



Educational level bias and employees' approach under different practices of evaluation

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ABSTRACT

The aim of the present study is to examine the educational background of an individual as a potential determinant of performance evaluation biases and how employees respond to this under different appraisal styles. This thesis assignment is based on previous literature concerning objective and subjective evaluations and biases derived from socio-demographic data such as the educational background of individuals. Overall literature shows that subjective evaluations leave some room for discrimination, however, objective evaluations seem to decrease wage differentials between employees, indicating less discrimination. As for educational level, no previous studies exist to establish a potential bias from evaluators' side. The inclusion of this variable as a possible source of discrimination is based on human capital theory and social identity theory. Based on the former, members with increased educational investment are expected to be productive and be rewarded with greater earnings. Based on the latter, members of the same "group", namely the same characteristics, tend to favor one another. Consequently, we expect participants with the same or similar educational background with that of their raters, to be evaluated favorably. The empirical research was based on the paper of [Maas and Gonzalez \(2010\)](#). A scenario-based experiment is used as research method of the study, which addressed to a sample of 90 bachelor, master and PhD candidates of managerial-related studies in universities in Greece. The results showed that employees responded to organizational attractiveness and perceived likelihood to earn an above average bonus as they believe educational level bias exists under different styles of evaluation.

Keywords: Education level, discrimination, subjectivity, performance evaluation.

1 INTRODUCTION

1.1 Background thesis and subject

The present thesis constitutes the final step within my master programme before obtaining the degree of science in Accounting, Auditing and Control. This research assignment relates to a topic that intrigued me to study further during the Seminar Management Control in the third block of the first academic year. Management Control is associated with human behavior and how this behavior can be observed and controlled within the organizations. Based on this, the aim of this research is to expand our knowledge in terms of human behavior in appraisal settings within the organizations and particularly to examine how employees respond to performance evaluation under different practices. More into detail, it is significant for managers to incorporate such measures in the appraisal contracts that provide information about employees' actions and produce accurate and efficient ratings. However, when subjectivity is introduced in the appraisal settings, managers lead to favoritism and bias. Due to this favoritism, employees' future incentives are affected considering the fact that their organizational attractiveness and their perceived likelihood of getting increased bonus based on positive ratings is expected to decrease. Consequently, it was a motive to search for factors which might contribute to rating inaccuracy and decrease subsequently employees' motivation for good performance and in turn, firm's value. Educational background is one factor that is examined in this study. Previous theory supports that evaluators tend to evaluate higher the members of their group and lower those not in their group, making more possible to demonstrate stereotyping (Oakes and Turner, 1986; Taylor, 1981). Based on this notion, I will examine and observe if educational background is a potential factor that leads to inaccurate evaluations and how employees perceive this educational discrimination under different practices. According to theory, the higher educated employees are, the more productive are expected to be. However, these perceptions lead to evaluation biases and sometimes seem to have a negative impact on employees' incentives and future behavior, as they perceive that they are treated unfairly. The contribution of this study is important from management perspective, as organizations need to modify the evaluation process if they wish to keep employees actions under control and in accordance with their ultimate goals.

1.2 Main research question and sub-questions

This study aims to examine how employees respond to attractiveness of a company and their likelihood of getting bonus when evaluated under different practices. Particularly, this study will show if educational background is expected to influence the preferences and perceptions of employees under subjective or objective practices of performance evaluation. Performance evaluation may be an incentive that induces employees to act in accordance with the firm's ultimate goals. It is significant for managers to incorporate such measures in compensation contracts that provide information about managers' actions, so that to be able to adjust the weighting of financial and non-financial ones. This notion is consistent with the Informativeness principle (Holmstrom, 1979). Ittner et al. (2003) additionally found that the design of compensation schemes includes a percentage of subjectivity that allows evaluators to incorporate factors other than financial measures, since these alone may not be the most efficient means to keep employees' actions under the frame of the firm's desired goals. It is difficult to overview all aspects of workers' jobs in an explicit contract, therefore a common way constitutes the use of subjective performance evaluation (Prendergast, 1999). However, the high level of subjectivity can lower managers' motivation, while it introduces favoritism and bias (Ittner et al, 2003). Attention is paid to two important forms of performance evaluation bias: centrality bias and leniency bias (Prendergast, 1999). The former is associated with the compression of performance ratings without any apparent discrimination among the rating outcomes, while the latter is the propensity to inflate employees' performance ratings (Saal et al., 1980). According to Bol (2011), managers respond to their own incentives and preferences when they use subjectivity in the evaluation process and many factors determine the accuracy of their ratings. Bol's findings suggest for example that information-gathering costs and employee-manager relationship will increase centrality and leniency bias. Evidence indicates that evaluation biases don't have necessarily adverse impact on compensation contracting. Behavioral theory predicts that centrality and leniency bias can have a positive effect on employee motivation and performance by increasing the perceived fairness of the reward system. These results are inconsistent with the agency theory (Baiman, 1982, 1990), which supports that biases may decrease employee's incentives for better performance, as individuals are assumed to be self-interest, and if any assigned task runs counter to their personal goals of well-being, they might exert less effort.

In addition, there are studies that have examined some factors of introducing subjectivity in performance ratings, like bias due to race, sex, ethnicity and other personal attributes of employees (Feldman, 1981). Managers are assumed to have incentives to misreport the appraisal outcomes of their subordinates, while they try to avoid spending their time and effort, providing accurate and thorough evaluations. This preference affects the managers' ratings behavior (Harris, 1994) and it leads to centrality bias and leniency bias.

Therefore, the above initial literature review on the subject of the thesis suggests that biases concerning the employee performance appraisal process are important because they have implications on employees incentives. The performance of employees is also associated with the overall performance of the firm. Thus, if employees respond about organizational attractiveness and perceived likelihood of getting an above average bonus as they consider that they are treated unfairly in evaluations, this may negatively impact their incentives for good performance and the overall performance of the firm.

Prior literature finds out that men seem to receive higher ratings compared to women, given the same or similar performance levels (Bauer and Baltes, 2002; Davison and Burke, 2000; Olian et al., 1988). For example, an evaluator might show gender-based stereotypes due to gender discrimination (Bauer and Baltes, 2002; Gupta et al., 2008). In subjective performance evaluations, women are expected to receive more favorable ratings, as the probability of female evaluator increases (Maas and Torres-Gonzalez, 2010). Yet, these results are in accordance with the fact that organizations try to provide equal opportunities for men and women, without any signs of stereotyping (Blau and Kahn, 2006; Dreher, 2003; Bell et al., 2002). Earnings differences between men and women in similar occupations in the labour market account for gender inequality. Women with good or better qualifications compared to men cannot get easily promotions and pay raises, because their skills are valued less than those of men and consequently their career development is slow or remains stable. This glass ceiling can explain the fact that women are not prevalent in highly managerial positions.

Regarding the educational level in performance evaluation biases, it seems to be a personal attribute of the employees that has not been examined before as a potential factor for evaluation biases. My attention derived from the human capital theory, which is related to the treatment of educational investment as an indicator which increases individual's productivity and is expected

to be rewarded with greater earnings (Becker, 1964, 1974). According to Ceci (1991) and Neisser et al. (1996), higher level of education results in crystallized intelligence, hence, the more educated individuals are, the greater analytical skills they have. Education is positively influencing task performance (Feldman, 2009). Proponents of screening and signaling models maintain that employees use education as a signal to potential employers especially in the hiring process (Spence, 1973). Thus, based on previous findings, this will allow for testing additional attributes of the employee that may lead to the receipt of different evaluations for different educational levels. It is important to investigate whether for each category of educated employees (low/high), they believe that receiving different evaluations are based on subjectivity and especially on educational discrimination by managers.

Taking all the above into account, performance evaluation procedure is important for firms, especially if it associates its results with rewards which lead to increased performance. The main subject of this study is to focus on whether the educational level is perceived to be a factor that leads to performance evaluation biases. This is important, because ratings that do not reflect reality but are rather based on personal prejudices may lead also to dissatisfaction among employees and to an extent to lower performance. Regarding the organizational attractiveness and perceived likelihood of getting an above average bonus, employees' preferences will be influenced based on the level of subjectivity in appraisal settings.

The main research question derived from the main problem statement is the following:

RQ: *“Is the educational level of employees considered to be a factor that influence the accuracy of evaluation process?”*

Based on the main research question, I will examine in particular the following sub-questions:

1. *“How do employees respond under subjective/objective appraisal styles?”*
2. *“How does the educational level of supervisor impact the organizational attractiveness of employees and their perceived likelihood of earning an above average bonus under different appraisal settings?”*

In order to answer the main research question and sub-questions of this study, a scenario-based experiment will be conducted which is addressed to bachelor, master and PhD graduates from

different universities in Greece. Participants will be asked to respond for organizational attractiveness and perceived likelihood of earning an above average bonus from a potential employer in case they will be evaluated under subjective or objective measures. Educational level of both raters and rates will be varying under different practices in order to test for any evaluation biases.

1.3 Research method

Due to the fact that the present thesis aims to answer a question at individual level, the type of research method will be used is a scenario based experiment in order to collect my data set. Since the research focuses on examining the perceptions or opinions for organizational attractiveness and perceived likelihood of earning an above average bonus when employees are evaluated under objective or subjective practices, the level of analysis will be based on individuals with several educational background and varying experiences. Consequently, the research will examine how graduates will respond to organizational attractiveness and perceived likelihood of earning an above average bonus when evaluated under objective or subjective practices from potential employers, changing at the same time the percentage of highly educated evaluators. The aforementioned sample used for my survey is expected to be the most representative one in order to answer my research question. Potential employees will help me answering the research objectives of this study and by doing so, results will show if educational level background might indicate evaluation biases under different practices. In particular, if employees believe that the level of subjectivity introduced in the appraisal settings will influence the accuracy of their ratings, then they are expected to show decreased organizational attractiveness and perceived likelihood of earning an above average bonus. Since the study focuses on one determinant of potential evaluation bias, employees will be asked indirectly if that factor influence their choice between subjective and objective methods when it comes to organizational attractiveness and perceived likelihood of earning an above average bonus. In order to examine this relationship, self-administered questionnaire will be chosen as a tool to Athens university bachelor, master and PhD graduates in Greece. In order to capture biases in the evaluation process deriving from the educational level of the employee, the percentage of being evaluated from highly educated managers will change under subjective and objective practices. Respondents will show their

preference for organization and their perception of getting an above average bonus under subjective or objective practices when the percentages change consecutively.

