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THE IMPACT OF MOTIVATION AND CAUSATION AND EFFECTUATION APPROACHES ON EXIT STRATEGIES

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ABSTRACT

Although exit is a central part of the entrepreneurial process, most of the entrepreneurship literature has focused on the entry and growth phases of a business. Our research examines the extent to which the entrepreneur’s personal motivations and venture development processes impact exit strategies. Specifically we examine the link between extrinsic and intrinsic motivation and causation and effectuation processes and an entrepreneur’s intended exit strategy. Our results indicate that extrinsically-motivated entrepreneurs are more likely to consider an IPO strategy and less likely to consider an independent sale. Intrinsically-motivated entrepreneurs are less likely to consider an IPO or liquidation and more likely to intend to exit through an independent sale. Entrepreneurs employing causation processes are more likely to consider an IPO strategy and less likely to intend to exit via liquidation. The sub-dimensions of effectuation are differentially related to exit strategies. Experimentation is positively related to an IPO strategy while affordable loss is positively, and flexibility negatively, related to liquidation.

INTRODUCTION

Entrepreneurial exit has recently emerged as one of the central topics in entrepreneurship research (DeTienne, 2010). The bulk of this research has focused upon three areas: (1) the importance of construct definition due to exit’s multi-level nature (exit of firms from the market and exit of founders from the firm) (Wennberg, 2008), (2) the critical distinction between exit and failure (Headd 2003; Wennberg, Wiklund, DeTienne, & Cardon, 2010), and (3) the fact that entrepreneurial exit is multi-faceted (Wennberg, 2008) suggesting there are many different exit routes including acquisition, IPO, liquidation, sale to individuals, and family succession (Birley and Westhead, 1993; DeTienne & Cardon, 2010; Petty, 1997). In the current research we examine the voluntary exit intentions of founders utilizing different exit strategies.

Although several of the most recent research studies that focus on exit draw upon theoretical arguments regarding the relationship between entrepreneurial motivation and entrepreneurial exit to develop hypotheses, none, that we are aware of, directly measure motivation. In this study we examine both intrinsic motivation – satisfaction derived from within the individual (e.g. to be in control of my own future, to be recognized for work) and extrinsic motivation – satisfaction derives from external rewards (e.g. to acquire personal wealth, to earn a higher salary) and the relationship between each and an entrepreneur’s exit strategy. As Wiklund, Davidsson, and Delmar (2003:248) noted “…people start and operate their own firms for a variety of reasons other than maximizing economic returns…thus it is important to assess the relative importance of economic and noneconomic motives in order to understand why small business managers exhibit the growth-related attitudes and behaviors that they do….”

Finally, there has been a recent interest in how venture development processes such as causation and effectuation impact firm outcomes (Dew, Read, Sarasvathy, & Wiltbank, 2009; Sarasvathy, 2001; Wiltbank, Read, Dew, & Sarasvathy, 2009). This research suggests that causation and effectuation processes may be related to new market creation, new-venture
performance, private equity investing, and entrepreneurial decision-making. In our research we examine their relationship to different exit strategies. Our general thesis is that both motivation and venture development processes (causation and effectuation) influence the choice of exit strategies.

**EXIT, MOTIVATION, VENTURE DEVELOPMENT AND HYPOTHESES**

**Entrepreneurial Exit**

Entrepreneurial exit refers to “the process by which the founders of privately held firms leave the firms they helped to create” (DeTienne, 2010: 203). Understanding the exit is important to the firm, the industry, and the overall economy; however, it is particularly important to the founder because a major component of new venture value creation is dependent upon the ability to harvest value in the future (Holmberg, 1991). The method by which a business owner intends to exit a business is referred to as his or her exit strategy. Business owners may exit a business by passing it on to family members (family succession), selling it to an individual (independent sale), another firm (acquisition), or employees (employee buy-out), going through an initial public offering (IPO), or liquidating. In this research we examine independent sale, acquisition, IPO, and liquidation.

