDT), this study investigates the influences of information variability and evaluators' traits (conscientiousness and agreeableness) on the tendency to provide a lower rating. This study involved fifty-two lecturers of the Accounting Department and Business Administration at the Ambon State of Polytechnic to participate in the experiment as a subjects. The research method used an experimental approach which is modified by Bol and Smith, 2011. The results showed that the evaluators tend to increase the rating on lower performance as the information variability increased. However, such a result is not in line with our expectation that more conscientiousness evaluators would provide a lower rating, while more agreeable evaluators would perform the other way around. The research findings recommend the company to create more inflexible subjective measurement procedures to reduce the tendency of lowering the rating, and take into account a certain person to be an evaluator and also to completely this issues and by adding cultural differences aspect could be more interesting.

Keywords- Conscientiousness, Agreeableness, Information variability, Performance, Leniency

1. Introduction

Cognitive Dissonance Theory (CDT) has widely used in many management studies, such as the field of marketing (Telci, Maden, & Kantur, 2011; Babu & Manoj, 2009; Kaish, 2006; Cummings & Venkatesan, 2006; Sweeney, Hausknecht, & Soutar, 2000). Even in the first study carried out by Festinger & Carlsmith (1959), CDT was used to explain the behavioral aspect of the performance measurement system and compensation management (Hinojosa, Gardner, Walker, Coglisier, & Gullifor, 2016). CDT (Festinger, 1957) is a theory of psychology that is very often used to explain decision-making behavior when an individual is exposed to conditions that create emotional discomfort. The emotional state represents inconvenience feelings derive from two or more different cognitions. Cognition is closely related to personal values, beliefs, knowledge, and information obtained. So often, the two or more cognitions do not match (consonant) one to another, which may lead an individual to feel inconvenience. Individuals will take actions to compel it through changing cognition, adding new cognition, or adjusting cognition based on their importance.

Oshikawa (2006) briefly mentioned the three main causes of emotional discomfort. These include: 1) the condition after an individual involved in an important and complicated decision-making process, 2) the state after being demanded to do or say something opposite to his/her attitudes, opinion, or beliefs, and 3) the condition after an individual is being exposed to clashing information. Practically, the requirements mentioned by Oshikawa (2006) are closely related to performance evaluation activity. Therefore, this study uses CDT to explain evaluators' behavior when encountering cognitive dissonance while performing an evaluation.

Emotional discomfort also occurs when an individual is engaged in unpleasant activities and is expected to obtain the expected outcomes (Harmon-Jones & Harmon-Jones, 2007). For various people, performance evaluation is an unpleasant activity for several reasons. The main reason is it requires evaluators to provide a rating on the effort that has been made by the individual/group during a certain period. The rating definitely will bring psychological, social, and economic consequences for both parties. Another reason relates to the condition of performance information itself.

Most companies nowadays use both objective and subjective performance ratings (Sebald & Walzl, 2014). While objective rating provides quantitative and verifiable measures, subjective evaluation relies on employees' qualitative information. Studies show that most managers prefer the objective measures rather than the subjective measures as the basis for determining employees' incentives. However, objective measurement are usually costly and hard to conduct since the information of performance is more subjective in general (Sebald & Walzl, 2014).

Another challenge in performing objective evaluation is noisiness of performance signal causing the company relying on objective measures, and this condition can harm the company. A manager may dismiss an actual hard work just because of his/her unanticipated performance decreases (Chan & Zheng, 2011). Bester and Münster (2016) stated that a lot of managers prefer to take unobservable efforts since objective information is often noisy. Therefore, most companies tend to assess performance by using subjective measures. Although subjective evaluation provides some advantages to the organization, some previous studies have investigated its disadvantages because the subjective measures are based on human judgment. Human judgment may lead to bias, thus decreasing informativeness and the incentive-strengthening role of subjective measures. Leniency is one of the biases (Breuer, Nieken, & Sliwka, 2013; Golman & Bhatia, 2012; Bol, 2011; Moers, 2005). Leniency is a tendency of an evaluator to rank higher than an employee's actual performance. Based on SDT, we suggest that leniency is a way for evaluators to reduce their emotional discomfort by adjusting their cognition according to its importance.

The previous study by Bol (2011) reported that leniency positively influenced workers' performance. In addition, Zábajník (2014) mathematical model supports the advantages of leniency in improving future employees' performance. Bol & Smith (2011) conducted further experiment and they found that employee's perceptions of fairness will encourage them to perform. Hence, that condition triggers the evaluator to elevate the rating. However, different from Zábajník (2014); Bol (2011); Bol & Smith (2011), Golman & Bhatia (2012) also proposed a mathematical model and predicted the negative effects of leniency on long term employee's efforts and productivity. Furthermore, Berger, Harbring, & Sliwka (2012) also conducted an experiment and identified that leniency could reduce performance in the long term.

Many studies have validated a few variables as predictors of leniency. A psychological study on leniency showed that people with relatively stable characteristics who conducted such an evaluation (Kane, Bernardin, Villanova, & Peyrefitte, 1995). Several research on the leniency also utilized a good manager's/altruist's behavior as an underlying hypothesis (Gibbs, Merchant, Van Der Stede, & Vargus, 2004; Grund & Przemeczek, 2012). However, Golman & Bhatia (2012) addressed that not all managers were tenderhearted though they have more preference for precise ratings. This result showed that increased rating behavior can be foreseen through individual's differences (Bernardin, Cooke, & Villanova, 2005). In addition, Negara, et al (2021) stated that management process will be reached depend on personal behavior towards several insights they gained.

