This study compared the salary differentials of college chief executive officers (CEOs), college presidents, and the five highest-paid employees at 190 private colleges and universities. The pay differential in total compensation for CEOs and the highest-paid professor at liberal arts institution was significantly higher than that at doctorate-granting institutions, which in turn was higher than that at research institutions. The pattern of pay differentials was reversed for the highest-paid and second highest-paid employee at research institutions and at liberal arts institutions. Other differentials failed to reach significance across institutions. Implications concerning institutions' internal consistency and external competitiveness are discussed. (Contains 34 references.) (Author/MSE)
Pay Differentials

Running head: PAY DIFFERENTIALS

Pay Differentials Revisited: CEOs and the Five Highest-Paid Employees at Private Colleges and Universities

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Abstract

In this paper, we examined pay differentials of CEOs and the five highest-paid employees at 190 private colleges and universities. The pay differential of the total compensation for CEOs and the highest-paid professor at Liberal-Arts Institutions (1.35) was significantly higher than that at Doctorate-Granting I Institutions (.92) which, in turn, was higher than that at Research Institutions (.75). The pattern of pay differentials was reversed for the highest-paid and the second highest-paid employee at Research Institutions (1.23) and those at Liberal-Arts Institutions (1.13). Other differentials failed to reach significance across different institutions. Implications related to internal consistency and external competitiveness were discussed.
Pay Differentials Revisited: CEOs and the Five Highest-Paid Employees at Private Colleges and Universities

Pay and benefit figures related to athletes, entertainers, and corporate executives have been widely publicized and available to the public (e.g., Gomez-Mejia & Balkin, 1992a, 1992b; Howard & Miller, 1993; Tosi & Gomez-Mejia, 1994). American people have been fascinated and obsessed with other people’s pay, chief executive officers’ (CEOs’) pay in particular.

Recently, CEO pay at U.S. corporations and non-profit organizations has created a round of headlines and has caught many people’s attention (Bongiorno & Hof, 1994; Business Week, 1993). American CEOs are making more than ever (Crystal, 1990). Human resource managers in our society are increasingly aware of the importance of distributive and procedural justice, the pay-performance link, and pay differentials (Cropanzano & Folger, 1991; Greenberg, 1987; Milkovich & Newman, 1993; Tang, in press; Tang, Tang, & Tang, 1996; Tang, Dozier, Tang, & Tang, 1996).

On the one hand, CEO pay has received more coverage than it deserves because there are very few CEOs in the society and their pay accounts for only a small share of corporations’ total labor costs. On the other hand, CEOs’ pay is significantly higher than that of an average worker. CEOs have a disproportionate ability to influence organization performance (Halebian & Finkelstein, 1993). Moreover, CEOs pay can help set the tone or culture of the organization (Lawler, 1981; Noe, Hollenbeck, Gerhart, & Wright, 1994).
Pay Differential

The present paper examines the pay differentials of CEOs and the five highest-paid employees at 190 private colleges and universities. Irrespective of job content or function, the pay differential is defined as the salary at one level divided by the salary at the next lower level. In theory, pay differential, a very important aspect of job evaluation, is a reflection of the relative worth of these positions to the organization (Mahoney, 1979; Simon, 1957).

Pay differential is related to the different "jobs" within the pay structure and should not be related to employees or "job incumbents". That is, the focus is on the relative pay of these positions. However, top-level executives' jobs are very unique in an organization. Their special contributions to the organization depend on their special knowledge, skills, and abilities. Therefore, the pay of top-level jobs will be somewhat related to these jobs and the job incumbents as individuals.

For people in the general public, it is also very common to compare the pay of the CEO and that of an average worker in an organization and examine a different pay differential (Tang, Dozier, et al., 1996). We will discuss examples of pay differentials later in this paper.

The compensation of the CEO, C, can be expressed as $C = A b^{L-1}$, where $A$ is the salary for management trainees, $b$ is the pay differential between hierarchical levels, and $L$ is the number of levels in the organization (Mahoney, 1979). It has been reported
that the ratios for the chief executives and the second highest paid position were 1.37 to 1.41, whereas the ratios for the second and the third position were 1.21 to 1.23 (Fox, 1974; Patton, 1951). Similar ratios have been reported by Mahoney (1979) using Kuethe and Levenson's (1964) data (1.71 and 1.47), Mahoney (1979) (1.56 and 1.37 for business students and 1.53 and 1.31 for compensation administrators), Finkin (1979) (1.39 and 1.38), and Jaques (1965) (1.33 for management and 1.25 for entry level).

