

# Factors Influencing Real Estate Brokerage Sales Staff Performance

*Michael A. Abelson\**  
*K. Michele Kacmar\*\**  
*Ellen F. Jackofsky\*\*\**

---

**Abstract.** This research examined factors that affect residential real estate sales staff performance from sixteen firms of various sizes in different residential markets. The human capital model was related to sales staff commission earnings. A psychological factors model and management systems model were introduced that explained variance beyond that accounted for by the human capital model. Multiple regression analysis demonstrated that five of the twenty-seven variables examined accounted for most of the statistically significant variance. These variables included gender, hours worked per week, amount of formal education, work satisfaction, and reputation of the firm. Suggestions on how to utilize the findings regarding those variables related to earnings, as well as those not related, are briefly discussed.

One of the most critical roles a real estate broker must play is that of recruiter and selector of his or her sales staff. However, determining if a person would be a good real estate salesperson is a very difficult job. An ever-increasing interest in examining factors that contribute to sales staff performance has occurred in the last few years.

Stribling [14] primarily examined individual sales staff biographical information, market factors, and some perceptions of the job. He found that hours worked per week, those not married, and those generally satisfied were better performers. Age, gender and experience at the firm were not related to performance. Stribling [14] used a self-report of gross commissions after business expenses as the performance measure. This performance measure may cause some concern because of the inconsistencies inherent in a measure that is both self-reported and relies on personal tax record keeping and reporting practices.

Follain, Lutes and Meier [7] more accurately determined performance as they examined staff biographical information and firm characteristics. They reported that more years of experience; greater hours worked; being a broker, especially in non-rural areas; being in a larger firm; and attending more seminars were present in higher performers. They reported that age, gender, function of the firm, marital status, and whether or not the firm participated in a large franchise were not related to performance.

Glower and Hendershott [8], Crellin, Frew and Jud [5], and Chinloy [4] examined similar factors and similar relationships. Generally, experience, hours worked per week, whether

---

\*Department of Management, College of Business Administration, Texas A&M University, College Station, Texas 77843-4221.

\*\*School of Management, Rensselaer Polytechnic Institute, Troy, New York 12180.

\*\*\*Cox School of Business, Southern Methodist University, Dallas, Texas 75275.

Date Revised—May 1990; Accepted—June 1990.

---

they were a broker or a sales agent, and some form of education, whether it be graduate school [7], college [8], or traditional seminars [5], each had an effect on performance.

Past research has contributed primarily by examining a human capital model approach and/or firm-specific factors. The objective of the present research is to extend past research examining the sales staff factors-sales staff performance relationship. To do this, psychological variables, such as personality factors, personal perceptions of various job-related aspects, and perceptions of various management systems within the firm were added to the traditional human capital model.

### ***Human Capital Model***

Sales staff age, tenure, education, gender, family responsibility, and hours worked per week are the human capital model variables examined in this study. Two forms of age were included, actual age and age started in real estate. Previous research has examined only actual age. Some of these studies have found that actual age was not related to performance [5, 7, 13], while others reported that it was [8]. This inconsistency in findings may indicate that age started in real estate may be a more important factor. Residential real estate agents typically start at young ages or when they are older and household issues are no longer a central focus. Actual age may therefore not be a determining issue of performance. Instead, it may be the age people begin a career in real estate that affects performance. If this is found to be true, this information would be a valuable tool in selecting sales agents because it is easily determined during the interview.

Three different types of tenure are examined in the present study. These include tenure at the firm, tenure in real estate, and tenure in sales other than real estate. Each of these has been examined in previous studies with various findings, however, these have not been examined simultaneously by the same study. Tenure with the firm is predicted to have the most significant influence on performance. This is suggested because the associate is familiar with the office procedures, office work norms, and the markets appropriate for that office's proximity. Total tenure in real estate also may be useful in increasing sales performance because experience gained at other firms, as well as the current firm, may be applied to difficult situations and thus increase the associate's productivity [5, 7, 8]. Finally, tenure in sales other than real estate should help increase sales performance. The associate may be able to apply sale techniques used in other sales positions to real estate. Experience is thought to affect performance differently than age because real estate agents enter the job market at different ages.