This study examines conscientiousness and agreeableness, and performance information variability as determinants of leniency. Conscientiousness and agreeableness have tested before as predictors of leniency by Bernardin, Cooke, & Villanova (2005). The main reason for reexamining these variables related to many inconsistent findings on the impact of conscientiousness and agreeableness across the studies. Some research resulted in a positive and significant relationship between conscientiousness and accountable rating (Bernardin, Thomason, Buckley, & Kane, 2016; Roch, Ayman, Newhouse and Harris, 2005). However, a study by Bernardin, Tyler, and Villanova (2009) indicates a negative correlation.

Conscientiousness and agreeableness as dimensions of personality traits have examined in many social contexts and found as the most potent traits of achievement, such as educational attainment and workplace achievement. A study by Nofle and Robins (2007) on 20 studies from 1995 to 2006 found that conscientiousness is the strongest predictor of attainment. However, O'Connell and Sheikh (2011) found that extraversion is stronger than conscientiousness in predicting occupational attainment. These findings make it interesting to reexamine in a different context.

Another variable is performance information variability. It is also known as ambiguous information. Golman and Bhatia (2012) proposed a mathematical model in which they presumed that managers prefer to provide an accurate rating. Therefore, leniency will only occur when those managers undergo uncertainty stemming from noise/ambiguous performance information. It supports Murphy's (2008) argument that ambiguous situations worsen bias. Liedtka, Church, and Ray (2008) employed information variability to show the ambiguity of objective information delivered to evaluators. In research on the effects of the variability information in BSC-based performance evaluation, they identified that variance in performance measures affected the score provided by the evaluators.

In this study, the experimental design of Bol and Smith (2011) was modified by adding information variability used by Liedtka, Church, and Ray (2008) previously. To create the design closer to the real condition, we extended the single time frame used Bol and Smith (2011) into three-time frames. In this study, fifty-four lecturers of the Accounting Department and Business Administration Department participated. This study revealed some following results. First, the performance variability worsened leniency when it was high. Second, high information variability decreased the rating, although the evaluators were high conscientiousness and less agreeable.

This study has a role in developing the management accounting and psychology literature through various ways. Firstly, this research enriches research based on SDT in the accounting area, especially in performance evaluation literature. Secondly, this study demonstrates certain conditions exacerbating the evaluator's bias. The study results are also expected to be empirical evidence supporting Golman's and Bhatia's (2012) mathematical argument explaining the role of uncertainty sources from the ambiguity/noisy signals as a leniency determinant. Third, these empirical results are expected to significantly contribute to the company for taking into account individuals by specific traits to conduct the evaluation task.

2. Systematic Literature Review Approach

2.1 Cognitive Dissonance and Performance Evaluation

Companies need performance evaluation primarily in the process of planning incentives and building optimal contracts for employees. Companies can employ both objective and subjective measures to assess their employees (Golman & Bhatia, 2012). The main reason for using objective measures is its verifiability and reliability. However, these objective measures are rarely available in certain situations, and thus the company pay more attention to evaluators' subjective judgment (Prendergast & Topel, 1993).

According to the CDT, two or more inconsistent cognitive elements will lead evaluators to feel dissonance. Cognition elements include thoughts, values, beliefs, attitudes, emotions, perceptions, and behaviors. Dissonance also occurs when newly acquired information contradicts belief and initial assumption. In the context of performance evaluation, studies suggest that evaluators tend to provide an accurate rating (Kampkötter & Sliwka, 2018; Golman & Bhatia, 2012). They rely even more on objective measures in deciding since they think objective measures as more scientific (Dai, Kuang, & Tang, 2018). However, their preference for providing equality and fairness makes them feel uncomfortable since both decisions must be a trade-off (Kampkötter & Sliwka, 2018; Du, Erkens, Young, & Tang, 2018; Bol & Smith, 2011).

Dissonance could worsen in other specific situations such as, when evaluators encounter ambiguous information and additional information or when there is a strong relationship between the evaluator and the subordinates (Bol & Smith, 2011; Varma & Pichler, 2007). The ambiguous information will be disruptive for the evaluators for it will affect rating accuracies. Over informations and unclear information is harmful because it is too far from sufficient for the evaluation process. The evaluators could be more vulnerable when the subordinate is someone who they know personally.

Previous studies found several actions that could be taken by evaluators to reduce the dissonance. The evaluators may ignore subordinate's impressions then go straight on their final decision (Ogunfowora, Bourdage, & Lee, 2010). Some information may be discounted, so the evaluation process could be more simplified – the inconsistency could be diminished. A dissonance reduction strategy could also be in the form of a lenient rating. Du et al. (2018) found that some supervisors tend to increase the rating of low performance when their concern on fairness raised.

2.2 Leniency

Despite several advantages, subjective evaluation has several disadvantages as well since it lacks objective criteria directing evaluators to tend to compromise behavioral bias. Some previous research have identified bias in subjective evaluation (Breuer et al., 2013; Grund & Przemeczek, 2012; Bol & Smith, 2011). It is known as leniency. According to Taylor & Hastman (1956), leniency is determining an average rating above the midpoint. In the context of performance evaluation, leniency is managers' tendency to provide higher ratings to employees than their real performance. Also, in the study of Bretz et al. (1992), 60% to 70% of company employees were rated at the top two performance levels, in general. In other words, those employees are overrated.