Mahoney (1979) stated that these pay differential ratios vary somewhat from one industry to another, but are reported to be reasonably consistent over time, indicative of customary relationship which persist and which are reflective of industry characteristics. In the present paper, pay differentials will be examined.

The Matthew Effect. Gabris and Mitchell (1988) borrow a quote from the Apostle Matthew in the Bible (Matthew 13: 12) and suggested the Matthew Effect in compensation: "For to him who has shall be given, and he shall have abundance; but from him who does not have, even that which he has shall be taken away". According to the Matthew Effect, merit increases are frequent and plentiful for good performers. But, poor to average performers suffer because money is taken from them to pay large merit increases to the good performers" (Heneman, 1992, p. 55).

Recently, Tang (in press) examined pay differentials and tested the Matthew Effect using Mahoney's (1979) hypothetical organization chart with six positions. These six positions were
arranged with three echelons (levels). Further, people’s attitudes toward money as measured by the Money Ethic Scale (MES) (Tang, 1992, 1993, 1995; Tang & Gilbert, 1995; Tang & Kim, 1995) were also examined. Tang (in press) found that men with high Money Ethic endorsement allocated significantly more money to the highest position and significantly less money to the lowest positions than did those with low Money Ethic endorsement.

More specifically, the pay differential for the highest and the lowest (third level) positions is 2.96 for men with high Money Ethic and is 2.04 for men with low Money Ethic. Further, the pay differential for the highest and the second level positions is 1.99 for the former group and is 1.64 for the latter group. However, women’s allocations of money were not affected by their endorsement of the Money Ethic. Thus, men’s allocation of position worth supports the Matthew Effect.

**CEOs Pay at Private Colleges and Universities**

Recently, salaries of the university CEOs (university presidents) and the five highest-paid employees (professors) at 190 private colleges have been revealed in *Chronicle of Higher Education* (Lederman, 1993a, 1993b; The Chronicle of Higher Education, 1993b). Colleges and universities are non-profit organizations. However, presidents are running universities that are becoming more complex and increasingly business-oriented.

**The Highest-Paid University CEOs and Professors**

In 1991, Daniel L. Ritchie, Chancellor at the University of Denver, was paid $1, whereas Joe B. Wyatt, chief executive of
Pay Differentials

Vanderbilt University was paid $395,725 (The Chronicle of Higher Education, 1993b). These two people were the lowest and highest paid CEOs in the survey. When benefits were combined in the data analysis, John Silber, president of Boston University, topped the list. John Silber's total compensation was $414,715, while Joe B. Wyatt's was $410,916.

Average Professor's Pay. According to The Chronicle of Higher Education (1993, April 14), the 1992-93 average nine-month pay for full professor, associate professor, assistant professor, and instructor at 1,900 institutions in the U.S., excluding those in medical schools (The Chronicle of Higher Education, 1993a). On the basis of salary data related to full-time instructional staff at Doctoral, Comprehensive, and Baccalaureate Institutions, we "estimated" that the average nine-month salary for all professors in the United States was about $43,182 a year (about $39,347, if we include instructors).

CEOs' Pay in Business. According to Business Week (1993), the pay for average workers, teachers, and engineers was $24,411, $34,098, and $58,240, respectively. In 1992, the highest-paid CEO was Thomas F. First, Jr., chairman and CEO of HCA-Hospital Corp. of America who earned $127 million (Business Week, 1993). Using these aforementioned average pay figures as the reference points, Mr. First's total compensation was roughly 5,203 times the salary of the average worker, 3,725 times the salary of the average teacher, 2,181 times the salary of the average engineer, and 2,779 time the salary of the average professor.
Further, the highest-paid CEO in 1993 was Michael D. Eisner, chairman of Walt Disney Co. He made $203,010,590. "It adds up to more than a half-million dollars a day, everyday, for an entire year. Or $78,081 an hour" (Bongiorno & Hof, 1994, p. 52).

On the basis of these data, if we use the average pay of workers, teachers, engineers, and professors as reference points, then, John Silber’s pay is only 17 times that of the average American worker, 12 times that of the average teacher, 7 times that of the average engineer, and 9.6 times that of the average professor. These ratios are significantly lower than that in industry, 5,203 to 1. The ratio for the highest-paid CEO in a Corporation (Thomas F. First, $127 million) and the highest-paid CEO in a private university (John Silber, $414,715) is about 306 to 1. The ratio between Michael D. Eisner ($203,010,590) and John Silber is about 490 to 1. The ratio between Michael D. Eisner and the average professor is about 4,701 to 1.

