

# **Validation of a New Strategy-Making Process Survey Scale**

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### **ABSTRACT:**

Terms such as strategy-making, strategy-making process, strategy creation style and strategic thinking have all been a focus of the strategic management literature for over a decade. A synthesis of insight from the literature in relation to these terms indicates six modes of strategy-making process in contemporary practice: command, planning, entrepreneurial, transactive, strategic intent and thinking in time. A stratified sample of 216 company directors, chief executive officers, top managers, strategy professionals and line managers provides the data for the exploratory factor analysis, reliability analysis, factor correlation analysis and bivariate correlations applied to the development of a new survey scale

### **KEY WORDS:**

strategy-making process, exploratory factor analysis, reliability analysis, factor correlations, bivariate correlations

### **PAPER PRESENTATION**

## INTRODUCTION

Strategy-making has come a long way since the rational, planning models of Andrews (1965) and Ansoff (1965). Michael Porter's (1980) influence remains strong from the perspective of industrial economics and the use of data and analysis. Henry Mintzberg (1994a, 1994b) has had high impact with his writing on an intuitive emphasis to strategy-making blending vision and learning followed then by strategic planning or 'programming'. Related to this evolution of insight on the practice of strategy Hart (1992) developed the strategy-making process construct which was empirically tested by Hart and Banbury (1994) with a quantitative survey instrument. The strategy-making process construct has similarities and differences with Mintzberg's (1994a, 1994b) well known strategy-making construct in that it describes in more detail the paradoxical extremes of strategic behaviour practiced in organizations, going beyond vision, learning and planning to introduce the command and generative elements. Hart (1992) associates planning with the rational element in his strategy-making process model.

The 1990s has been described as a decade where greater focus developed on strategic thinking and less emphasis was given to strategic planning (Mintzberg, 1994a, 1994b). The strategic management disciplines vocabulary has continued to expand as a range of writers have sought to innovate and better understand strategy practice (Moss Kanter, 2006). Hamel and Prahalad (1989) introduced the term strategic intent to the vocabulary of the strategy discipline. Liedtka (1998a, 1998b) linked strategic intent – a direct intuitive understanding of the future direction of the organization articulated by the CEO and possibly the top management team – to helping focus strategic thinking in strategy-making. Liedtka (1998a, 1998b) also introduced the term thinking in time to the discussion of strategic thinking – understanding the ethos and history of a business, its past, present and future situation to inform thinking about the future direction for the organization. The focus of this paper is the development of an updated strategy-making process survey scale which adds value to Hart (1992) and Hart and Banbury's (1994) important contribution by integrating insight from Hamel and Prahalad (1989) and Liedtka (1998a,

1998b). The Hart and Banbury (1994) scale is unique as in the opinion of this writer as it efficiently captures the subtle and not so subtle techniques used by executives and line managers in the day to day entrepreneurial and political cut and thrust of managing an enterprise. An update reflecting new understanding and vocabulary in this under researched area (Whittington, 2004) is timely and useful.

## **BACKGROUND**

There has been an evolution of theoretical and empirical understanding of strategy-making over the past 25 years from the descriptions of strategic thinking provided by Ohmae (1982) and Peters and Waterman (1982), to Hamel and Prahalad's (1989) introduction of the term strategic intent to the strategy vocabulary, Mintzberg's (1994b) high impact *The Rise and Fall of Strategic Planning*, Hart (1992) and Hart and Banbury's (1994) research with the strategy-making process construct, Liedtka's (1998) five element model of strategic thinking and White's (1998) strategy creation style. We need to understand these contributions better to provide a basis for the development of a new survey scale which reflects this new learning. What has evolved is a 'bewildering array of conceptual models, dimensions and typologies' (Hart and Banbury, 1994: 252) with few attempts to empirically classify strategy processes. A selection of the more influential models relevant to this paper - there are many more models in the literature (Hart and Banbury, 1994) - is detailed in Table 1 below.