Recent research examining education has produced fairly consistent results. Crellin, Frew and Jud [5], Follain, Lutes and Meier [7] and Glower and Hendershott [8] found that brokers and sales staff education is related to performance. Glower and Hendershott [8] found that brokers and sales staff with a college education had greater performance. Follain, Lutes and Meier [7], in a study that examined mostly residential sales staff, found that a graduate degree was related to performance. Crellin, Frew and Jud [5] reported that both a college business degree and an M.B.A. were related to residential sales staff performance. The present study examines years of formal education and not specific categories of education. We expect to find the same results as previous research.

Residential real estate is one of the few careers in which females are not a minority. Because women hold more residential sales positions than commercial sales positions, it is predicted that this self-selection is for a reason, and that women will be better performers

in residential sales than men. Chinloy [4] found that males were higher performers, but his study included both commercial and residential agents. Commercial agents, who are generally male, typically earn more than agents in the traditionally female-dominated residential market. Crellin, Frew and Jud [5] reported that there was no gender difference in performance for non-broker residential agents; those examined in the present study. This study will attempt to reexamine the effect of gender on performance.

Traditionally, women have been responsible for the majority of family responsibilities. This situation also is expected to influence the performance of sales associates because it is primarily a female work force and the time and priority issue that arise due to family responsibilities may influence performance. To examine this contention, two forms of family responsibilities were examined: marital status and the number of children living at home. The stronger the pull from the home on the sales associate, the more influence each of these family responsibilities are posited to have on performance. Thus, it is predicted that both marriage and responsibility for several children at home will lead to lower performance although Follain, Lutes and Meier [7] found no relationship between performance and marital status.

Finally, hours worked per week also is predicted to influence sales staff performance. Previous research examining this factor found that associates willing to work the longest hours will be the most successful [5, 7, 13]. Two studies did report that there may be decreasing returns to hours worked per week [5, 8]. Following the rationale of most of the previous research, it is predicted that as hours worked per week increase, so will performance.

The human capital model that was just reviewed, frequently has been examined in past real estate research. While the human capital model is examined in this study, other models also are incorporated. The present study expands on past research by predicting that variables from two other models also may influence sales staff performance. The following sections outline two models: the psychological factors model and the management systems model. The variables in these models are predicted, individually and as a group, to be related to performance.

### ***Psychological Factors Model***

The psychological factors model in the present study focuses specifically on personality, attitude and perception variables. Because no other area of psychology may be as broad as the area of personality [12], it is necessary to narrow our scope. In order to do this, a common starting point is needed. This is best accomplished through a definition of personality.

Personality has been defined as the unique organization of thoughts, feelings, and behaviors that define an individual and determine that person's pattern of interaction with the environment [3]. The 'environment' of interest to the present investigation is that of an independent contractor (i.e., sales associate).

With this in mind, more specific personality traits that would influence how an individual reacts in this environment can be isolated. Past research has found that for individuals who wish to develop their own business, not unlike the activities required of a sales associate, the personality variable of need for achievement is required [11]. Therefore, it is predicted that sales associates who have a high need for achievement will be successful.

Two other related variables, need for autonomy and need for affiliation, also have been found to be needed by individuals, in particular managers, as they deal with their work environment [9]. Specifically, individuals who have a high need for affiliation tend to create a strong sense of team spirit among fellow workers [11]. While this may be required of a broker, sales associates should not be in the office improving team spirit. Instead, they should be in the field listing and showing properties. Being in the field listing and showing properties is behavior more reflective of an individual with a high need for autonomy. For these reasons, it is predicted that sales associates who have a high need for autonomy also may be better performers, while sales associates who have a high need for affiliation may not be better performers.

Research has shown that attitudes and perceptions held by people influence their performance [6]. However, past research in this area has not produced a consistent relationship between satisfaction and performance [9]. This is generally attributed to the subjective component of measuring performance that occurs when supervisor performance evaluations are used. This study overcomes this problem by using objective sales staff commission earnings as the measure of performance. It is expected that general, as well as other types of satisfaction (i.e., satisfaction with pay, satisfaction with work, and satisfaction with co-workers) will increase sales staff sales commission performance.