DeTienne and Cardon (2010) indicate that exit strategies may be categorized using three sets of descriptors: risk/reward relationship, complexity of exit, and potential for entrepreneur to be engaged after the exit. An independent sale is a relatively low-risk strategy that primarily occurs in the low-end market, often using a business broker, and rarely allows for the entrepreneur to be engaged after the sale. Both acquisitions and IPOs are strategies that are risky and complex with the potential for high financial return (Haunschild, 1994). While similar in complexity and the risk and reward relationships, IPOs and acquisition may differ in the entrepreneur’s engagement after the sale. An IPO may be viewed as a way to generate funds for growth, thus the entrepreneurs are often retained in some capacity and are required to dilute their equity over a longer period of time (Daily et al., 2003). An acquisition is more often viewed as a complete exit strategy and the restructuring that occurs often results in replacement of the entrepreneur. A liquidation exit strategy may be chosen as entrepreneurs may simply elect to disband their venture and liquidate their assets once it has served the purpose for which it was designed. This is a low risk and relatively simple strategy perhaps used most often with lifestyle or income-replacement founders.

Exiting a business is a process. The length of time required to complete the process is directly related to the complexity of the business, and the circumstances underlying the decision to exit. Because exit is a process that occurs as the owner wants to leave the business, the central premise of this research is that exit strategies will be influenced by the motivation of the owner and the processes that were used to initially develop the business.

**Intrinsic and Extrinsic Motivation**

Because individuals enter new venture creation with varying motivations (e.g. Carland, Hoy, Boulton, & Carland, 1984; Wiklund, et al., 2003) it seems plausible that these motivations will impact their exit strategy. For example, someone who creates a venture to meet a social need may be unwilling to sell the firm to a large corporation without the same values. In his classic book “Let my People go Surfing” Patagonia founder Yvon Chouinard discusses this dilemma when the
company had reached a crises in growth; ultimately he made a decision not to sell the firm. Conversely, a founding team whose primary motivation is personal wealth may be focused upon an IPO or acquisition from the initial business discussions.

Motivation is the activation of goal-oriented behavior and is usually considered to be either intrinsic or extrinsic. Intrinsic motivation comes from the satisfaction inherent to the task or activity itself. Research has found that intrinsic motivation is usually associated with high achievement and enjoyment. According to cognitive evaluation theory (Ryan & Deci, 1985) individuals are more likely to be intrinsically motivated if they attribute performance results to internal factors they can control, believe that they can effectively reach desired goals, and are interested in mastering a situation. Bandura’s (1997) work on self-efficacy comes to a similar conclusion. Despite the research into intrinsic motivation, much of the literature in entrepreneurship and economics relies on extrinsic reward as a primary motivator for entrepreneurial behavior. For example, Campbell’s (1992) theory of entrepreneurship suggests that an individual chooses to be an entrepreneur if the expected present value of profit from entrepreneurship exceeds that of being an employee. Extrinsic motivation comes from outside of the individual. Money and financial reward are common extrinsic rewards. Kuratko, Hornsby and Nazziger (1997) suggest that extrinsic motivation includes personal wealth acquisition, personal income generation, and an increase in income opportunities.

Causation and Effectuation

The main body of entrepreneurship research has been either explicitly or implicitly based on rational decision making models. For example, Drucker (1998) claims that most opportunities are discovered through a purposeful search process. Consistent with this approach, competitive advantage for emerging firms is conceptualized to be largely determined by competencies related to finding and exploiting opportunities, and the resources controlled by the firm (eg. Chandler & Jansen 1992; Cooper, Gimeno-Gascon & Woo 1994). Most entrepreneurship researchers have assumed that individuals engage in rational goal-driven behaviors when pursuing entrepreneurial opportunities. Thus, the predominant entrepreneurial decision model taught in most business schools is a goal-driven, deliberate model of decision-making, referred to by Sarasvathy (2001) as a causation model. Causation models start with a specific end in mind. Strategies are developed and resources are gathered to accomplish that end. The major decision criterion is maximization of returns. Plans are implemented and controlled toward the pre-determined outcome.