However, doing a scenario based experiment brings out some trade-offs that I need to take into account. For construct validity and reliability reasons, I used the research instrument of [Martins and Parsons \(2007\)](#), adopted also by [Maas and Gonzalez \(2010\)](#), in order to measure my dependent variables, being organizational attractiveness and perceived likelihood of earning an above-average bonus. Also, for the manipulated independent ones, I used dummies for educational level factors, as well as for different evaluation practices. By doing so, I tried to operationalize my theoretical concepts and have valid measurements. By varying the independent manipulated variables and the measured independent ones, variation is expected also to the dependent variables, ensuring by this way internal validity. In order to increase internal validity and excluding any external factors that might cause noise to the relationship to be examined, control variables are used in the empirical analysis.

1.4 Managerial contribution

This study has a worthwhile contribution to the firm's evaluation process and especially in case subjectivity, derived from the acquired level of education of employees, is proved to have an adverse effect on the future employees' incentives and consequently, on firm's value. In that case, measures should be taken to modify the evaluation process. Also, the results from this study will show insight to the fact that highly educated employees will show preference to companies where highly educated managers will evaluate them under subjective methods, while they have more possibilities to be evaluated higher. However, if highly educated workers contribute only marginally to firm's effectiveness, despite the fact that they are expected to have better performance than the less educated ones, then it would be a serious problem for the integrity of organization's operation, this phony to be perpetuated. That would also affect adversely the firm's costs of staffing highly educated workers and to keep rewarding them, while hoping for something else. That is the case where the selection process needs to be reviewed, as employees use education as a screen or alternatively the educated employees obtain educational credentials in order to signal their talents to potential employers ([Spence, 1973](#)). Also, nowadays, there is increased demand for labor with enhanced qualifications and experience, as technology evolves rapidly and working conditions become more demanding. Thus, companies have to choose among very talented and

potential candidates with strong educational backgrounds. Most of the firms nowadays seem to prefer candidates who have at least a Master's degree. Consequently, this may be a form of educational level bias, as managers may be inclined to highly-educated candidates. Thus, it is important to investigate whether this holds as a potential fact when employees are evaluated under different appraisal styles after examining the data. Based on the aforementioned, employees who obtain more credentials and have enhanced educational background will show increased organizational attractiveness to those companies that use subjective measures when the possibility to be evaluated by highly educated managers, increase.

In a nutshell, results of the present study will add to existing literature in terms of educational level, as it has not been studied previously as an additional factor of discrimination. It has significant contribution to the existing knowledge, as the congruence between employment relations and the offer of equal opportunities to potential employees is a crucial issue that firms should take care of its existence, especially when they design compensation schemes which tie employees' incentives with their performance. While most compensation arrangements aim to control agent's actions providing objective measures, they ignore the importance of the trade-offs that subjectivity might have in the long-run. When supervisors use subjectivity and they are themselves the residual claimants of employees' performance, that creates room for personal preferences, prejudices as well as other incentives (minimization of time and effort invested, confrontation avoidance, criticism limitation), regarding the given ratings. This bias affects the incentive-compensation system and organizations should account for the aforementioned process. The present study will provide additional insights concerning the determinants that affect the managers' rating behavior and it might contribute in adjusting subjective dimensions in the evaluation process, preventing any behavioral displacement from employees' side. Existing literature underpins the positive relation between employee's educational background and task performance as explained earlier in the study and if evaluators seem to be influenced by the notion that the level of education implies a productive worker or good outcome of his actions, then a biased appraisal should be constrained by incorporating accountability in the evaluation process. It would be fair for managers to account for their ratings and to report the measures they use, either they are objective or subjective ones, and lead them to their final evaluation outcome.

1.5 Scientific Contribution

The results of the present study would be an important contribution to the literature and might benefit management accountants, managers and policy makers, especially in countries that performance-based compensation schemes play a more dominant role. It would be interesting to examine the incentive effect of biased evaluations and the determinants that might contribute to it, as companies aim to the effectiveness of performance-based compensation contracts and they wish to keep their personnel's actions under control.

Particularly, the fact that backfired my interest to examine the level of education as determinant of managers evaluation biases and how employees respond to this fact under different practices, was the assigned paper of [Merchant \(1982\)](#) regarding the control function of management. Organizations seem to have as primary task the management control function, in order to ensure their success. Management control is associated with behavioral problems and dealing with people is something that motivates me considerably. A good management control system limits any deviations from the established standards and the desired goals. People don't always understand what is expected from them and due to several reasons, they might act objectively to firm's goals. The effects of biases in the evaluation process are considered a severe factor for any behavioral displacement from employees' perspective. Organizations analyze the counterproductive effects associated with performance measurement and compensation systems and try to keep employees' actions in accordance with the firm's ultimate goals. The present study will provide significant results concerning the design process of control systems and more deeply the design of the incentive contracts. Most organizations link the incentives of their employees with the outcome of their performance, as a rewarding structure. Nevertheless, there are several calls for empirical evidence on the effect of managers' personal incentives on rating behavior ([Murphy and Cleveland, 1991](#), [Harris, 1994](#)). According to [Feldman \(1981\)](#), there are factors that introduce subjectivity in performance ratings like race, sex, ethnicity and other personal attributes of employees. Finally, taking into account all previous information, it is important to test how employees respond under objective or subjective appraisal settings. If employees consider that they are evaluated unfairly based on different educational background, they will show decreased organizational attractiveness and perceived likelihood of getting an above average bonus, hence, decreased future performance. In case firms have established performance-reward schemes, the

impact on performance will be more intense. If biases derived from the level of subjectivity in the reward systems are seemed to exist, then it is important to reconsider the design of the reward systems.

1.6 Structure of this thesis

This thesis assignment is structured in six main chapters. The first one is related with background information and introduces the reader to the subject. More into detail, the problem definition is explained related to determinants that might influence the accuracy of evaluation procedure and how employees respond about organizational attractiveness and likelihood of getting an above average bonus under different appraisal practices considering educational level as determinant for evaluation biases. In order to examine and answer the main research question as well as the sub-questions developed, previous theory and existing knowledge is essential in order to support the hypotheses developed. Hence, the second chapter analyzes the theoretical concepts that our hypotheses will be based on and particularly how theory supports the moderating effect of educational level as personal attribute of the rater and the rate in relation to their organizational attractiveness and perceived likelihood of earning an above average-bonus when evaluated under different practices. Subsequently, based on theory, research hypotheses are developed for testing purpose in the third chapter indicating assumed relationships between the theoretical concepts. In addition to this, the fourth chapter presents the data set and the methodology used in order to test the hypotheses formulated in the third chapter. Particularly, the sample used in order to test the hypotheses is consisted of bachelor graduates, master graduates and PhD candidates from a well-known university in Greece, who have been asked about organizational attractiveness and perceived likelihood of getting an above average bonus when evaluated under different practices. It should be noted that this thesis assignment does not start the research from the assumption that such educational bias exist; it examines if employees respond to their preferences as though they perceive such biases might exist in appraisal settings, changing the percentage of highly educated managers who will probably evaluate them. The fifth chapter involves the results of the empirical analysis and provides potential answer to the main research question and sub-question. Finally, chapter six involves a comparison between the theoretical part and the survey part, where similarities and differences between them are confronted, conclusions, limitations and recommendations for further research are presented.

2 PERFORMANCE EVALUATION PROCESS AND BIASES

2.1 Introduction

In order to answer the main research question, this chapter will pay attention to the employee evaluation procedure and the different practices that companies might use for appraisal settings. When subjectivity is introduced in the appraisal settings, performance evaluation process generates biases considering especially personal attributes of the employees and particularly in this study, the educational background of the individuals. For this purpose, it was considered important to analyze how the employee evaluation process should take place in firms and in what main points should focus in order to produce fruitful and accurate results. Then, it is analyzed the educational level discrimination that might derived from evaluation schemes. This literature review background will assist in developing further the research hypotheses for testing, concerning whether employees expect different evaluations due to the personal prejudices of the evaluator. More into detail, the following theory will provide insights for answering the sub-question developed in terms of perceived unfairness and particularly, how employees respond to their preferences for choosing a company as potential employer and the likelihood of getting an above average bonus under subjective or objective practices of evaluation. In the end of the chapter there is a conclusion section, summarizing all important information derived from the analysis in this chapter.

2.2 Employee evaluation process

The assessment of employees is a process by means of designating the value of the various employees, as compared to some standards and comparison of employees between them. Some businesses instead of the term assessment of employees they use the term *employee evaluation*, which involves performance evaluation, performance appraisal, performance review and annual review (Amaratunga and Baldry, 2002).

In particular, the term *performance* of an individual's work means the combination of competence, effort made, and various other factors. What a person is capable of doing does not need to be the same during his work. The term *capability* refers to the performance the person can have potentially, while the term *performance* refers to what the person is doing now, under given

conditions. How does the person perform the work depends on the ability and desire or incentives that are associated with this work (Brutus, 2010).

Often, dissatisfaction is expressed with various aspects of the performance evaluation procedure, such as: time and effort spent there, tension between employee relations with their supervisors or reliability of the results. However, in general, if the evaluation process is completed correctly, its importance is great (Choon and Embi, 2012).

In general, the main uses of employee evaluation are the following described below.

Definition of performance targets and development of employee: The employee must be assessed against the objectives set jointly with his supervisor. Then, his/her performance is monitored and usually once a year he/she completes the Evaluation Form. The evaluation can help significantly to support employee development. The meeting carried after the evaluation encourages the discussion of evaluation results and gives the supervisor and the employee the opportunity to discuss the long-term goals of the position of the latter and the plans of the firm. The supervisor may advise the employee on the steps he/she needs to follow to achieve his/her goals. Also, based on existing skills, special abilities and weaknesses of the employee arising from the consequent interview assessment, the supervisor gives the employee short and specific proposals to improve productivity, to enhance the achievement of long-term professional objectives, while arguing with the specific career prospects which gives the company. They may jointly establish an employee career plan, so the supervisor undertakes a consultant role in managing his/her career (Fisher, 1994).