The highest-paid individual, not a university CEO, in the whole survey was Wayne Isom, a professor of cardiothoracic surgery at Cornell University. Dr. Wayne Isom made $1,770,730 in pay and benefits in the 1990-1991 academic year. It appears that Dr. Isom’s pay was 72 times the pay of the average worker, 52 times the pay of the average teacher, 30 times the pay of the average engineer, and 41 times the pay of the average professor. In fact, there were six professors, all in the medical profession, who made more than $1 million in 1991. Further, for the highest-paid CEO in a Corporation (Thomas F. First) and the highest-paid professor in
private university (Dr. Wayne Isom), the pay ratio is about 71 to 1. The ratio between Michael D. Eisner and Dr. Wayne Isom is about 115 to 1. (Please notice that some of comparisons may not be fair because the salary data were collected in different years.)

The Present Study

The present study will examine more closely the pay, benefits, and the total compensation (pay and benefits combined) of university presidents and the five highest-paid professors at 190 private colleges. The pay differentials of the university CEO and the five highest-paid employees will be examined also.

It should be pointed out that the pay differentials examined in the present study are different from those examined in the literature. That is, the CEOs and the five highest-paid employees investigated in this study do not have the identical supervisor-subordinate relationship across all different universities. The highest-paid employee can be a vice president of academic affairs who works under the supervision of the university president, or a professor of cardiothoracic surgery who do not work directly under the university CEO. We will try to answer the following questions: How much is CEOs' pay at private colleges and universities? Are there differences among Research, Doctorate-Granting I, and Liberal-Arts Institutions? How is CEO pay related to the highest-paid professors (pay differential) in these institutions?

Types of Institutions

In industry, the size of the organization, ability to pay, and type of industry are associated with CEO pay. It has been shown in
the literature that "labor-intensive industries, such as education and services, tend to be lower paying than are industries whose technologies are less labor-intensive, such as petroleum and pharmaceuticals" (Milkovich & Newman, 1993, p. 207). Further, large organizations tend to pay more than small ones (Milkovich & Newman, 1993).

In this investigation, three types of educational institutions will be examined according to the Carnegie Foundation for the Advancement of Teaching: Research Institutions, Doctorate-Granting I Institutions, and Liberal-Arts Institutions. Tang et al. (1996) found that university expenditures (one of the many proxies to measure the "size" of the university operations) at Research Institutions ($716.5 million) are significantly higher than that at Doctorate-Granting I Institutions ($190.1 million) which, in turn, are significantly higher than that at Liberal-Arts Institutions ($35.2 million). Research Institutions tend to have higher SAT scores for incoming freshman students than other types of universities (Tang et al., 1996). Thus, they may have higher abilities to attract and retain star professors and students than other universities.

Moreover, those with larger expenditures will be able to pay more than those with smaller ones (i.e., ability to pay). Market factors probably are the driving force for the possible compensation differences among these different types of institutions. Very high salaries have been paid to highly skilled
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Faculty of Liberal-Arts Institutions may come from fields which have a much higher supply than the demand for their services. Therefore, without large science and professional programs such as medical school, law school, business school, etc., Liberal-Arts Institutions are staffed by more professors of English, history, and social sciences than is the case in large Research Institutions.

Thus, Research Institutions, Doctorate-Granting Institutions, and Liberal-Arts Institutions may be considered different "industries" within the educational systems of higher education. Due to these differences, Research Institutions will be able to attract and retain star performers, whereas Liberal-Arts Institution will not. Due to star performers at major research institutions, it is expected that the pay differentials at Research Institutions will be different from that at Liberal-Arts Institutions (e.g., industry differences). This will be true only when the "highest-paid employee" (Level 2) is involved in the calculation of two pay differentials: Level 1/Level 2 and Level 2/Level 3 (i.e., L1/L2 and L2/L3).

Hypothesis 1: The pay differentials (L1/L2 and L2/L3) at Research Institutions will be different from that at Liberal-Arts Institutions.
Pay Differentials

Method

Compensation Data

Research data of the present study were obtained from The Chronicle of Higher Education (1993b) which collected information from a tax document known as Form 990, submitted to the Internal Revenue Service each year by all private non-profit institutions, i.e., every private institution classified as Research I and II, Doctorate-Granting I, and Liberal-Arts I by the Carnegie Foundation for the Advancement of Teaching. This tax document does not always provide a complete accounting of what university president and officials earn, but it is the best measure available to the public.

