MISSION STATEMENTS AND VISION STATEMENTS: EXAMINING THE RELATIONSHIP TOWARD PERFORMANCE OUTCOMES

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ABSTRACT

This paper examines 798 firms with mission statements and vision statements to show there are relationships between the two and posits that strong relationships produced greater organizational performance. Using the taxonomies of Allison (2017a), Allison (2017b), and an extension of the latter developed in this paper, the statements are classified into their taxonomic groups and then analyzed statistically. The results surprisingly show a single strong link between one type of mission statement and one type of vision statement. This paper then discusses how such a relationship may result in superior performance outcomes. Consequently, this paper significantly contributes to theory by finding a specific relationship between statements, discussing why some firms have this relationship, and then extending this discussion to organizational performance.

INTRODUCTION

Mission statements have been a frequently studied topic (Vizeu & Matitz, 2013). Also frequently studied has been the topic of vision by virtue of it being a major component of other subjects such as leadership and strategic management. However, vision statements as a codified document have not been studied as much as mission statements. Nevertheless, because both statements are text, rigorous study of them has been arguably difficult. It has been the increase in computing power that has led to the development of techniques to analyze text such as text analytics.

Text analytics has provided as way in which to analyze mission statements and vision statements without researcher bias. Allison (2017a) provided a natural language taxonomy of vision statements while Allison (2017b) provided a natural language taxonomy of mission statements. Because the mission and vision statements are from the same organizations, it may be possible to find relationships between the two and make some conclusions about performance outcomes. That is why this paper exists.

The purpose of this paper is to explore the relationships between mission and vision statements from the same organizations and to determine if there are organizational performance outcomes from those relationships. The uniqueness of this paper is that it utilizes the natural language taxonomies of textual constructs to study the relationships between those constructs. Additionally, in order to study these relationships this paper extends the three-class taxonomy of mission statements provided by Allison (2017b) by dividing the three parent classes into 20 child classes. Finally, this paper significantly contributes to theory by developing and testing two hypotheses that show there are relationships between types of mission statements and types of vision statements and extending these findings to conclusions about performance.

LITERATURE REVIEW

Mission Statements

One of the first topics found in many strategic management textbooks is that of the mission statement (e.g. Hill, Jones, & Schilling, 2015; Grant, 2008). Correspondingly, mission statements have become a commonly studied tool in research (Vizeu & Matitz, 2013). With all the attention brought to the topic, a common definition of mission statement is not to be found. Two general perspectives emerge from the literature. The first is that a mission statement is a "container" that holds several different statements in it. For example, Powers (2012) states that a mission statement consists of mission, values, vision, and philosophy while Rajasekar (2013) adds internal and external analysis, strategy implementation, and strategy evaluation. The second perspective is that a mission statement is a statement of why the firm exists (e.g. Ganu, 2013; David & David, 2008). This simpler definition is what this paper accepts as the definition. In order to discover a relationship between mission and vision statements, the first cannot contain the second or the findings are convoluted. Also, some firms have mission statements but do not have vision statements. In order to determine a relationship between the two, a company will need to have both, implying the narrower definition of mission statement is needed.

Research into mission statements has focused upon three areas. One prevalent focus has been upon what a mission statement should contain. Some research has been performed to examine included strategic issues such as strategic differentiation (Finley, Rogers, & Galloway, 2001) and strategic purpose (Perfetto, Holland, Davis, & Fedynigh, 2013; Orwig & Finney, 2007). Other research has been performed to examine content such as firm customers (Peyrefitte & David, 2006), diversity (Barkus & Glassman, 2008), and marketing information (Anitsal, Anitsal, & Girard, 2012; Anitsal, Anitsal, & Girard, 2013). Other research has been performed to determine what should be in a mission statement (e.g. Alshameri, Greene & Srivastava, 2012; Pearce & David, 1987; King, Case & Premo, 2012; King, Case & Premo, 2014). This latter research has more prescriptive to create a mission statement that creates some form of advantage for the firm.

A second area upon which mission statement research has focused is as a communication tool. Mission statements have been shown to be a tool to communicate meaning to a receiver (Sufi & Lyons, 2003; Nous, 2015) but that meaning should be conveyed both to internal and external stakeholders directly (Amato & Amato, 2002; Biloslavo, 2004; King, Case & Premo, 2013). Additionally, the communication to internal stakeholders is vital for the mission statement to be put into practice (Analoui & Karami, 2002; Rajeasekar, 2013). However, some firms take mission statements further than just a statement of strategic existence. Some firms have used the mission statement as a means to create organizational impression management to build an image in the receiver's mind (David & David, 2003; Peyrefitte, 2012; Khalifa, 2011).