Determining training needs: One of the most important parameters of employee assessment is that it can be used in determining the training needs for each employee. If some employees do not meet the requirements and expectations of the firm, a properly designed and adapted to development needs training program can give them the opportunity to improve any deficiencies in their knowledge or skills. In addition, education of employees is a function aimed at enhancing their performance, whilst assessment of employees is necessary not only for the evaluation of the initial value of the employee and to assess the changes brought about by the implementation of the training program. It may, i.e., be considered a tool for the evaluation of education programs and practices (Gruman and Saks, 2011).

Association of employee performance and remuneration: An evaluation of an employee is an essential tool for any firm wishing to link the remuneration of employees with their performance. Under this perspective, the employee performs more because he/she works with greater zeal and intensifies his/her efforts because he/she will be rewarded more than other colleagues with lower performance. In this way the firm increases efficiency by providing financial incentives. A prerequisite to smoothly operate the reward system is the implementation of a fair evaluation based on objective evaluation criteria, so as not to question the integrity of the system. The system will fail if employees believe that employers and supervisors distribute additional bonuses or awards based on their personal preferences. The work of people must be accurately assessed and the company should develop a reward system, which is based on the productivity of employees. At the same time, it should treat all workers fairly (Gruman and Saks, 2011).

Improve the attraction and selection system of employees: Another important element of the assessment is that it can be used as a criterion of whether it is successful the function of attracting and selection of people, for each job position in general. Monitoring the efficient workers and how they were hired can guide the future process of attracting and selection practices that are proving most effective at each job position (Gruman and Saks, 2011).

2.2.1 Questions a performance evaluation process should answer

Every business is unique. It has its own regime, being influenced from the external environment in which belongs to, based also on its employees, vision, strategy and structure. Every business has its own strategy and different approaches to the implementation of evaluation methods. When the company determines what is the philosophy of the evaluation system then it captures a guide of the evaluation and a form of evaluation (Hui and Qui-xan, 2009).

The next question a firm should address is where to orient, what should be evaluated. What the business should do, is to identify what skills are necessary to successfully engage with the duties of employees and the specific evaluation criteria, as for how well should the employee be paid (Hui and Qui-xan, 2009).

Furthermore, the firms should address the question concerning the methods used in the evaluation process. The assessment process is performed using certain managing techniques. The methods used nowadays are divided into quantitative, which relate to the performance measurement of

employees, and qualitative, which is measured from the attitude and behavior of employees. Firms can use both these categories, so there is completeness in the results of evaluation (Karatepe et al, 2006).

Additionally, what is important, is to assess the effectiveness of the evaluation process. To be considered an evaluation effective, it must have certain characteristics, which are necessary for successful implementation. If one of these elements is missing, then the process is not considered functional and it needs to be repeated. The first of these elements is validity. Evaluation needs to be compatible with the process, according to the content and structure of each job. To implement this, a satisfactory analysis should be developed for each job position before determining the measure of performance, taking into account the interference of various parameters that do not allow accurate measurement. Performance assessments are reliable when employees know the type of indicators used as objective measures of performance (Karatepe et al, 2006).

The third element which needs to exist is objectivity. The element of objectivity concerns the judgment of the evaluator and how this is applied when performing the evaluation process. The assessment should reflect what employees offer and what they succeed in their work, and not to rely on characteristics of their personality. In addition, personal likes and dislikes the evaluator may have, should not affect the visual performance of employees, because this will result in minimizing or maximizing subjective judgment (Muller, 2013).

2.3 Evaluation practices and level of Subjectivity

Nowadays, firms seem to use a mix of objective and subjective measures as integrated part of a larger performance measurement process. Particularly, the level of subjectivity introduced in reward systems is associated with bonus maximization and long-term performance of the firm (Ittner et al., 2003). Bonuses are based on financial results in the short-term period and managers try to maximize their profit by using accounting-based reward systems. Hence, they sacrifice the long-run performance by using solely financial metrics. Consequently, appraisal settings should use also non-financial measures, so that incentive contracts to take advantage of any information might be ignored in formula-based systems and to deal with any managerial dysfunctional behavior due to incomplete objective metrics (Baker et al. 1994; Baiman and Rajan, 1995).

Based on Informativeness principle, performance measures should provide congruence between the principal's objectives and that of the agent (e.g. [Holmstrom 1979](#); [Banker and Datar 1989](#)). These models support the use of any measure that carries additional information on the agent's actions. Although many of these models indicate only a few information about specific types of performance measures, several studies enhance the results of the aforementioned papers by investigating the role of non-financial measures ([Feltman and Xie 1994](#); [Hauser et al. 1994](#); [Hemmer 1996](#)). According to these models, financial measures alone are not sufficient to motivate employees and propose the use of non-financial measures in order to improve incentive systems.

Performance measurement seems to be an ethical dilemma in contemporary firms. Although organizations need to ensure that their appraisal systems do not allow managers to make biased ratings, still there is research in psychology, management and accounting indicating that many employees feel that are treated unfairly and their evaluations seem to be inaccurate. What are the elements that make employees perceive the evaluation received is unfair? In organizational settings, there are traditional views, such as equity theory ([Adams 1965](#)) supporting the relative ratio of an employee's outcome of his inputs. This relates to distributive justice which focuses on the fairness of the evaluations received, in accordance with the work performed. Additional evidence suggests, however, that beliefs about unfair performance evaluations may also be based on demographics-based rater bias (e.g. [Arvey and Murphy, 1998](#)), where employees with specific demographic characteristics get higher or lower ratings. This category of biases is associated with intentional ratings adjustments and is contingent upon the rate's gender, race, age, or other demographic characteristic ([Pulakos et al., 1989](#); [Tsui and O'Reilly, 1989](#)). Previous studies have examined whether evaluators provide favorable ratings to men compared to women given similar levels of their performance. Although the results are mixed, a lot of studies, lab experiments and field studies have found evidence of such a pro male bias ([Bauer and Baltes, 2002](#); [Davison and Burke, 2000](#); [Olian et al., 1988](#)).

In addition, a considerable amount of studies have found that male-female wage differentials are not so intense in organizational settings where payment is based on objective performance indicators. For instance, [Gunderson \(1975\)](#) found that when firms use objective practices such as piece-rates or commissions, differences are smaller between the wages paid to men and those paid to women. In a similar vein, [Jirjahn and Stephan \(2006\)](#) using a sample of German blue-collar

workers found that objective practices such as piece rates increased women's pay compared to men's. The aforementioned are in accordance with findings from previous literature on the effects of evaluation and pay systems in terms of racial discrimination. Also, [Elvira and Town \(2001\)](#) using personnel data from a firm with subjective method of evaluation, found that racial differences between the rater and the rate lead to lower ratings of the latter.

Also, [Heywood and O' Halloran \(2005\)](#) and [Fang and Heywood \(2006\)](#) using sample of US and Canadian data respectively, conclude that there are racial earnings differences when it comes to time rates payment contrary to pay-to-performance practice. Hence, race-based differentials are higher when firms use subjective reward systems than time rates.

2.4 Evaluation and personal prejudices

In this section, it is important to focus on the performance evaluation process and on specific personal prejudices which derive from the part of the evaluator. Specific analysis is conducted for educational level bias, which is the focus of the present thesis. According to the above theoretical framework on the process of performance evaluation, it can be assumed that performance evaluations leave some space for discretion from the part of evaluators and supervisors in the performance appraisal of subordinates. This may not hold only disadvantages, because this space for discretion may allow for evaluating the employees based on their characteristics in general and not only on specific standards and indicators set so as to be as objective as possible ([Gibbs et al., 2004](#); [Murphy and Cleveland, 1995](#)). Under subjective performance evaluations though, there is also space for either intentional or unintentional biases ([Harris, 1994](#); [Jawahar, 2005](#); [Prendergast and Topel, 1993](#)).

Examining the first category of intentional biases, the study of [Prendergast and Topel \(1993\)](#) shows that managers and supervisors in general may use their position and performance evaluations in order to promote their favorites in the organization. Furthermore, there are also unintentional biases, which may be due to leniency and centrality biases, which are the most common, which tend either to move rating upwards or downwards respectively ([Jawahar and Williams, 1997](#); [Moers, 2005](#); [Murphy and Cleveland, 1995](#)). Moreover, the halo bias is also important in this category, because the evaluators seem to assess the overall image of an employee and errors made may be ignored, due to previous excellent performance of the employees ([Balzer and Sulsky, 1992](#); [Jacobs and Kozlowski, 1985](#); [Lance et al., 1994](#)).

Intentional or unintentional bias may occur based on the personal prejudices of the evaluator, which may concern characteristics of the employee such as socio-demographic data and in particular the gender, race, age etc. (Pulakos et al., 1989; Tsui and O'Reilly, 1989). In the present dissertation, the focus is on the educational background of an individual.

2.4.1 Educational level and Performance evaluation bias

In the present study it is examined how the educational level of an individual may contribute to biased appraisals considering it as a personal prejudice of evaluators and the effects that subsequently this might have on employees' incentives and perceived organizational attractiveness. Based on previous studies, education is positively influencing task performance (Feldman, 2009). Educational level is associated with the academic credentials or degrees an individual has obtained. In research studies, educational level is frequently measured categorically. Educated employees are supposed to be those individuals who hold at least bachelor's degrees as these degrees are necessary for the entry into higher-paying occupations (Trusty & Niles 2004). Also, the emergence of human capital theory in the late 1950s is related to the treatment of educational investment as an indicator which increases individual's productivity and that will be rewarded with greater earnings (Becker, 1964, 1974). Education is linked with productivity through the provision of skills and knowledge, and consequently increases the efficiency of the more educated. There are also proponents of screening and signaling models, according to which employees use education as a signal to potential employers especially in the hiring process (Spence, 1973). This is essential for the hiring process, as employers are unaware of the productive capabilities of the employees. In addition, higher level of education results in crystallized intelligence based on the study of Ceci (1991) and Neisser et al. (1996). Individuals with more education are also likely to have greater analytical skills as well. Finally, values acquired through education as responsibility, moral integrity, conscientiousness, are related with years of education (Goldberg et al., 1998).

