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The Effect of University Sales Education on the First After-College Sales Job

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The Effect of University Sales Education on the First After-College Sales Job

by

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Honors Thesis submitted to the Peter T. Paul College of Business and Economics

University of New Hampshire

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# University Sales Education and First After-College Sales Job

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## Abstract

This research investigates the relationship between the amount of sales education and the job performance of the recent UNH graduates on the first after-college sales job. The overarching hypothesis suggests that more sales education leads to better sales job performance. The results of the research found this correlation to be positive and significant. Also, this research found that job performance indicators that are affected the most significantly by the amount of sales education are confidence, passion, commitment, and on-target earnings. Moreover, it identifies the categories of sales education that were determined to be the most crucial in better first after-college sales job performance, and it finds that more breadth in sales education tends to have the largest impact.
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**Introduction**

This research investigates the correlation between the amount of sales education offered completed by recent UNH alumni and their performance on the first after-college job in sales. This research also examines the extent of participation of the current and previous students at UNH in different sales activities to identify the particular aspects of the sales-job performance that were affected the most significantly. This research attempts to connect various sales practices of UNH (Sales Club, Professional Sales Group, Sales classes and sales minor, Sales internship, and engagement with other sales students) with the results that people achieved on their sales jobs. For this research we refer to the results as sales-job performance.

This is a critical field to investigate because sales education has experienced rapid growth in the U.S. (USCA, 2019), but there are little empirical evidence of the aforementioned claims. As a result of this research, future employers and university faculty will have evidence of the relative utility of the various elements of sales education, which in turn may justify the development and future potential growth of other sales activities at UNH. Students will also be able to make more informative decisions regarding their sales activities choices.
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**Literature Review**

Are salespeople born or made? From the general observation of the used car dealerships, the majority of people can state that salespeople were born (Martin, 2011). According to the prevailing social perception, this is a "type" of people that know how to buddy with everyone and gain the most out of their customers' wallets (Martin, 2011). However, according to the U.S. Bureau of Labor and Statistics (2019a) and conclusions from Daniel Pink's (2012) book "To sell is human: The surprising truth about moving others," the number of new jobs in sales increased by two million from 2013 to 2020, which makes it the highest growth job category in the U.S. So, are these two statements in conflict? How is it possible that people say that they do not like salespeople, but then they actually end up in a sales role?

The answer is relatively straightforward. Sales is not "how to sell used cars on Route 66," but rather sales is an essential field of jobs that is, due to increased demand, developing significantly (Spiller, Kim, & Aiken, 2019). What is more, sales jobs currently are the second hardest group of jobs to fulfill in the U.S. (ManpowerGroup, 2018). Indeed, sales have become one of the most common job for more than 50% of graduates of any major (Cespedes & Weinfurter, 2016) and 88% for marketing majors (Stevens & Kinni, 2007). To satisfy growing demand and lack of skilled personnel, some universities, along with the University of New Hampshire (UNH), created specialized sales education programs to help students be prepared for the future job (Deeter-Schmelz & Kennedy, 2011).

The first incorporation of sales courses in marketing majors occurred in 1943 but then declined significantly due to the controversy about sales education (Spiller et al., 2019). Starting from the 1980s, the sales education field received enough legitimacy to be studied in universities, and the number of universities offering sales initiatives began to increase significantly. There
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were 67 schools offering sales classes in 2007, and almost 300 in 2019 (Sales Education
Foundation, 2019).

Why was prior sales education in universities identified to be essential for employees
from the employers' point of view? According to Cespedes et al. (2016), companies had a
turnover rate of 60% with new hires without prior sales education. The Sales Education
Foundation in the 2017 annual report stated that students who completed some sales education
had a turnover rate less on 30% than those without training. Also, these people are 50% more
productive and, as a result, save around $200,000 each to their employer. Research by Bolander,
Bonney, and Satornino (2014) tested the hypothesis that sales education leads to better job
outcomes and supported it with their research. Summarizing all related literature, these positive
outcomes are related to two factors. First is that sales education shapes the perception of the sales
career. Second is that sales education helps to develop skills and knowledge for a sales career.
Both these factors will be discussed in the next paragraphs.

