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by

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The Effects of Locus of Control on Real Estate Agent Job

Satisfaction, Turnover, and Sales Performance
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Finally, I would like to convey my sincere appreciation for my girlfriend, Amanda. Although she preferred not to read about the investigation of locus of control in real estate and Pearson Product Moment correlations, she provided invaluable support throughout the entire project. Amanda understood the time commitment this study required, and she made consistent sacrifices so I could dedicate myself to the completion of it.
# Table of Contents

Acknowledgements........................................................................................................i
Table of Contents........................................................................................................ ii
List of Tables.................................................................................................................. iii
List of Appendices......................................................................................................... iv
Abstract......................................................................................................................... v

Chapter
  I. Review of the Literature.........................................................................................1
  II. Rationale and Hypotheses.....................................................................................13
  III. Method..................................................................................................................17
  IV. Results..................................................................................................................23
  V. Discussion..............................................................................................................26
  VI. Summary...............................................................................................................35

References......................................................................................................................49
Appendices.....................................................................................................................55
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Frequencies and Percentages for Demographic Variables</td>
<td>19</td>
</tr>
<tr>
<td>2. Descriptive Statistics for Key Variables</td>
<td>20</td>
</tr>
</tbody>
</table>
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Levenson LOC Scale.</td>
<td>55</td>
</tr>
<tr>
<td>B. IRB Approval Letter.</td>
<td>56</td>
</tr>
<tr>
<td>C. Informed Consent.</td>
<td>57</td>
</tr>
<tr>
<td>D. Invitation to Participate</td>
<td>58</td>
</tr>
<tr>
<td>E. Debriefing Form.</td>
<td>59</td>
</tr>
</tbody>
</table>
Abstract

Relationships among locus of control and job satisfaction, turnover intention, and sales performance in real estate were examined. A scale adapted from Levenson’s (1974) Internal-External scale was used to measure LOC in 86 real estate agents at a large Midwestern real estate company. Previous research has shown that internal LOC is positively related to job satisfaction (Majumder, MacDonald, & Greever, 1977) and performance (Tseng & Kessel, 1971; Tseng, 1970) in other industries while having a negative correlation with turnover intentions. Results showed a significant relationship between internal LOC and job satisfaction as well as a negative correlation between internal LOC and turnover intentions in real estate agents. Also supported was the negative relationship between external LOC and job satisfaction. Additionally, external LOC real estate agents displayed higher intentions to quit. There were no significant gender differences or differences in age or level of education. Results from this study suggest the importance of LOC as a selection measure for real estate agents. Taken together, it appears that internal LOC individuals are more compatible for the demands of a career in real estate. Future research should investigate full-time real estate agents exclusively and use alternative methods for measuring sales performance.
Chapter I
Review of the Literature

Companies all over the world are spending millions of dollars on selection instruments designed to bring the best individuals into their organizations. The process of hiring and training a new employee is a substantial investment in most industries. Therefore, it is important to identify characteristics that predict high performance and low turnover in any given job. More specifically, employers are charged with predicting person-job fit (P-J fit), or the match between a candidate’s interests and abilities and the demands of the job (Edwards, 1991).

One industry that may be particularly susceptible to the importance of P-J fit is real estate. As independent contractors, real estate agents are responsible for acquiring business, marketing properties, facilitating transactions, and earning an income almost exclusively from sales commission. This industry’s “sink or swim” mentality too often results in high turnover (Sirmans & Swicegood, 1997), so it is beneficial for companies to foresee whether some individuals may be a better fit than others.

Like many other jobs in which performance is impacted by external factors, real estate success is affected by many variables. For example, real estate sales fluctuate in response to economic trends, government ordinances, and changes of season. Interest rates alone can determine if homeowners decide to put their homes on the market. In many regions, summer and spring months generate the majority of business while sales in
fall and winter months diminish. Given the individuality of the profession and the
influence of external factors on performance, it likely takes a unique person to succeed in
real estate. The purpose of this paper is to investigate some of the characteristics
necessary for an individual to not only achieve success in real estate, but also remain in
the industry for a long period of time.

Person-Job Fit

For many years researchers have been studying the compatibility between an
individual and the work environment, or person-environment fit (P-E fit; Dawis, 1992).
This broad construct is founded on the idea that there is an ideal environment for a certain
type of person. Holland (1973) identified six work environments that he labeled as
realistic, investigative, artistic, social, enterprising, and conventional. Similarly, Holland
also identified six personality types of the same names. Although originally
conceptualized as dichotomous variables, Holland (1985) eventually suggested that the
individual and the environment are continuous variables which could be exhibited in
varying degrees from very low to very high. Holland suggests the more compatible an
individual is with the environment, the higher the individual’s job satisfaction will be.

Since Holland first proposed P-E fit, the construct has been broken down into
several more specific components, one of which is person-job fit (P-J fit). Edwards
(1991) describes P-J fit as the congruence of a person’s traits and skills with the
requirements of the job. It has been argued that an individual’s performance is, in part,
determined by the compatibility of his or her traits and skills with the characteristics of
the job (Weiss, Davis, England, & Lofquist, 1967). Over the years, this theory has gained
much support (e.g., Caldwell & O’Reilly, 1990; Holland, 1985; Kristof-Brown,
Zimmerman, & Johnson, 2005). In addition to a positive relationship with performance, P-J fit has been found to positively correlate with job satisfaction (Caldwell & O’Reilly, 1990), employee engagement (Maslach, Schaufeli, & Leiter, 2001), and tenure (Kristof-Brown, et al., 2005).

Edwards (1991) posited that P-J fit can be broken down into two dimensions. One of these dimensions is the demands-abilities component, which describes the relationship between a person’s knowledge, skills, and abilities with the job requirements. For example, a bus driver with a perfect driving record (demands) and excellent customer service (skills) would have high demands-abilities fit. Hence, her skills and abilities would match with the criteria for being a bus driver. According to Edwards, needs-supplies fit is the second dimension of P-J fit, which assesses the extent to which the individual’s needs, desires, and preferences are met by performing the job. A school teacher who experiences repeated satisfaction when his students excel (needs, desires, and preferences) is said to have high needs-supplies fit. The teacher’s desire for his students to succeed is supplied by the performance of the job. Together, these forms of fit compose P-J fit, or the overall compatibility of a person’s characteristics with that of the job.

A type of P-E fit that should be distinguished from P-J fit is person-organization fit (P-O fit), which describes the compatibility of an individual and the organization at which he or she works (Kristof-Brown, et al., 2005). P-J fit is different than P-O fit in that P-J fit involves the specific tasks and skills required by a single job whereas P-O fit emphasizes the fit between a person’s personality and the values of an entire organization. For example, a bank teller may love handling currency and working with
customers (job tasks/skills) while disapproving of company goals and policies (organizational values). In this case, the employee has high P-J fit but low P-O fit. Contrarily, if another bank teller shares similar values as the bank but struggles with interpersonal interaction and counting money, the employee would have high P-O fit but low P-J fit.

Overall, the concept of P-J fit has garnered significant attention in both the academic and professional domains (Lauver & Kristof-Brown, 2001). Recruiters, selection personnel, and managers may all benefit from the understanding and implementation of P-J fit practices. This belief is especially true for real estate, an industry with well-defined objectives and relatively stable job demands. In fact, if the chief characteristics required of a real estate agent include self-motivation and diligence, P-J fit for a realtor likely calls for an individual who believes his or her own behaviors will directly produce outcomes.