In contrast, “effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means” (Sarasvathy, 2001: 245). In the context of attempting to start new businesses, Sarasvathy argued that effectual logic is emphasized in the earlier stages of venture creation with a transition to more causal strategies as the new firm and market emerge out of uncertainty into a more predictable situation. Based on relationships that she found between subjects’ thinking aloud and the behavior they took in reaction to the problems they faced (i.e., their observed decisions), Sarasvathy developed several behavioral principles that relate to effectuation and causation. The behaviors linked to these principles, or sub-constructs, she proposed, could be observed and therefore could be tested using methods designed to capture cognitions and behavior to differentiate causation and effectuation. In causation processes, individuals focus on maximizing returns, competitive analysis and business planning, exploiting preexisting knowledge, and using a logic of prediction. In effectuation processes decision making is based on affordable loss, exploiting environmental contingencies by experimenting and remaining flexible, and using a logic of control in which they seek alliances and pre-commitments.
rather than prediction. Since Sarasvathy (2001) introduced effectuation, a few researchers have attempted to empirically measure and test effectuation and causation. An example is the work by Chandler et al. (2010) who developed and validated scales measuring causation and effectuation. Their measure of causation was a single reflective construct while effectuation appeared to be a formative construct consisting of several sub-dimensions (experimentation, flexibility, affordable loss, pre-commitments).

Sarasvathy (2001) states that effectuation and causation fundamentally refer to cognitive processes. She used think-aloud protocols in which she asked experimental subjects to continually talk aloud and describe what they are thinking as they were faced with problems and decisions. The underlying logic is extracted from the experts’ thinking aloud about the actual problem presented to them. Although these different logics may manifest as different behaviors, data collection methods that are designed to capture only behavior may not clearly differentiate between the two.

**Extrinsic Motivation and Intended Exit Strategy**

There has been little research regarding motivation and exit strategies. However, the common assumption is that when someone starts a business their intention is to maximize the value of the company. However, research in entrepreneurship and new venture development indicates that profit maximization is only one of the principle motivations for starting a business (Wennberg, et al., 2010). Therefore, we posit that profit maximization may be only one of the motivations when exiting a business. However, individuals who are motivated by extrinsic factors such as money are more likely to pursue a value maximization strategy when exiting a business as well. It is commonly assumed that value can be maximized by going through an IPO or selling to a larger business. Therefore, we expect that individuals motivated by extrinsic factors will be more likely to have an intended exit strategy that includes going through an IPO or selling to another business.

\[ H1: \text{ High levels of extrinsic motivation will be positively associated with an IPO exit strategy.} \]

\[ H2: \text{ High levels of extrinsic motivation will be positively associated with an acquisition exit strategy.} \]

**Intrinsic Motivation and Intended Exit Strategy**

Individuals motivated by predominantly intrinsic factors will be more likely to focus on the work that the company does. If they have created the business they will have an inherent interest in the products and services provided by the company and the customers served by the company. Therefore, individuals with a high level of intrinsic motivation are more likely to consider exit strategies that allow the business to continue in a similar manner to the way it is currently run such as selling to an individual or ensuring that family members have the opportunity to run the business. In addition, because they are motivated predominantly by intrinsic factors, they are less likely to consider liquidation.

\[ H3: \text{ High levels of intrinsic motivation will be positively associated with an independent sale exit strategy.} \]

\[ H4: \text{ High levels of intrinsic motivation will be negatively associated with a liquidation exit strategy.} \]
Causation and Intended Exit Strategy

Individuals employing causation processes of business development develop an end goal for the business. We believe that this includes considering an exit strategy. Since the objective motivating causation processes is maximization of returns, we argue that individuals employing causation processes will be more likely to seek to maximize value in the exit strategy, and therefore pursue an IPO or an acquisition strategy.

**H5:** The use of causation processes will be positively associated with an IPO exit strategy.

**H6:** The use of causation processes will be positively associated with an acquisition exit strategy.

Effectuation and Intended Exit Strategy

Effectuation has been viewed as a formative construct (Chandler et al., 2010) comprised of the sub-constructs of flexibility, experimentation, affordable loss, and pre-commitments. Because it is a formative construct, the subcomponents are not summative in nature. As a result we look at each of the sub-constructs of effectuation separately. Effectuation includes a generalized aspiration for success. Individuals who are experimenting and remaining flexible are presumably doing so because they expect to be able to grow and harvest a business. Thus, we expect those experimenting and remaining flexible to do so because they expect to be able to harvest a business profitably by selling it to a larger business or going through an IPO. We also expect those experimenting and remaining flexible to consider other options than discontinuance.