Several articles have demonstrated that students exposed to some extent of sales
education do have a positive attitude towards a career in sales (Bristow, Gulati, & Amyx, 2006).
Even one sales course helps to spark interest in sales and to make deliberate decisions about the
sales career path (Luthy, 2000). Other research has shown that a vital role in increasing student
interest and shaping attitude is played by the sales faculty (Peltier, Cummins, Pomirleanu, Cross,
& Simon, 2014).

Of course, the other important role in sales education is to help students grow skills and
knowledge. In the 20th century, sales and marketing were oriented to increase awareness, sell the
product, and increase revenue in the short-run (Quintana, 2018). However, "modern-day selling
requires a comprehensive, collaborative approach because automation has transformed
traditional face-to-face selling" (Wyner, 2017). The approach of our century is to build and to maintain a personal relationship to increase sales revenue in the long run (Ballestra, 2017). As a result, the University Sales Center Alliance (USCA) requires approved schools to follow an identified curriculum to ensure the quality of sales education. Each program has to be divided into at least two levels - basic and advanced sales. Basic level sales education helps to build up the foundation for skills to influence customers, and advanced sales classes help to reinforce these skills (USCA, 2013).

Overall, five primary skills and tactics are being taught during sales classes. (Deeter-Schmelz et al., 2011). They include the following: establishing a rapport, uncovering customer needs and wants, presenting the product using pain-points identified before, addressing financial incentives, and asking for closing commitment. The most effective way to practice these skills, according to the USCA requirements, is to implement "role-play" - the simulation of buyer/seller interaction. However, only Bolander et al. (2014) research has tested the relationship between these particular skills to the actual results of the recent graduates.

The research of Bolander et al. (2014) is specifically considered, because their research is the foundation for a relationship that this research will test. They developed seven hypotheses based on USCA requirements. They proposed that salespeople hired from universities sales programs are more likely to be successful in each particular tactic mentioned before in their day-to-day selling activities compared to the salespeople that were not in sales programs. In addition to the skills mentioned previously, they tested the relationship for commitment to the company for those who did and did not complete sales education in the university. Their seventh hypothesis tested the relationship between overall first-year sales performance for those who did and did not complete sales education in the university. They administrated the survey of 178
salespeople within one company to control other environmental factors, and their sample consisted evenly from those who did and did not complete the sales education in the university. Only 54% of respondents completed the survey and were used to draw conclusions. They measured the sales program participation using a binary question, and for the measures of sales performance, they assessed the sales volume for each respondent. Also, to test the sixth hypothesis, they used three-component conceptualization of the work commitment, described in the research of Meyer, Allen, and Smith (1993). Also, the research accounted for the personality differences of respondents by adding the extraversion measure from Big Five Personality Index as the most related trait to the sales performance (Furham & Fudge, 2008).

Analyzing the results of this study, five hypotheses of seven were confirmed. The authors found the positive correlation between sales performance and development of mentioned below skills for prior sales students. Skills that demonstrated the direct relation to the sales performance and previous sales education were building rapport, presentation of benefits, creation of emotional response. The other two skills (use of constative communication and financial discounts) did not demonstrate any relation to the prior sales education. Bolander et al. (2014) connected these results to the possible in-house training, and the lack of proper skills focus in sales education. Their sixth hypothesis was confirmed — they found a positive relationship between prior sales education and commitment to the company, together with overall positive attitudes towards sales job.

All these findings have important implications for both employers and university faculty (Bolander et al., 2014). Employers can be assured that sales graduates are more skilled than those without sales education. Sales students can quickly implement material learned in sales classes, and as a result, benefit employers by higher short-run sales performance. Moreover, a high
commitment rate for sales students can help maintain the employer's permanent sales team, which can ensure the predictability of sales results. The findings of this research for university faculty suggest that sales students are precious for employers, and sales education can be expanded (Bolander et al., 2014).

At the end of their article, the authors mention the limitations of their research, and as a result, the potential for future research. One of their concerns is the lack of generalizability. This study was conducted on just one company, so the results cannot be applied to all situations with confidence. One more factor that adds to the problem of generalizability is the factor of a relatively small sample size. There were only 96 respondents for the final analysis, which makes the results risky to apply as predictions. The second major caveat is the binary choice for sales education. Respondents were tested on whether they participated in sales education or not. So, there were no conclusions about the specific categories of sales education, affecting the aforementioned skills the most and least significantly.