Perceptions sales staff hold about their job also may influence performance. For example, performance may decrease if the job is viewed as having a high level of ambiguity or a high degree of conflict regarding sales expectations. Also, the level of frustration the agent feels from the job, as well as the level of stress experienced because of the job, may decrease performance. However, performance may be enhanced by a strong willingness to work and commitment to the firm or a strong personal attachment to the job. Finally, if the sales agent experiences tremendous pressure from clients this may decrease desire to produce and negatively influence sales performance.

### *Management Systems Model*

Several factors under the control of management also may influence sales staff performance. First, past research has found a relationship between training and performance [5, 7]. However, research has not examined the effect of the perceived need by sales agents of typical office training on sales staff performance. It is suspected that those stating they need the most training would be those who are lower performers. If a negative relationship between need for training and performance occurs, it suggests that training is important for performance and that those needing it the most realize this affects their performance.

How satisfied the agent is with the supervisor also could influence performance. Some agents may find a close relationship with the manager is essential to their continued high level of performance. Others may just want a manager who is there to answer questions whenever they arise. It is hypothesized that satisfaction with management, therefore, will be related to performance.

Specific managerial qualities have been shown to have an effect on performance [1, 2]. The qualities proposed to affect performance in the present study include integrity and ability to act as a role model.

Finally, the reputation of the firm may directly influence sales staff performance. The amount of walk-in and call-in business may lead the sales agent working in the office to believe the firm has a good reputation. Agents being aware of positive feedback regarding their firm/office from others in the industry may also enhance their personal motivation. This, along with other positive attitudes sales staff have about their firm, will further enhance sales associate motivation and productivity.

## **Method**

### *Sample*

Sixteen firms, four single-office firms and three multiple-office firms in Dallas, Texas, and four single-office firms and five multiple-office firms in Houston, Texas participated. An attempt was made to balance the number of firms from each city as well as the number of multiple- and single-office firms. Firm size ranged from one single-office firm with 6 full-time sales associates to one firm with more than twenty offices and 500 sales associates in a single city. Each firm was asked to select the one office that most typified the organization. The offices involved ranged in size from 6 to 41 full-time sales associates. Participating firms represented different residential real estate markets and geographic areas. Nine sales associates were randomly selected from each office so that one office or firm was not over-represented in the sample, which is why multiple-office firms were asked to involve only one office in the study. Ninety sales associates participated in the study, which represents a 64% response rate. Close attention was taken to assure a scientific sampling of representative sales staff. The extent to which having all participants located in two metropolitan areas in Texas influences this representativeness should be taken into consideration.

### *Questionnaire Development and Data Collection*

The twenty-seven independent variables studied were measured using traditional and rather straightforward one-item questions (human capital model), or well-developed, psychometrically sound multi-item scales (psychological factors and management systems). Exact items, scale titles and authors can be obtained from the first author.

Brokers and sales associates released sales commission performance information for the twelve-month period after completion of the questionnaire. This information was made available on a monthly or quarterly basis and served as the dependent variable.

The table in the Appendix lists the average, standard deviation, and range for each of the variables examined in the study. The variables in the psychological factors and management systems models were measured on a seven-point scale with 1 representing strong disagreement and 7 indicating strong agreement. Performance (commissions) was the amount of gross sales commissions in dollars sales staff received during a twelve-month period. For analyses, an adjusted daily average earned was calculated and used for all participants to account for those people working less than a full year after completion of the questionnaire.

### Data Analysis

Internal consistency reliabilities were obtained from each multi-item variable scale. Coefficients ranged from 0.51 to 0.96, most being 0.75 and above. Zero-order Pearson Product Moment correlations were calculated between the independent variables and twelve-month post questionnaire sales commission data. A regression analysis examining the relationship between groups of independent variables was then performed to determine the relative strengths of these variables in predicting performance. Groups of variables by models were entered in the order in which they appear in Exhibit 1. Changes in  $R^2$  accounted for by the addition of each set of variables as well as the  $R^2$  statistical significance were calculated.