**H7:** The use of experimentation will be positively associated with (a) an IPO exit strategy, (b) an acquisition exit strategy, and negatively associated with (c) a liquidation exit strategy.

**H8:** The use of flexibility will be positively associated with (a) an IPO exit strategy, (b) an acquisition exit strategy, and negatively associated with (c) a liquidation exit strategy.

An associated component of effectuation is making decisions based on the affordability of the loss. According to Sarasvathy (2001), individuals engaging in effectuation will experiment, but if the results are not as positive as hoped for, will move to cut the losses early. As a result, we expect that those employing effectuation will consider affordability of the loss, and will move to cut losses from unsuccessful experiments early. Therefore, while those using effectuation processes have a generalized aspiration of success, they will also be more willing to consider discontinuing the business if it does not appear to be working out well.

**H9:** The use of an affordable loss mindset will be positively associated with a liquidation exit strategy.

DATA AND METHODS

This study is conducted using a cross-sectional survey methodology. The sampling frame came from the 2005 Dun & Bradstreet directory. The database contained contact information and secondary data such as start-up date, employment figures, revenues, and SIC Codes. We selected two four-digit codes—Plastic products (SIC 3089) and prepackaged software (SIC 7372).
resulted in a nation-wide sample frame of 1500 two to five-year old firms. These industries were selected because we had some familiarity with the industries and there are a relatively large number of recent start-ups in both industries. This allowed us to have some control over industry influences. In addition, after forming the scales we checked for significant differences between industries and found none. This study is part of a larger research program.

We eliminated 354 firms because of bad addresses, resulting in an effective mailing list of 1146 firms. One-hundred-ninety six firms responded with usable results for a response rate of 17.1 percent. The selection of 2 to 5 year old firms was based on an assumption that start-up processes may take a year or two (or sometimes more). We limited our sample to firms that were five years or newer to reduce the instability of recall data.

Responding firms averaged 3.8 years of age and had an average of 14.42 full time employees. Of the CEOs responding 79 percent were male. 56 percent of the responding companies were in the plastics products industry (SIC 3089) and the remaining 44 percent were in the packaged software industry (SIC 7372). Once again, we selected these industries because it allowed us to control for industry influences and there were a sufficient number of start-ups during the specified time period. There were no significant differences between respondents and non-respondents with respect to employment levels, revenue levels, and industry representation.

**Measures**

Using seven point Likert-type items, anchored by “strongly disagree” and “strongly agree”, entrepreneurs were asked to “consider the start-up phase of your venture and indicate the degree to which you agree or disagree with each of the following statements.”

To measure extrinsic and intrinsic motivation we used measures developed and validated by DeTienne, Shepherd, and DeCastro, 2008. Extrinsic motivation is measured by a four item scale ($\alpha = .88$). A representative item is, “I started this business to acquire personal wealth”. Intrinsic motivation is measured by another four item scale ($\alpha = .78$). A representative item is, “I started this business to be in control of my own future.” See DeTienne et al. 2009 for a complete list of items.

The items measuring causation and effectuation processes were measured using five-point Likert type scales. Respondents were asked the degree to which they agreed with or disagreed with the statements in the questionnaire. To measure causation processes, we used seven items validated by Chandler et al., 2010 ($\alpha = .78$). See Chandler et al. (2010) for a complete list of items. As noted above, Chandler et al. (2010) suggest that effectuation is a formative construct consisting of the sub-dimensions of experimentation, affordable loss, pre-commitments, and flexibility. We used the sub-dimensions and measures developed by Chandler, et al. (2010) to measure each sub-dimension. Experimentation is a four item scale ($\alpha = .78$) originally developed from the work of Brown and Eisenhardt (1997) and Koberg et al., (2003). A representative item states “We experimented with different products and/or business models.”

To measure affordable loss, we used a three item scale ($\alpha = .85$) which reflects the emphasis on predetermining the amount of affordable loss and focusing on as many strategies as possible with the given means (Sarasvathy, 2001). An example item states “We were careful not to commit more resources than we could afford to lose.” To measure flexibility, we used a four item measure ($\alpha = .70$) which reflects the extent to which entrepreneurs remain flexible. For example, one item states “We allowed the business to evolve as opportunities emerged.”
Exit Strategy. Respondents were asked to indicate whether they had an exit strategy and to indicate their perceived probability of exit through seven exit routes — four of which (IPO, acquisition, independent sale, and liquidation) are used in this analysis.