As a result of these limitations stated above, this research is an important addition to Bolander et al., (2014) work. With access to the UNH graduates' database, the hypothesis will be tested across different companies and industries. Moreover, the research will help determine the specific job indicators that are highly affected by sales education. In addition, various sales education categories will be tested to identify the effect on key job performance indicators. Also, another part of the research is to determine the "weights" of sales education categories. By determining these weights, it will be able to conclude which parts of the sales education were most significant for the graduates.
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**Research Question(s) and Prediction(s)**

Is there a direct correlation between the extent of participation in UNH Sales Practices and the performance on the first sales job? The general anticipated hypothesis is that more involvement in sales program activities leads to better performance in a sales position.

Additional findings may be derived from this research. Which specific practices of UNH Sales leads to enhancement of sales performance? What are the areas of sales performance that are affected the most and the least significant? These additional questions will help to drill down in the exact utilities and build up the potential for future research. The overall hypothesis I anticipate will follow the rule "more is better"; however, there might be diminishing marginal returns, a ceiling effect, or even an excess of sales education that may suppress sales performance.

**Methodology**

The main source of the data is primary data acquisition - there is no existing data on UNH sales graduates and their performance related to sales jobs. There are two stages in the completion of this research data acquisition. The first stage consists of qualitative research. The second stage of the study is quantitative data acquisition based on the first stage findings.

The qualitative stage of the research is used to define the variety of categories for participation in UNH Sales education and a variety of indicators to define sales performance. To investigate the various categories of UNH sales program engagement, the first round of in-depth interviews with recent graduates or current seniors was conducted. These interviews helped get the perception of which particular sales initiatives affected our target audience, or they believe could affect other students. After the first round of in-depth interviews, the second round of interviews was held to define the first after-college sales performance of recent graduates. These
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interviews helped to identify indicators of the sales performance, that recent UNH were used to
on their first after-college sales job.

The qualitative data from the two rounds of in-depth interviews was used to develop a
survey instrument to test the hypotheses. The survey tested for four main factors – first is for the
extent of the participation in the sales education at UNH, second is for weighted importance of
different sales education initiatives, third is for sales performance categories derived from the
qualitative research, and forth is for a degree of in house training on the first after-college sales
job and an extraversion from Big Five personality test, as two factors that significantly affect
sales performance (Furham et al., 2008).

At least 100 qualified respondents were anticipated as a target for this research. The data
analysis is conducted in SPSS, using the frequencies, means, bivariate correlations, and
regressions. Since we determined the direction of the correlations, we can run one-tailed tests of
statistical significance. This analysis examines the potential effects of different extent of
participation in sales activities at UNH and also is used to drill down to specific UNH sales
practices and specific job performance categories that are affected the most.
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**Data Acquisition**

During the first stage of the research, we conducted eight interviews in total, which helped to derive the categories of participation in UNH sales and indicators for the sales performance. Based on these interviews, the options for involvement were derived as UNH Sales Club, UNH Sales competitions, Professional Sales Group, UNH Sales classes and minor, Engagement with other UNH Sales students, and Sales internship. These were categories that people interviewed, defined as the degrees of participation in sales education.

"UNH Sales Club" is a voluntary club available to everyone at UNH with the meetings every two weeks and panel discussions with the sales professionals. "UNH Sales competitions" is representing the sales competitions, where UNH students participated – might be both internal competitions (UNH Sales Competition, Elite Series competition (limited to PSG members)) or external competitions (NISC, NSC, and others), where UNH students participate. "Professional Sales Group" is the group of students that are competitively selected and focus specifically on the internal, state-wide, and national sales competitions. "UNH Sales classes and Minor" represents the participation in at least one semester-long sales educational class or participation in the 20 credit-hour minor program, served with two levels of sales classes and mandatory sales field experience. "Engagement with other UNH Sales students" is representing the interaction between students in their college experience. Many students were not engaged in any specific sales education category; however, they interacted a lot with those who were and gained valuable skills out of this interaction. "Sales Internship" is representing participation in any sales internship during college education.

During the second part of the qualitative research, indicators for sales performance were defined. These indicators included confidence, passion, quota, conversion rate, revenue, on-
target earnings (later OTE), and commitment. These indicators were pointed out as the most important during the first after college sales job by our interviewees.

Based on these six categories for sales participation and these seven job-performance indicators, the Qualtrics survey was developed and reviewed by the UNH Institutional Review Board (UNH IRB #8285). The survey was constructed with multiple filters so that we can be reassured that we are targeting only qualified recipients. The defined target group was UNH graduates that had the first after-college job in sales.