Several studies found that some evaluator becomes more lenient when their preference for fairness emerges (Du et al., 2018; Bol & Smith, 2011). They tend to provide a higher rating for subjective performance when objective information is weak (Bol & Smith, 2011). A higher rating will represent a fair rating for the employee. Various evaluators believe that fair rating would influence subordinates' future performance. The study by Du et al. (2018) showed that evaluators made a lenient adjustment by shifting from the new evaluation system into the old evaluation system when the performance is low.

2.3 Variability of Performance Information

Variability information is also known as ambiguous or uncertain information. It represents indefinite, insufficient, multiple, fragmented, probability, unclear, unstructured, contradictory, inconsistent, or meaningless information (Norton 1975). In performance evaluation, the ambiguity of performance measures results in various interpretations and often does not comprehensively indicate the economic impacts of management actions (Feltham & Xie, 1994). Information ambiguity is manipulated in multiple ways in empirical testing. Liedtka et al. (2008) employed information variability to show the information ambiguity delivered to performance evaluators. It is in line with Ha & Hoch (2002) using the previous approach to manipulate the ambiguity in the marketing study.

The issue of information ambiguity is crucial due to its effects on managerial decisions. Managers who encountered ambiguous information tend to estimate favorably (Highhouse, 1994). It also occurs when managers evaluate their employees' performance. Openhanded managers will manage to provide higher ratings to their employees. The managers will feel uncomfortable due to the ambiguous information. Therefore, they will show different responses, either by ignoring the ambiguous information or providing discount (Van Dijk & Zeelenberg, 2003). The employees will perceive evaluation as an unselective and unfair action due to their managers' ignorance of ambiguous information. This situation can interfere their performance. Therefore, managers can minimize such a condition by providing a more agreeable measurement.

The term of ambiguous information is similar to another often-used term in other literature, discrepant information. Discrepant information refers to information that is always incongruent or disagreeing with each other. For example, quarter reports may show different indicators during the period. Information discrepancy brings evaluators into psychological discomfort (dissonance cognitive). Therefore, evaluators tend to avoid it by not exposing themselves to incongruent information. They will not put incongruent information into account while making their decision. The rating then becomes more favorable for the evaluated employee. Based on the above explanation, this research formulates the following hypothesis:

H₁: The higher the variability of performance information, the subjective performance score provided by the participants will increase as well.

2.4 Conscientiousness and Agreeableness

Conscientiousness and agreeableness are two of the five dimensions of personality traits. Personality exhibits the characteristic patterns of individual's feeling, thinking, and behavior. Digman (1989) mentioned five personal characteristics called the "Big-Five." It consists of emotional stability, extraversion, conscientiousness, agreeableness, and openness to experience. To predict leniency, this study employed two factors of personality, namely conscientiousness and agreeableness.

Agreeableness is indicated by flexible, well-mannered, trustworthy, tenderhearted, easy-to-forgive, cooperative, gentle, sympathetic, and tolerant characteristics (Barrick & Mount, 1991). An agreeable individual has social awareness and empathy. If an individual has a high agreeableness, he/she tends to conduct pro-social/generous actions (Jensen-Campbell & Graziano, 2003), yet a more agreeable person (the agreeableness score is high) can be dysfunctional as well. A strong orientation to a universal agreement may elevate their aims to keep away from

disputes that may appear while encountering certain situations that require an assertive and independent solution, such as performance evaluation. The effort to avoid conflict may increase the tendency to inflate rating (Bernardin et al., 2005).

In the context of performance evaluation, a more agreeable manager (the agreeableness score is high) tends to rate employees' performance higher than their real performance since the manager aims to keep going the conducive situations in the organization and prevent the conflicts with employees. Providing a higher rating can indicate the manager's sympathy for his/her employees as well. From CDT, more agreeable, tolerant, sympathetic, credible, and gentle managers will be hard to rate their employees with low score since the managers have a long-term interaction with their employees. The long-term interaction has built kinship, solidarity, and required trust. A more agreeable manager would undergo depression when assigning a low rating. If the performance information shows high variability, the more agreeable manager tends to ignore and prioritize his pro-social life values thus he rates highly.

On the contrary, a less agreeable manager (the agreeableness score is low) is less likely to undergo depression when assigning a low rating, consequently, the manager will not increase the rating. Conscientiousness shows trustworthy, careful, skeptical, organized, responsible, and full of plans (Barrick & Mount, 1991). Individuals having high conscientiousness scores are likely to have high-performance standards and design more challenging desires (Costa & McCrea, 1992). In the case of performance measurement, managers having a higher conscientiousness tend to be more cautious and conscientious in the evaluation process, thus they do not tend to increase the rating (Bernardin et al., 2005). These managers would fight for keeping up a good social image for their employees, friends, and superiors. Thus, it would influence their assessment of employees' performance. In the condition of high-performance variability, a high conscientious manager would likely be more dubious in judging. They would not risk their image by judging inaccurately through more rigid calculations. Therefore, the likelihood to elevate employees' rating would be lower compared to those having lower conscientiousness levels. This conscientiousness score is opposite to the agreeableness score. Managers who have high agreeableness scores and low conscientiousness scores tend to increase the rating.