**Locus of Control**

Perhaps one characteristic that may predict success in real estate is locus of control (LOC), which, according to Rotter (1966), is the individual difference that describes the general extent to which individuals believe they control the events or outcomes that occur in their lives. The most common dichotomy of this construct categorizes individuals as displaying either an internal or an external locus of control. Those who believe their actions and choices determine their future (also called internals) operate with an internal LOC. Individuals with an external LOC (also called externals) believe fate, chance, or other external factors produce their outcomes (Broedling, 1975). Given the autonomous nature of a career in real estate, one would expect a successful
agent to believe that he or she has control over the outcomes of his or her business efforts. An agent who works hard, practices frequent prospecting, and negotiates transactions probably does so because these behaviors are believed to produce results. On the contrary, an agent who believes fate or external factors determine success may become discouraged or unmotivated, thus performing at a lower level.

**Dimensionality**

LOC is often considered a multidimensional construct. According to Paulhus (1983), LOC is best divided into three spheres: personal efficacy, interpersonal control, and sociopolitical control. Confirmatory factor analysis by Paulhus strongly supported this three-factor model. Paulhus describes personal efficacy as perceived control over personal success in nonsocial environments. These situations include solving puzzles, passing exams, or excelling at one’s work. The next sphere is interpersonal control, or control over other individuals in a group or team setting. A person operating in this sphere would feel in control when attempting to persuade a group of investors, maintain friendships, or meet new people. The final sphere, sociopolitical control, describes perceived control over social or political groups or outcomes. Individuals with high sociopolitical control see value in attending rallies, reaching out to government officials, and becoming involved in change initiatives. According to Paulhus (1983), an individual’s score on one of these dimensions does not necessarily mean a high score on the others or vice versa.

LOC can also be analyzed through distinction among causal agents. Levenson (1973) claims that people generally assign control to one of three sources: themselves, chance, or powerful others. This model is similar to Rotter’s (1966) internal versus
external model in that internals assign control to themselves, believing that they are the cause of their own outcomes. Also, chance is often the causal agent for those whom Rotter considers to be externals. However, Levenson posits that externals may credit outcomes to some powerful entity. This third causal agent is not included in Rotter’s scale.

**Related Constructs**

There are several constructs that display similar characteristics to LOC. Self-efficacy is related to LOC in that it describes an individual’s belief in him or herself to be able to succeed in a given task or situation (Bandura, 1977). The difference between LOC and self-efficacy is that while LOC is a general perception of control across situations, self-efficacy varies based on the situation. For example, an internal LOC real estate agent, or more specifically, an agent who exhibits high personal efficacy, may have a general feeling of control in most areas of life while simultaneously feeling little self-efficacy in his or her attempt to cold call potential clients. Overall, self-efficacy is a unique feeling of confidence in a specific endeavor whereas personal efficacy is one’s generalized feeling of control over any number of nonsocial scenarios. Personal efficacy, as a dimension of LOC, is more stable across situations and not as malleable to changing tasks or activities in the way that self-efficacy is.

In a study investigating the influence of personal characteristics on salespeople’s problem-solving strategies, Srivastava and Sager (1999) found support for the relationship between internal LOC and high self-efficacy. As salespeople coped with the stress of the job, many of those who attributed outcomes to their own behaviors also felt more confident in their ability to solve problems. Srivastava and Sager concluded that
THE EFFECTS OF LOC ON REAL ESTATE AGENTS

internals approach a stressful situation (like those often introduced in real estate) with greater persistence and determination.

A construct also related to LOC is learned helplessness. Externals, by definition, feel more helpless than internals in determining outcomes around them. However, learned helplessness, as defined by Seligman (1973), occurs when a person feels out of control because of repeated past experiences in which his or her behaviors did not produce the desired response, often when the desired response may, in fact, be attainable. Like self efficacy, learned helplessness is a situationally-based phenomenon. Whereas external LOC is a general feeling of lack of control, learned helplessness involves changing one’s behavior in accordance with the feeling of lack of control.

Cohen, Rothbart, and Phillips (1976) conducted a study that investigated both LOC and learned helplessness. In their study, participants completed a series of spatial reasoning tests followed by either contingent or noncontingent feedback. Contingent feedback occurred when participants were rewarded for correct responses and received no reward for incorrect responses. Noncontingent feedback occurred when the participants experienced arbitrary reinforcement in which there was no linkage between reward and accuracy of responses. Each participant also completed Rotter’s (1966) measure of LOC to identify themselves as either internals or externals. Results showed that external LOC participants in the noncontingent condition became frustrated and displayed helpless behavior, whereas internal LOC participants in the noncontingent condition did not. Perhaps these findings suggest that individuals who believe outcomes are independent of their behaviors may also display learned helplessness, and in some cases, ultimately result in poor performance, frustration, or turnover. This may also
suggest that external LOC real estate agents may experience less success and higher turnover if they experience learned helplessness.

Locus of Control and Performance

Research has shown that employees with an internal LOC may perform better than those with an external LOC (Tseng & Kessel, 1971; Majumder, et al., 1977; Tseng, 1970). For example, in a study in which supervisors assigned performance ratings to their secretaries, supervisors rated secretaries with an internal LOC as significantly more efficient than those with an external LOC (Tseng & Kessel, 1971). Another study examining the performance of rehabilitation counselors found that internal employees performed better than their external counterparts (Majumder, et al., 1977). In addition to higher performance, counselors with an internal LOC reported higher job morale, higher job satisfaction, and a more positive attitude than counselors with an external LOC.

Tseng (1970) studied a group of vocational rehabilitation clients and found that internals displayed significantly higher job proficiency and need for achievement than externals. Results also showed those with an internal LOC reported significantly higher compliance with rules, observance of safety practices, safer operation and better care of equipment, higher ability to work with others, work tolerance, better manners in the shop, more abstract thinking, and higher conscientiousness (Tseng, 1970).

Further support for this relationship is found in a study by Miller, Kets De Vries, and Toulouse (1982) in which the performance of internal and external LOC executives was examined. In this study, internal LOC executives were more likely to take risks, develop detailed plans, and utilize technology to advance their businesses. On the other hand, externals displayed less propensity for innovation and less proactiveness. These
results suggest that internals may view their organizations as more malleable structures, whereas externals tend to adhere to the status quo.

More relevant to real estate, however, are the findings supporting the relationship between LOC and sales performance. Spiro and Weitz (1990) conducted a study on the antecedents of adaptive selling success. Adaptive selling is the process of altering one’s sales strategies when interacting with different people or situations in order to best respond to the nature of that specific sale. In other words, an adaptive seller is one who identifies client needs and preferences and adjusts accordingly. Spiro and Weitz found a significant positive relationship between internal LOC sales staff and the practice of adaptive selling. In real estate, adaptive sellers are individuals who use different sales strategies, communication styles, and negotiation techniques for each unique client. For example, an adaptive selling agent who responds to text messaging from one client may communicate through telephone calls or email with another. One home seller may seek daily updates, whereas the other only requires communication when a potential buyer makes an offer. Real estate agents who adapt consistently likely do so because they believe it will result in greater success. This belief that changing one’s behavior to better suit the client, which will ultimately result in a sale, is characteristic of a person with an internal LOC.

Like many independent contracting jobs, a career in real estate can be highly stressful. Coping is a necessary skill for agents to learn in order to stay afloat and deal with the pressures of the industry. Research has shown that an individual’s LOC affects the coping techniques he or she uses to deal with problems and manage everyday stress, finding that internals are more likely to handle stress independently, whereas externals
often seek assistance from others (Tanck & Robbin, 1979). Further, there is evidence suggesting that internals view the stresses of work as more controllable than externals (Newton & Keenan, 1990). A possible reason for these differences is that internals are believed to analyze problems in detail, assessing the causes of stressful situations and employing methods for dealing with stressors (Callan & Dickson, 1992). On the other hand, external LOC employees credit outcomes to external factors such as price, competitor products, or relationships between competitors and potential buyers (Parkes, 1984).