Henry Mintzberg's contribution over more than 30 years is significant. Mintzberg and Waters (1982) studied the evolution of strategy processes in a retail chain Steinberg Inc. over many years. They identified two modes of strategy-making. First an entrepreneurial mode and second a planning mode. The entrepreneurial mode was associated with 'bold decision making' by the CEO and periods of revolutionary and evolutionary change (Mintzberg and Waters, 1982: 495). The planning mode was

**Table 1 Selected Strategy-Making Process Models**

Allison (1971) <ul style="list-style-type: none"> <li>— Rational</li> <li>— Organizational</li> <li>— Bureaucratic</li> </ul>	Mintzberg (1973) <ul style="list-style-type: none"> <li>— Entrepreneurial</li> <li>— Planning</li> <li>— Adaptive</li> </ul>	Mintzberg and Waters (1982) <ul style="list-style-type: none"> <li>— Entrepreneurial</li> <li>— Planning</li> </ul>
Bourgeois and Brodwin (1984) <ul style="list-style-type: none"> <li>— Commander</li> <li>— Change</li> <li>— Cultural</li> <li>— Collaborative</li> <li>— Crescive</li> </ul>	Mintzberg (1994a, 1994b) <ul style="list-style-type: none"> <li>— Vision</li> <li>— Learning</li> <li>— Planning or Programming</li> </ul>	Hart and Banbury (1994) <ul style="list-style-type: none"> <li>— Command</li> <li>— Symbolic</li> <li>— Generative</li> <li>— Transactive</li> <li>— Rational</li> </ul>
Liedtka (1998a, 1998b) <ul style="list-style-type: none"> <li>❑ Strategic thinking</li> <li>— Systems perspective</li> <li>— Intent focused</li> <li>— Intelligently opportunistic</li> <li>— Thinking in time</li> <li>— Hypothesis driven</li> <li>❑ Strategic planning</li> </ul>	White (1998) <ul style="list-style-type: none"> <li>❑ Strategy creation style</li> <li>— Symbolic</li> <li>— Rational</li> <li>— Generative</li> <li>— Transactive</li> </ul>	Bailey, Johnson and Daniels (2000) <ul style="list-style-type: none"> <li>— Command</li> <li>— Planning</li> <li>— Incremental</li> <li>— Political</li> <li>— Cultural</li> <li>— Enforced choice</li> </ul>

associated with the integration and formalization of a complete set of business decisions. Later Mintzberg (1994a: 108) in his *Harvard Business Review* article ‘The fall and rise of strategic planning’ argued strongly strategic thinking favours a right brain, creative, intuitive, divergent approach. Strategic thinking: ‘...is about synthesis. It involves intuition and creativity...strategies...must be free to appear at any time and at any place in the organisation, typically through messy processes of informal learning.’ Mintzberg (1994a; 1994b) argues that it is feasible for strategies to originate with line managers, in particular with the assistance of planners or internal consultants. Mintzberg (1994a; 1994b) believes top management and the CEO should distance themselves from business units during the strategy process to assist reflection and creativity at line management level. The CEO and top management can then later play a role in recognizing the value of these strategies and facilitate ‘strategic programming’ by internal consultants so

that the strategy can be disseminated throughout the firm. Too much emphasis on planning can constrain and restrict adaptation to the challengers of the marketplace. To Mintzberg (1994a, 1994b) strategic thinking is about vision and learning followed by strategic planning or ‘programming’.

American Stuart Hart’s contribution in the 1990s is also critical to development of the new survey scale. Hart (1992) explaining the strategy-making process construct, identified five distinct modes in his integrative framework: command, symbolic, rational, transactive and generative. In this approach strategy mastery requires contradictory skills and firms also may be more adept at certain modes compared with other modes. The command mode is associated with a ‘top down’ management style giving direction to line managers lower down the organization chart who are required to obey the instructions they receive. The symbolic mode is where the strategy is driven by a mission and vision for the future. Top management seeks to motivate and inspire whilst line managers endeavor to respond to the challenge. The rational mode is characterized by strategy driven by the planning system. Top management focus is evaluation and control and line managers follow the system. The transactive mode emphasizes participation and performance feedback. Top managers enable and empower the line managers whose role is to learn and improve. The generative mode is characterized by the fostering of initiative by top management and line managers experimenting and taking risks. In this approach strategy mastery requires contradictory skills and firms also may be more adept at certain modes compared with other modes. Greater strategy mastery in a larger number of elements encourages better performance. Hart and Banbury (1994) empirically studied the relationship between strategy-making process, complexity, munificence, turbulence and organization performance in 238 industrial companies in the mid-west of the United States. This empirical study builds on Hart’s (1992) theoretical discussion. The empirical study found that high strategy making process capability assists larger organizations in turbulent environments. Smaller firms in more stable environments do not benefit from high levels of strategy-making capability. High and low strategy-making process capability did predict organization performance in turbulent environments.