From CDT, a high conscientious manager would feel uncomfortable and cognitively impaired for inaccurate evaluation. Therefore, they would be more meticulous in rating their employees. Consequently, they are doubtful to provide a higher rating. The contrary thing happens to managers with lower conscientiousness levels. They will feel comfortable if they cannot rate accurately, thus, they will tend to provide a higher rating. Therefore, this research formulates the following hypothesis:

H₂: The higher the conscientiousness score/the lower the agreeableness, the subjective performance score provided by the participants will be lower as well.

3. Research Method and Materials

3.1 Participants

This research employed an experimental method participated by lecturers of the Accounting Department and Business Administration Department at Ambon State Polytechnic.

Participants were selected from the world of education-administrator in higher education because competition between universities is getting tighter and the performance of lecturers through knowledge, skills and research activities has a huge effect on the rank of the university as well (Tran, et al., 2021). The criteria of the selected participants are as follows: 1) The lecturers experienced in assessing students' performance; 2) They have a fundamental understanding of performance evaluation according to accounting information. The knowledge and experience are required since performance evaluation needs basic accounting knowledge and experience.

3.2 Experimental Design

This study slightly modified a design developed by Bol & Smith (2011) to fit the aim of this study. Previous research used two objective information conditions, namely high and low sales information. Meanwhile, this study used only low sales information since leniency is noticed under low sales situations. The sales information is extended into three periods and manipulated using a variance of 10.4 and 0.4 for ambiguous information and unambiguous performance information, respectively. Previously, Liedtka, Church, & Ray (2008) used these measures as well. Also, this study conducted a 2 x 2 between subject-ANOVA.

3.3. Variable Measurement

3.3.1 Independent Variable

Two independent variables used in this study are variability information and conscientiousness and agreeableness. Variability information is manipulated through ambiguous and unambiguous information. The ambiguous and unambiguous information is demonstrated through performance information with a variability of 10.4 and 0.4, respectively. We also utilized the International Personality Item Pool (IPIP) scale (Goldberg et al., 2006) to measure evaluators’ traits. To assess the validity and reliability of the instrument, we measured the loading factor and the Cronbach Alpha. Though the loading should be more than 0.60 to represent the ability of construct to measure variance, the loading for conscientiousness and agreeableness is still acceptable (Hair, Black, Babin, & Anderson, 2010). The Cronbach Alpha for both items varies from 0.53 to 0.72. Since we used-acceptable range of 0.50 – 0.75, we deleted 1 item on Conscientiousness. The values indicate that the instrument is acceptable (Brownlow, Hinton, & McMurray, 2014). The result of the factor analysis and reliability test is as shown below.

Item	Loading Factor	Cronbach Alpha
Conscientiousness :		
I like order	0.533	0.641
I often forget to put the thing back in their proper place	0.538	0.591
I follow a schedule	0.514	0.488
I leave my belongings around	0.483	0.626
I get chores done right away	0.513	0.648
I am exacting at my work	0.515	0.530
I pay attention to details	0.512	0.605
Agreeableness :		
I am not interested in other people’s problems	0.561	0.554
I take time out for others	0.493	0.509
I feel little concern for others	0.484	0.705
I am not really interested in others	0.545	0.599
I insult people	0.569	0.546
I sympathize with others’ feelings	0.524	0.623
I have a soft heart	0.485	0.652
I am interested in people	0.531	0.726

3.3.2 Dependent Variable

The dependent variable is a subjective evaluation of the district manager. In evaluating, the participants were assisted by the information obtained from interviews with the office manager's staff and personal notes. After examining the information, participants rated the manager's performance on a scale of 0-10.

3.3 Procedure

This study consists of two phases. The first phase is measuring the participants' traits. A total of 62 candidates filled the IPIP question items out regarding conscientiousness and agreeableness. The treatment successfully selected 52 participants who were then randomly classified to one of four following cells:

	Lower Conscientiousness / Higher Agreeableness	Higher Conscientiousness / Lower Agreeableness
Low Variability	Cell 1	Cell 3
High Variability	Cell 2	Cell 4

After filling the cells, the participants continued to the second stage to deal with experimental material. The participants were requested to presume they became a regional director of a pipe company. As regional director,

he/she supervises ten district managers assigned a responsibility for sales and office administration. One of the regional director’s responsibilities is to conduct the district managers’ annual evaluation in the form of objective and subjective evaluation.

For objective evaluation, participants were requested to rate the district manager's performance on sales. Experimental material presented the sales information of ten district managers from 3 periods in 2 conditions, high and low variability. In the high variability condition, sales of 10 managers are provided with a variance of 10.4, while variance of 0.4 is used to reflect low variability. The rating used ten scales to indicate the level of performance.

In subjective evaluation, for more than six months, the participants were inform that they made several personal notes regarding to the district manager. They were also informed that they could not investigate their manager’s performance on a daily basis. Therefore, they interviewed some staff members. The interview notes and personal records were then handed over to the participants. To complete the subjective evaluation, participants provided subjective ratings using 10 scales from low to high. The participants answered three questions for the manipulation check after they finished the experimental task.

Table 1 presents the participants’ demographics information. The total participants was 52 consisting of 21 males and 31 females. The majority of participants is below 50 years old and has become faculty members for 10 to 20 years.

Table 1 Participants Demography

Item	Total (people)	Percentage
Sex:		
Male	21	40%
Female	31	60%
Age:		
< 40 years	26	50%
40-50 years	24	46%
>50 years	2	4%
Working experience:		
< 10 years	12	23%
10-20 years	39	75%
>20 years	1	2%

4. Result and Discussions

4.1 Manipulation Check

Firstly, we randomly tested the equality of each cell participants to conform internal validity (Nahartyo, 2016) before testing the data. Equality test was conducted by comparing each cell participants’ demographic characteristics (age and working experience). We also compared the rating performed by female and male participants. The results of the comparison of equality between cells are presented in Table 2.