Likewise, Srivastava and Sager (1999) investigated LOC differences in two coping styles: problem-focus coping (PFC) style and emotion-focus coping (EFC). The major difference in the two styles is that PFC involves removing stressors, whereas EFC involves avoiding them. PFC requires an individual to identify the cause, develop an alternative, and implement a strategy for eliminating the stressor, whereas EFC is the process of creating distance from the stressor by soliciting assistance from others or diverting attention elsewhere (Folkman & Lazarus, 1980). Participation from 134 salespeople showed a strong positive relationship between internal LOC and PFC (Srivastava & Sager, 1999). Based on these findings, it is likely that internal LOC real estate agents would approach stressors with greater confidence and persistence than external LOC real estate agents.

Finally, the research of Watson and Baumal (1967) makes a strong case for why internals may make good real estate agents. In their study on LOC and future performance, Watson and Baumal asked participants to study a list of paired nonsense syllables under one of two conditions: the syllables will be needed later (skill condition)
or the syllables may be needed later depending on chance (chance condition). Results showed that the most errors were made by internal LOC participants in the chance condition, whereas external LOC participants made the most errors in the skill condition. This suggests that internals prefer to know they will have the opportunity to bring about outcomes by behaving in a certain way, whereas externals do not thrive (or are not as concerned with performance) when put into a situation in which their actions bring about the outcomes. Thus, in an independent contracting role such as real estate agent in which outcomes result directly from individual behavior, internals are expected to perform at a higher level.

**Locus of Control in Real Estate**

The role of LOC in real estate has not been heavily researched. However, one study exploring various personality traits in real estate performance found that real estate agents tend to have a higher average internal LOC than the general population (Rowinski, 2005). In this study, a 23-item variation of Rotter’s (1966) unidimensional measure of LOC was distributed to 60 real estate agents in a large Midwestern city. Forty-two questionnaires were returned, showing a mean internal LOC score which was significantly higher than that of the general population.

Rowinski’s (2005) study also discussed the importance of commercial relationships in the real estate industry. To achieve success, most agents must practice frequent relationship maintenance techniques including social interactions, following up, and other correspondences (Rowinski, 2005). These behaviors allow agents to establish commercial relationships with clients, increasing the likelihood of repeat business and referrals. An individual who practices such behaviors may likely believe that his or her
actions will determine outcomes (in this case, real estate sales performance). Therefore, real estate agents who utilize these steps in order to build and maintain commercial relationships may have an internal LOC.

Rowinski’s (2005) study also confirms the notion that self-attribution plays a significant role in real estate success. It seems that real estate agents who believe they can adjust behavior to achieve success are more likely to achieve success than real estate agents who believe outcomes are independent of their efforts. Because of the nature of a commission-based career, salespeople would be required to rely on diligence and effort more so than employees who are given consistent assignments and projects by their managers. The current study seeks to continue this investigation by further examining the role of LOC in real estate. Moreover, this study will attempt to determine if internals perform better than externals in the real estate industry as well as investigate the relationship of LOC, job satisfaction, and turnover.
Chapter II

Rationale and Hypotheses

There are several characteristics that have been linked to success in the real estate industry. According to Rowinski (2005), an individual who practices diligence, relationship maintenance, and self-attributional behavior is more likely to thrive as a real estate agent. Research has shown that high P-J fit, or the compatibility of a person with his or her job, is correlated with high performance (e.g., Caldwell & O’Reilly, 1990; Holland, 1985; Kristof-Brown, et al., 2005).

One aspect of the person in the P-J fit that may be particularly suited to a real estate agent is internal locus of control (LOC). It is possible that only a certain type of individual can thrive in a job that demands self-motivation and independence. Research has shown that those with an internal LOC are likely to cope with stress more effectively than external LOC individuals (Tanck & Robbin, 1979). More specifically, it has been shown that internal LOC workers are more likely to implement a problem-focus coping style (PFC), which involves identifying the cause, developing an alternative, and implementing a strategy for eliminating the stressor. External LOC workers, on the other hand, were more likely to engage in emotion-focus coping (EFC), which is characterized by problem avoidance and asking for help (Srivastava & Sager, 1999). These findings suggest a greater propensity for dealing with stress and obstacles one would face as an independent contractor. In fact, a study by Majumder, et al. (1977) showed that
employees with an internal LOC reported higher job morale, higher job satisfaction, and a more positive attitude than those with an external LOC. Perhaps real estate agents who are more confident in their ability to succeed will also be more satisfied with their overall experience of the job.

Therefore, the following is hypothesized:

*Hypothesis 1a: Internal LOC in real estate agents will be positively related to job satisfaction.*

*Hypothesis 1b: External LOC in real estate agents will be negatively related to job satisfaction.*

Another fundamental issue confronting the real estate industry is high turnover of real estate agents (Sirmans & Swicegood, 1997). P-J fit has been found to correlate with longer tenure (Kristof-Brown, et al., 2005). Therefore, if internal LOC is in fact a determinant of P-J fit among real estate agents, perhaps agents with a high internal LOC would be less likely to leave their jobs. Research shows that organizational commitment is negatively related to turnover (Hom, Katerberg, & Hulin, 1979), and several studies report that individuals with an internal LOC are more likely to be committed to an organization that those with an external LOC (Furnham et al., 1994; Kinicki & Vecchio, 1994; Luthans et al., 1987). Finally, individuals with an external LOC have been found to report higher intentions to quit (Spector & Michaels, 1986).

Consequently, the following is hypothesized:

*Hypothesis 2a: Internal LOC in real estate agents will be negatively related to turnover intentions.*
Hypothesis 2b: External LOC in real estate agents will be positively related to turnover intentions.

The connection between internal LOC individuals and general workplace success may not be sufficient for inferring that internal LOC real estate agents are more likely to experience success in home sales. However, it has been shown that internal LOC workers are more likely to implement a problem-focused coping style (PFC), which involves identifying the cause, developing an alternative, and implementing a strategy for eliminating the stressor (Srivastava & Sager, 1999). These findings suggest a greater propensity for dealing with the stress and obstacles one would face as an independent contractor. Effective stress management may also be related to increased job satisfaction, which based on the research of Judge, et al. (2001) has been shown to relate positively to job performance.

Additionally, findings from Watson and Baumal’s (1967) study on the influence of LOC in different activities may offer support for internal LOC in real estate. Results showed that internal LOCs thrive most in situations in which they are certain there will be an opportunity to apply their skills. External LOC participants did not perform as well under these skill-demanding conditions, but rather, achieved more success in activities that claimed a winner by chance. In another study, Spiro and Weitz (1990) found that salespeople with an internal LOC were more likely to practice adaptive selling, a self-regulatory technique often used in real estate sales. According to Miller, et al. (1982) individuals with an internal LOC are more likely to take risks, create business plans, and leverage technology to increase production. These findings suggest that internal LOC will
also be related to higher performance in real estate. Therefore, the following is hypothesized:

*Hypothesis 3a: Internal LOC in real estate agents will be positively related to sales performance.*

*Hypothesis 3b: External LOC in real estate agents will be negatively related to sales performance.*
Chapter III

Method

Participants

During the time of the study, all participants worked for a large Midwestern real estate company consisting of about 1200 real estate agents. A sample of 250 real estate agents was selected using a random number generator. Agents with less than one real estate transaction in the last fiscal year were eliminated, which produced usable data from 86 real estate agents. A power analysis revealed that this sample size was sufficient to obtain a power of .80 with an alpha level of .05 and a medium effect size for the hypotheses proposed (Cohen, 1992). Only respondents who had recorded at least one real estate transaction in the past fiscal year were included in the sample so that sales performance could be measured across participants and the sample included only those agents who consider real estate to be a significant source of income. Participation in this study was purely voluntary. Respondents were informed that their individual responses were strictly for research purposes only and that their individual results would be aggregated, containing no identifying information when the results are reported to the participating organization.