White (1998) examined the strategy creation style of companies in the dynamic franchise channel segment with a sample drawn from 188 useable responses obtained from franchise-owned restaurants in the United States. White (1998) links Hart's (1992) rational and symbolic strategy-making process modes to deliberate strategy (Mintzberg and Waters, 1982). White (1998) links the transactive and generative modes in Hart (1992) to emergent strategy (Mintzberg and Waters, 1982). White (1998) omits the command mode from his analysis. The study found organizations in more variable environments favoured the symbolic and generative modes. Organizations in munificent environments preferred the transactive and rational modes.

Liedtka (1998a: 122) following on a few years later from Mintzberg's (1994a; 1994b) contribution with a theoretical paper sees strategic thinking as a 'particular way of thinking, with specific attributes.' Liedtka (1998a, 1998b) developed a model with five elements in her conceptualization of strategic thinking. First, strategic thinking is based on a systems perspective where the strategic thinker has a mental picture of a complete system of value creation in the firm and his or her own small role within the larger system (Liedtka, 1998a). Second, strategic thinking is driven by the strategic intent of the firm providing focus and energy to the staff and the organization to achieve goals in times of uncertainty (Boisot, 1995; Liedtka 1998a). Third, strategists need to 'think in time' (Liedtka 1998a: 123) linking the firm's past, present and future, recognizing unfamiliar strategy directions relative to the past, and also continuous oscillation in thought process from the past, present and future in their thought processes (Neustadt and May, 1986). Scenario planning can assist thinking in time by exploring possible future outcomes. Fourth, strategic thinking is 'hypothesis-driven' (Liedtka 1998a: 123) and the 'scientific method accommodates both creative and analytical thinking sequentially in its use of iterative cycles of hypothesis generating and testing.' Here Liedtka (1998a) uses the term 'scientific' in its truest sense in terms of the empirical and the abstract elements of this approach (Zikmund, 1997) as distinct from the strategy as science

metaphor in the strategy literature (De Wit and Meyer, 2004). Finally, strategic thinking is intelligently opportunistic. Here Liedtka (1998a) argues that the firm whilst following a particular strategy should not lose sight of alternative strategies or commercial opportunities that may be more appropriate for a changing environment. Liedtka's (1998a, 1998b) vocabulary is quite innovative introducing new terms such as intelligently opportunistic and thinking in time to the debate. Liedtka (1998a, 1998b) also provides clarification of the link between strategic intent and strategic thinking.

It is timely to gather what we have learned in the strategy discipline from this theoretical and empirical work and integrate this new knowledge from a range of writers with our existing empirical tools – primarily the Hart and Banbury (1994) strategy-making process scale but also the White (1998) strategy creation style tool to create the new survey scale. Integrating this insight from the theoretical development of Hart (1992), Mintzberg (1994a, 1994b) and Liedtka (1998a, 1998b) and the empirical learning from Mintzberg and Waters (1982), Hart and Banbury (1994) and White (1998) there are six elements evident in our present day theoretical understanding of strategy-making process. *Command* with the chief executive officer and the top managers leading and directing the organization based on their understanding and analysis of the business environment, an important and distinguishing element in Hart (1992) and Hart and Banbury's (1994) contribution. A *rational* planning and control focus among top management with use of a mission statement and documentation of the strategy in a regular formal cycle (Hart, 1992; White, 1998). *Entrepreneurial* risk taking, experimentation and innovation are encouraged with implications for patterns of resource allocation, and the capacity of individuals and the organization for evolutionary and revolutionary change (Mintzberg and Waters, 1982; Hart, 1992; Mintzberg, Ahlstrand and Lampel, 1998). *Strategic intent* plays an influential role where the CEO and top managers provide a direct, intuitive understanding of future direction of the organization from the top down that gives focus to strategic thinking (Prahalad and Hamel, 1990). *Transactive*, participative strategizing allowing interaction between organization stakeholders in an inclusive process with learning, dialogue and feedback (Hart and Banbury, 1994). The final element of the model is *thinking in time* combining



understanding of the past, present and future of the organization to determine a feasible future direction (Liedtka, 1998a). The ethos and history of the organization influence's strategy-making and scenario planning is used to further add value to strategic conversations. This insight informed item development.