Pay Data. The following data were presented in that report: 1991-92 expenditures, pay and benefits of CEO (labeled as L1, Level 1, in the present study) and five highest-paid employees (labeled as L2, L3, L4, L5, and L6). In this study, "pay" is defined as all salaries, fees, bonuses, and severance payments that each person received, whereas "benefits" include all welfare benefit programs, such as health and pension plans. Total compensation consists of pay and benefits.

Pay Differentials. Further, the pay differentials of pay, benefits, and the total compensation were examined. In order to present the calculations clearly, the following symbols were used: the pay differential L1/L2 represented that CEO's pay (L1) was divided by that of the highest-paid employee (L2). Similar calculations were done concerning their benefits and total compensation.
Types of Institutions. There were 33 Research Institutions, 20 Doctorate-Granting I Institutions, and 137 Liberal-Arts Institutions in this study. The three types of institutions were used as the major classification variable in separate one-way analyses of variance (ANOVAs).

Results

Pay Data Among Types of Institutions

University CEOs. University CEOs’ pay differences among Research Institutions, Doctorate-Granting I Institutions, and Liberal-Arts Institutions were examined using one-way analysis of variance (ANOVA). Table 1 shows that the differences among Research, Doctorate-Granting I, and Liberal-Arts Institutions were significant ($F(2, 186) = 59.10, p = .0002$). According to the Tukey-HSD procedure, the average pay of university CEOs at Research Institutions ($234,500.8$) was significantly higher than those at Doctorate-Granting I Institutions ($140,477.4$) and Liberal-Arts Institutions ($125,273.2$) ($ps < .05$). No significant difference was found between the Doctorate and Liberal-Arts Institutions.

Insert Tables 1, 2, and 3 about here

Table 2 shows the results concerning the differences on benefits. University CEOs at Research Institutions were paid significantly more ($42,553.6$) than those at Doctorate-Granting I Institutions ($14,854.2$) and Liberal-Arts Institutions ($19,994.8$). When pay and benefits were combined (Table 3), again the same
pattern of results was found: CEOs at Research Institutions were paid more ($277,054.4) than those at Doctorate-Granting I Institutions ($162,725.1) and Liberal-Arts Institutions ($144,911.3).

The Highest-Paid Employees. When the five highest-paid employees at these 190 private colleges were examined, basically the same pattern of results was found. Thus, CEOs and the five highest-paid employees at Research Institutions have earned more money than their counterparts.

Pay Differentials

The main purpose of the present study was to examine the pay differentials between two adjacent job levels. Pay, benefits, and the total compensation of university CEOs were compared with those of the highest-paid employees at these 190 colleges. Results are presented in Tables 4, 5, and 6.

CEO and the Highest-Paid Employee (L1/L2)

Pay. The results of one-way ANOVAs show that the pay differential for CEOs and the highest-paid employee across three types of institutions reached significance ($F (2, 185) = 53.87, p = .0001). Due to the star performers at major Research Institutions, the average CEOs' pay was only 73 percent of the highest-paid employees ($L_1/L_2 = .73$). That is, the university presidents made a lot less than the star performers in their own organizations. At Doctorate-Granting I Institutions, the pay differential of these two positions was .88 which was similar to that of Research Institutions (.73). However, at Liberal-Arts
Institutions the average CEO's pay was much higher than the highest-paid employees. The pay differential was 1.35. Thus, pay differential at Liberal-Arts Institutions was significantly better than that at Research Institutions and Doctorate-Granting Institutions (Tukey-HSD procedure, ps < .05). Hypothesis 1 was supported.

Benefits. For benefits, no significant differences among Research, Doctorate, and Liberal-Arts Institutions were found (Table 5). Thus, Hypothesis 1 was not supported.

Total Compensation. When pay and benefits were combined, the total compensation differential for CEOs and the highest-paid professor at Liberal-Arts Institutions (1.35) was much higher than that at Doctorate-Granting Institutions (.92) which, in turn, was higher than that at Research Institutions (.75) (please see Table 6). Hypothesis 1 was supported.