**Exhibit 1**  
**Factors that Influence Performance**

Factors	Zero-order Pearson Product Moment Correlation	Multiple Regression $R^2$ /Adjusted $R^2$	Change in $R^2$
<i>Human Capital Model</i>		0.31**/0.21	
Current Age	—		
Age started in real estate	—		
Tenure in firm	0.31**		
Tenure in real estate	0.19**		
Tenure in sales	—		
Gender (females higher performers)	-0.19*		
Marital status	0.23*		
Children at home	—		
Formal education	—		
Hours worked per week	0.40**		
<i>Psychological Factors Model</i>		0.43*/0.25	0.12*
Need for achievement	—		
Need for autonomy	—		
Need for affiliation	—		
General satisfaction	—		
Work satisfaction	—		
Co-worker satisfaction	—		
Pay satisfaction	—		
Client pressure	-0.19*		
Commitment	—		
Experienced job stress	—		
Experienced job frustration	—		
Attachment to the job	—		
Experienced ambiguity and conflict	—		
<i>Management Systems Model</i>		0.51**/0.30	0.08
Need for training	-0.25**		
Satisfaction with supervisor	—		
Manager qualities	0.31**		
Organization reputation	—		

Note:—not related; \*related ( $P < 0.05$ ); \*\*highly related ( $P < 0.01$ ).  
Highest value possible is 1.00. A negative sign indicates a significant, but negative relationship.

## Results

Questionnaire responses were correlated independently with performance data for the one year after the questionnaire was completed to determine which variables were by themselves related to performance. As can be seen in Exhibit 1, five of the ten variables in the human capital model were related to performance. Results indicated that the longer the tenure at the firm and in real estate the higher the sales staff performance. Those who are currently married and/or female also were high performers. Finally, the more hours worked per week, the better the performance. Interestingly enough, formal education, the number of dependent children, age, age started in real estate, and tenure in sales other than real estate were not related to performance.

Exhibit 1 also indicates that the variables in the psychological factors model were generally not related to performance. The only exception was pressure from clients. However, need for achievement, autonomy, or affiliation as well as general, co-worker, work, and pay satisfaction, commitment to the job, job stress, job frustration, attachment to the job, and ambiguity and conflict in the job were not found to relate to the performance of a sales associate.

Two variables in the management systems model were related to sales staff performance and two were not. High performers did not believe they needed more training. Also, while satisfaction with supervisor was not related to performance, certain other qualities of managers did influence performance. Respondents indicated that managerial behaviors such as understanding, availability, optimism, integrity, time management, and maintaining morale were very important in improving productivity and thus performance. Finally, the organization's reputation did not seem to influence performance.

Next, each of the factors related to performance were analyzed further using regression analyses. Performance was regressed on each grouping of variables to determine their importance within the set. Each set of variables (by model groupings) were added hierarchically. The capital model was entered first, then the psychological factors model, followed by the management systems model. The results from this analysis also appear in Exhibit 1. These analyses were performed to determine the relative importance of each additional set of model variables in explaining sales staff performance.

The human capital model was examined first because past sales staff performance research demonstrated that these variables significantly influence performance. The results in Exhibit 1 confirmed past research findings. Human capital variables, as a group, were significantly related to performance. The variables within that group which accounted for statistically significant amounts of variance indicate that high performers work more hours per week, have more formal education, and are more likely to be female.

Variables in the psychological factor model then were added to the equation to determine if these variables explained additional variance. The change in  $R^2$  was 0.12, demonstrating a statistically significant increase in variance explained. Only work satisfaction contributed to the increase in explained variance. Finally, variables in the management systems model were added. Results indicated that these variables, as a group, also significantly increased variance explained.