Research has focused on a third area of mission statements by examining the link between the statement and organizational performance. Several studies have found a relationship between the statement and organizational performance (e.g. Bart & Hupfer, 2004; Sheaffer, Landau & Drori, 2008; Alavi & Karami, 2009; Erol & Kanbur, 2014). However, other studies have shown no relationship between mission statements and performance (e.g. Sufi & Lyons, 2003; Alawneh, 2015). The discrepancy in findings begs the question of what is occurring to produce such results. One explanation may lie in how, or if, the mission statement is communicated to the organization. As stated previously, the mission statement must be communicated and adopted by internal stakeholders in order for the statement to be effective.

Vision Statements

The literature written about vision statements is as murky as that of mission statements. Much of the ambiguity rests in how the topic is approached. Research has occurred on vision because the topic crosses the fields of strategic management, leadership, and organizational behavior to name a few. In this view, vision has been defined very loosely as organizational purpose, strategic intent, strategic goals, and a future state of the organization (e.g. Baum, 1994; Kantabutra & Avery, 2010) while others define vision as simply the future image of the organization (Brown, 1998; Carver, 2011). However, this organizational vision is ineffective unless it is communication properly to stakeholders (Baum, 1994; Kantabutra & Avery, 2010; O'Connell, Hickerson, & Pillutla, 2011) and accepted by stakeholders (Slack, Orife, & Anderson, 2010). One potential way of communicating the vision is through a vision statement.

This paper focuses upon the vision statement as a written communication of organizational vision. Similar to mission statements, vision statements have also been researched in three areas. One obvious area is the relationship between a vision statement and organizational performance. Vision statements have been found to create goals for employees that create better employee effectiveness and through that customer satisfaction (Kantabutra & Avery, 2010). Organizational effectiveness can also be enhanced through the use of organizational impression management via vision statements (Price, 2012). However, all of the positive effects are negated and can be reversed if the vision statement is just a collection of words and not implemented (Lucas, 1998).

A second area of research has been upon the content of vision statements. Brown (1998) stated that most vision statements were poorly written or had no focus. Since that time, whether coincidentally or not, some research has focused upon the elements that need to be within a vision statement. Some have focused on the length of time (Brown, 1998) while others have focused upon the statement containing motivating and challenging goals (e.g. Lucas, 1998; MacLeod, 2016; Meade & Rogers, 2001). MacLeod (2016) also adds the caveat that the content of the statement is irrelevant if the vision is not taken seriously.

The final area of study for vision statements is how these are implemented. Some of this research has been focused upon ensuring the statement is communicated to internal stakeholders in order to guide their actions (Lucas, 1998; Payne, Blackbourn, Hamilton, & Cox, 1994). Kantabutra and Avery (2010) take this notion further and investigate how the statement can be communicated in order to enhance its effectiveness.

HYPOTHESES

This paper has defined mission statements and vision statements to be separate, individual statements conveying two different aspects of an organization. This definition was a necessity in order to focus upon each of those for analysis. However, the literature does not always distinguish between the two. Some research has tied the two together (e.g. Braun, Wesche, Frey, Weisweiler, & Peus, 2012; Matejka, Kurke, & Gregory, 1993; Powers, 2012; Rajasekar, 2013; Baum, 1994). Similarly, strategic management textbooks have considered mission statements to be a "container" in which mission, vision, values, and other proclamations are kept (e.g. Hill, et al. 2015). Thus, research does not have clearly defined boundaries for mission and vision. If research cannot keep the two separate, then practitioners may have an equally difficult time separating the two. This situation is lamented by Kantabutra and Avery (2010). Thus, when firms are considering creating these statements, they may be created at the same time, implying a consistent theme during creation.

Braun et al (2012) created an extended model of the process of creating the mission "container" in order to achieve positive organizational results. This model emphasizes the creation of the statements should be done concurrently. Strategic management texts (e.g. Grant, 2008; Hill, et al 2015) often place these statements together in the subject presentation, implying these go hand-in-hand and should be developed at the same time. It is not a far stretch to say that statements developed at the same time are going to be similar.

Erol and Kanbur (2014) state mission statements and vision statements are pictures of organizational capability. Fairhurst, Jordan, and Neuwirth (1997) go further and state that these statements are interdependent so that they project the same organizational characteristics, just in their own way. Unity of purpose through the use of these statements is one way of meeting objectives (Gurley, Peters, Collins, & Fifolt, 2015). This unity through these statements can only be met if the statements themselves are unified. Unity in the statements can only be achieved if similar or related wording is used in the statements.