ANALYSIS AND RESULTS

A correlation matrix including the variables used in the analysis is included in Table 1. Correlations among variables are moderate to low, suggesting limited potential for distortions due to multicollinearity.

We used hierarchical regression analysis to investigate the hypothesized relationships. The dependent variables were the intended exit strategies. In each case we entered the motivational variables first, since they are considered to be individual level variables. We subsequently entered the causation and effectuation variables, since causation and effectuation processes in the context of emerging businesses are organizational level constructs. Hence, before estimating the organizational level relationships we had already accounted for motivational differences. Results are displayed in Table 2.

The first two hypotheses referenced extrinsic motivation. The first hypothesis stated that high levels of extrinsic motivation will be positively associated with an IPO exit strategy. This hypothesis is tested by the regression model presented in Model 3 of Table 2. The results are in the hypothesized direction, but are not significant. Therefore, Hypothesis 1 is not supported. Hypothesis 2 stated that high levels of extrinsic motivation will be positively associated with an acquisition exit strategy. This hypothesis is tested in the model presented in Model 2 of Table 2. Extrinsic motivation is not significantly related to an acquisition exit strategy. Thus, our first two hypotheses are not supported. However, in a result we did not hypothesize, those with high levels of extrinsic motivation are less likely to consider an independent sale (Model 1, p<.10).

The next two hypotheses referred to intrinsic motivation. Hypothesis 3 stated that high levels of intrinsic motivation will be positively associated with an independent sale. This hypothesis is supported (Model 1, p<.05). The fourth hypothesis stated that high levels of intrinsic motivation will be negatively associated with a liquidation exit strategy. This result is also marginally supported (Model 4, p<.10). Thus, it appears that individuals with high levels of intrinsic motivation for the venture have a greater interest in seeing it continue.

The remaining hypotheses referred to the venture development process (causation or effectuation) and its resulting association with stated exit strategies. Hypotheses 5 and 6 stated that the use of causation processes will be positively associated with IPO and acquisition exit strategies. Hypothesis 5 is supported (Model 3, p<.001), however there is no support for Hypothesis 6. Entrepreneurs engaging in causation processes are more likely to consider an IPO exit strategy.

The final hypotheses refer to sub-dimensions of effectuation and their relationship with exit strategies. Hypotheses 7a and 7b state that the use of experimentation will be positively associated with an IPO exit strategy and an acquisition strategy while 7c asserts that the use of experimentation will be negatively associated with a liquidation strategy. Hypothesis 7a is supported (Model 3, p<.01) and Hypotheses 7b and 7c were not.
Hypotheses 8a and 8b state that the use of flexibility will be positively associated with an IPO exit strategy and an acquisition strategy while 8c asserts that the use of flexibility will be negatively associated with a liquidation strategy. There is no support for hypothesis 8a and 8b. Hypothesis 8c is supported (Model 4, p<.01) indicating that flexibility is negatively related to a liquidation strategy. Our final hypothesis states that affordable loss will be positively associated with a liquidation exit strategy and is marginally supported (Model 4, p<.10).

In summary those with high extrinsic motivation are less likely to consider sale to an individual. Those with high intrinsic motivation are more likely to consider an acquisition and less likely to consider a liquidation. Those using causation and experimentation are more likely to consider an IPO. Those using flexibility are less likely, and those focusing on affordable loss more likely, to consider liquidation.

Both dependent and independent variables for this study came from a single source, and hence the results could be contaminated by same source variance. To help mitigate this threat, we used Harman’s One-Factor Test as described by Podsakoff et al. (2003) to test for same-source variance. The first factor accounted for only 11% of the total 68.2% variance and no single factor accounted for the majority of the covariance, suggesting that common method variance is not solely responsible for our findings.