Measures

Demographics. Demographic information was collected from all participants. Each real estate agent was asked to provide age, sex, and educational background.
Descriptive statistics for these variables are presented in Table 1. Participants were also asked to indicate the number of years they have worked with the company and total number of years they have been licensed in real estate. The means and standard deviations for these, along with statistics for each LOC item, job satisfaction, turnover intention, and sales performance, are shown in Table 2.

**Locus of Control (LOC).** LOC was measured using the internal dimension and the external (chance) dimension of the Levenson (1974) LOC scale (see Appendix A). The original LOC scale consisted of 16 items using a 5-point scale, eight for the internal LOC dimension and eight for the external (chance) dimension. A reliability analysis was conducted to measure the reliability of both the internal dimension and the external dimension. The original 8-item internal dimension scale yielded a reliability of .60, which was similar to Levenson’s (1974) original LOC scale (>.64). Because this is lower than .70, an item analysis was conducted in order to indentify which items, if removed, would increase the reliability of the scale. This process was continued until the highest possible alpha was obtained. The final scale consisted of three items, yielding a coefficient alpha of .72. This 3-item internal LOC scale was used to measure internal LOC in this study. The external LOC dimension (chance) assessed the degree to which an individual perceives that fate or chance dictates the outcomes in his or her life. In this study, all eight items of the original external scale had a coefficient alpha reliability of .77. Internal LOC and external LOC were scored separately.

**Turnover intentions.** Turnover intentions were measured by asking one item as follows: “I plan to be working for this organization six months from now.” Participants
Table 1

*Frequencies and Percentages for Demographic Variables*

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<tr>
<th>Sex Variable</th>
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<td>Male</td>
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<td>Female</td>
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<th>Age</th>
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<td>41-50</td>
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<td>20.9%</td>
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<tr>
<td>51-60</td>
<td>24</td>
<td>27.9%</td>
</tr>
<tr>
<td>&gt;60</td>
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<td>31.4%</td>
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**Educational Background**

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<td>High School</td>
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<td>Associate’s Degree</td>
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<td>Doctoral Degree</td>
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<tr>
<td>Prefer Not to Respond</td>
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<td>2.3%</td>
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Table 2

*Descriptive Statistics for Key Variables*

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<tr>
<th>Item</th>
<th>( M )</th>
<th>( SD )</th>
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<td>Years Licensed</td>
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<td>9.83</td>
</tr>
<tr>
<td>External LOC</td>
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</tr>
<tr>
<td>Internal LOC</td>
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<tr>
<td>Turnover Intention</td>
<td>4.35</td>
<td>0.79</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>4.17</td>
<td>0.72</td>
</tr>
<tr>
<td>Sales Performance</td>
<td>$47,826.51</td>
<td>$65,341.94</td>
</tr>
</tbody>
</table>

*Note:* External LOC items and Internal LOC items were summed separately. External LOC consisted of 8 items and Internal LOC consisted of 3 items.
answered this question using a 5-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

**Job satisfaction.** Job satisfaction was measured with the response to a single item worded as follows: "Overall, I am satisfied with my job." Participants answered this question using a 5-point scale ranging from *Strongly Disagree* to *Strongly Agree*. Research supports the use of a single item scale to measure job satisfaction, explaining that one response captures the desired information without the risk of redundancy or compromising construct validity (Scarpello & Campbell, 1983; Wanous, Reichers, & Hudy, 1997).

**Sales performance.** Participants were asked to indicate their net income in the previous fiscal year in an open response format. This response provided an operationalized measure for sales performance.

**Procedure**

Approval was sought (see Appendix B) by presenting a research proposal to the Institutional Review Board at Xavier University. Each member of the final participant pool received an email from the Vice President of Core Services, an individual who oversees all company operations. In addition to the informed consent form (see Appendix C), this email included an invitation to participate in the study as well as a link to the survey hosted by SurveyGizmo.com (see Appendix D). Participants were protected by a guarantee of anonymity. As responses were submitted, they were collected in a file that was only accessible to the researcher. No individual responses were made available to any other party; only aggregated results were provided to the participating organization.
Participants were allowed to discontinue participation at any time for any reason, at which point their data were eliminated.

This study was estimated to take 15 minutes to complete. Real estate agents were not compensated for participating.

Data were automatically collected once participants submitted their final response on the final scale. The study concluded with a debriefing form explaining the aims of the study and supplying participants with contact information in case they are interested in learning more about the project (see Appendix E).
Chapter IV

Results

All stated hypotheses were tested using the Pearson Product moment correlation. Part A of the first hypothesis, proposed that internal LOC would be positively correlated with job satisfaction. Results suggest that there was a significant positive relationship between internal LOC and real estate agent job satisfaction, $r(84) = .35, p = .010$.

Part B of the first hypothesis, proposing that external LOC would be negatively correlated with job satisfaction was also analyzed. Results supported this hypothesis, demonstrating a significant negative relationship between external LOC and job satisfaction, $r(84) = -.26, p = .008$.

Part A of the second hypothesis, proposing that internal LOC would be negatively correlated with turnover intentions, was analyzed. Results suggested a significant negative relationship existed between internal LOC and turnover intentions, $r(84) = -.28, p = .010$.

Part B of the second hypothesis, proposed that external LOC would be positively related with turnover intentions. Results supported this hypothesis, suggesting that there was a significant positive relationship between external LOC and turnover intentions, $r(84) = .30, p = .002$. 
Part A of the third hypothesis, proposed that a positive relationship exists between internal LOC and sales performance. Results revealed a nonsignificant relationship, $r(84) = .05, p = .310$.

Part B of the third hypothesis, proposing that external LOC and sales performance are negatively correlated, was also analyzed. A nonsignificant relationship was found, $r(84) = -.02, p = .419$.

**Supplemental Analyses**

In addition to testing the hypotheses, a Pearson Product moment correlation was used to investigate the relationship between tenure and LOC. The results showed no significant relationship between internal LOC and tenure, $r(84) = -.01, p = .934$. Similarly, a nonsignificant relationship was found for external LOC and tenure $r(84) = .08, p = .472$.

Analyses were also conducted to determine if any group means displayed a significantly different relationship with LOC. More specifically, an independent samples $t$-test was used to uncover potential gender differences. It was found that there was no significant difference between gender groups for internal LOC $t(84) = -.13, p = .897$. For external LOC, there was also no significant gender difference $t(84) = .40, p = .690$.

Further, an ANOVA revealed that there was no significant difference among age groups when measuring internal LOC $F(4, 81) = .63, p = .646$. Likewise, there was no significant difference among age groups for external LOC $F(4, 81) = .54, p = .702$. Finally, ANOVAs were used to discover any differences that may have existed among education levels and LOC. It was found that no significant difference was shown between
internal LOC and education level $F(5, 80) = .60, p = .703$. Additionally, no significance was found in differences of education level for external LOC $F(5, 80) = 1.03, p = .406$. 
Chapter V
Discussion

The purpose of this study was to determine if a relationship exists between LOC and three workplace variables in real estate: job satisfaction, turnover intention, and sales performance. Internal LOC has been shown to exhibit positive correlations with job satisfaction (Majumder, et al., 1977) and negative correlations with intention to quit (Spector & Michaels, 1986) in business realms operating under the employee-employer model. However, no research has been conducted to determine if these relationships hold true in real estate, an industry which consists of independent contractors instead of hierarchical employment structures. In real estate, an individual’s performance can be determined by his or her income because income is directly dependent upon sales volume. Research has supported the relationship between internal LOC and sales performance in other industries (Spiro & Weitz, 1990). This study sought to determine if the same relationship exists in real estate.