Table 2 Result of Equality Test

Characteristic	Mean	Std. dev	F	Sig.
Age :				
Cell 1	40.23	7.073	0.100	0.959
Cell 2	39.71	6.044		
Cell 3	40.58	2.712		
Cell 4	40	4.352		
Working experience:				
Cell 1	13.08	4.499	0.999	0.401
Cell 2	12.79	3.641		

Cell 3	11.25	2.958		
Cell 4	11.15	3.132		
Sex:				
Male	6.38	1.284	0.727	0.398
Female	6.68	1.194		

The table shows that, there is no significant difference in age and working experience between the cells. Also, the rating given by male and female participants does not differ significantly. These results show that, in each cell, the participants are equal. Hence, if the changing happened, it must be from the treatment not the inequality of the subjects.

The manipulation test is the next procedure for data processing. It was done through two phases. In the first phase, we asked participants to assess the district manager’s (David Sutton) personality. Participants answered three questions as they entered the second phase. The questions related to (1) David's sales score compared to other district managers; (2) the participants' belief on David's performance based on the personal records and interviews; and (3) participant's agreement that the two performance measures do not similarly depend on each other.

In manipulation test, the participants scored David's sales and the mean of his scores was 3.48 (s.d = 1.915), which was significantly higher than the median scale used by 3.5 ($p < 0.000$). This showed that the participants understood that David's sales performance score was low. The next manipulation tests resulted in the means value of 5.10 (1.550) and 4.33 (1.491), respectively, with confidential level ($p < 0.000$). In other words, the participants were confident with the scores they provided and understood that the two performance measures were not similarly dependent.

5 Hypothesis Testing

The study used the 2x2 between subject-ANOVA to test the hypothesis. The first hypothesis was tested by comparing the subjective scores from the participants in cell 1 to cell 2 and those in cell 3 to cell 4. Meanwhile, the second hypothesis was tested by comparing the mean of subjective performance from participants in cell 1 to cell 3 and cell 2 to cell 4.

Table 3 Hypothesis Testing

Hypothesis		Mean	Std. dev	Levene’s test	F	Sig.
H ₁	The subjective score of higher conscientiousness/lower agreeableness on lower variability	6.38	1.121	0.184	4.656	0.042
	The subjective score of lower conscientiousness/higher agreeableness on higher variability	7.33	1.073			
	The subjective score of higher conscientiousness/lower agreeableness on lower variability	5.86	1.562	2.286	4.712	0.040
	The subjective score of higher conscientiousness/lower agreeableness on higher variability	6.92	0.852			
H ₂	The subjective score of lower conscientiousness/higher agreeableness on low variability	6.38	1.121	0.533	1.002	0.326
	The subjective score of higher conscientiousness/lower agreeableness on lower variability	5.86	1.562			
	The subjective score of lower conscientiousness/higher agreeableness on higher variability	7.33	1.073	0.325	1.119	0.301

The subjective score of higher conscientiousness/lower agreeableness on higher variability	6.92	0.862			
--	------	-------	--	--	--

The first hypothesis investigated the influence of information variability on the performance scores provided by the participants. The hypothesis was tested by comparing performance scores at different levels of traits. Based on Table 3, several significant differences ($p < 0.05$) existed between the performance scores provided by the participants from low information variability conditions (6.38 & 5.86) to performance scores given under the high information variability (5.86 & 6.92). Therefore, H_1 was supported.

In this study, on the conditions of information variability (high and low), the participants provided conscientiousness/agreeableness scores. Those scores were then compared. The results found differences in scores (6.38 & 5.86) and (7.33 & 6.92). Nevertheless, the results did not significantly support the second hypothesis. In other words, the results showed that the performance information variability worsened the evaluators' bias. Furthermore, the results indicated that the more conscientious evaluators provide the lowest scores under ambiguous conditions (low variability) although there was no significant difference.

This study examines whether conscientiousness and agreeableness, and information variability are determinants of leniency. Using SDT we posit evaluator traits as cognitions that may lead evaluators to feel dissonance on variable information. The result shows that as the information variability increased, the evaluators tend to increase the rating to reduce dissonance. This result confirms our prediction that information variability influences leniency. The evaluators may have a desire to produce an accurate but fair performance rating. Unfortunately, ambiguity derives from information variability is an inherent condition exposed by the evaluators. Under variable information conditions, the evaluator would prefer to raise rather than to discount rating. For them, increasing the rating may be execrable, thus, the discounting rating is fiendish.

This result also confirms that emotional discomfort lead evaluator to build their strategy to reduce dissonance by ignoring incongruent information. One of the efforts to reduce dissonance in psychological studies is known as selective exposure, which individuals have the freedom to make choices about the information they are exposed to. Selecting information according to their preferences will reduce their mental burden. Garrett, Carnahan, & Lynch (2013) argued that congruent information would increase the conformity between the cognitions received and the initial judgment and confirm the sense of correctness.