## **HYPOTHESES**

The first hypotheses emerges from the argument that organization size influences strategy process capability favourably by encouraging the firm to develop a variety of means to resolve the coordination challenges in managing an organization with large scale (Chandler, 1962; Hart and Banbury, 1994). Smaller organizations do not confront the same coordination challenges compared with large organizations as the top management team and line managers in small firms have more direct contact, reducing the need for formality and rationality. Hart and Banbury (1994) placed considerable emphasis on this issue in their paper and if the content of the strategy-making process scale is being updated a test of the following hypothesis is timely:

H<sub>1</sub>: Firm size influences strategy-making process capability.

Second, Hart and Banbury (1994) suggested that organization performance may well be a predictor of strategy-making process capability however they did not investigate this relationship empirically. There is a gap in the literature in the examination of this relationship despite the heavy body of literature examining a strategic planning or strategy process construct and organization performance. Hence:

H<sub>2</sub>: Organization performance influences strategy-making process capability.

## **SAMPLE AND METHOD**

True to Mintzberg's (1994a, 1994b) view that executives, line managers and consultants at all levels of the organization are involved in strategy-making a stratified sample of 216 company directors (N = 25), chief executive officers (N = 20), executive directors (N = 14), top managers (N = 37), strategy professionals (N = 48) and line managers (N = 72) provided the data for analysis. The sampling strategy focused on the private sector and represents greater than 17% of the ASX Top 300 plus a strong sample of

senior executives in prominent, large strategic management consultancies. A total of 29 responses or 13.4% of useable responses was obtained from ‘new economy’ businesses. The percentage of ‘old economy – manufacturing’ businesses in the sample is 22.7% (49 of 216 responses) compared with the ASX Top 300 composition of approximately 28%. The sample of ‘old economy’ traditional businesses is robust at 110 responses representing 50.9% of the sample population (ASX Top 300 64%). The overall response rate was 21.6%. using a purposive sampling approach to create the stratified, cross-industry sample (Short *et al.*, 2002). In terms of the independent variables in the analysis organization size was measured by total sales in three bands - less than \$1,000,000 Australian dollars, \$1,000,000 to \$20,000,000 Australian dollars and greater than \$20,000,000 Australian dollars. Actual objective financial data for the period 2002 - 2004 was obtained from the Annual Reports of the 69 listed companies identified in the survey responses. The average of 2002-2004 percentage change in actual net profit after tax and actual return on equity was calculated to create the independent variable for H<sub>2</sub>. Likert scale ratings from 1 = Strongly Disagree to 7 = Strongly Agree were requested from respondents on the 22 strategy-making survey items after they had provided brief demographic details (i.e. industry, company size).

Preliminary analysis (i.e. tests for skewness, kurtosis, exploring for outliers with Mahalanobis’ distance in SPSS, visual inspection of correlation matrices and residual scatterplots etc.) indicated no concerns with the quality of the data. Pairwise deletion was used to handle missing data as it is the most accurate approach with fewest respondents lost (Switzer, Roth and Switzer, 1998). A small number of outliers were identified in the objective financial data. Wide variation in the range of either favourable (i.e. Case 76: exceptional return on equity performance) or unfavourable (i.e. Cases 21, 24 and 92: strong variation in net profit/loss after tax, shareholders’ funds and return on equity) actual company performance impacting both return on equity and net profit after tax data was the cause of these outliers. Mahalanobis distance was also calculated for each case from each of the variables to review the existence of multivariate outliers in the survey scale and the actual financial data. Again only a small number of outliers were identified in the survey data– not enough to influence the analysis – and no action was

taken. After the action to remove the outliers in the univariate actual financial data there were no concerns with multivariate outliers.