Hypothesis 1a predicted that internal LOC in real estate agents would be positively related to job satisfaction. Support for this hypothesis was found, suggesting that internal LOC and job satisfaction are related and that internal LOC may indeed be a factor of P-J fit for real estate agents. This finding suggests that those real estate agents who believe they control their own destiny may be more likely to be satisfied working in the industry. Perhaps internal LOC real estate agents cope with the fluctuating demands
of their careers more effectively by adjusting behavior in accordance with those demands, believing that such adjustments will make a positive impact. Additionally, as an independent contractor, a real estate agent exercises full control over his/her work schedule. The ability to work at one’s own preferred pace likely appeals to the internal LOC individual who believes his/her actions and decisions shape outcomes. A final reason supporting the relationship between job satisfaction and internal LOC in real estate agents is the commission-based pay structure. Compensation is another aspect of work in which the real estate agent exhibits more control than the traditional employee. If a real estate agent would like to generate more income, he/she could respond by working longer hours or making some other business adjustment. This strategy would be appealing to the internal LOC real estate agent who would expect to see results coming from such decisions.

Hypothesis 1b was also supported. Real estate agents exhibiting an external LOC showed lower levels of job satisfaction. Consistent with findings from Hypothesis 1a, external LOC may be related to lower job satisfaction. It may be the case that external LOC real estate agents become less satisfied with their careers because they feel they do not have control over what happens with their business. Frustration and discontentment may build when external LOC agents hold the perception that workload and income are based on forces outside of themselves. It is also possible that external LOC individuals are less comfortable making adjustments in the workplace. For a real estate agent who believes outcomes are largely determined by fate, deviating from the normal business plan may appear fruitless.
This study also showed support for Hypothesis 2a, which predicted that internal LOC would be negatively correlated with turnover intentions. It appears as though a real estate agent who believes he or she determines what happens in life would be more likely to stick with a career defined by frequent challenges and erratic demands, such as in real estate (Spector & Michaels, 1986). It is also possible that internal LOC individuals are less likely to quit regardless of industry. However, the independent nature of real estate may function as the ideal work environment for the internal LOC individual to thrive, thus eliminating the desire to quit.

Support was also found for Hypothesis 2b, which posited that external LOC would be positively related to turnover intentions. It is likely that real estate agents who feel the outcomes around them are subject to fate would be more likely to quit in such a demanding industry that involves a lot of independent input. If a real estate agent felt as though the outcomes around him or her were the result of chance and largely unaffected by personal efforts, a career in real estate may quickly become frustrating or overwhelming. These negative emotions would likely encourage an individual to consider exiting the organization and to consider a new field of work.

Contrary to the first two hypotheses, hypotheses 3a and 3b were not supported. It was expected that internal LOC would be positively correlated with sales performance, whereas external LOC would be negatively related to sales performance. However, no significant relationships were found for either hypothesis. Internal LOC agents, by definition, believe that their behaviors directly influence outcomes around them. Therefore, it was assumed this belief would motivate agents to work harder to determine those outcomes, ultimately resulting in higher sales than their external LOC counterparts.
Based on the present study, this was not the case, and no relationship appears to exist between LOC orientation and sales performance. Perhaps this lack of a relationship is caused by the combination of so many confounds affecting real estate agents’ sales performance. For example, two individuals with the same sales volume may have a vastly different number of transactions. A single house sold in an affluent neighborhood could generate the same amount of sales volume as five houses in a much less affluent suburb. In addition to differing price points, many real estate agents may only work on a part-time basis. In order to participate in this study, real estate agents were required to record at least one transaction in the previous fiscal year. Whereas this criterion eliminated inactive agents from the participant pool, anecdotal evidence suggests that part-time real estate agents were included in the sample. Including part-time real estate agents may contaminate the results because these individuals may not need to make as much money as full-time real estate agents in order to make a living.

It is also possible that an agent’s income is influenced more significantly by professional factors such as business strategy or sphere of influence. Regardless of locus of control orientation, business strategy plays a large role in determining sales performance. Virtually every real estate agent has a different method for acquiring business, completing transactions, and gaining repeat customers. A real estate agent’s marketing plan, internet presence, negotiation skills, communication style, and tendency to work with buyers or sellers are some of the many factors that influence success in the business. Based on this study’s failure to find a significant correlation between LOC and sales performance, it may be that business strategy differences such as these are more closely related to sales outcomes in real estate than LOC. Future research should certainly
explore this issue, as well as investigate alternative measures to a real estate agent’s performance, such as the number of listings and even customer ratings.

**Supplemental Analyses**

No relationship was found between LOC and tenure. Because of the significant correlation found between LOC and turnover intentions, one could have predicted that internal LOC would be positively related to tenure. To some degree, tenure occurs at the absence of turnover intention. Therefore, no relationship between LOC and tenure is, in some ways, surprising. Again, it is likely that the part-time real estate agents who participated in this study affected the correlation between these variables. Part-time real estate agents are not usually dependent on real estate sales as a primary vehicle for income. Therefore, the effect of LOC on tenure would likely be minimized as part-time real estate agents may not face the same level of stress or burnout that full-time real estate agents would experience. With less stress or burnout present, a real estate agent would be less likely to quit. Still, future research may benefit by examining only full-time real estate agents.

Similarly, there was no support shown for the relationship between LOC and gender. This finding is consistent with what has been found in other industries (Feingold, 1994). It may be that no difference in LOC exists between real estate agents of different genders. LOC and age also showed a nonsignificant relationship in this study as an examination of the internal LOC means revealed little difference across age groups, although a significant majority of the participants were females (75.6%). Moreover, this finding corroborates what has been found in previous research in that no appreciable difference in LOC has been detected between young adults and individuals above the age
of 59 (Lachman, 1986). An investigation between LOC and educational background also produced no significant evidence for a relationship. It might be expected that an individual who believes he or she can largely determine his or her outcomes in life would be more likely to pursue higher levels of education. However, with a range from high school diploma to doctoral degree, this sample did not find any relationship exists between LOC and educational background.

In sum, there were no differences among age, gender, and educational background on LOC orientation. However, this study did find that job satisfaction and turnover intentions were significantly related to internal and external LOC in real estate agents, which corroborates research on LOC in other industries (Majumder, et al., 1977; Spector & Michaels, 1986). In general, LOC is considered a function of personality (Spector & Michaels, 1986), and studies (including the current one) continue to confirm its stability over time. Therefore, attempting to train employees to enhance their internal LOC is not encouraged. Instead, LOC should be considered as a tool for personnel selection. Because LOC continues to show no significant differences among protected demographic groups, it is a trait that may not be particularly susceptible to adverse impact if used as a selection measure. Whereas there was no support for the relationship between LOC and sales performance, real estate organizations could still benefit if they could enhance the job satisfaction and lower turnover intentions when selecting real estate agents. As LOC has been shown to relate to both of these outcomes, it should be considered to play an integral role in real estate agent P-J fit.
Limitations

As with most scientific research, this study comes with a few limitations. First, it cannot be guaranteed that results from this study may be generalizable to real estate agents working for other organizations. However, the sample selected for this study included individuals working from over 20 branch offices in several different cities. Therefore, such a diverse population with a wide range of individual differences suggests that these results may be expected in future research.