Taken all the above together along with the incentives of managers, regarding the fact that they prefer to minimize the time and effort, to limit criticism, to avoid confrontations and prevent damaging personal relationships (Harris, 1994), they might incline their ratings to centrality or

leniency bias in the performance evaluation process and provide highly educated employees with favorable ratings based on their expectations and personal prejudices.

Also important is the fact that people have an inclination to classify themselves into several social categories. Turner (1985) supports that these social categories are defined based on characteristics abstracted from the members. Tajfel and Turner (1979) are referred to social identity theory as a theory for intergroup behavior that leads to personal prejudice, discrimination and such conditions that promote different types of intergroup behavior. People within a group with the same traits, seem to be treated positively compared to those who are outside the group and receive biased behavior. Managers would expect their subordinates to be productive and good performers taking their educational background into account. Social identity theory could explain this personal prejudice while particular behavior towards the group with the same characteristics is associated with stereotyping. Managers with similar educational background like that of their subordinates, might provide lenient evaluations. More into detail, people have the tendency to see themselves as part of a certain group. Hence, they see others as part or not part of the same group as them. They identify their in-group and lead to discrimination against out-groups. The idea of in-group favoritism and discrimination against out-group has been confirmed from several studies. For instance, Lalonde (1992) found in-group bias when he asked a hockey team the reason it performed poorly. Although players claimed that the other group used 'dirtier' techniques, Lalonde observed after a series of matches that this was an in-group bias from the poor-performers. This example enhances the idea that people see their group in a more favorable way than other groups. Based on this, we expect managers with a certain level of education will consider their subordinates with the same or similar background worth to be evaluated in a more favorable or lenient way. In case employees assume that high educated managers evaluate them under subjective schemes of rating, then they will perceive that belonging to the same group with them and having their educational background as a signal for greater earnings and productivity, they will get favorable ratings.

In the present thesis, the research is focused on how the educational level of the rater and that of the rate moderate the relation between the level of subjectivity in appraisal settings and organizational attractiveness. Respondents will be asked about their organizational attractiveness and perceived likelihood of earning an above-average bonus when evaluated under subjective or objective practices.

2.5 Effects of evaluation biases in appraisal settings

One common problem that concerns all the organizations is the agent-principal relationship. The dilemma arising is associated with the fact that the agent is able to act for his own interest rather than that of the principal. Based on this theory (Jensen and Meckling, 1976), “agency costs” are created due to any deviation from principal’s interest. Asymmetric information indicates that the principal is not able to observe the actions of the agent, hence, additional information is useful to enhance the evaluation of the agent’s performance. The aforementioned notion is in accordance with the Informativeness principle (Holmstrom, 1979), stating that any measure reveals information for the level of effort put by the agent, should be included in the contract design. Since it is difficult to identify all aspects of workers’ jobs in an explicit contract using financial measures, subjective performance evaluation enhances the accuracy of the judgment (Prendergast, 1999). Ittner et. al (2003) also examined the weighting of performance measures using a balance scorecard. They found that introducing subjectivity in reward systems allows managers to keep balance of the financial measures placed for performance measurement. However, evidence suggests that subjective factors used for evaluation may lead to favoritism and bias, something that might have an adverse impact on employees’ future incentives. Additionally, when people feel that they are treated unfairly, they will likely act against the firms’ goals and they will be demotivated. Equity theory (Adams, 1963) supports the perception that employees expect to maintain equity between the inputs they contribute to a job and the outputs they receive from it. In that sense, they are motivated to improve performance.

In the present study we hypothesize that educational level might be an additional factor that could lead to performance evaluation biases according to existing knowledge. In a nutshell, as long as employers are usually unaware of an employee’s productive capabilities, they expect the level of education of the latter to contribute in the firm’s value increase. Such a prejudice affects the design of evaluation system when subjectivity appears, while any centrality or leniency bias of the appraisal ratings, affects accordingly the future incentives of employees. Highly educated ones might have fewer incentives to exert more effort, if the ratings include centrality bias, while there will be no apparent discrimination among the highly educated (above-average performers) employees and the low educated ones (below-average performers). Based on equity theory of motivation (Adams, 1963), individuals will react negatively if they feel that the effort they put

forth in a task, isn't rewarded accordingly. In this study, if employees feel that they are not treated fairly, then they might act objectively to firm's desired results. Low educated employees (below-average performers) will consider compressed ratings to be less unfair and they will behave less negatively. Regarding the leniency bias, existing literature supports that individuals have a propensity to over-estimate their abilities relative to their supervisors (Shore and Thornton, 1986, Harris and Schaubroeck, 1988). Consequently, employees are likely to perceive a non-inflated rating as unfair. Akerlof and Yellen (1988) believe that when employees expect that their performance is to receive a higher rating, then they will react negatively against the compensation contract and they might exert less future effort. However, leniency bias in evaluation process might increase perceived fairness and enhance workers' incentives according to Bol (2011).

2.6 Closing Remarks

From the literature review analysis conducted in the present chapter, several conclusions can be drawn. First, employee evaluation process needs to be carefully designed and tested before implemented, as its importance is vital for business's sustainable operation. In order to have a more comprehensive and completed evaluation process, subjective and objective measures should be used. However, when subjectivity is introduced in the appraisal settings, managers need to provide accurate evaluations and not being influenced by personal prejudices and stereotypes. There is previous evidence that supports the existence of factors that leads to biased appraisals and personal prejudices concerning the personal attributes of employees. Based on the theoretical background mentioned before, educational level of employees seems to be a factor that might lead to biased ratings. According to related theories, I hypothesize that this factor determine the organizational attractiveness of employees and the perceived likelihood of earning an above-average bonus. Research hypotheses are developed in the following chapter.

3 RESEARCH HYPOTHESES

3.1 Introduction

Based on the literature review on the subject presented above, specific research hypotheses are developed, which will be analyzed below. In order to test them, it was adopted the setting of [Martins and Parsons \(2007\)](#), based on which the university students of the sample will read a description of a firm and will be asked to answer some questions for the attractiveness of potential employer and the likelihood they perceive of getting positive performance appraisal. This will be done by varying the performance appraisal methods from being subjective and objective as well as the percentage of highly educated managers. Furthermore, the educational level of the employee will change accordingly in order to test for any moderating effect on the relationship between the level of subjectivity introduced in the appraisal setting and the organizational attractiveness.

3.2 Research hypotheses

The research hypotheses of this study are not derived from the assumption that there is educational level bias. We examine if individuals respond to their preferences as they believe such bias to exist. In the present dissertation, it was also found that in general, performance evaluation biases may stem from personal prejudices, concerning the socio-demographic level of participants. Taking also into account that the social identity theory in some cases has been verified, it can be assumed that the educational level of employees may play a significant role during the evaluation process. Evaluators with similar educational background compared to that of the employees, are expected to show leniency bias to employees belong to their group with similar characteristics. Therefore, the hypothesis is as follows:

Hypothesis 1. In cases where the percentage of highly educated supervisors increases and uses subjective performance appraisal methods, highly educated employees evaluated will tend to present increased organizational attractiveness and perceived likelihood of getting above average bonus.

Thus, as the social identity theory setup shows, individuals who are more alike, will tend to show some preference over others who have similar characteristics with them. Therefore, it is expected that educational level as an attribute of the employees will determine the organizational

attractiveness of the employees and the perceived likelihood of earning an above average bonus, especially in subjective evaluation setups. Consequently, Hypothesis 2 is developed:

Hypothesis 2. In cases where the percentage of highly educated supervisors increases and uses subjective performance appraisal methods instead of objective methods, low educated employees evaluated will tend to present decreased organizational attractiveness and perceived likelihood of getting above average bonus.

3.3 Closing Remarks

In this chapter the main research hypotheses were developed which underpin the research objectives of the study. Those research hypotheses were developed based on the theoretical background concerning the evaluation biases derived from educational level discrimination. The next chapter will present the research method used, the sample and the testing variables used to measure our theoretical concepts.

4 DATA AND METHODOLOGY

4.1 Introduction

In the present chapter, data and methods for the empirical analysis are presented which will be conducted to fulfill the research aim and objectives of the present thesis and will test the research hypotheses developed. First, the research design will be analyzed and then the data set and variables used. Then, the data analysis methods will be discussed which will be implemented in the empirical investigation.

4.2 Research design

In order to test the research hypotheses developed, data will be collected from bachelor students, master students as well as PhD candidates enrolled in a university of business and economics in Athens. The students participated voluntarily in the research and did not receive payments or other benefits for their participation. They read the scenarios distributed and answered the questions during the class hours.

The participants in the study will have to complete two different questionnaires. The first aims at measuring the dependent variables of the study, whilst the second aims at comprising manipulation checks and questions which are associated with the control variables and demographics. The participants will have necessarily to fill in the first questionnaire before answering the second one. The latter enhances the validity of results. Respondents first read the company's description and then answer whether they feel attracted from the organization and whether they consider it possible to earn an above average bonus. If manipulation checks were to be put first, this may have confused participants about what to answer in terms of organizational attractiveness and perceived likelihood to earn an above average bonus.

Work locus of control shows whether individuals have control over events which affect them in the workplace (Spector, 1988). Thus, organizational attractiveness and perceived likelihood to earn an above average bonus may not only be affected from the organization itself, but also from the control the individual has in the workplace. It was chosen as an exit questionnaire, because

participants took the “candidate” role, to apply for a certain job before. Thus, as exit questionnaire may provide more reliable outcomes for their Work Locus of Control.

Demographics were put in the end of the questionnaire, because respondents in general may feel uncomfortable to answer personal questions in the beginning of the questionnaire.

In order to measure the dependent variables, the research instrument chosen was the one of [Martins and Parsons \(2007\)](#), adapted for the needs of the present research. This questionnaire was used also from the study of [Maas and Gonzalez \(2010\)](#). The company description, according to the researchers, the participants will read is the following ([Maas and Gonzalez, 2010:10](#)):

“Company X is an international company with multiple businesses worldwide which operates in various manufacturing and service sectors. Its reputation is attributed to the quality offered in terms of professional development and career growth, perspectives for managerial positions and working life balance. The company offers career opportunities in a variety of specialized areas such as finance and accounting, operations, marketing, information technology and e-business etc. The company is hiring talented graduates in several operations in Greece as well as in other markets where it operates.”