The survey asked people for the degree of participation in the UNH Sales education. We categorized options for the participation to be - was not available (since some parts of the UNH sales education was not available in some years), did not participate, participated rarely, participated occasionally, and always participated. Respondents were asked to define how much they participated in any given category of the sales education based on these options. The question of Sales Internship was framed binary since there is no available "quantity" of participation in the internship. This part was made to be able to define the amount of engagement in each sales education category. Later, respondents were asked to assign the weight to each category of sales education. This was asked to determine the utility of each category to the respondent.

The second block of the online survey asked respondents to remember their first after-college sales job. It was understandable, that since we are targeting respondents that started in different industries and companies with various resources, we will not be able to objectively compare results for categories of job performance we determined on the first stage that are connected to the monetary values (conversion rate, revenue generated, OTE). As a result, the questions were framed subjectively on purpose. Respondents were asked to subjectively compare
themselves in the aforementioned job performance indicators with their colleagues on similar positions using the 100 points sliders, where 0 was defined as the strong disagreement with the job performance indicator, and 100 as the strong agreement. For example, respondents were asked to identify their agreement/disagreement with the statement that they had higher job performance rating than his colleagues on the same position. This helped us ensure the ability to compare results between all respondents since they measured themselves on the same subjective scale.

Moreover, respondents were asked for the amount of training in the company that they received at their first sales job. This question was present since this factor might mitigate or dissolve some results. Additionally, respondents were tested for extraversion/introversion, as this factor also might be affecting the overall job performance results.

The survey was active for 24 days, and a total of 145 responses were recorded. Out of these 145 responses, 104 respondents were qualified and participated in the research.
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Data analysis

In order to proceed to the SPSS data analysis, the mathematical model was developed. We created two cumulative ratings that later was tested for the relationship. The first rating is a sales rating which was defined as a SR (sales rating) = \( \frac{\alpha X + \beta Y + \gamma Z + \delta F + \epsilon R + \epsilon M}{(\alpha + \beta + \gamma + \delta + \epsilon + \epsilon) \cdot \text{max}(X)} \), where \( \alpha, \beta, \gamma, \delta, \epsilon, \epsilon \) are the weight coefficients of each sales education category, \( X, Y, Z, F, R, M \) are the amount of participation in each sales education category, \( \text{max}(X) \) is the maximum amount of involvement in sales education category (discussed in next paragraph). The second rating that was developed is a JPR (job performance rating) = \( \frac{Q + W + E + R + T + Y + U}{n} \), where \( Q, W, E, R, T, Y, U \) stands for the degree of the agreement with each job performance indicator, \( n \) – number of indicators. Later in the data analysis, these two factors will be tested for the correlation to either support or refute the main hypothesis.

Before computing the SR and JPR for each of the respondents, the values for each category had to be assigned. For the part of participation degrees in UNH Sales education the values were assigned with these assumptions: "was not available" and "did not participate" were assigned 0, "participated rarely" was assigned 1, "participated occasionally" was assigned 2, "always participated" was assigned 3. Since the "Sales internship" question was asked binary – the respondent was assigned with 3 if there were any presence of the sales internship, and 0 if there were none.

Coefficients were developed to compute the weights for the UNH sales categories. All respondents ratings from the 100-point scale were added and divided by the number of respondents who participated in this question. The coefficients that were later applied to the SR were following: UNH Sales club coefficient - \( \alpha \) - 52.8846, UNH Sales competitions - \( \beta \) - 67.0755, Professional Sales Group - \( \gamma \) - 61.4750, UNH Sales classes/Minor - \( \delta \) - 76.000,
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engagement with other UNH Sales students - $\varepsilon - 71.0986$, Sales internship - $\varepsilon - 75.3651$. With these coefficients, the revised sales rating is:

$$SR = \frac{52.8846 \cdot X[0,1,2,3] + 67.0755 \cdot Y[0,1,2,3] + 61.4750 \cdot Z[0,1,2,3] + 76.000 \cdot F[0,1,2,3] + 71.0986 \cdot R[0,1,2,3] + 75.3651 \cdot M[0,1,2,3]}{(52.8846 + 67.0755 + 61.4750 + 76.000 + 71.0986 + 75.3651) \cdot 3}$$