The Highest-Paid and the Second Highest-Paid Employee (L2/L3)

The pay differentials of pay (Table 4) and total compensation (i.e., pay and benefits combined) (Table 6) between the highest-paid professor (L2) and the second highest-paid professor (L3) showed that the ratio at Research Institutions was significantly higher than that at Liberal-Arts Institutions. The pattern of our results for L2/L3 was the opposite of that for L1/L2. Hypothesis 1 was supported. No differences among the three types of
institutions were found for benefits. Hypothesis 1 was not supported for benefits data.

Other Pay Differentials

Further, three additional differentials (i.e., L3/L4, L4/L5, and L5/L6) were calculated for pay, benefits, and total compensation. The pay differentials among Research, Doctorate-Granting, and Liberal-Arts Institutions failed to reach significance (see Tables 4, 5, and 6).

Discussion

The present paper examines the pay differentials of pay, benefits, and total compensation of CEOs and the five highest-paid employees in 190 private colleges and universities. The results show that the pay differentials of pay and total compensation for the university CEOs and the highest-paid employees (L1/L2) and for the highest-paid and the second highest-paid employees (L2/L3) were different among Research, Doctorate-Granting I, and Liberal-Arts Institutions. CEOs at Liberal-Arts Institutions are paid less than their counterparts in terms of their "absolute" amount of pay, benefits, and overall compensation. However, for these CEOs, their pay and total compensation are higher than the highest-paid professors in their own institutions. On the other hand, at major Research Institutions, university presidents actually make less money than their star professors.

When the highest-paid professors and the second highest-paid professors are examined, it is clear that the pay and total compensation differentials (L2/L3) at Research Institutions are
Pay Differentials

higher than that at Liberal-Arts Institutions. When differentials for lower pay levels are examined (L3/L4, L4/L5, and L5/L6), these differentials fail to reach significance. Therefore, pay differentials are about the same across different universities.

It is also interesting to know that the benefit differentials across these institutions are all about the same. Therefore, our data seem to support the common belief that compensation administrators and employees tend to pay more attention to "actual pay" and less to "benefits" in an organization. It should be pointed out that the different levels examined in the present paper do not represent the same direct supervisor-subordinate relationship across all different universities and colleges.

The pay differentials presented in the present study are similar to those presented in the literature (e.g., Fox, 1974; Kueth & Levenson, 1964; Mahoney, 1979). Therefore, it appears that there is some consistency over time. It has been suggested that these pay differential ratios vary somewhat from one industry to another, but are reported to be reasonably consistent over time, indicative of customary relationship which persist and which are reflective of industry characteristics (Mahoney, 1979).

In this study, we examined only 190 selected private colleges. Future research may focus on the consistency of these pay differentials across different types of institutions over time and on the possible differences in pay differentials between private colleges and public colleges.
At Liberal-Arts Institutions, CEOs may feel that their pay is not as competitive as those at Research and Doctorate-Granting I Institutions. The pay differences are related to external competitiveness and are due to different industry that they are in.

However, "relatively" speaking, CEOs in Liberal-Arts Institutions have made more money than the highest-paid employees in their own organizations. From CEOs' perspectives, those at Liberal-Arts Institutions may find fair "internal consistency" or "equity" in their organizations than their counterparts at Research and Doctorate-Granting I Institutions. In a sense, CEOs at Liberal-Arts Institutions are the biggest fish in a small pond.

It is reasonable to expect that CEOs at Research and Doctorate-Granting I Institutions may feel that they are underpaid due to the lack of "internal consistency" in their organizations. They are "not" the biggest fish in a large pond. On the other hand, CEOs at Liberal-Arts Institutions may also feel that they are underpaid because their absolute pay is lower than CEOs at Research and Doctorate-Granting I Institutions. Their focus may be on "external competitiveness" of pay.

University expenditures and type of institution are somewhat related to each other. Major Research Institutions have higher expenditures and better reputation rankings than other institutions (Tang et al., 1996). Large Research Institutions probably will be able to attract scarce resources, such as research grants, private donations, research talents, and probably excellent students.
With great expenditures, universities may expand and acquire research space, support, and talents which may further enhance the reputation of the university in the academic and scientific market and the community. University expenditures, reputation, and type of institution are signs of power, control, and authority. Obviously, for those university CEOs who possess power, control, and authority, they will be able to demand a higher level of compensation than those who do not.

American university CEOs' pay is relatively reasonable compared to those in large corporations. It has been pointed out that for many nonprofit officials, such as university CEOs, big paychecks are not only deserved but necessary in order to compete for talent with private employers in recent years.