In order to measure the performance appraisal style and the likelihood of being evaluated by a highly educated supervisor, [Maas and Gonzalez \(2010\)](#) altered the description [Martins and Parsons \(2007\)](#) gave for those factors. As for the performance appraisal style, the participants regarding the objective conditions will read ([Maas and Gonzalez, 2010: 11](#)):

“Employees who have been hired recently are evaluated every two months by their supervisor. The supervisor uses a set of objective measures defined by the company headquarters in order to provide evaluations. These measures are the same for every employee and the supervisor does not influence the ratings. These ratings will be used for rewarding annual bonus and promotion decisions.”

Furthermore, those participating in the subjective conditions will read ([Maas and Gonzalez, 2010: 11](#)):

“Employees who have been hired recently are evaluated every two months by their supervisor. The supervisor evaluates the performance of each employee using a set of subjective criteria based

on his discretion. These criteria can vary among new employees. The performance ratings will be used for employees' bonus calculation and for taking promotion decisions."

Concerning the likelihood of being evaluated by a highly educated manager, the factor of performance appraisal style was manipulated by changing the percentage of highly educated managers, varying by low (10%), medium (50%) and high (90%). If there is a low setup, the participants will read (Maas and Gonzalez, 2010: 11):

"Currently, around 10 percent of the managers who supervise new employees have Master and PhD education degree."

The research design involves a 2x3x2 within-subject structure, as there are two main performance appraisal styles (objective/subjective), three likelihoods of being evaluated by highly educated managers (10%, 50% or 90%) and the educational level of employees used as the third factor respectively for the present study. Educational level is split into two groups, namely, BSc students regarded as low educated individuals and MSc/PhD ones regarded as highly educated.

The research of Maas and Gonzalez (2010) and to an extent the present research concerns a scenario-based experiment. The choice to base this study to a previously published research adds to the internal validity of the proposed model. The research could not have been conducted at firm-level, because employees and specifically executives from companies were reluctant to provide information towards their evaluations. For this purpose, educational discrimination was chosen to be measured from the scope of potential candidates for a job, which are the bachelor, Master and PhD candidates.

This method has the ability to manipulate independent variables and measure all possible outcomes. Specifically, in the case the research was conducted in specific companies, employees would have to answer on whether they are satisfied with their evaluations in predetermined setups. This does not allow examining other possible cases. In this research, they are examined simultaneously different appraisal styles (objective/subjective) and different percentages of highly-educated supervisors (low, medium, high). In an empirical research at company-level, such a variety of setups may have not been easy to find.

Although this scenario-based experiment has the above advantages, there are although possible constraints which should be highlighted. The first constraint is the use of quantitative methods instead of qualitative ones. Qualitative methods may provide more in-depth examination about the impact of educational level on performance evaluations. As the research is conducted for the first time using a sample from potential employees, it was considered significant to have objective results, which add to the validity of the study. In the interpretation of results the researcher is not involved in contrast to the case of interviews in qualitative frameworks. Moreover, in this scenario-based experiment, there is always the risk for participants to not take seriously the research. This constraint was tackled through adding as more as possible questions to test on whether participants actually understand differences between the setups of objective and subjective evaluations for the same cases (low, medium, high percentage of highly educated managers).

4.3 Data and variables

In order to measure the dependent variables, two ways will be used. The participants will be asked to state how likely it is to earn an above-average bonus in case they were hired by the firm, by stating a 0-100% likelihood. Then, it will be used also the [Martins and Parsons \(2007\)](#) organizational attractiveness questionnaire, which is structured in a six-point Likert scale (1=disagree very much, 6=agree very much). [Spector's \(1988\)](#) questionnaire "Work Locus of Control Scale" will also be used as an exit questionnaire, which involves 8 items in a six-point Likert scale also (1=disagree very much, 6=agree very much). The list of all variables of the model is presented in the following table.

Table 1: Variables involved in the research

Category/Name	Measure	Theoretical values	Range of values
Manipulated independent variables			
Appraisal style	Two-level manipulation, by changing the scenario facts	0=objective evaluation, 1=subjective evaluation	0-1
Percentage of highly educated managers	Changing the scenario facts	0=10%, 1=50%, 2=90%	0-2

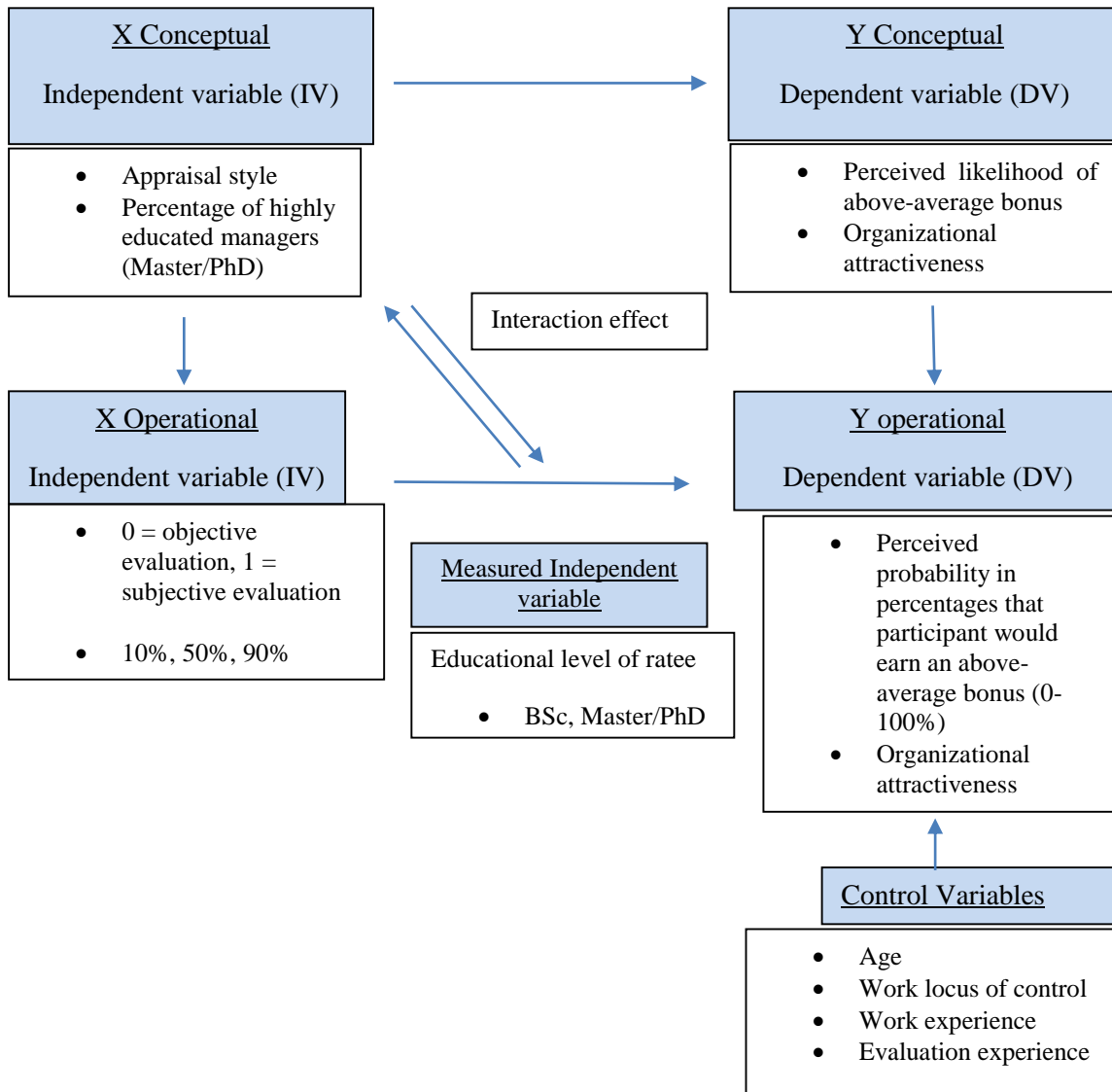
Measured independent variables			
Educational level	Categorical variable which indicates the educational level of the participant	0=Vocational or University education, 1=Master/PhD	0-1
Dependent variables			
Perceived likelihood of above-average bonus	Perceived probability (in percentages) that participant would earn an above-average bonus	0-100	0-100
Organisational attractiveness	Mean score of six items in instrument of Martins and Parsons (2007) measuring organizational attractiveness, scored on a 6-point Likert scale	1--6	1—6
Control Variables			
Age	Age in years		
Work Locus of Control	Mean score of 8 items in the instrument of Spector (1988) measuring work locus of control, scored on a 6-point Likert scale	1--6	1--6
Work experience	Dummy indicating whether participant has ever had a paid job	0=no work experience, 1=work experience	0-1
Evaluation experience	Dummy indicating whether participant has ever been formally evaluated in a work setting	0=no evaluation experience, 1=evaluation experience	0-1

4.4 Predictive Validity Framework

The Predictive Validity Framework of Libby (1981) is presented below, where the relation between the dependent, independent and control variables are clearly depicted. This framework is widely used in experimental accounting research and it is helpful in setting up a research design. The concepts of interest in the present thesis concern the appraisal style, the educational level of

managers, organizational attractiveness, and perceived likelihood of earning an above average bonus. The educational level of employees is used as a moderating variable, that is, the relation between dependent and independent variable is conditional on the value assumed by the moderating variable.

Figure 1- Predictive Validity Framework



4.5 Data analysis

In this section the key research techniques used for the data analysis, are presented.

The first step will be to perform descriptive statistics by presenting the main results of the data collected. Using statistical analysis in SPSS Statistics, summarized data is presented from observations collected, split into two groups of respondents (low educated/highly educated), two forms of appraisal style and three possible percentages of being evaluated by highly educated manager. Then, bivariate correlations will be analyzed in order to test for significant relationship between the variables. Normality of data is an important assumption in parametric testing. Consequently, we need also to test the data for normality.

Last but not least, manipulation checks are conducted for construct validity reason, using post experimental questions. These checks are important in order to understand if the manipulation of independent variable has its intended effect on the participants of the study. Participants will be asked to state in a six-point Likert scale (1=Totally disagree, 6=Totally Agree) the following:

“It was clear to me that the different scenarios were developed under different appraisal styles.”