$$= \frac{52.8846 \cdot X[0,1,2,3] + 67.0755 \cdot Y[0,1,2,3] + 61.4750 \cdot Z[0,1,2,3] + 76.000 \cdot F[0,1,2,3] + 71.0986 \cdot R[0,1,2,3] + 75.3651 \cdot M[0,1,2,3]}{1211.696},$$

where $X$ - degree of participation in UNH Sales club, $Y$ - degree of participation in UNH Sales competitions, $Z$ - degree of participation in Professional Sales Group, $F$ - degree of participation in UNH Sales classes/Minor, $R$ - degree of participation in engagement with other UNH Sales students, $M$ - degree of participation in Sales internship. Each block of the variable (ex. $52.8846 \cdot X[0,1,2,3]$) is forming the UNH sales education category utility for each respondent (later notated as UNH [Category] Utility). This sales rating formula will be used in the mathematical model as the independent variable, which represents the degree of participation in the overall UNH Sales education.

The JPR will be used as a dependent variable in the model, and since the developed survey did not include questions of each job performance indicator weight, the overall formula for dependent variable is: $JPR = \frac{Q+W+E+R+T+Y+U}{7}$, where $Q$ – confidence, $W$ – passion, $E$ – quota, $R$ – conversion rate, $T$ – revenue generated, $Y$ – on-target earnings, $U$ – commitment.

For the data analysis, the bivariate correlation analysis is used. The correlation model analyzed the correlations between SR and JPR for the main hypothesis and also examined correlations between each UNH Sales education category utility and each job performance indicator. This will allow to drill down from the ratings (major correlation) to the specific data and figure out detailed correlations.
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Results

The main hypothesis of this research is that more sales education leads to better sales performance on the first after-college sales job. In our mathematical model, this will be represented in the form of the positive and significant correlation between the independent variable – sales rating (SR) and dependent variable job performance rating (JPR). To identify this correlation, the regression analysis was run, which generated the results presented in Figure 1 on the right. There is a significant positive correlation, with the $R=0.197$, $R^2=0.039$, and $P=0.046$. This result is supported at a 95% confidence level.

The analysis for detailed correlations is presented in figure 2 below. There are two levels of confidence at 95%, 90% used in this correlation analysis due to the small sample size and other potential dissolving and mitigation effects. Results from figure 2 will include:

- Participation in the UNH Sales Club leads to feeling more confident in the sales position, feeling more passionate about sales position, and earning higher on-target earnings. These results are supported at a 95% confidence level. Also, engagement in the UNH Sales

Figure 1. Regression analysis for SR and JPR
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class leads to feeling more committed to the company and overall better job performance. These results are supported at a 90% confidence level.

- Participation in UNH Sales Competitions leads to feeling more confident in the sales position and feeling more passionate about a sales position. These results are supported at a 95% confidence level. Also, engagement in UNH Sales Competitions leads to higher on-target earnings and overall better job performance. These results are supported at a 90% confidence level.

- Participation in Professional Sales Group leads to feeling more confident on the sales position and earning higher on-target earnings. These results are supported at a 95% confidence level. Also, engagement in Professional Sales Group leads to feeling more passionate about sales position, feeling more committed to the company, and overall better job performance. These results are supported at a 90% confidence level.

- Participation in UNH Sales classes/Minor leads to feeling more confident on the sales position, feeling more passionate about sales position, earning higher on-target earnings, and to overall better job performance. These results are supported at a 95% confidence level.

- Engagement with other UNH Sales students leads to feeling more confident on the sales position. This result is supported at a 95% confidence level. Also, engagement with other UNH Sales students leads to feeling more passionate about sales position and earning higher on-target earnings. These results are supported at a 90% confidence level.

- Participation in a sales internship leads to feeling more confident on the sales position and feeling more passionate about a sales position. These results are supported at a 95% confidence level.
Participation in the overall more sales education (SR) leads to feeling more confident on the sales position, feeling more passionate about sales position, earning higher on-target earnings, and to overall better job performance (main hypothesis). These results are supported at a 95% confidence level.

Higher confidence, passion, quota, conversion rate, revenue generation, OTE, and commitment leads to better overall job performance. These results are supported at a 95% confidence level.