## Summary

This study has confirmed findings from past research as well as broadened our

understanding of factors contributing to sales staff performance. The zero-order Pearson Product Moment correlations demonstrated that individual variables in the human capital model were consistently related to performance. High performers were more often female and married. They had more experience in the firm and in real estate. They also worked longer hours. The human capital model as previously believed and expected, proved to be important in explaining sales staff performance.

One of the strengths of this study is that the relationship between many previously unstudied factors and performance were examined. One variable in the psychological factors model was found to influence performance, while the others were not. Sales staff who received pressure from clients were better performers. Various other types of satisfaction, commitment and attachment to the job, job stress, frustration and ambiguity had no significant influence on performance. These results suggest that firms attempting to have effective interventions to improve sales staff performance should concentrate more on helping the person deal with external concerns such as client pressures than on frustrations inherent in the job.

Variables in the managerial systems model, such as integrity, being an effective role model, and knowledge of need for training, were found separately to be related to performance while satisfaction with the manager and organizational reputation produced no independent significant effect. These results indicate that managers need to spend their energy more on developing appropriate qualities and less on trying to befriend and satisfy sales staff needs just to "keep them happy" in order to improve sales staff performance. It appears that a well-run office will help increase sales more than an office where everyone just likes the manager.

Another strength of this study is that for the first time, models other than the human capital model as a group were examined. The present study also examined a psychological factors model and a management systems model. While the human capital model was found to be important, the psychological factors model and the management systems model did add to our understanding of sales staff performance above and beyond the traditional human capital model. When all variables are considered simultaneously, the most significant variables were hours worked per week, formal education, gender, work satisfaction, and organizational reputation.

## **Discussion**

While this information is informative, just how exactly is one to apply it to the real estate profession? First, many of these findings can be used to select sales associates who have the potential to be high performers. If performance is a primary criterion for selection, formal education, and hours sales staff typically work or expect to work each week should be given strong consideration. Women also will be better performers in the residential markets. The number of children, age, and age started in real estate will have little effect on performance. There is little reason to be concerned with or attempt to assess potential sales staff's need to achieve, need for autonomy, or need to work with others. Focus should not be on what makes a salesperson happy but more emphasis should be placed on how to keep the client happy.

It is also important to note that a sales associate does not have to be "satisfied" or have a nice relationship with the manager or owner of the firm to be productive. What is important is that the sales associate perceives the manager as possessing certain qualities.



Even though client pressures, job stress, and frustration are part of the job, they seem to have little relationship with performance. While it may be nice to acknowledge these problems as they arise, no constant emphasis needs to be placed on them.

## Conclusion

Prior to the present study, research in the area of predicting sales staff performance focused on a specific set of factors. Various studies had examined and reexamined these same factors (see Crellin et al. [5] for a thorough review). However, the present study breaks the mold and extends what is known about residential sales staff performance in several ways. Each of these are enumerated in this final section.

First, it validates some findings of previously published works. Second, it examines a much broader array of factors, which have potential to influence sales staff performance, than have previously been reported by other studies. Besides looking at primarily biographical factors (i.e., the human capital model), as was done in the past, we have included personality factors, sales staff perceptions related to the work and office, and management systems that have the potential to affect performance.

The present study provides evidence to support the contention that several of these other factors contribute to sales staff performance. Just as importantly, there is evidence to suggest that some factors thought to be related to performance, such as satisfaction and job stress, have little if any effect on performance.

Third, examining the human capital, psychological factors and management systems models simultaneously leads to a more parsimonious view. Of the twenty-seven variables examined, three human capital (hours worked, gender, formal education), one psychological (work satisfaction), and one management systems variable (organizational reputation) most significantly contribute to performance. Managers should consider associating with salespeople who are female, have high levels of formal education and who are willing to put in long hours. While working with these salespeople, managers should attempt to help them to be more satisfied with the work itself and enhance sales staff perception of the office's reputation.

Finally, a fourth contribution of this research is that it helps answer or reaffirm answers to some questions (e.g., hours worked and formal education) while raising other questions (e.g., why were personality and perceptions of the workplace generally *not* related to performance?).