Though the overall result did not provide support for conscientiousness and agreeableness, partial data show that the high conscientious evaluator provides the lowest rating compared to the rating from both high agreeable evaluator. The result represents the effect of conscientiousness as initial cognition in shaping an individual's value while encountering dissonant cognition. Conscientiousness is characterized as one who is careful and diligent. He/she is known for his/her highly accountable rating and capability in calculating before making a decision (Bernardin et al., 2009). Therefore, he/she anchored on more quantitative than qualitative information. When objective information indicates low performance, a conscientious evaluator would not hesitate to keep his/her reputation by not letting their employees' general impressions influence them (Ogunfowora et al., 2010). They would reject other cognition in terms of subjective information by providing a lower rating.

Another interesting finding of this study is an unsupported hypothesis. The test result shows that the two traits of the evaluator do not influence the tendency to raise the performance rating. This test result does not support previous studies (Bernardin et al., 2005). The unsupported hypothesis could be mainly caused by this research setting. Before being assigned into the treatment cells, the participants' traits were measured by using a 5-scale IPIP. The data showed that the conscientiousness and agreeableness levels were around the midpoint. Consequently, there was no significant difference in conscientiousness and agreeableness levels. If the conscientiousness and agreeableness levels are definitely different, the results will be different as well .

Moreover, cultural differences also may cause the unsupported hypothesis of the influence of evaluators' traits on behavior-inflating ratings. This opinion is in accordance with findings of Barron & Sackett, (2008) regarding the cultural effects (collectivism) on managers' leniency in Asia.

6. Conclusions

This study attempts to explain the causes of leniency by using arguments from CDT. CDT has widely used to explain various phenomena related to decision making. The result of this study confirms that the information variability makes evaluators tend to provide a higher rating on the poor actual performance. The result also showed that agreeableness influence leniency. The agreeable evaluators are found providing a lenient rating for low performance. However, in the same condition, conscientious evaluators are found giving a lower rating. These results have a practical implication on the performance measurement system commonly used by organizations. The study suggests the organization to consider the more conscientious individual as the evaluator.

In addition to evaluating performance in a business environment, the result of this study has implications also on performance evaluation practice in other organizations, namely education. To evaluate students' performance is teachers' routine work. However, teachers' tendency to suffer leniency is found in several studies (Kuhlemeier, Hemker, & van den Bergh, 2013). On the other hand, teacher also had a responsibilities in creating quality students through several ways. One of them is related to information variability which is called updating manual library to e-library for students and academic staff to access more information because nowadays, the information variability is a students need and e-library would provide reliable and plenty of informations to be accessed (Long, Anong and Vongurai, 2021)

There are several reasons for such inflating rating behavior. For some evaluators, a higher rating is a way to express appreciation for student's good intentions and effort. Some suggest it as a compensation for personal and social problems such as parental problems and broken homes). It also suggests that leniency related to teacher's limited ability to derive good instruction that led to students' inability to understand the evaluation process.

As the previous result and this finding show that information variability influences leniency, this study implies a proposal to develop a performance measurement system that uses a format that does not allow the evaluator to raise the rating of all employees, such as ranking distribution system. This system would demand the evaluators to distinguish ranking among the employees (Harari, Rudolph, & Laginess, 2015). Another implication of this study is to develop a performance evaluation system that does not only contain measurement but also provides feedback of the evaluation result. Feedback would explain the underlying reasons for giving a certain rating. The evaluator will be more careful when raising a rating since they will be considered to be unprofessional.

The insignificant in rating given by participants with the same level of conscientiousness and agreeableness also reveals as one of this study limitations. Thus, this can be opportunities for further studies. Extending this study can be executed by using other instruments to measure conscientiousness and agreeableness. One of the other tools is, for example, the NEO Personality Inventory (Costa & Mc Crae, 1992). Further research can also be conducted by selecting participants with completely different conscientiousness and agreeableness levels. In addition, cultural differences may cause the unsupported hypothesis of the effects of personality traits on behavior-inflating ratings. The study from Xie, Chen, & Roy (2006) found that individualistic orientation is more lenient than collectivistic orientation. The effects of cultural differences in the evaluators' behavior and ratings provided can be taken into account in further research.

Conflict of Interest

The authors surely confirm that there is no conflict of interest to declare for this publication.

Acknowledgement

The authors sincerely thank to an anonymous reviewers and the Editor-in-Chief for providing and give critical comments and suggestions in order to improving the quality of the paper.

References

1. Babu, G., & Manoj, E. (2009). Cognitive Dissonance and Purchase Involvement in the Consumer Behavior Context. *Journal Od Marketing Management*.
2. Barrick, M. R., & Mount, M. K. (1991). The Big Five Personality Dimensions and Job Performance : A Meta-Analysis. *Personnel Psychology*. <https://doi.org/10.1111/j.1744-6570.1991.tb00688.x>