Thus, using a taxonomy based on the language in the statements, the conclusion is that an organization's mission type and vision type are related. Thus, the following hypothesis can be made:

Hypothesis 1: There is a significant relationship between the type of mission statement an organization chooses and the type of vision statement an organization chooses.

Chun and Davies (2001) state companies do not pay enough attention to content in mission statements. In a similar notion, most vision statements are poorly written (Brown, 1998). Some organizations do not seem to put the necessary effort into creating these documents to become a vital component of the organization (Lucas, 1998). Part of the reason for this may be the organizations do not understand the important nature of these statements. As a natural consequence, many vision statements are written simply because it is something to do (MacLeod, 2016) and the same conclusion can be made for mission statements (King, et al, 2011).

Because many organizations do not put effort into creating mission and vision statements but also are encouraged to create them, it would be natural for these organizations to examine statements from similar firms and either use those as templates. This last statement may be corroborated in the literature. Firmin and Gilson (2010) found common themes in mission statements for colleges. Peyrefitte and David (2006) found similarities in mission statements across industry boundaries. Thus, there may be duplication of types of mission statements and vision statements due to "copying".

Because of this "copying", common organizations would then have the same type of mission statements and the same type of vision statements. Thus, there should be a relationship between some mission statement types and some vision statement types. The following hypothesis can then be made.

Hypothesis 2: There is a relationship between at least one mission statement type and vision statements type.

METHODOLOGY

One way to test for any relationship between vision statements and mission statements is to adopt a classification system for both. Both of these constructs have taxonomies developed.

Allison (2017a) developed a taxonomy for vision statements while Allison (2017b) developed a taxonomy for mission statements. Each of these is discussed in turn.

Allison (2017a) developed a taxonomy for vision statements where there are two parent classes and several child classes. The two parent classes are called Spatially Oriented statements and Achievementcentric statements. The Spatially Oriented class has eight child classes and the Achievementcentric class has nine child classes.

The vision statement taxonomy of Allison (2017a) has been chosen for several reasons. First, as of the writing of this paper, it may be the only detailed taxonomy of vision statements in existence. Second, this taxonomy was created by using the natural language of 798 vision statements themselves rather than using predetermined classes. This methodology of using natural language may be a far superior method because the classification relies on characteristics in the data rather than potential researcher bias (Duarte & Sarkar, 2011; Kuo-Chung & Li-Fang, 2004). Finally, the methodology of determining the taxonomy was rigorous within the framework just described. This process started with creating classes from the basic data, using that classification to determine rules for classification, and then using those rules to classify the data again to determine a misclassification rate. The parameters of the text analytics software were altered individually to find the lowest misclassification rate. Misclassification rate was chosen because the rules developed by the software would be used to classify statements not in the original data.

Allison (2017b) developed a taxonomy for mission statements consisting of three parent groups: the Producers, the Partners, and the Promoters. This taxonomy was developed using the mission statements from the same 798 organizations as the vision statements. This taxonomy was chosen for this study for the same reasons as for the vision statement taxonomy since the same process was used. The one negative aspect of this taxonomy is that no child classes were developed for the three parent classes. In order to draw comparisons between the vision statements classes and the mission statements classes, the mission statement child classes needed to be developed.

Thus, for this paper, the mission statements were divided based upon the parent classes mentioned previously. For each separate parent class data set, a partition called an unsupervised classification was derived. From this unsupervised classification rules were derived for the classification scheme. These rules were then applied to the original parent data set so that a misclassification rate could be determined. Once the process was created, each parameter was altered one by one until a minimum misclassification rate was found. The classification of each of the parent classes was found using this method. The Producers parent class broke up into four child classes. The Partners parent class divided into twelve child classes. Finally, the Promoters parent class separated into six child classes. The child classes are described in Appendix 1. The rules used to classify mission statements are found in Appendices 2 through 5.

Hypothesis 1

The test for Hypothesis 1 used the same sample that formed the mission statement taxonomy of Allison (2017b) plus the child classes developed here and the vision statement taxonomy of Allison (2017a). The test was conducted on two different levels. First, the parent classes for each type of statement were tested to determine if there is a relationship. Second, the child classes of the parent classes were also tested for a relationship.

For the first test using the parent classes, the Producers, Partners, and Promoters classes of the mission statement taxonomy were compared to the Spatial Oriented class and the Achievementcentric classes of the vision statement taxonomy. This data is nominal data, so the test to be used in this case is the Chi-Square test for independence (Donnelly, 2015; Bluman, 2015).