The present study provided additional information for the broker and associates that past studies have not presented. It is hoped that some of the new relationships presented will be useful to brokers and managers and will contribute to better management of the brokerage real estate firm. Also, it is hoped that this research will motivate others to continue this line of research and further examine some of the questions raised by this study.

*This research was funded by a grant from The Real Estate Center at Texas A&M University.*

## References

- [1] M. A. Abelson. Seven Rules Aid Managers. *The Real Estate Center Journal* 3:4 (1989), 7-9.
- [2] ——. Providing the Support For a Thriving Sales Force. *Real Estate Today* 22:6 (1989), 52-55.
- [3] G. W. Allport. *Pattern and Growth in Personality*. New York: Holt, Rinehart & Winston, 1961.
- [4] P. Chinloy. The Real Estate Brokerage: Commissioned Sales and Market Values. *The Journal of Real Estate Research* 3 (1988), 37-52.
- [5] G. E. Crellin, J. R. Frew and G. J. Jud. The Earning of REALTORS: Some Empirical Evidence. *The Journal of Real Estate Research* 3 (1988), 69-78.
- [6] M. Fishbein and I. Ajzen. *Belief, Attitudes, Intentions, and Behavior*. Reading, MA: Addison-Wesley, 1975.
- [7] J. R. Follain, T. Lutes and D. A. Meier. Why Do Some Real Estate Salespeople Earn More Than Others? *The Journal of Real Estate Research* 2 (1987), 73-81.
- [8] M. Glower and P. H. Hendershott. The Determinants of REALTOR Income. *The Journal of Real Estate Research* 3 (1988), 53-68.
- [9] M. T. Iaffaldano and P. M. Muchinsky. Job Satisfaction and Performance: A Meta-Analysis. *Psychological Bulletin* 97 (1985), 251-73.
- [10] D. C. McClelland. *The Achieving Society*. New York: D. Van Nostrand, 1961.
- [11] ——— and D. H. Burham. Power is the Great Motivator. *Harvard Business Review* 54 (1976), 100-10.
- [12] W. Mischel. *Introduction to Personality*. New York: CBS College Publishing, 1981.
- [13] L. Porter and R. Steers. Organizational, Work, and Personal Factors in Employee Turnover and Absenteeism. *Psychological Bulletin* 80 (1973), 151-76.
- [14] J. C. Stribling. *Characteristics of the High Performance Real Estate Salesperson*. TRERC-785-1M-488, Texas Real Estate Research Centre, 1985.

**Appendix**  
**Average, Standard Deviation, and Range for Factors Examined in the Present Study**

Factors	Average	Standard Deviation	Range
<i>Human Capital Model</i>			
Current Age	47.6	10.8	20-60+
Age started in real estate	40.8	9.3	20-60
Tenure in firm	3.9	4.2	<1-21
Tenure in real estate	6.7	5.5	<1-> 26
Tenure in sales	3.3	6.4	<1-> 26
Gender	NA	NA	NA
Marital status	NA	NA	NA
Children at home	0.7	1.1	0-3
Formal education	NA	NA	NA
Hours worked per week	44.3	18.7	<10-> 60
<i>Psychological Factors Model</i>			
Need for achievement	5.3	0.8	1-7
Need for autonomy	4.1	0.7	1-7
Need for affiliation	4.5	0.7	1-7
General satisfaction	3.6	0.33	1-7
Work satisfaction	3.0	0.34	1-7
Co-worker satisfaction	3.1	0.31	1-7
Pay satisfaction	3.0	0.35	1-7
Client pressure	4.2	1.20	1-7
Commitment	4.2	0.35	1-7
Experienced job stress	2.6	1.03	1-7
Experienced job frustration	4.0	0.83	1-7
Attachment to the job	2.5	0.27	1-7
Experienced ambiguity and conflict	4.0	0.49	1-7
<i>Management Systems Model</i>			
Need for training	4.1	1.2	1-7
Satisfaction with supervisor	3.0	0.35	1-7
Manager qualities	5.4	1.03	1-7
Organization reputation	4.0	0.50	1-7
<i>Performance</i>			
12-month gross	\$16,455.60	\$14,948.70	0-162,000