Next, it must be noted that variability in sales performance ($SD = \$65,341.94$) may be attributed to factors that cannot be controlled. The quantifiable sales figure is perhaps the most widely used measure of performance for independent contracting, such as real estate. However, factors that may have enabled or hindered sales performance are unknown to the researcher. It is possible that participants may have received house listings from managers or business referrals during the fiscal year that was analyzed. In these cases, little or no effort may have been required from the real estate agent to acquire business. Likewise, it is also possible that extenuating personal circumstances may have arisen during the time being analyzed, preventing the real estate agent from performing at his/her typical level. Or, as mentioned previously, it could be that the variability of housing prices or part-time versus full-time status impacts sales volume more so than most (if not all) other variables.

Another factor that could potentially affect the study is the presence of social desirability. Although participants were ensured that no identifying information would be disclosed, it is possible that they still responded according to what they believed the participating organization would perceive as favorable. Perhaps the job satisfaction ($M =$}
4.17, $SD = .72$) and turnover ($M = 4.35, SD = .79$) items were most susceptible to the influence of social desirability because these constructs were closely related to the participants' perceptions of the participating organization. The high means and low standard deviations for these items suggest a ceiling effect may have occurred. Of course, this restriction in range would have made it even more challenging to detect significant relationships involving job satisfaction and turnover intentions, which may suggest that these findings may be even more robust than reported in this study.

**Conclusion and Suggestions for Future Research**

The topic of LOC has been heavily researched for many years, providing a wealth of support for the benefits of internal LOC in a number of business arenas. For real estate, an industry that experiences difficulty predicting performance and turnover, there is a need for a better understanding of the factors that are related to job satisfaction, turnover intentions, and performance. This study suggests that a belief in one’s ability to control outcomes may be linked to higher job satisfaction and lower turnover. This finding may account for some portion of P-J fit in real estate. Still, this study failed to uncover a relationship between real estate agent LOC and the most common measure of real estate agent performance — sales performance.

Nevertheless, an opportunity exists to further understand the role of LOC in real estate. As noted previously, future research should investigate the variables in this study among real estate agents who only work full-time. Additionally, other factors such as self-efficacy and learned helplessness could be examined as they have been shown to relate to LOC orientation (Srivastava & Sager, 1999; Cohen, et al., 1976). Moreover, as noted earlier, stress is related to LOC (Tanck & Robbin, 1979). Hence, if stress is
assumed to be a common byproduct of a career in real estate, it should also be investigated in future research. Finally, sales performance may be captured in a way that provides more information. Collecting data on number of listings, average transaction revenue, and ratio of expired listings to closed listings could incrementally allow for a more clear understanding of performance in real estate.

The current study was conducted in order to examine the role of LOC in real estate. Support was found for a positive relationship between internal LOC and job satisfaction as well as a negative relationship with intention to quit. External LOC was shown to be correlated with lower job satisfaction and higher intention to quit. LOC showed no relationship with sales performance or demographic groups. These findings support the use of internal LOC as a selection measure for real estate agents. Future research should focus on full-time real estate agents and alternative measures of performance, including number of listings and customer ratings.
Chapter VI

Summary

Real estate is a dynamic industry that offers careers to a large number of professionals. Like many other jobs, success in real estate is affected by many variables. The purpose of this paper is to investigate some of the characteristics necessary for an individual to not only achieve success in real estate, but also remain in the industry for a long period of time.

Perhaps one characteristic that may predict success in real estate is locus of control (LOC), which is the general extent to which individuals believe they control the events or outcomes that occur in their lives (Rotter, 1966). The most common dichotomy of this construct categorizes individuals as displaying either an internal or an external locus of control. Those who believe their actions and choices determine their future (also called internals) operate with an internal LOC. Individuals with an external LOC (also called externals) believe fate, chance, or other external factors produce their outcomes (Broedling, 1975).

Given the autonomous nature of a career in real estate, one would expect a successful agent to believe that he or she has control over the outcomes of his or her business efforts. An agent who works hard, practices frequent prospecting, and negotiates transactions probably does so because these behaviors are believed to produce results. On
the contrary, an agent who believes fate or external factors determine success may become discouraged or unmotivated, thus performing at a lower level.

There are several characteristics that have been linked to success in the real estate industry. According to Rowinski (2005), an individual who practices diligence, relationship maintenance, and self-attributional behavior is more likely to thrive as a real estate agent. Research has shown that high compatibility of a person with his or her job, is correlated with high performance (e.g., Caldwell & O’Reilly, 1990; Holland, 1985; Kristof-Brown, et al., 2005).

It is possible that only a certain type of individual can thrive in a job that demands self-motivation and independence. Research has shown that those with an internal LOC are likely to cope with stress more effectively than external LOC individuals (Tanck & Robbin, 1979). This suggests a greater propensity for dealing with stress and obstacles one would face as an independent contractor. In fact, a study by Majumder, et al. (1977) showed that employees with an internal LOC reported higher job morale, higher job satisfaction, and a more positive attitude than those with an external LOC. Perhaps real estate agents who are more confident in their ability to succeed will also be more satisfied with their overall experience of the job.

Therefore, the following is hypothesized:

*Hypothesis 1a: Internal LOC in real estate agents will be positively related to job satisfaction.*

*Hypothesis 1b: External LOC in real estate agents will be negatively related to job satisfaction.*
Another fundamental issue confronting the real estate industry is high turnover of real estate agents (Sirmans & Swicegood, 1997). P-J fit has been found to correlate with longer tenure (Kristof-Brown, et al.). Therefore, if internal LOC is in fact a determinant of P-J fit among real estate agents, perhaps agents with a high internal LOC would be less likely to leave their jobs. Research shows that organizational commitment is negatively related to turnover (Hom, et al., 1979), and several studies report that individuals with an internal LOC are more likely to be committed to an organization that those with an external LOC (Furnham et al., 1994; Kinicki & Vecchio, 1994; Luthans et al., 1987). Finally, individuals with an external LOC have been found to report higher intentions to quit (Spector & Michaels, 1986).

Consequently, the following is hypothesized:

Hypothesis 2a: Internal LOC in real estate agents will be negatively related to turnover intentions.

Hypothesis 2b: External LOC in real estate agents will be positively related to turnover intentions.

Findings from Watson and Baumal’s (1967) study on the influence of LOC in different activities may offer support for internal LOC in real estate. Results showed that internal LOCs thrive most in situations in which they are certain there will be an opportunity to apply their skills. External LOC participants did not perform as well under these skill-demanding conditions, but rather, achieved more success in activities that claimed a winner by chance. In another study, Spiro and Weitz (1990) found that salespeople with an internal LOC were more likely to practice adaptive selling, a self-regulatory technique often used in real estate sales. According to Miller, et al. (1982)
individuals with an internal LOC are more likely to take risks, create business plans, and leverage technology to increase production. These findings suggest that internal LOC will also be related to higher performance in real estate. Therefore, the following is hypothesized:

_Hypothesis 3a: Internal LOC in real estate agents will be positively related to sales performance._

_Hypothesis 3b: External LOC in real estate agents will be negatively related to sales performance._

**Method**

**Participants**

A sample of 250 real estate agents was selected using a random numbers generator. Agents with less than one real estate transaction in the last fiscal year were eliminated, which produced usable data from 86 real estate agents. During the time of the study, all participants worked for a large Midwestern real estate company consisting of about 1200 real estate agents. A power analysis revealed that this sample size was sufficient to obtain a power of .80 with an alpha level of .05 and a medium effect size for the hypotheses proposed (Cohen, 1992). Only respondents who had recorded at least one real estate transaction in the past fiscal year were included in the sample so that sales performance could be measured across participants and the sample included only those agents who consider real estate to be a significant source of income. Participation in this study was purely voluntary. Respondents were informed that their individual responses were strictly for research purposes only and that their individual results would be
aggregated, containing no identifying information when the results are reported to the participating organization.