We strongly agree with Stephen Joel Trachtenberg, CEO of George Washington University who made $304,988 in the survey, that university CEOs are underpaid. Their pay is far less than they could earn in the private business sector. However, considering the overall picture of pay in higher education, we think that CEO pay at private universities is appropriate and fair.

Many CEOs, trustees, and academic consultants agree that university CEOs spend more time than most corporate CEOs in contending with such tough issues as shared governance and competing constituencies. The operations are becoming increasingly business-oriented and complex, yet still non-profit.

Recently, many organizations have been involved in downsizing which creates an egalitarian structure with fewer organizational
levels and smaller pay differentials between adjacent levels and between the highest CEO and lowest paid workers. For universities and colleges in the United States, downsizing has already affected many campuses. Employees' perception of pay fairness may be better in a flat organizational structure (few levels) than that in a tall structure (many hierarchical levels). However, egalitarian structures are more susceptible to pay compression which may lead to low morale and high turnover.

On the other hand, healthy pay differentials within an organization will motivate employees to stay with the organization, increase their experience and training, and seek greater responsibility. For many managers and employees who value money, the big payoff at the top of the organization may serve as a goal or motivator. Therefore, we need to find a balance concerning pay differentials.

Gomez-Mejia and Balkin (1992b) pointed out using agency theory, that by far, number of "job moves" produces the largest monetary gains. Moreover, the financial returns yielded by job moves tend to be greater for professors with exceptional scholarly records, i.e., top-tier publications. However, it pays for faculty members to move regardless of the quality of their publications.

It appears that only those with the best credentials will be able to have good job moves in order to increase their pay and to become CEOs. Moreover, only CEOs who move to the top Research Institutions will reach their top pay in private universities and colleges. However, it is realized that moving from one type of
institution to another is sometimes very difficult. Different types of credentials are required at major Research Institutions.

It is also interesting to know in the field of higher education, the star professors in Research Institutions are making more money than the university president. Therefore, it is not necessary to become the CEO of the institution in order to make the most money in an academic setting. A big fish that changes from a small pond to a large pond may enjoy its growth and become the biggest one.

Tang (1992) stated that our own attitudes toward money can be perceived as our "frame of reference" in which we examine our everyday life. Our perception of pay equity and pay fairness depends on our "frame of reference" and the type of comparisons. The meaning of money is in the eye of the beholder. There is no exception when we consider the fairness of CEO pay.
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References


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Table 1

University CEOs and Five Highest-Paid Employees' Pay

<table>
<thead>
<tr>
<th>Position</th>
<th>Type of Institution</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1-CEO</td>
<td>M</td>
<td>234,500.8</td>
<td>140,477.4</td>
<td>125,273.2</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>73,347.0</td>
<td>73,666.0</td>
<td>40,032.0</td>
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</tr>
<tr>
<td>L2-First</td>
<td>M</td>
<td>470,842.8</td>
<td>177,591.1</td>
<td>93,914.2</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>360,868.1</td>
<td>71,569.9</td>
<td>24,429.4</td>
<td></td>
</tr>
<tr>
<td>L3-Second</td>
<td>M</td>
<td>368,443.0</td>
<td>153,654.7</td>
<td>83,217.2</td>
<td>1 &gt; 2 &gt; 3</td>
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<tr>
<td></td>
<td>SD</td>
<td>255,126.1</td>
<td>52,774.9</td>
<td>19,776.2</td>
<td></td>
</tr>
<tr>
<td>L4-Third</td>
<td>M</td>
<td>329,608.6</td>
<td>144,208.7</td>
<td>78,089.7</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>189,362.7</td>
<td>48,043.6</td>
<td>18,576.8</td>
<td></td>
</tr>
<tr>
<td>L5-Fourth</td>
<td>M</td>
<td>307,645.7</td>
<td>137,784.6</td>
<td>73,043.3</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>166,773.3</td>
<td>44,849.9</td>
<td>17,524.6</td>
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<tr>
<td>L6-Fifth</td>
<td>M</td>
<td>296,224.3</td>
<td>130,167.5</td>
<td>69,944.1</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>150,874.5</td>
<td>44,264.1</td>
<td>16,368.9</td>
<td></td>
</tr>
</tbody>
</table>

Note. L1-CEO: University CEOs. L2-First: The highest-paid employee. L3-Second: The second highest-paid employee. M = Mean, SD = Standard Deviation. Pay data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure (p < .05).
L1: F (2, 186) = 59.10, p = .0001.
L2: F (2, 186) = 80.79, p = .0001.
L3: F (2, 186) = 91.97, p = .0001.
L4: F (2, 186) = 126.60, p = .0001.
L5: F (2, 186) = 140.79, p = .0001.
L6: F (2, 172) = 145.09, p = .0001.
## Table 2