Exploratory factor analysis (EFA) was preferred rather than confirmatory factor analysis (CFA) for data reduction with principal axis factoring with oblique rotation used in SPSS DATA REDUCTION to simplify factors and give a more interpretable solution in Table 2 below (Tabachnick and Fidell, 2001). The next step in scale construction was assessing the reliability of the new scale using Cronbach's alpha measuring internal consistency for Table 3. Cronbach's alpha 'is based on the average correlation of items within a test if the items are standardized' (Coakes and Steed, 2001: 147) and can be evaluated as a correlation coefficient. SPSS RELIABILITY provides this test. The mean of each of the new sub-scales identified in the factor analysis was then calculated using SPSS COMPUTE for the remaining analysis. The factor correlation matrix (Table 4 below) and the bivariate correlations (Table 5 below) of the variables in the new scale calculated using SPSS CORRELATE were then examined to ensure no presence of multicollinearity or singularity (Tabachnick and Fidell, 2001) and obtain a univariate grasp of the relationship between the dependent variable and each of the independent variables (Coakes and Steed, 2001). *Discriminant validity* is the ability of some measure to correlate poorly with measures of different concepts and this was also considered in evaluating the new scale using Table 4 and also Table 5.

## **SCALE DEVELOPMENT**

Table 2 below presents the results of the exploratory factor analysis. Factor 1 is the new strategic intent sub-scale. Factor 2 is the rational sub-scale and factor 3 the command sub-scale adapted from Hart and Banbury (1994) and White (1998). Factor 4 is the new thinking in time sub-scale developed in O'Shannassy (2005). Factor 5 is an adaptation of the transactive sub-scale from Hart and Banbury (1994) and also White (1998). Factor 6 is the entrepreneurial sub-scale developed in O'Shannassy (2005), adapted from Hart and Banbury (1994) and White (1998).

**Table 2 Strategy-Making Process Exploratory Factor Analysis**

<b>Item</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Intuitive understanding future helps staff focus	.842					
Intuitive understanding helps when decentralized	.666					
Intuitive understanding future among employees	.589					
Strategic planning: regular cycle		.953				
Written strategic plan each year		.731				
Formal analysis forms basis for plan		.561				
We have a written mission statement		.523				
CEO determines and executes strategy			.732			
CEO and a few direct reports set strategy			.731			
CEO defines our firm's "vision"			.402	-.328		
History and ethos influence's strategy				-.582		
Consider the past, present and future				-.571		
Scenario planning				-.340		
Strategy process an on-going dialogue					.761	
Most people this company have input	.366				.520	
Communications, IT etc. help strategic thinking					.436	
Upward flow of information encouraged					.377	
Formulation and implementation are simultaneous					.366	
Employees encouraged to experiment						.660
Most people are willing to take risks						.659
Employees understand what needs to be achieved						.458
Evolutionary and revolutionary change						.449

Note: Negative loadings result from using an oblique rotation. All loadings are in the same direction. Factor loadings below 0.300 have been suppressed.

The reliability analysis in Table 3 below provides strong overall evidence of the internal reliability of the new scale. The internal reliability of the rational, strategic intent, entrepreneurial and transactive modes is excellent to very good. The command and thinking in time mode internal reliability figures are good.

**Table 3 Strategy Making Process – Cronbach’s Alpha**

Variable	Cronbach’s Alpha
Command mode	.637
Rational mode	.782
Strategic intent mode	.868
Entrepreneurial mode	.779
Thinking in time mode	.643
Transactive mode	.784
<b>Overall (N = 216)</b>	0.855

The factor correlation matrix in Table 4 indicates no evidence of multicollinearity or singularity.

Correlation between the items greater than 0.32 clearly justifies the use of an oblique rotation in the exploratory factor analysis.

**Table 4 Strategy Making Process – Factor Correlation Matrix**

	Factor	1	2	3	4	5	6
1	Strategic intent	1.000	.228	.020	-.382	.408	.408
2	Rational	.228	1.000	.034	-.190	.071	.090
3	Command	.020	.034	1.000	-.092	-.018	.003
4	Thinking in time	-.382	-.190	-.092	1.000	-.319	-.228
5	Transactive	.408	.071	-.018	-.319	1.000	.406
6	Entrepreneurial	.408	.090	.003	-.228	.406	1.000

The bivariate correlations in Table 5 below evidence a number of acceptable, significant correlations among the strategy-making process elements giving evidence of discriminant validity.