Measures

Demographics. Demographic information was collected from all participants. Each real estate agent was asked to provide age, sex, and educational background. Participants were also asked to indicate the number of years they have worked with the company and total number of years they have been licensed in real estate.

Locus of control (LOC). LOC was measured using the internal dimension and the external (chance) dimension of the Levenson (1974) LOC scale. The original LOC scale consisted of 16 items using a 5-point scale, eight for the internal LOC dimension and eight for the external (chance) dimension. An item analysis was conducted to measure the reliability of both the internal dimension and the external dimension. The original 8-item internal dimension scale yielded a poor reliability of .60. Therefore, an item analysis was conducted in order to identify which items, if removed, would increase the reliability of the scale. This process was continued until the highest possible alpha was obtained. The final scale consisted of three items, yielding a coefficient alpha reliability of .72. This 3-item internal LOC scale was used to measure internal LOC in this study. The external LOC dimension (chance) assessed the degree to which an individual perceives that fate or chance dictates the outcomes in his or her life. In this study, all eight items of the original external scale had a coefficient alpha reliability of .77. Internal LOC and external LOC were scored separately.

Turnover intentions. Turnover intentions were measured by asking one item as follows: “I plan to be working for this organization six months from now.” Participants
answered this question using a 5-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

**Job satisfaction.** Job satisfaction was measured with the response to a single item worded as follows: “Overall, I am satisfied with my job.” Participants answered this question using a 5-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

**Sales performance.** Participants were asked to indicate their net income in the previous fiscal year in an open response format. This response provided an operationalized measure for sales performance.

**Procedure**

Approval was sought by presenting this research proposal to the Institutional Review Board at Xavier University. Each member of the final participant pool received an email from the Vice President of Core Services, an individual who oversees all company operations. In addition to the informed consent form, this email included an invitation to participate in the study as well as a link to the survey hosted by SurveyGizmo.com. Participants were protected by a guarantee of confidentiality. As responses were submitted, they were collected in a file that was only accessible to the researcher. No individual responses were made available to any other party; only aggregated results were provided to the participating organization. Participants were allowed to discontinue participation at any time for any reason, at which point their data were eliminated.

**Results**

Part A of the first hypothesis, proposing that internal LOC would be positively correlated with job satisfaction, was analyzed using a Pearson Product moment
correlation. Results suggest that there was a significant positive relationship between internal LOC and real estate agent job satisfaction, \( r(84) = .35, p = .010 \).

Part B of the first hypothesis, proposing that external LOC would be negatively correlated with job satisfaction was also analyzed using a Pearson Product moment correlation. Results supported this hypothesis, demonstrating a significant negative relationship between external LOC and job satisfaction, \( r(84) = -.26, p = .008 \).

Part A of the second hypothesis, proposing that internal LOC would be negatively correlated with turnover intentions, was analyzed using a Pearson Product moment correlation. Results suggested a significant negative relationship existed between internal LOC and turnover intentions, \( r(84) = -.28, p = .010 \).

Part B of the second hypothesis, proposing that external LOC would be positively related with turnover intentions, was also analyzed using a Pearson Product moment correlation. Results supported this hypothesis, suggesting that there was a significant positive relationship between external LOC and turnover intentions, \( r(84) = .30, p = .002 \).

Part A of the third hypothesis, proposing that a positive relationship exists between internal LOC and sales performance, was analyzed using a Pearson Product moment correlation. Results revealed a nonsignificant relationship, \( r(84) = .05, p = .310 \).

Part B of the third hypothesis, proposing that external LOC and sales performance are negatively correlated, was also analyzed using a Pearson Product moment correlation. A nonsignificant relationship was found, \( r(84) = -.02, p = .419 \).
Supplemental Analyses

Additional correlational testing showed no significant relationship between internal LOC and tenure, $r(84) = -.01, p = .934$. Similarly, a nonsignificant relationship was found for external LOC and tenure $r(84) = .08, p = .472$.

A $t$-test was used to uncover potential gender differences. It was found that there was no significant difference between gender groups for internal LOC $t(84) = .13, p = .897$. For external LOC, there was also no significant gender difference $t(84) = .40, p = .690$.

Further, an ANOVA revealed that there was no significant difference among age groups when measuring internal LOC $F(4, 81) = .63, p = .646$. Likewise, there was no significant difference among age groups for external LOC $F(4, 81) = .54, p = .702$.

Finally, ANOVAs were used to discover any differences that may have existed among education levels and LOC. It was found that no significant difference was shown between internal LOC and education level $F(5, 80) = .60, p = .703$. Additionally, no significance was found in differences of education level for external LOC $F(5, 80) = 1.03, p = .406$.

Discussion

The purpose of this study was to determine if a relationship exists between LOC and three workplace variables in real estate: job satisfaction, turnover intention, and sales performance. Internal LOC has been shown to exhibit positive correlations with job satisfaction (Majumder, et al., 1977) and negative correlations with intention to quit (Spector & Michaels, 1986) in business realms operating under the employee-employer model. However, no research has been conducted to determine if these relationships hold
true in real estate, an industry which consists of independent contractors instead of hierarchical employment structures. In real estate, an individual’s performance can be determined by his or her income because income is directly dependent upon sales volume. Research has supported the relationship between internal LOC and sales performance in other industries (Spiro & Weitz, 1990). This study sought to determine if the same relationship exists in real estate.

Hypothesis 1a predicted that internal LOC in real estate agents would be positively related to job satisfaction. Support for this hypothesis was found, suggesting that internal LOC and job satisfaction are related and that internal LOC may indeed be a factor of P-J fit for real estate agents. This finding suggests that those real estate agents who believe they control their own destiny may be more likely to be satisfied working in the industry. Perhaps internal LOC real estate agents cope with the fluctuating demands of their careers more effectively by adjusting behavior in accordance with those demands, believing that such adjustments will make a positive impact. Additionally, as an independent contractor, a real estate agent exercises full control over his/her work schedule. The ability to work at one’s own preferred pace likely appeals to the internal LOC individual who believes his/her actions and decisions shape outcomes.

Hypothesis 1b was also supported. Real estate agents exhibiting an external LOC showed lower levels of job satisfaction. Consistent with findings from hypothesis 1a, external LOC may be related to lower job satisfaction and thus lower P-J fit in real estate. It may be the case that external LOC real estate agents become less satisfied with their careers because they feel they do not have control over what happens with their business.
Frustration and discontentment may build when external LOC agents hold the perception that workload and income are based on forces outside of themselves.

This study also showed support for hypothesis 2a, which predicted that internal LOC would be negatively correlated with turnover intentions. It appears as though a real estate agent who believes he or she determines what happens in life would be more likely to stick with a career defined by frequent challenges and erratic demands, such as in real estate (Spector & Michaels, 1986). It is also possible that internal LOC individuals are less likely to quit regardless of industry. However, the independent nature of real estate may function as the ideal work environment for the internal LOC individual to thrive, thus eliminating the desire to quit.

Support was also found for hypothesis 2b, which posited that external LOC would be positively related to turnover intentions. It is likely that real estate agents who feel the outcomes around them are subject to fate would be more likely to quit in such a demanding industry that involves a lot of independent input.

Contrary to the first two hypotheses, hypotheses 3a and 3b were not supported. It was expected that internal LOC would be positively correlated with sales performance, whereas external LOC would be negatively related to sales performance. However, no significant relationships were uncovered for either hypothesis. Internal LOC agents, by definition, believe that their behaviors directly influence outcomes around them. Therefore, it was assumed this belief would motivate agents to work harder to determine those outcomes, ultimately resulting in higher sales than their external LOC counterparts. Based on the present study, this was not the case, and no relationship appears to exist between LOC orientation and sales performance. It is possible that an agent’s income is
influenced more significantly by professional factors such as business strategy or sphere of influence.