This test has been used in other research testing such as business type and lean manufacturing usage (Nallusamy, 2016), testing consumer organic produce purchases compared with geographic region (Mrinia & Maharjan, 2015), and testing the relationship of restaurant layout and ambience (Jana & Chatterjee, 2014).

The Chi-Square test depends upon the cells in the cross tabulation of the variables having an expected frequency of five or more. Thus, it was imperative to run a frequency table to find out how many statements are in each of the cells. The frequency table is shown in Table 1.

Since no cell has an expected count of less than five, the Chi-Square test was performed to determine if there is some form of relationship between the mission statement parent types and the vision statement parent types. The results are shown in Table 2.

Table 1: Crosstabulation of the parent classes for mission and vision statements

			Vision Parent Name		Total
			Achievement	Spatial	
Mission Parent Name	Partners	Count	139	91	230
		Expected Count	140.7	89.3	230.0
	Producers	Count	225	163	388
		Expected Count	237.3	150.7	388.0
	Promoters	Count	124	56	180
		Expected Count	110.1	69.9	180.0
Total		Count	488	310	798
		Expected Count	488.0	310.0	798.0

Table 2: The results of the Chi-Square test of mission and vision statement parent classes

	Value	Degrees of Freedom	Significance
Pearson Chi-Square	6.219[a]	2	.045
Likelihood Ratio	6.339	2	.042
Number of Valid Cases	798		

The Chi-Square test had a p-value of less than 0.05 indicating the test had a significant result. The results show there is support for Hypothesis 1 on the parent level, that there is a relationship between the type of mission statement and type of vision statement chosen by an organization.

The second level of testing was on the child level. Each child type was coded with the hundreds place denoting the parent class and the tens and ones digits denoting the child class. For example, a mission statement with a code of 305 meant the third parent class (Promoters) and the fifth child class under it. A code of 112 meant the first parent class (Partners) and the twelfth child class under it. Each of these codings were regarded as nominal data. However, when the crosstabulation was created, there were many cells (343 out of 374) where the expected frequencies in the cells were less than five. This is shown in Table 3.

Because there are cells that have an expected frequency of less than five, the Chi-Square test can yield distorted results (Agresti & Finlay, 1997). Fisher's exact test and its extensions are designed for tables such as this that have cells of small expected frequencies; however the test was designed for smaller tables and, when large tables are involved, the use of computational time and resources can be unrealistic (Agresti & Finlay, 1997; Schlotzhauer, 2009). Because of the size of

this table, computing resources were not available leaving the Monte Carlo simulation as the last alternative.

The Monte Carlo simulation is a method for taking a test that can yield results that are distorted and finding a more accurate result (Tuffery, 2011). The simulation takes a random sample and runs the test on that sample. This is done many times, with the average of the results becoming the simulation's results. Research using the Monte Carlo simulation includes measuring body absorption of chemicals (Van Landingham, Lawrence, & Shipp, 2004), creating a decision-making tool for plant capacity expansion (Renna, 2013), and forecasting hotel occupancy (Zakhary, Atiya, El-shishiny, & Gayar, 2011).

Table 3: Expected frequencies of mission child classes versus vision child classes