**DISCUSSION AND CONCLUSION**

Our analyses indicate that entrepreneurs who were primarily motivated intrinsically to start their ventures are more likely to exit via an independent sale and less likely to liquidate. The finding that these are entrepreneurs are more likely to exit via an independent sale makes sense. Entrepreneurs are often psychologically linked to their firm even so far as to refer to it as their “baby” (Cardon, Zietsma, Saparito, Matherne, & Davis, 2005); thus, it is reasonable that they would rather turn it over to another individual through an independent sale rather than sell it to a large firm or to liquidate. If they sell it to another individual – in particular someone they know – they may feel that they have the ability to make sure their “baby” is well cared for. The finding that intrinsically motivated entrepreneurs are less likely to liquidate makes sense for the same reasons; however, this might also signal a sunk cost issue wherein individuals are unwilling to leave a venture even if makes practical sense to do so. Future research should investigate whether intrinsically motivated entrepreneurs are more likely to fall into a sunk cost fallacy resulting in market inefficiencies.

Our analyses also indicate that entrepreneurs with high extrinsic motivation are less likely to consider an independent sale. This too is reasonable given the fact that these sales tend to be at the low end of the market averaging approximately $250K per sale (DeTienne, 2010).

Those who employ causation processes are more likely to have an IPO exit strategy. The explanation we used to develop the hypothesis for this relationship is that the planning that goes along with a causation process includes planning for the exit. But this may not completely explain why an IPO exit rather than another type of exit. Another explanation may be that the entrepreneurs who use a well-developed process are more knowledgeable about high potential exits such as the IPO. We also found that those using experimentation – a process associated with effectuation – are also more likely to consider an IPO. This provides evidence to Sarasvathy’s contention that neither process leads to a greater firm outcomes; however, it does shed some speculation about the overlap between the two constructs.
As anticipated, entrepreneurs focusing on affordable loss were more likely to consider a liquidation strategy. This is real options theory at work which as entrepreneurs who limit their losses are more likely to exit when those losses reach a certain point. Finally we found that entrepreneurs who use flexibility are less likely to consider liquidation. One explanation may be that these individuals see an opportunity to change direction and thus do not see a need to liquidate. Certainly if one can adjust and change the business model they can reinvent themselves over time and prevent a liquidation scenario. Those who employ causation processes and explicit effectuation processes, such as flexibility, are less likely to have considered liquidation albeit for different reasons. Although intrinsic or extrinsic motivations are not directly related to considering the discontinuance of the business, the interaction between motivation and process is significantly related. Specifically, those who are extrinsically motivated and employ a flexible process are significantly less likely to have considered discontinuance as an exit option.

Although enough of our hypotheses are supported to provide evidence that motivation and venture development processes do impact intended exit strategies, several of our hypotheses were not supported. Specifically, individuals with high levels of extrinsic motivation were somewhat less likely to consider an independent sale, but did not seem to explain any significant variance in the exit strategies that suggest in exit options that are usually expected to yield a greater harvest. This is consistent with a viewpoint that the money made is more important than the disposition of the venture.

Perhaps not unexpectedly, the equations using causation and sub-dimensions of effectuation to predict liquidation and IPO have more significant relationships and explain a larger amount of variance. This may suggest that business owners view these strategies as the extreme ends of the exit strategy spectrum.

While our research is the first to examine both motivation and causation and effectuation processes in the context of entrepreneurial exit, it may actually bring to light more questions than answers. These ideas should be examined using multiple methods (interviews, large survey samples) and multiple samples. Our work is limited to two industry sectors and to smaller and younger firms.

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**REFERENCES**


Table 1: Descriptive Statistics and Correlations
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** Correlation is significant at the 0.01 level 2-tailed.
* Correlation is significant at the 0.05 level 2-tailed.
Table 2: Hierarchical Regression Results

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<tr>
<td>Δ R²</td>
<td>.05</td>
<td>.06</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>Model R²</td>
<td>.02</td>
<td>.04</td>
<td>.15</td>
<td>.10</td>
</tr>
<tr>
<td>Model Adjusted R²</td>
<td>.01</td>
<td>.02</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>Model F-statistic</td>
<td>1.06</td>
<td>1.35</td>
<td>3.95***</td>
<td>3.14***</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level 2-tailed.
* Correlation is significant at the 0.05 level 2-tailed.
† Correlation is significant at the 0.10 level 2-tailed.