In sum, there were no differences among age, gender, and educational background on LOC orientation. However, this study did find that job satisfaction and turnover intentions were significantly related to internal and external LOC in real estate agents, which corroborates research on LOC in other industries. In general, LOC is considered a function of personality, and studies (including the current one) continue to confirm its stability over time. Therefore, attempting to train employees to enhance their internal LOC is not encouraged. Instead, LOC should be considered as a tool for personnel selection.

Limitations

As with most scientific research, this study comes with a few limitations. First, it cannot be guaranteed that results from this study may be generalizable to real estate agents working for other organizations. It is possible that the organizational culture of the participating real estate company may impact the job satisfaction or turnover intentions of participants beyond the degree to which they are related to locus of control. However, the sample selected for this study included individuals working from over 20 branch offices in several different cities. Therefore, such a diverse population with a wide range of individual differences suggests that these results may be expected in future research.

Next, it must be noted that variability in sales performance may be attributed to factors that cannot be controlled. The quantifiable sales figure is perhaps the most widely used measure of performance for independent contracting, such as real estate. However, factors that may have enabled or hindered sales performance are unknown to the
THE EFFECTS OF LOC ON REAL ESTATE AGENTS

researcher. It is possible that participants may have received house listings from managers or business referrals during the fiscal year that was analyzed. In these cases, little or no effort may have been required from the real estate agent to acquire business. Likewise, it is also possible that extenuating personal circumstances may have arisen during the time being analyzed, preventing the real estate agent from performing at his/her typical level. Or, as mentioned previously, it could be that the variability of housing prices or part-time versus full-time status impacts sales volume more so than most (if not all) other variables.

Another factor that could potentially affect the study is the presence of social desirability. Although participants were ensured that no identifying information would be disclosed, it is possible that they still responded according to what they believed the participating organization would perceive as favorable. Perhaps the job satisfaction ($M = 4.17, SD = .723$) and turnover ($M = 4.35, SD = .794$) items were most susceptible to the influence of social desirability because these constructs were closely related to the participants’ perceptions of the participating organization. The high means and low standard deviations for these items suggest a ceiling effect may have occurred. Of course, this restriction in range would have made it even more challenging to detect significant relationships involving job satisfaction and turnover intentions, which may suggest that these findings may be even more robust than reported in this study.

Conclusion and Suggestions for Future Research

The topic of LOC has been heavily researched for many years, providing a wealth of support for the benefits of internal LOC in a number of business arenas. For real estate, an industry that experiences difficulty predicting performance and turnover, there is a
need for a better understanding of the factors that are related to job satisfaction, turnover intentions, and performance. This study suggests that a belief in one’s ability to control outcomes may be linked to higher job satisfaction and lower turnover. This finding may account for some portion of P-J fit in real estate. Still, this study failed to uncover a relationship between real estate agent LOC and the most common measure of real estate agent performance – sales performance.

Nevertheless, an opportunity exists to further understand the role of LOC in real estate. As noted previously, future research should investigate the variables in this study among real estate agents who only work full-time. Additionally, other factors such as self-efficacy and learned helplessness could be examined as they have been shown to relate to LOC orientation (Srivastava & Sager, 1999; Cohen, et al., 1976). Moreover, as noted earlier, stress is related to LOC (Tanck & Robbin, 1979). Hence, if stress is assumed to be a common byproduct of a career in real estate, it should also be investigated in future research. Finally, sales performance may be captured in a way that provides more information. Collecting data on number of listings, average transaction revenue, and ratio of expired listings to closed listings could incrementally allow for a more clear understanding of performance in real estate.

The current study was conducted in order to examine the role of LOC in real estate. Support was found for a positive relationship between internal LOC and job satisfaction as well as decreased intention to quit. External LOC was shown to be correlated with lower job satisfaction and higher intention to quit. LOC showed no relationship with sales performance or demographic groups. These findings support the use of internal LOC as a selection measure for real estate agents. Future research should
focus on full-time real estate agents and alternative measures of performance, including number of listings and customer ratings.
THE EFFECTS OF LOC ON REAL ESTATE AGENTS

References


Appendix A

Levenson LOC Scale

The Levenson internal-external control scale is protected by copyright, so it is not reproduced in this document. A copy of this scale can be found at teachinternalcontrol.com
Appendix B

IRB Approval

June 27, 2013

David Wheatley
4424 Ashland Ave. #2
Cincinnati, OH 45212

Re: Protocol #1299-7, The Effects of Locus of Control on Real Estate Agent Job Satisfaction, Turnover and Sales Performance

Dear Mr. Wheatley:

The IRB has reviewed the materials regarding your study, referenced above, and has determined that it meets the criteria for the Exempt from Review category under Federal Regulation 45CFR46. Your protocol is approved as exempt research, and therefore requires no further oversight by the IRB. We appreciate your thorough treatment of the issues raised and your timely response.

If you wish to modify your study, including the addition of data collection sites, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

Please contact our office if you have any questions. We wish you success with your project!

Sincerely,

[Signature]

Morell E. Mullins, Jr., Ph.D.
Chair, Institutional Review Board
Xavier University

MEM:sb

C: Mark Nagy, Advisor
Appendix C

Informed Consent Form

You are being given the opportunity to volunteer to participate in a project conducted by David Wheatley through Xavier University.

The purpose of this study is to examine the relationship between personality and workplace outcomes. Volunteers will complete one survey estimated to take approximately 15 minutes. There are no known risks associated with this project, and data will be collected anonymously. In no way will any identifying information be disclosed, and data will only be available to the researcher in the aggregate form. Information gained through this survey will be used to advance scientific knowledge on workplace outcomes and help Sibey Cline to understand how to best serve its employees. As a volunteer, you reserve the right to withdraw from participating at any time for any reason without penalty. If you decide to participate in this project, please print a copy of this form for your records. If you choose not to participate in this study, your decision will have no effect on any future services you may be entitled to from the university.

If you have any questions at any time during the study, you may contact David E. Wheatley at wheatleyd@xavier.edu or (502) 751-4871, or Dr. Mark Nagy at nagyms@xavier.edu or (513) 745-1958. Questions about your right as a research participant should be directed to Xavier University’s Institutional Review Board at (513) 745-2870.
Appendix D

Invitation to Participate

Good morning/afternoon,

You have been selected to participate in a study on personality in real estate. David Wheatley, a training and development intern at the corporate office, is conducting a study in fulfillment of his master’s degree at Xavier University. Your participation would be a big help to him.

The survey is estimated to take about 15 minutes to complete. If you choose to do so, please read the informed consent form (attached) thoroughly. The link to the survey can be found below. Thank you!

Robin Sheakley

Vice President of Core Services
Appendix E

Debriefing Form

Thank you for taking the time to complete this survey. The purpose of this study is to gain a better understanding of the role of locus of control in real estate. Locus of control is a personality trait that describes a person’s general feeling about what determines outcomes in his or her life. Those who have an internal locus of control believe that they possess the ability to control most of their own outcomes whereas people with an external locus of control generally believe chance, fate, or powerful others determine their outcomes (Rotter, 1966).

Specifically, this study seeks to discover whether there is a relationship between locus of control and three workplace outcomes: job satisfaction, turnover, and sales performance. It is hypothesized that real estate agents with a high internal locus of control will report higher job satisfaction and sales performance and lower turnover intention than those with an external locus of control.

If you have any questions or concerns, please contact David E. Wheatley at wheatleyd@xavier.edu or Dr. Mark Nagy at nagyms@xavier.edu.