3. Barron, L. G., & Sackett, P. R. (2008). Asian variability in performance rating modesty and leniency bias. *Human Performance*. <https://doi.org/10.1080/08959280802137754>
4. Berger, J., Harbring, C., & Sliwka, D. (2012). Performance Appraisals and the Impact of Forced Distribution—An Experimental Investigation. *Management Science*. <https://doi.org/10.1287/mnsc.1120.1624>
5. Bernardin, H. J., Cooke, D. K., & Villanova, P. (2005). Conscientiousness and agreeableness as predictors of rating leniency. *Journal of Applied Psychology*. <https://doi.org/10.1037/0021-9010.85.2.232>
6. Bernardin, H. J., Tyler, C. L., & Villanova, P. (2009). Rating level and accuracy as a function of rater personality. *International Journal of Selection and Assessment*. <https://doi.org/10.1111/j.1468-2389.2009.00472.x>
7. Bol, J. C. (2011). The determinants and performance effects of managers' performance evaluation biases. *Accounting Review*. <https://doi.org/10.2308/accr-10099>
8. Bol, J. C., & Smith, S. D. (2011). Spillover effects in subjective performance evaluation: Bias and the asymmetric influence of controllability. *Accounting Review*. <https://doi.org/10.2308/accr-10038>
9. Breuer, K., Nieken, P., & Sliwka, D. (2013). Social ties and subjective performance evaluations: An empirical investigation. *Review of Managerial Science*. <https://doi.org/10.1007/s11846-011-0076-3>
10. Brownlow, C., Hinton, P., & McMurray, I. (2014). SPSS Explained 2nd Edition. In *Routledge*. <https://doi.org/10.4324/9781315797298>
11. Costa, P. T., & McCrea, R. R. (1992). Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEO-FFI) professional manual. *Psychological Assessment Resources*.
12. Cummings, W. H., & Venkatesan, M. (2006). Cognitive Dissonance and Consumer Behavior: A Review of the Evidence. *Journal of Marketing Research*. <https://doi.org/10.2307/3150746>
13. Dai, N. T., Kuang, X. (Jason), & Tang, G. (2018). Differential Weighting of Objective Versus Subjective Measures in Performance Evaluation: Experimental Evidence. *European Accounting Review*. <https://doi.org/10.1080/09638180.2016.1234402>
14. Digman, J. M. (1989). Five Robust Trait Dimensions: Development, Stability, and Utility. *Journal of Personality*. <https://doi.org/10.1111/j.1467-6494.1989.tb00480.x>
15. Du, F., Erkens, D. H., Young, S. M., & Tang, G. (2018). How adopting new performance measures affects subjective performance evaluations: Evidence from EVA adoption by Chinese State-Owned Enterprises. *Accounting Review*. <https://doi.org/10.2308/accr-51763>
16. Feltham, G. A., & Xie, J. (1994). Performance Measure Congruity and Diversity in Multi-Task Principal/Agent Relations. *The Accounting Review*.
17. Festinger, L. (1957). An Introduction to the Theory of Dissonance. In *A Theory of Cognitive Dissonance*. <https://doi.org/10.1037/10318-001>
18. Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*. <https://doi.org/10.1037/h0041593>
19. Garrett, R. K., Carnahan, D., & Lynch, E. K. (2013). A Turn Toward Avoidance? Selective Exposure to Online Political Information, 2004-2008. *Political Behavior*. <https://doi.org/10.1007/s11109-011-9185-6>
20. Gibbs, M., Merchant, K. A., Van Der Stede, W. A., & Vargus, M. E. (2004). Determinants and effects of subjectivity in incentives. *Accounting Review*. <https://doi.org/10.2308/accr.2004.79.2.409>
21. Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*. <https://doi.org/10.1016/j.jrp.2005.08.007>
22. Golman, R., & Bhatia, S. (2012). Performance evaluation inflation and compression. *Accounting, Organizations and Society*. <https://doi.org/10.1016/j.aos.2012.09.001>
23. Grund, C., & Przemeczek, J. (2012). Subjective performance appraisal and inequality aversion. *Applied Economics*. <https://doi.org/10.1080/00036846.2011.560109>
24. Ha, Y.-W., & Hoch, S. J. (2002). Ambiguity, Processing Strategy, and Advertising-Evidence Interactions. *Journal of Consumer Research*. <https://doi.org/10.1086/209221>
25. Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis: A Global Perspective. In *Multivariate Data Analysis: A Global Perspective*.