## **FINDINGS AND DISCUSSION**

The strategy-making process scale is a substantial international research finding in itself in this under researched area (Hart and Banbury, 1994). The development of the strategic intent and thinking in time sub-scales provide rare new insight into contemporary strategy practice. In addition, the bivariate correlations provide partial support for each of  $H_{1-2}$ . In relation to  $H_1$  organization size measured by total sales indicated a highly significant favourable influence with the rational mode and a negative significant influence with the transactive mode. This is a plausible finding in that large organizations have greater planning and control challenges resulting in more emphasis on this mode of strategizing. In relation to  $H_2$  organization performance measured by objective financial efficiency correlated favourably with the strategic intent and the entrepreneurial modes. Hart and Banbury (1994) suggested this relationship may be significant and this analysis provides important insight into the interaction of organization performance and strategy-making process. Strong financial performance may provide the resource-slack required to develop the sophisticated strategic intent and entrepreneurial modes. The results provide evidence of predictive validity in relation to measures we could reasonably expect the strategy-making process variables to correlate with. Insight has been added to Hart and Banbury (1994) and White (1998).

## **LIMITATIONS**

The study is limited to a sample drawn from the Australian private sector. The response rate for this study is 21.6% and accounts for a significant portion of the resources dedicated to corporate strategy development in Australia – 26% of the ASX Top 200 and 10 of the ASX Top 20. Nonetheless with non-response at 78.4% of the database the possibility of non-response bias in the results is recognized. This paper uses only exploratory factor analysis partly for method reasons and partly due to sample size. In future research there is scope for confirmatory factor analysis to be undertaken if a sample of more than

300 responses can be developed now that exploratory work is well progressed (Tabachnick and Fidell, 2001). Similar to Hart and Banbury (1994) the single respondent design of the strategy process sophistication scale requires some caution in interpretation. Questions in the survey for this paper were worded to ensure a top manager, consultant or organization member with line management responsibility and involvement in strategy process could respond. This was in keeping with the essence of this research project which studies a more open, democratic, inclusive strategy process with 'top-down' and 'bottom-up' information flow and communication (Mintzberg 1994a, 1994b). The analysis for the hypothesis tests includes only bivariate correlations. ANOVA analysis supports the hypothesis test findings.

## **CONCLUSION**

Development of this survey scale provides possibly a quite influential finding for the strategic management discipline and a foundation for future research. The writing of Hamal and Prahalad (1989), Hart (1992), Hart and Banbury (1994) and Mintzberg (1994a, 1994b) has had high impact and has been supplemented by the writing of Liedtka (1998a, 1998b). The integration of learning from these contributions has provided the theoretical foundation on which the new survey scale developed in this paper has been developed. Looking to the future this paper provides the foundation for research in a range of organizational settings with a range of constructs including perceived environmental uncertainty, strategy consensus, organization performance, competitive advantage and others in cost effective, large sample studies. This research can enhance our understanding of the complex challenges of strategy-making which experts such as Whittington (2004) continue to flag as a desirable outcome. The paper also provides a sound demonstration of exploratory quantitative survey scale technique.

**Table 5      Mean, Standard Deviations, and Bivariate Correlations**

	<b>Variable</b>	<b>Mean</b>	<b>S.D.</b>	<b>alpha</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1	Total sales	2.56	.637		1	.017	-.031	.378**	-.040	-.118	-.055	-.177*
2	Financial efficiency	8.445	33.38		.017	1	.071	.098	.383**	.346**	.145	.060
3	Command mode	5.37	1.068	.637	-.031	.071	1	.108	.162*	.067	.152*	.070
4	Rational mode	4.902	1.317	.782	.378**	.098	.108	1	.306**	.142*	.269**	.139*
5	Strategic intent mode	4.714	1.240	.868	-.040	.383**	.162*	.306**	1	.577**	.564**	.590**
6	Entrepreneurial mode	4.316	1.169	.779	-.118	.346**	.067	.142*	.577**	1	.393**	.590**
7	Thinking in time mode	5.055	1.015	.643	-.055	.145	.152*	.269**	.564**	.393**	1	.485**
8	Transactive mode	4.547	1.080	.784	-.177*	.060	.070	.139*	.590**	.590**	.485**	1

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)



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