**University CEOs and Five Highest-Paid Employees’ Benefits**

<table>
<thead>
<tr>
<th>Position</th>
<th>Type of Institution</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1-CEO</td>
<td>M</td>
<td>42,553.6</td>
<td>14,854.2</td>
<td>19,004.8</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>33,972.6</td>
<td>11,249.7</td>
<td>16,616.4</td>
<td></td>
</tr>
<tr>
<td>L2-First</td>
<td>M</td>
<td>33,205.7</td>
<td>17,677.0</td>
<td>13,383.9</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>24,350.4</td>
<td>9,949.6</td>
<td>7,592.1</td>
<td></td>
</tr>
<tr>
<td>L3-Second</td>
<td>M</td>
<td>31,279.4</td>
<td>15,461.8</td>
<td>12,017.7</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>17,239.1</td>
<td>7,963.5</td>
<td>6,732.5</td>
<td></td>
</tr>
<tr>
<td>L4-Third</td>
<td>M</td>
<td>32,349.0</td>
<td>16,431.3</td>
<td>11,593.1</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>18,901.4</td>
<td>8,835.3</td>
<td>6,409.4</td>
<td></td>
</tr>
<tr>
<td>L5-Fourth</td>
<td>M</td>
<td>28,931.3</td>
<td>14,637.9</td>
<td>11,038.0</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>16,812.0</td>
<td>9,723.5</td>
<td>6,261.3</td>
<td></td>
</tr>
<tr>
<td>L6-Fifth</td>
<td>M</td>
<td>28,262.8</td>
<td>13,723.2</td>
<td>11,715.1</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>15,161.0</td>
<td>7,731.9</td>
<td>14,670.3</td>
<td></td>
</tr>
</tbody>
</table>

Note. Benefits data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure ($p < .05$).

L1: $F (2, 177) = 18.74, p = .0001$.
L2: $F (2, 177) = 32.40, p = .0001$.
L3: $F (2, 176) = 52.15, p = .0001$.
L4: $F (2, 176) = 55.15, p = .0001$.
L5: $F (2, 177) = 47.03, p = .0001$.
L6: $F (2, 166) = 17.24, p = .0001$. 

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Table 3

University CEOs and Five Highest-Paid Employees' Total Compensation

<table>
<thead>
<tr>
<th>Position</th>
<th>Type of Institution</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1-CEO</td>
<td>M</td>
<td>277,054.4</td>
<td>162,725.1</td>
<td>144,911.3</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>81,621.0</td>
<td>76,017.1</td>
<td>49,452.6</td>
<td></td>
</tr>
<tr>
<td>L2-First</td>
<td>M</td>
<td>504,048.4</td>
<td>195,268.1</td>
<td>108,432.0</td>
<td>1 &gt; 2, 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>363,242.1</td>
<td>76,625.8</td>
<td>28,914.3</td>
<td></td>
</tr>
<tr>
<td>L3-Second</td>
<td>M</td>
<td>399,722.4</td>
<td>169,116.5</td>
<td>96,531.6</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>251,268.9</td>
<td>57,041.3</td>
<td>23,532.6</td>
<td></td>
</tr>
<tr>
<td>L4-Third</td>
<td>M</td>
<td>361,957.6</td>
<td>164,282.6</td>
<td>90,858.1</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>186,347.0</td>
<td>50,535.7</td>
<td>22,254.0</td>
<td></td>
</tr>
<tr>
<td>L5-Fourth</td>
<td>M</td>
<td>336,577.0</td>
<td>152,422.5</td>
<td>85,098.1</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>165,450.4</td>
<td>48,000.3</td>
<td>21,280.7</td>
<td></td>
</tr>
<tr>
<td>L6-Fifth</td>
<td>M</td>
<td>324,487.1</td>
<td>143,890.6</td>
<td>82,320.7</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>149,826.1</td>
<td>48,661.2</td>
<td>24,231.8</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total compensation data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure (p < .05).