“I would like to cooperate with a highly-educated manager”

“I would like to be evaluated by a highly-educated manager”

“Being evaluated from a highly-educated manager would have reduced my organizational attractiveness”

“Being evaluated from a highly-educated manager would have reduced the perceived likelihood to earn an above average bonus.”

The inclusion of more than two questions for manipulation checks aimed to examine if the participants actually understood the difference between the cases. For all the questions above, paired t-tests are performed so as to capture statistically significant differences between the two groups of participants (BSc and MSc/PhD). In addition, in order to test the research hypotheses, MANCOVA analysis will be performed, because it allows more than one dependent variable in the model. In this research, the dependent variables are two and therefore this method is appropriate for the analysis. As factors of the model will be used the perceived appraisal style, the

likelihood of being evaluated by a highly educated supervisor, and the educational level of the rate. As control variables in the model will be involved age, work locus of control, work experience and evaluation experience. This way, it will be clear whether the factors of the model affect significantly the dependent variables. Age, along with work experience and evaluation experience can be considered as individual factors, along with Work Locus of Control which may explain variability in organizational attractiveness and perceived likelihood to earn an above average bonus.

4.6 Closing Remarks

In this section, they were presented the data and variables used for the empirical analysis and the analysis of the aforementioned data. The research design follows the scheme of [Maas and Gonzales \(2010\)](#), to university students in a university in Greece. The university students will respond to their organizational attractiveness and perceived likelihood of earning an above-average bonus, so as to obtain fruitful results as for the effect of educational level bias in the performance evaluation procedure. The methodology to analyze those effects is the MANCOVA analysis, which allows for more than one dependent variable in the model.

5 DATA ANALYSIS

5.1 Introduction

In the present chapter the aim is to present data analysis for the proposed model in chapter 4, data and methodology. First, it was essential to implement descriptive statistical analysis. Then, MANCOVA analysis was conducted in order to capture differences in organizational attractiveness and perceived likelihood to earn an above average bonus in all cases. Last but not least, manipulation checks were performed in order to be ensured that participants understood the difference between the different case scenarios.

5.2 Descriptive statistics and correlations

In the present section, table 2 and table 3 present the descriptive statistics on the dependent variables per cell in a three-factor model, while table 4 shows the bivariate correlations among the variables. Table 2 shows the mean values of the dependent variable “organizational attractiveness” under subjective and objective appraisal style between the two groups of participants with different educational background, namely BSc as low educated group and Master/PhD candidates regarded as highly educated group. For the BSc participants, it was expected organizational attractiveness to present similar values under both appraisal styles without any significant difference among different scenarios of percentages of highly-educated managers. Table 2 shows that BSc participants do not actually consider the possibility to be evaluated by highly educated managers as an important factor of evaluation bias under subjective or objective appraisal styles. Concerning the group of highly educated participants (Master/PhD), it was expected similar values of organizational attractiveness under objective method of evaluation in contrast to subjective appraisal style, where according to theory and the hypotheses developed, this group was expected to present increased values when the possibility to be evaluated by highly evaluated managers, increases. However, results show that while the possibility highly educated employees to be evaluated by highly educated managers, increases, the former show decreased organizational attractiveness. Employees with characteristics similar to those of their “group”, seem to believe that evaluation under subjective method will not be favorably biased. In a similar vein, table 2 shows the mean values of the second dependent variable “perceived likelihood to earn an above-

average bonus” between the two groups of participants. Results indicate that low educated employees will show decreased perceived likelihood to earn an above average bonus under objective appraisal style as well as under subjective one, when the possibility to be evaluated by highly-educated managers, increases. Low educated employees seem to believe that when the level of subjectivity introduced in the evaluation schemes allows the evaluation by highly educated managers, then the former might consider potential educational bias at the expense of them. On the contrary, Master/PhD participants do not show big differences in their perceived likelihood to earn an above average bonus regardless of the possible scenarios of being evaluated by highly educated managers.

Table 2- Descriptive Statistics- three factor model: Organisational attractiveness

Mean levels of dependent variables according to the education level of participants and percentage of highly educated managers (three factor models)

Dependent Variable: Organisational Attractiveness

Education level	Appraisal Style	Percentage of highly educated managers	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
BSc	objective	10%	11,756	,429	10,913	12,598
		50%	11,444	,429	10,602	12,287
		90%	10,517	,429	9,675	11,359
	subjective	10%	11,156	,429	10,313	11,998
		50%	10,967	,429	10,125	11,809
		90%	11,806	,429	10,963	12,648
Master/PhD	objective	10%	10,850	,429	10,008	11,692
		50%	11,539	,429	10,697	12,381
		90%	10,883	,508	9,884	11,881
	subjective	10%	11,172	,429	10,330	12,014
		50%	10,983	,429	10,141	11,825
		90%	10,956	,429	10,113	11,798

Table 3-Descriptive Statistics-three factor model: Perceived likelihood of earning an above average bonus

Mean levels of dependent variables according to the education level of participants and percentage of highly educated managers (three factor models)

Education level	Appraisal Style	Percentage of highly educated managers	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Bsc	objective	10%	67,333	1,684	64,025	70,642
		50%	57,556	1,684	54,247	60,864
		90%	49,111	1,684	45,802	52,420
	subjective	10%	37,333	1,684	34,025	40,642
		50%	26,889	1,684	23,580	30,198
		90%	30,444	1,684	27,136	33,753
Master/PhD	objective	10%	64,222	1,684	60,914	67,531
		50%	60,889	1,684	57,580	64,198
		90%	60,625	1,997	56,701	64,549
	subjective	10%	40,444	1,684	37,136	43,753
		50%	31,556	1,684	28,247	34,864
		90%	39,556	1,684	36,247	42,864

Normality of data is an important assumption in parametric testing. Consequently, we need to test the data for normality. SPSS Statistics provides the output of Table 4, which presents two-well known tests of normality, namely the Kolmogorov-Smirnov test and the Shapiro-Wilk test. As the sample of this study is small, Shapiro-Wilk test is appropriate for assessing normality.

Table 4: Tests of Normality

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Organisational attractiveness	,041	527	,031	,992	527	,006
Perceived likelihood to earn an above average bonus	,142	527	,000	,954	527	,000
Age	,150	527	,000	,893	527	,000
Work locus of control	,087	527	,000	,979	527	,000
Evaluation experience	,389	527	,000	,624	527	,000
Work experience	,388	527	,000	,625	527	,000
Percentage of highly educated managers	,227	527	,000	,795	527	,000
Appraisal style	,347	527	,000	,636	527	,000
Education	,347	527	,000	,636	527	,000

a. Lilliefors Significance Correction

Both tests imply that none of the variables is normally distributed, as the p-value is below 0.05 significance level. Thus, the appropriate correlation coefficient is Spearman. The latter does not require variables to be normally distributed. Spearman correlation is a non-parametric test that provides analysis between variables of ordinal measurement levels or ratio scales. Correlations among the variables are presented below.

Table 5 below shows that there are no significant correlations between any of the factors (appraisal style, likelihood of being evaluated by a highly educated manager and educational level of employees). None of these factors is correlated with any of the control variables apart from the educational level of employees that is negatively correlated with work experience. Although the value of 0.113 is too low, it is statistically significant. Employees who invested time for enhancing their educational background and obtaining degrees seem to present lower work experience compared to low educated ones, who probably entered the workplace in an earlier stage of their career. In addition, there are some significant correlations between the independent variables with the dependent ‘perceived likelihood to get an above average bonus’. More into detail, participants

under subjective appraisal style show lower likelihood of getting an above average bonus. The correlation coefficient is -0.738 and it is statistically significant. That result is in accordance also with the fact that as the percentage of highly educated employees increases, results show a negative correlation with the likelihood of getting bonus (-0.194). Furthermore, there is also significant correlation between two control variables indicating that as the age of participants increases, a statistically significant decrease (-0.201) affects the work locus of control. The older employees are, the less patient are to control events affecting them.

Table 5-Bivariate Correlations

All significant correlations are flagged with an asterisk.

Spearman Correlations										
		Organisational attractiveness	Appraisal style	Percentage of highly educated managers	education	Bonus	Work locus of control	Age	Work experience	Evaluation experience
Organisational attractiveness	Correlation Coefficient	1,000	-,002	-,029	-,028	,035	-,033	,008	-,023	,018
	Sig. (2-tailed)		,959	,513	,521	,423	,446	,850	,591	,684
	N	527	527	527	527	527	527	527	527	527
Appraisal style	Correlation Coefficient	-,002	1,000	,031	,025	-,738**	,000	-,005	-,003	-,007
	Sig. (2-tailed)	,959		,478	,562	,000	,993	,915	,953	,881
	N	527	527	527	527	527	527	527	527	527
Percentage of highly educated managers	Correlation Coefficient	-,029	,031	1,000	-,031	-,194**	,005	,006	,003	,008
	Sig. (2-tailed)	,513	,478		,478	,000	,904	,896	,942	,854
	N	527	527	527	527	527	527	527	527	527
education	Correlation Coefficient	-,028	,025	-,031	1,000	,118**	,082	-,043	-,113**	-,063
	Sig. (2-tailed)	,521	,562	,478		,007	,058	,325	,009	,149
	N	527	527	527	527	527	527	527	527	527
bonus	Correlation Coefficient	,035	-,738**	-,194**	,118**	1,000	-,043	,038	,017	-,065
	Sig. (2-tailed)	,423	,000	,000	,007		,329	,384	,704	,134
	N	527	527	527	527	527	527	527	527	527
Work locus of control	Correlation Coefficient	-,033	,000	,005	,082	-,043	1,000	-,201**	-,061	,016
	Sig. (2-tailed)	,446	,993	,904	,058	,329		,000	,164	,718
	N	527	527	527	527	527	527	527	527	527
Age	Correlation Coefficient	,008	-,005	,006	-,043	,038	-,201**	1,000	,083	-,082

	Sig. (2-tailed)	,850	,915	,896	,325	,384	,000		,058	,061
	N	527	527	527	527	527	527	527	527	527
Work experience	Correlation Coefficient	-,023	-,003	,003	-,113**	,017	-,061	,083	1,000	-,103*
	Sig. (2-tailed)	,591	,953	,942	,009	,704	,164	,058		,018
	N	527	527	527	527	527	527	527	527	527
Evaluation experience	Correlation Coefficient	,018	-,007	,008	-,063	-,065	,016	-,082	-,103*	1,000
	Sig. (2-tailed)	,684	,881	,854	,149	,134	,718	,061	,018	
	N	527	527	527	527	527	527	527	527	527

5.3 Manipulation checks

In this section, manipulation checks are conducted for construct validity reason, using post experimental questions. These checks are important in order to understand if the manipulation of independent variable has its intended effect on the participants of the study. Based on the results presented in table below, for the question “It was clear to me that the different scenarios were developed under different appraisal styles” the mean is statistically different from zero ($p=0.000$). The mean is not statistically different from unity ($p=0.83$). Thus, the manipulation test is successful.