26. Harari, M. B., Rudolph, C. W., & Laginess, A. J. (2015). Does rater personality matter? A meta-analysis of rater Big Five-performance rating relationships. *Journal of Occupational and Organizational Psychology*. <https://doi.org/10.1111/joop.12086>
27. Harmon-Jones, E., & Harmon-Jones, C. (2007). Cognitive Dissonance Theory After 50 Years of Development. *Zeitschrift Für Sozialpsychologie*. <https://doi.org/10.1024/0044-3514.38.1.7>
28. Highhouse, S. (1994). A verbal protocol analysis of choice under ambiguity. *Journal of Economic Psychology*. [https://doi.org/10.1016/0167-4870\(94\)90014-0](https://doi.org/10.1016/0167-4870(94)90014-0)
29. Hinojosa, A. S., Gardner, W. L., Walker, H. J., Cogliser, C., & Gullifor, D. (2016). A Review of Cognitive Dissonance Theory in Management Research: Opportunities for Further Development. *Journal of Management*. <https://doi.org/10.1177/0149206316668236>
30. Jensen-Campbell, L. A., & Graziano, W. G. (2003). Agreeableness as a Moderator of Interpersonal Conflict. *Journal of Personality*. <https://doi.org/10.1111/1467-6494.00148>
31. John Bernardin, H., Thomason, S., Ronald Buckley, M., & Kane, J. S. (2016). Rater Rating-Level Bias and Accuracy in Performance Appraisals: The Impact OF Rater Personality, Performance Management Competence, and Rater Accountability. *Human Resource Management*. <https://doi.org/10.1002/hrm.21678>
32. Kaish, S. (2006). Cognitive Dissonance and the Classification of Consumer Goods. *Journal of Marketing*. <https://doi.org/10.2307/1249462>
33. Kampkötter, P., & Sliwka, D. (2018). More dispersion, higher bonuses? On differentiation in subjective performance evaluations. *Journal of Labor Economics*. <https://doi.org/10.1086/694588>
34. Kane, J. S., Bernardin, H. J., Villanova, P., & Peyrefitte, J. (2018). Stability of Rater Leniency: Three Studies. *Academy of Management Journal*. <https://doi.org/10.5465/256619>
35. Kuhlemeier, H., Hemker, B., & van den Bergh, H. (2013). Impact of Verbal Scale Labels on the Elevation and Spread of Performance Ratings. *Applied Measurement in Education*. <https://doi.org/10.1080/08957347.2013.739425>
36. Liedtka, S. L., Church, B. K., & Ray, M. R. (2008). Performance Variability, Ambiguity Intolerance, and Balanced Scorecard-Based Performance Assessments. *Behavioral Research in Accounting*. <https://doi.org/10.2308/bria.2008.20.2.73>
37. Long, Sovang.,Somsit, Duang, EK,Anong.,Vongurai, Rawin. (2021). Determinants of Business Education On Students Satisfaction in Higher Education: A Case Study In Cambodia. *The Journal of Asian Finance, Economics and Business*.,8 (3), 1405-1416. <https://doi.org/10.13106/JAFEB.2021>. VOL8.NO3.1405
38. Moers, F. (2005). Discretion and bias in performance evaluation: The impact of diversity and subjectivity. *Accounting, Organizations and Society*. <https://doi.org/10.1016/j.aos.2003.11.001>
39. Nahartyo, E. (2016). Design and Implementation of Experimental Research. *Experimental Research Method Workshop*.
40. Negara, Dj, Ferdinand, F., Meitiana, M., Astuti, Mh, Anden, T., Sarlawa6, R., & Mahrita, A. (2021). Knowledge Sharing Behavior in Indonesia: An Application of Planned Behavior Theory. *The Journal of Asian Finance, Economics and Business* , 8 (3), 1053–1064. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.1053>
41. Nofle, E. E., & Robins, R. W. (2007). Personality Predictors of Academic Outcomes: Big Five Correlates of GPA and SAT Scores. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.93.1.116>
42. O’Connell, M., & Sheikh, H. (2011). “Big Five” personality dimensions and social attainment: Evidence from beyond the campus. *Personality and Individual Differences*. <https://doi.org/10.1016/j.paid.2011.01.004>
43. Ogunfowora, B., Bourdage, J., & Lee, K. (2010). Rater personality and performance dimension weighting in making overall performance judgments. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-009-9144-y>
44. Oshikawa, S. (2006). Can Cognitive Dissonance Theory Explain Consumer Behavior? *Journal of Marketing*. <https://doi.org/10.2307/1248672>
45. Prendergast, C., & Topel, R. (1993). Discretion and bias in performance evaluation. *European Economic Review*. [https://doi.org/10.1016/0014-2921\(93\)90024-5](https://doi.org/10.1016/0014-2921(93)90024-5)

46. Roch, S. G., Ayman, R., Newhouse, N., & Harris, M. (2005). Effect of identifiability, rating audience, and conscientiousness on rating level. *International Journal of Selection and Assessment*. <https://doi.org/10.1111/j.0965-075X.2005.00299.x>
47. Sebald, A., & Walzl, M. (2014). Subjective performance evaluations and reciprocity in principal-agent relations. *Scandinavian Journal of Economics*. <https://doi.org/10.1111/sjoe.12045>
48. Sweeney, J. C., Hausknecht, D., & Soutar, G. N. (2000). Cognitive dissonance after purchase: A multidimensional scale. *Psychology and Marketing*. [https://doi.org/10.1002/\(SICI\)1520-6793\(200005\)17:5<369::AID-MAR1>3.0.CO;2-G](https://doi.org/10.1002/(SICI)1520-6793(200005)17:5<369::AID-MAR1>3.0.CO;2-G)
49. Tran, Tkn, Nguyen, Td, Pham, Tv, Nguyen, Tlh, Giang, Md, & Ha, Nt (2021). Impact of Administrative Post and Gender on Lecturers' Research Motivation in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8 (3), 705–715. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.0705>
50. Taylor, E. K., & Hastman, R. (1956). Relation of Format and Administration to the Characteristics of Graphic Rating Scales. *Personnel Psychology*. <https://doi.org/10.1111/j.1744-6570.1956.tb01062.x>
51. Telci, E. E., Maden, C., & Kantur, D. (2011). The theory of cognitive dissonance: A marketing and management perspective. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2011.09.120>
52. Van Dijk, E., & Zeelenberg, M. (2003). The Discounting of Ambiguous Information in Economic Decision Making. *Journal of Behavioral Decision Making*. <https://doi.org/10.1002/bdm.450>
53. Varma, A., & Pichler, S. (2007). Interpersonal affect: Does it really bias performance appraisals? *Journal of Labor Research*. <https://doi.org/10.1007/BF03380053>
54. Xie, J. L., Chen, Z., & Roy, J.-P. (2006). Cultural and Personality Determinants of Leniency in Self-Rating Among Chinese People. In *SSRN*. <https://doi.org/10.1111/j.1740-8784.2006.00043.x>
55. Zábajník, J. (2014). Subjective evaluations with performance feedback. *RAND Journal of Economics*. <https://doi.org/10.1111/1756-2171.12054>