L1: F (2, 177) = 63.71, p = .0001.
L2: F (2, 177) = 81.74, p = .0001.
L3: F (2, 176) = 98.40, p = .0001.
L4: F (2, 176) = 139.28, p = .0001.
L5: F (2, 177) = 150.47, p = .0001.
L6: F (2, 166) = 151.99, p = .0001.
### Table 4

**Pay Differential for University CEOs and Five Highest-Paid Employees**

<table>
<thead>
<tr>
<th>Position</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1/L2</td>
<td>M</td>
<td>.73</td>
<td>.88</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.38</td>
<td>.45</td>
<td>.31</td>
</tr>
<tr>
<td>L2/L3</td>
<td>M</td>
<td>1.25</td>
<td>1.14</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.34</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>L3/L4</td>
<td>M</td>
<td>1.09</td>
<td>1.06</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.11</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>L4/L5</td>
<td>M</td>
<td>1.06</td>
<td>1.05</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.08</td>
<td>.04</td>
<td>.07</td>
</tr>
<tr>
<td>L5/L6</td>
<td>M</td>
<td>1.05</td>
<td>1.05</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.05</td>
<td>.05</td>
<td>.06</td>
</tr>
</tbody>
</table>

**Note.** Pay differential data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure (p < .05). The pay differential for L1 and L2 was calculated by using L1/L2.

L1/L2: F (2, 185) = 53.87, p = .0001.
L2/L3: F (2, 186) = 5.76, p = .0037.
L3/L4: F (2, 186) = 1.15, p = .3181.
L4/L5: F (2, 186) = 1.31, p = .2725.
L5/L6: F (2, 172) = .02, p = .9799.
Table 5

Benefits Differential for University CEOs and Five Highest-Paid Employees

<table>
<thead>
<tr>
<th>Position</th>
<th>Type of Institution</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1/L2</td>
<td>M</td>
<td>1.95</td>
<td>.91</td>
<td>1.50</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>3.26</td>
<td>.57</td>
<td>1.56</td>
<td></td>
</tr>
<tr>
<td>L2/L3</td>
<td>M</td>
<td>1.01</td>
<td>1.14</td>
<td>1.12</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.35</td>
<td>.31</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td>L3/L4</td>
<td>M</td>
<td>.99</td>
<td>1.04</td>
<td>1.04</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.17</td>
<td>.31</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>L4/L5</td>
<td>M</td>
<td>1.50</td>
<td>1.09</td>
<td>1.10</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>2.41</td>
<td>.35</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>L5/L6</td>
<td>M</td>
<td>1.16</td>
<td>1.04</td>
<td>1.10</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.80</td>
<td>.33</td>
<td>.38</td>
<td></td>
</tr>
</tbody>
</table>

Note. Benefits differential data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure (p < .05). The benefits differential for L1 and L2 was calculated by using L1/L2.

L1/L2: F (2, 172) = 1.76, p = .1749.
L2/L3: F (2, 174) = 2.09, p = .1273.
L4/L5: F (2, 174) = 1.75, p = .1777.
## Pay Differentials

### Table 6

**Total Compensation Differential for University CEOs and Five Highest-Paid Employees**

<table>
<thead>
<tr>
<th>Position</th>
<th>Type of Institution</th>
<th>(1) Research</th>
<th>(2) Doctorate</th>
<th>(3) Liberal-Arts</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1/L2</td>
<td></td>
<td>.75</td>
<td>.92</td>
<td>1.35</td>
<td>3 &gt; 2 &gt; 1</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>.38</td>
<td>.40</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L2/L3</td>
<td></td>
<td>1.23</td>
<td>1.14</td>
<td>1.13</td>
<td>1 &gt; 3</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>.30</td>
<td>.14</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L3/L4</td>
<td></td>
<td>1.08</td>
<td>1.05</td>
<td>1.07</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>.11</td>
<td>.05</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L4/L5</td>
<td></td>
<td>1.07</td>
<td>1.04</td>
<td>1.07</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>.08</td>
<td>.04</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L5/L6</td>
<td></td>
<td>1.05</td>
<td>1.05</td>
<td>1.05</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>.06</td>
<td>.05</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Total compensation differential data were analyzed using one-way analyses of variance. The mean differences among the three groups (i.e., research, doctorate-granting, and liberal-arts institution) were further analyzed by the Tukey-HSD procedure ($p < .05$). The total compensation differential for L1 and L2 was calculated by using L1/L2.  
L2/L3: $F (2, 176) = 4.42, p = .0134$.  
L3/L4: $F (2, 175) = .61, p = .5454$.  
L4/L5: $F (2, 176) = .93, p = .3947$.  
L5/L6: $F (2, 164) = .02, p = .9759$.  

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