Table 6: One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
qb1	38,897	89	,000	,94444	,8962	,9927

One-Sample Test

	Test Value = 1					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
qb1	-2,288	89	,825	-,05556	-,1038	-,0073

For the other questions it was important to see whether the means are statistically different between BSc and Master/PhD participants.

Table 7: Group Statistics

	education	N	Mean	Std. Deviation	Std. Error Mean
qb2	Bsc	45	,1333	,34378	,05125
	Master/Phd	45	,9111	,28780	,04290
qb3	Bsc	45	,1778	,38665	,05764
	Master/Phd	45	,8667	,34378	,05125
qb4	Bsc	45	,5778	,49949	,07446
	Master/Phd	45	,2444	,43461	,06479
qb5	Bsc	45	,5778	,49949	,07446
	Master/Phd	45	,1333	,34378	,05125

Table 8 below presents that in all cases, means are statistically different between the two groups, as p-values are below the 0.05 significance level. Moreover, as means show, Master and PhD participants are more willing to cooperate and be evaluated from highly-educated managers. For BSc participants, cooperation and evaluation by a highly educated manager would have reduced organizational attractiveness and perceived likelihood to get an above average bonus more than in Master/PhD participants.

Table 8: Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means								
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference			
								Lower	Upper		
qb2	1,799	,183	-11,637	88	,000	-,77778	,06683	-,91060	-,64496		
Equal variances assumed											
	1,799	,183	-11,637	85,360	,000	-,77778	,06683	-,91066	-,64490		
Equal variances not assumed											
qb3	1,343	,250	-8,932	88	,000	-,68889	,07713	-,84216	-,53562		
Equal variances assumed											
	1,343	,250	-8,932	86,812	,000	-,68889	,07713	-,84219	-,53559		
Equal variances not assumed											
qb4	11,414	,001	3,377	88	,001	,33333	,09870	,13719	,52948		
Equal variances assumed											
	11,414	,001	3,377	86,350	,001	,33333	,09870	,13713	,52953		
Equal variances not assumed											
qb5	42,639	,000	4,917	88	,000	,44444	,09039	,26481	,62408		
Equal variances assumed											
	42,639	,000	4,917	78,045	,000	,44444	,09039	,26449	,62440		
Equal variances not assumed											

5.4 MANCOVA analysis

In the present section the results of MANCOVA analysis are presented. The dependent variables are two: Organizational attractiveness and perceived likelihood to earn an above average bonus. The fixed factors are the manipulated independent variables, that is, the appraisal style and the percentage of highly educated supervisors. Covariates are the measured independent variable, the educational level of participants, as well as the control variables, age of participants, evaluation experience, working experience and work locus of control. The results of the statistically significant coefficients are presented below with the full output of MANCOVA in table 9.

Table 9: MANCOVA estimations

All significant impacts have p-value (sig. column) below the 0.05 significance level.

Parameter Estimates							
Dependent Variable		B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Organisational attractiveness	Intercept	11.914	1.149	10.366	.000	9.656	14.172
	[appraisal_style=,00] * [high_educ=,00] * educ_all	-.396	.512	-.773	.440	-1.403	.610
	[appraisal_style=,00] * [high_educ=1,00] * educ_all	.267	.512	.522	.602	-.739	1.274
	[appraisal_style=,00] * [high_educ=2,00] * educ_all	-.395	.556	-.711	.477	-1.487	.696
	[appraisal_style=1,00] * [high_educ=,00] * educ_all	-.486	.512	-.948	.344	-1.492	.521
	[appraisal_style=1,00] * [high_educ=1,00] * educ_all	-.149	.512	-.291	.771	-1.155	.858
	[appraisal_style=1,00] * [high_educ=2,00] * educ_all	-.170	.514	-.331	.741	-1.181	.840
	[appraisal_style=,00] * educ_all	0 ^a					
	[appraisal_style=1,00] * educ_all	0 ^a					
	[high_educ=,00] * educ_all	0 ^a					
	[high_educ=1,00] * educ_all	0 ^a					
	[high_educ=2,00] * educ_all	0 ^a					
	educ_all	0 ^a					
	work_locus	-.122	.197	-.618	.537	-.509	.265
	age_all	.022	.096	.230	.818	-.166	.210

	work_exper_all	-.137	.260	-.527	.598	-.648	.374
	eval_exper_all	.072	.259	.276	.783	-.438	.581
	[appraisal_style=,00]	-.164	.792	-.207	.836	-1.720	1.392
	[appraisal_style=1,00]	0 ^a					
	[high_educ=,00]	.452	.973	.465	.642	-1.460	2.365
	[high_educ=1,00]	-.298	.973	-.306	.760	-2.210	1.615
	[high_educ=2,00]	0 ^a					
bonus	Intercept	18.641	4.489	4.153	.000	9.823	27.459
	[appraisal_style=,00] * [high_educ=,00] * educ_all	-.661	2.001	-.330	.741	-4.592	3.270
	[appraisal_style=,00] * [high_educ=1,00] * educ_all	4.517	2.001	2.258	.024	.586	8.448
	[appraisal_style=,00] * [high_educ=2,00] * educ_all	7.719	2.170	3.557	.000	3.455	11.983
	[appraisal_style=1,00] * [high_educ=,00] * educ_all	.801	2.001	.400	.689	-3.130	4.732
	[appraisal_style=1,00] * [high_educ=1,00] * educ_all	3.624	2.001	1.811	.071	-.308	7.555
	[appraisal_style=1,00] * [high_educ=2,00] * educ_all	12.684	2.009	6.312	.000	8.736	16.631
	[appraisal_style=,00] * educ_all	0 ^a					
	[appraisal_style=1,00] * educ_all	0 ^a					
	[high_educ=,00] * educ_all	0 ^a					
	[high_educ=1,00] * educ_all	0 ^a					
	[high_educ=2,00] * educ_all	0 ^a					
	educ_all	0 ^a					
	work_locus	-1.060	.770	-1.378	.169	-2.572	.451
	age_all	.434	.374	1.161	.246	-.301	1.169
	work_exper_all	.534	1.016	.525	.600	-1.463	2.530
	eval_exper_all	-2.162	1.013	-2.135	.033	-4.152	-.173
	[appraisal_style=,00]	28.289	3.094	9.143	.000	22.211	34.367
	[appraisal_style=1,00]	0 ^a					
	[high_educ=,00]	22.687	3.802	5.968	.000	15.218	30.155
	[high_educ=1,00]	8.575	3.802	2.256	.025	1.107	16.044
	[high_educ=2,00]	0 ^a					

a. This parameter is set to zero because it is redundant.

The results in the table above show that there is no statistically significant impact on organizational attractiveness deriving from the independent manipulated variables (appraisal style, percentage of highly educated managers) or the measured independent variable (educational level of employees), not even from the simultaneous effect of the percentage of highly educated managers and performance appraisal scheme. As for the perceived likelihood to earn an above average bonus, the independent manipulated variable 'appraisal style', presents a positive and statistically significant effect on the perceived likelihood to earn an above average bonus. This implies that employees believe that getting an above average bonus is more possible to happen under objective appraisal settings than subjective ones. This explanation is also in accordance with the percentage of highly educated managers, indicating that lower possibility, employees to be evaluated by highly educated managers is associated with positive and statistically significant result on the perceived likelihood to get an above average bonus (22.68 when the percentage of highly educated employees is 10% and 8.57 when the percentage of highly educated employees is 50%). Also, the combination of objective appraisal style, medium percentage of highly educated managers and the educational level of employees seem to explain any variability on the perceived likelihood to earn an above average bonus (7.719). Considerably important seems to be also the combination of subjective appraisal style along with the medium percentage of highly educated managers and the educational level of employees. This suggests that when the educational level increases and the possibility is medium (50%), employees to be evaluated under subjective appraisal style by highly educated managers, has a positive and significant impact on the perceived likelihood to earn an above average bonus.

6 CONCLUSION

6.1 Discussion

In the present section, the outcomes of the research are explained and relevant literature review findings are compared with the existing ones. First, it is important to note that the outcomes of the research showed that educational level is considered to be a determinant factor of evaluation biases for both groups of participants in the study. Low educated employees present decreased organizational attractiveness and perceived likelihood to earn an above average bonus under different appraisal styles, when the percentage of being evaluated by highly educated managers, increase. This is in accordance with Hypothesis 2 developed in previous section. However, highly educated employees present decreased organizational attractiveness and perceived likelihood to earn an above average bonus under both appraisal styles, when the percentage of being evaluated by highly educated managers, increase. This is in contrast with Hypothesis 1 developed, indicating no perceived educational level bias.

In a nutshell, results of the present study are mixed. Educational level bias does not seem to account for different values in organizational attractiveness. More into detail, variation in organizational attractiveness cannot be explained from different appraisal style or different percentage of highly educated managers, while none of the variables has significant impact on it. On the other hand, variation in perceived likelihood to earn an above average bonus can be derived from different appraisal style, as well as from the simultaneous effect of different appraisal style, percentage of highly educated managers and the educational level of employees. MANCOVA results show significant impact on perceived likelihood to earn an above average bonus when an interaction effect of objective appraisal style, low and medium percentage of highly educated managers exists, as well as under subjective appraisal schemes when the percentage of highly educated managers is medium.