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<th>Job_Passion</th>
<th>Job_Quota</th>
<th>Job_Conversion_Rate</th>
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**Correlation is significant at the 0.01 level (1-tailed).**
*Correlation is significant at the 0.05 level (1-tailed).*
*Correlation is significant at the 0.1 level (1-tailed).*

Figure 2. Bivariate correlations for SR and JPR variable blocks with 2 level of confidence at 95% and 90%

Unfortunately, there are no significant correlations related to sales categories and hitting quota, conversion rate, and revenue generation. As a result, it is not possible to state that these indicators are affected by sales education.
University Sales Education and First After-College Sales Job

Other correlations appeared as a result of the research (presented in figure 3 below):

- Respondents that participated in the PSG, Sales Minor, engaged with other sales students and had sales internship were more likely to have in-house training at the company, where they started in sales after college. These results are supported at a 95% confidence level.

- Respondents that have higher SR were more likely to choose the job with the in-house training.

- Feeling more confident about sales, feeling more passionate about sales position, higher conversion rate, higher revenue generation, higher OTE, and higher commitment are positively correlated with in-house training. These results are supported at a 95% confidence level.

- Respondents participating in sales minor are more extroverted than introverted.

- Respondents that are feeling more confident about sales and feeling more passionate about sales position are more extraverted than introverted.

- Respondents who are more extraverted than introverted are likely to have better overall job performance and higher commitment to the company.
Discussion
The correlation analysis represented that there is a positive relationship between overall participation in sales education and better job performance (p<0.05). However, the $R^2$ is low, which means that, while significant, sales education does not explain much of the variance of job performance. In fact, the scatter plot with Figure 1 shows the degree of dispersion of the data points, showing there are a lot of reasons that sales performance can vary. However, there is still an effect from sales education. Overall, the main hypothesis that sales education leads to better sales job performance was supported by this correlation.

Our detailed correlation analysis helped to drill down into the specific categories of sales education and indicators of job performance that were affected the most significant. Overall, almost every category of sales education positively affected the students' agreement with, "I was feeling confident in my sales position.". The other indicator that was affected by various sales education categories is passionate about their sales position. Both these factors might be correlated due to the content of the sales education, which helps students build up skills and feeling more prepared for the job in sales.

Another job performance indicator that was significantly affected by the sales education was the on-targeted earnings (OTE). On-target earnings are the amount of the money that the respondent is earning – usually, it consists of the base salary and the commission, which is a critical KPI of the salesperson. The research showed that sales education positively affects the amount of money that recent graduates earned on the first after-college sales job. However, there were no correlations for sales education for the quota, conversion rate, and the revenue generated that were examined in this research. The "sales math principles" assume that the OTE is in direct correlation with the quota, conversion rate, and the revenue generated as many companies are building up the OTE model for their employees based on these indicators (Lemkin, 2017).
combination of the positive correlation (Sales categories and OTE) and the absence of correlations that are connected to OTE (Sales categories and quota, conversion rate, revenue generated) might have underlying reasons. The potential causes need to be identified in further causal research, and the results might include the specificity of the UNH sales education curriculum, the existence of the confounding variables, as interpersonal qualities, negotiation skills, and others. Any potential causal relationships need to be determined in further research. However, the UNH Sales education might incorporate some curriculum changes, so that these indicators are addressed better in sales education.

The other correlation that stands out from this research is that the highest correlations for the overall sales performance were present for the respondents, who participated in one or more of the following: UNH Sales minor, PSG, and UNH Sales club. These categories were the most impactful categories of sales education, which means that overall sales education served its initial goal – to help students prepare better for the first position in sales. Future development of UNH Sales will benefit students as they will be more prepared for their careers. Also, with the specific focus on the quota, conversion rate, and revenue generation, UNH Sales might help future students to be better in each of these job performance indicators that were determined significant by recent UNH graduates.

Also, these findings will help potential employers to understand the value of the previous sales education for their potential future employees. Overall, the results show that the employees with prior sales education will be better in sales in their performance, specifically in the confidence, passion, OTE, and have a slightly higher commitment, than those employees without sales education. Also, employees will find this research helpful, as it shows that In-House job training for incoming sales employees is useful and affects overall job performance. Moreover,
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based on these findings they might understand what potential employees might be lacking so that they can adjust the in-house training to be more focused on quota, conversion rate, and revenue generation, and lower the focus on the confidence, passion and OTE training since the university sales education significantly targets these categories.