Consequently, the results of the present thesis are not in alignment with previous literature concerning the objective and subjective performance evaluation setups. Low educated employees seem to believe that the level of subjectivity introduced in appraisal settings leads to decreased perceived likelihood of earning an above average bonus when the percentage of highly educated managers increase. Employees might believe that educational level discrimination will be apparent

under subjective appraisal schemes and they might not be favorably evaluated. Social identity theory applies in this case and participants consider that supervisors not belong to their “group”, are not going to evaluate them in a favorable way. However, what runs counter to theory, is the fact that highly educated employees were expected to show increased organizational attractiveness when evaluated by highly educated managers under subjective evaluation settings. In this case, employees respond to organizational attractiveness and perceived likelihood to earn an above average bonus as they perceive that educational level bias does not play a significant role in the evaluation settings or that being evaluated by highly educated manager does not imply favorable ratings. Social identity theory does not apply in this case, consequently, Hypothesis 1 developed, is rejected.

6.2 Conclusions

In the present thesis the aim was to examine employees’ perceived likelihood of earning an above-average bonus and their ratings of organizational attractiveness. For this case, a scenario-based experiment was conducted, addressed to 90 Greek university, Master and PhD students. Employees’ responses to the case scenarios showed that educational level is considered to be a determinant factor for evaluation biases. Low educated employees seem to believe that educational level discrimination will affect their evaluation in a stricter way when evaluated by highly educated managers, showing decreased perceived likelihood to earn an above average bonus. Highly educated employees on the other hand seem to believe that being evaluated also by highly educated managers, does not imply a favorable rating outcome regardless of the fact that they belong to the same “group”.

Based on the results, in this point research hypotheses developed can be tested for their validity. The outcomes of the hypotheses are presented in the following table:

Table 10: Outcomes of research hypotheses

Hypothesis	Outcome
1. In cases where the percentage of highly educated supervisors increases and uses subjective performance appraisal methods, highly educated employees evaluated will tend to present increased organizational attractiveness and perceived likelihood of getting above average bonus.	Rejected
2. In cases where the percentage of highly educated supervisors increases and uses subjective performance appraisal methods instead of objective methods, low educated employees evaluated will tend to present decreased organizational attractiveness and perceived likelihood of getting above average bonus.	Accepted

6.3 Limitations

In this point, it is important to discuss the limitations which emerged from the empirical research. First, the sample of the participants was based on specific criteria, but it was not random. Since students were reluctant to participate in a scenario-based experiment, due to the time they needed to read the descriptions, the final sample was not rather a convenient sample. Therefore, the results of the thesis cannot be inferred to the total population examined, which are the university, Master and PhD candidates. Moreover, scenario-based experiments may not reflect accurately the situation in the labor market from the part of the evaluators. Thus, although the results give a picture of how potential employees might respond to different setups, there is no information on how firms implement performance evaluations. Last but not least, the participants are students of managerial-related studies. This suggests that they possibly know the theory behind discrimination based on socio-demographic characteristics in the labor market. Thus, their answers may be intended to show that their educational background does not influence the process despite the level of subjectivity introduced. If students from other fields were involved in the sample outcomes may have been differentiated. Maybe in this case participants' answers would not have been purposeful, but rather reflect their actual beliefs.

Last but not least, although quantitative methods provide objective data, they do not answer deeper questions, as “why” it matters the percentage of highly educated supervisors and the level of subjectivity introduced in the evaluation settings.

6.4 Recommendations for further research

Based on the aforementioned limitations of the study, future research will be interesting to be conducted with a scenario-based experiment in university, Master and PhD candidates for an existing company, not a fictional one, which uses specific methods to evaluate its employees. Those methods can be retrieved from interviews with executives in the company. Moreover, two additional semi-structured interviews with participants may be conducted so as to examine in depth the reason why they present increased/decreased organizational attractiveness and perceived likelihood to get an above average bonus.

To overcome difficulties concerning scenario-based experiments, a study to employees in an existing company could be an interesting example. Again, executives of the company may be interviewed to provide information concerning evaluation methods applied. Employees may answer questionnaires and be interviewed to show their satisfaction towards their benefits, payments and rewards they receive based on their educational level.

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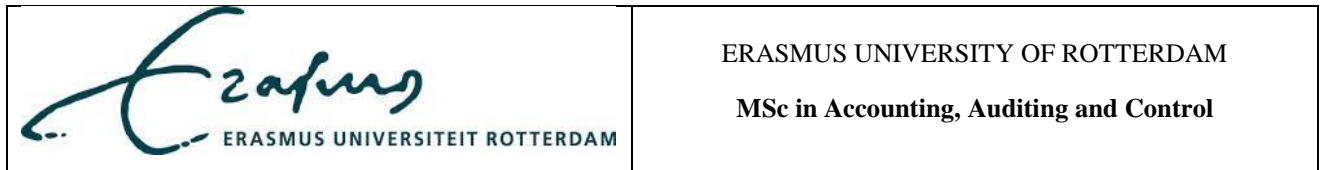
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APPENDIX

Questionnaire



QUESTIONNAIRE

The present research is part of my Master programme in Erasmus School of Economics. Your answers will be based on what you actually believe and how would you respond under specific circumstances when it comes to evaluation procedure by a potential employer. The sample selection is random and your answers will remain confidential and anonymous.

PART A – PERCEIVED LIKELIHOOD OF EARNING AN ABOVE-AVERAGE BONUS AND ORGANISATIONAL ATTRACTIVENESS

A. Please read the following description of the company and answer the set of questions below:

“Company X is an international company with multiple businesses worldwide which operates in various manufacturing and service sectors. Its reputation is attributed to the quality offered in terms of professional development and career growth, perspectives for managerial positions and working life balance. The company provides career opportunities in a variety of specialized areas such as finance and accounting, operations, marketing, information technology and e-business etc. The company is hiring talented graduates in several operations in Greece as well as in other markets where it operates. Employees who have been hired recently are evaluated every two months by their supervisor. The supervisor uses a set of **objective** measures defined by the company’s headquarters in order to provide evaluations. These measures are the same for every employee and the supervisor does not influence the ratings. These ratings will be used for rewarding annual bonus and promotion decisions. Currently, around **10 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would really like to work for this company

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

4. I feel I know enough about this company to no longer be interested in it

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from 0-100%?

.....

B. Please read the following description and answer the following set of questions:

“For the same company, imagine now that all recently hired employees are evaluated every two months by their direct supervisor. The supervisor calculates a performance rating for each employee under his/her supervision, using a set of **objective** criteria, which are determined by the local company headquarters. These criteria are the same for each new employee and the supervisor has no direct influence on the performance ratings of the new employees. The

performance ratings will be used to determine each employee's annual bonus and to make promotion decisions. Currently, around **50 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would really like to work for this company

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

4. I feel I know enough about this company to no longer be interested in it

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately

Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from -100%?

.....

C. Please read the following description and answer the following set of questions:

“For the same company, imagine now that currently around **90 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would really like to work for this company

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

4. I feel I know enough about this company to no longer be interested in it

- Disagree very much
- Disagree moderately

- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from 0 -100%?

.....

D. Please read the following description and answer the following set of questions:

“For the same company, imagine now that all recently hired employees are evaluated every two months by their direct supervisor, who evaluates the performance of each employee under his/her supervision, using **a set of self-chosen subjective** criteria. These criteria can vary across the new employees and the supervisors have **much discretion** in determining the overall performance ratings. The performance ratings will be used to determine each employee’s annual bonus and to make promotion decisions. Currently, around **10 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would really like to work for this company

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly

- Agree moderately
- Agree very much

4. I feel I know enough about this company to no longer be interested in it

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from -100%?

.....

E. Please answer the following description and answer the set of questions:

“For the same company, the supervisor evaluates the performance of each employee under his/her supervision, using a set of self-chosen subjective criteria. In this case, currently around **50 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would really like to work for this company

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

4. I feel I know enough about this company to no longer be interested in it

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from -100%?

.....

F. Please read the following description and answer the following set of questions:

“For the same company, currently, around **90 percent of the managers** who supervise new employees have Master and PhD education degree”

1. I am very interested in pursuing my application with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

2. I would be very willing to accept a job with this company if offered one

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly

Agree moderately

Agree very much

3. I would really like to work for this company

Disagree very much

Disagree moderately

Disagree slightly

Agree slightly

Agree moderately

Agree very much

4. I feel I know enough about this company to no longer be interested in it

Disagree very much

Disagree moderately

Disagree slightly

Agree slightly

Agree moderately

Agree very much

5. How likely it is to earn an above-average bonus in this company in a scale from -100%?

.....

PART B – WORK LOCUS OF CONTROL

Work Locus of Control Scale - 8							
The following questions concern your beliefs about jobs in general. They do not refer only to your present job.							
		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1. On most jobs, people are able to achieve whatever they set out to achieve	1	2	3	4	5	6	
2. If you know what kind of job you want to do, you can find a job that gives it to you	1	2	3	4	5	6	
3. Being lucky to find a job you want to do, is an important factor	1	2	3	4	5	6	
4. Good fortune determines the promotions in a job	1	2	3	4	5	6	
5. Employess who perform well, they get usually promoted	1	2	3	4	5	6	
6. Being an outstanding employee on most jobs is a matter of luck	1	2	3	4	5	6	
7. When people perform well in their jobs, they generally get rewarded	1	2	3	4	5	6	
8. Luck is the main factor that distinguishes people who make a lot of money and those who make a little	1	2	3	4	5	6	

PART C– GENERAL INFORMATION

1. **Gender** Male Female

2. **Age**

18-20

21-23

24-26

27-29

30 and over

3. **Educational level:**

Vocational or University education

Master /PhD

4. **Do you have work experience?**

Yes

No

5. **Do you have evaluation experience?**

Yes

No

PART D– POST EXPERIMENTAL QUESTIONNAIRE

1. **It was clear to me that the different scenarios were developed under different appraisal styles.**

Disagree very much

Disagree moderately

Disagree slightly

Agree slightly

Agree moderately

Agree very much

2. I would like to cooperate with a highly-educated manager.

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

3. I would like to be evaluated from a highly-educated manager.

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

4. Being evaluated by a highly-educated manager would have reduced my organizational attractiveness.

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much

5. Being evaluated by a highly-educated manager would have reduced the perceived likelihood to earn an above-average bonus.

- Disagree very much
- Disagree moderately
- Disagree slightly
- Agree slightly
- Agree moderately
- Agree very much