Also, the results of this research will help students make better decisions. Because of our main hypothesis, we can state that sales education leads to better job performance. For those students, who understand that their first after-college job will be in sales, it will be beneficial to participate in sales education so that they can enhance their results after graduation. Moreover, for those business students who are undecided for the career path, this research also will help determine the correct focus during the college years, since there is more than 50% probability, that they will end up in sales (Cespedes & Weinfurter, 2016). Also, for those students who want specifically to develop confidence in communication, sales education might be beneficial, regardless of the career path.
Limitations and potential for future research

The nature of the research was to determine the existing correlations. To investigate the potential reasons for the aforementioned correlations, the additional causal research is needed. This additional research will help UNH Sales and the university to overall better understands the underlying reasons for correlations and apply changes to the education curriculum.

For the research, we had a relatively small sample size. Out of the 15k alumni of Paul College and around 4k alumni from the recent 3-4 years, the results were gathered only from 150 people. The size of the sample size limits the ability to generalize findings with reasonable confidence. As a result, this model might be tested with newer alumni, starting from the class of 2020. This will help to build up the through time data and also ability to compare students among years. This research might be incorporated in the "first destination" survey that is shared with the recent alumni community after several months from graduation to identify the placement rate.

Throughout the research process, it was identified that our mathematical model lacks an important component. The online survey also should include the section for weights assigned to each job performance indicator. With this data, the mathematical model for JPR will account for the assigned weight of each indicator, and overall the JPR will become more representative. The weight part needs to be added after the existing part of the self-evaluation of the job performance indicators. The gained data should be derived in the coefficients that will be applied to each indicator in the JPR calculation.

Moreover, this research can be extended to other universities, where sales education has been long established. Since the UNH Sales education program is relatively new, the generalizations cannot be made with high confidence. Expanding the same model and survey to other universities will help achieve the generalization. The adjustment needed for external launch will include only defining the sales education categories for each specific university, and they
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might differ in both meaning and naming. The first several schools that this model can be expanded might include Florida State University, Bryant University, William-Patterson University, as these schools have well-developed sales education, communicate a lot with UNH Sales center, and overall well-represented in the sales education community.
References


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Appendix

Q10 - How often were you involved in Sales Education during your college experience?
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<table>
<thead>
<tr>
<th>#</th>
<th>Field</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Variance</th>
<th>Count</th>
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<td>UNH Sales Club</td>
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Q11 - Have you ever had an internship in Sales during your college education?

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**Q12 - How important were each of the following parts of sales education to you?**

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<td>Sales Internship</td>
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Q14 - Please rate the following statements

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<td>1</td>
<td>I was feeling confident on my sales position</td>
<td>0.00</td>
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<td>74.02</td>
<td>24.68</td>
<td>609.01</td>
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<td>2</td>
<td>I was feeling passionate about my sales position</td>
<td>8.00</td>
<td>100.00</td>
<td>73.01</td>
<td>26.31</td>
<td>692.16</td>
<td>94</td>
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<tr>
<td>3</td>
<td>I was hitting my quota</td>
<td>4.00</td>
<td>100.00</td>
<td>82.73</td>
<td>22.73</td>
<td>516.78</td>
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<tr>
<td>4</td>
<td>I had higher conversion rate than my colleagues on similar positions</td>
<td>0.00</td>
<td>100.00</td>
<td>75.88</td>
<td>23.05</td>
<td>531.09</td>
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<tr>
<td>5</td>
<td>I was generating more revenue than my colleagues on similar positions</td>
<td>6.00</td>
<td>100.00</td>
<td>73.38</td>
<td>23.61</td>
<td>557.39</td>
<td>94</td>
</tr>
<tr>
<td>6</td>
<td>I had higher OTE (on-target earnings) than my colleagues on similar positions</td>
<td>0.00</td>
<td>100.00</td>
<td>67.07</td>
<td>28.44</td>
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<td>92</td>
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<tr>
<td>7</td>
<td>I was feeling more committed to my company than my colleagues on similar positions</td>
<td>10.00</td>
<td>100.00</td>
<td>70.73</td>
<td>24.80</td>
<td>615.24</td>
<td>90</td>
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<tr>
<td>8</td>
<td>I had extensive training at my first sales job</td>
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<td>100.00</td>
<td>62.32</td>
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### Q15 - How would you rate yourself on the extra-introversion scale during your first year on first sales job?

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