Table of MissionType by VisionType																			
		VisionType																	
		101	102	103	104	105	106	107	108	201	202	203	204	205	206	207	208	209	Total
MissionType																			
101	Expected	0.9373	1.3634	0.8947	1.7895	2.3434	1.8321	2.2581	1.7895	4.3885	2.4712	2.5564	2.3434	1.2782	1.8747	3.4511	0.7669	1.6617	
102	Expected	0.4962	0.7218	0.4737	0.9474	1.2406	0.9699	1.1955	0.9474	2.3233	1.3083	1.3534	1.2406	0.6767	0.9925	1.8271	0.406	0.8797	
103	Expected	0.5238	0.7619	0.5	1	1.3095	1.0238	1.2619	1	2.4524	1.381	1.4286	1.3095	0.7143	1.0476	1.9286	0.4286	0.9286	
104	Expected	0.7995	1.1629	0.7632	1.5263	1.9987	1.5627	1.9261	1.5263	3.7431	2.1078	2.1805	1.9987	1.0902	1.599	2.9436	0.6541	1.4173	
105	Expected	0.6065	0.8822	0.5789	1.1579	1.5163	1.1855	1.4612	1.1579	2.8396	1.599	1.6541	1.5163	0.8271	1.213	2.2331	0.4962	1.0752	
106	Expected	0.5238	0.7619	0.5	1	1.3095	1.0238	1.2619	1	2.4524	1.381	1.4286	1.3095	0.7143	1.0476	1.9286	0.4286	0.9286	
107	Expected	0.3308	0.4812	0.3158	0.6316	0.8271	0.6466	0.797	0.6316	1.5489	0.8722	0.9023	0.8271	0.4511	0.6617	1.218	0.2707	0.5865	
108	Expected	0.3308	0.4812	0.3158	0.6316	0.8271	0.6466	0.797	0.6316	1.5489	0.8722	0.9023	0.8271	0.4511	0.6617	1.218	0.2707	0.5865	
109	Expected	0.3584	0.5213	0.3421	0.6842	0.896	0.7005	0.8634	0.6842	1.6779	0.9449	0.9774	0.896	0.4887	0.7168	1.3195	0.2932	0.6353	
110	Expected	0.7719	1.1228	0.7368	1.4737	1.9298	1.5088	1.8596	1.4737	3.614	2.0351	2.1053	1.9298	1.0526	1.5439	2.8421	0.6316	1.3684	
111	Expected	0.3033	0.4411	0.2895	0.5789	0.7581	0.5927	0.7306	0.5789	1.4198	0.7995	0.8271	0.7581	0.4135	0.6065	1.1165	0.2481	0.5376	
112	Expected	0.3584	0.5213	0.3421	0.6842	0.896	0.7005	0.8634	0.6842	1.6779	0.9449	0.9774	0.896	0.4887	0.7168	1.3195	0.2932	0.6353	
201	Expected	3.5564	5.1729	3.3947	6.7895	8.891	6.9511	8.5677	6.7895	16.65	9.3759	9.6992	8.891	4.8496	7.1128	13.094	2.9098	6.3045	
202	Expected	0.8822	1.2832	0.8421	1.6842	2.2055	1.7243	2.1253	1.6842	4.1303	2.3258	2.406	2.2055	1.203	1.7644	3.2481	0.7218	1.5639	
203	Expected	5.0727	7.3784	4.8421	9.6842	12.682	9.9148	12.221	9.6842	23.749	13.373	13.835	12.682	6.9173	10.145	18.677	4.1504	8.9925	
204	Expected	1.1855	1.7243	1.1316	2.2632	2.9637	2.317	2.8559	2.2632	5.5501	3.1253	3.2331	2.9637	1.6165	2.3709	4.3647	0.9699	2.1015	
301	Expected	0.7995	1.1629	0.7632	1.5263	1.9987	1.5627	1.9261	1.5263	3.7431	2.1078	2.1805	1.9987	1.0902	1.599	2.9436	0.6541	1.4173	
302	Expected	0.3584	0.5213	0.3421	0.6842	0.896	0.7005	0.8634	0.6842	1.6779	0.9449	0.9774	0.896	0.4887	0.7168	1.3195	0.2932	0.6353	
303	Expected	0.5238	0.7619	0.5	1	1.3095	1.0238	1.2619	1	2.4524	1.381	1.4286	1.3095	0.7143	1.0476	1.9286	0.4286	0.9286	
304	Expected	0.8546	1.2431	0.8158	1.6316	2.1366	1.6704	2.0589	1.6316	4.0013	2.2531	2.3308	2.1366	1.1654	1.7093	3.1466	0.6992	1.515	
305	Expected	0.8546	1.2431	0.8158	1.6316	2.1366	1.6704	2.0589	1.6316	4.0013	2.2531	2.3308	2.1366	1.1654	1.7093	3.1466	0.6992	1.515	
306	Expected	1.5714	2.2857	1.5	3	3.9286	3.0714	3.7857	3	7.3571	4.1429	4.2857	3.9286	2.1429	3.1429	5.7857	1.2857	2.7857	
Total	Frequency	22	32	21	42	55	43	53	42	103	58	60	55	30	44	81	18	39	798

With these mission and vision statements, the simulation was run 10,000 times. The final results are shown in Table 4. The 99% confidence interval for the p-value has an upper bound of 0.0005 indicating significance for this test. The Mantel-Haenszel statistic shows there was not a significant difference in the results between each of the samples. The results of this test also show a relationship between mission statement and vision statement child classes and even stronger support for Hypothesis 1.

Table 4: Monte Carlo results for comparing mission and vision statement child classes

Statistic	Degrees of Freedom	Value	Probability
Chi-square	336	513.0448	<0.0001
Likelihood Ratio	336	448.9864	<0.0001
Mantel-Haenszel	1	2.6737	0.1020
Phi coefficient		0.8018	
Contingency coefficient		0.6256	
Cramer's V		0.2005	

Hypothesis 2

As with the previous hypothesis, the goal is to test the hypothesis on two levels. The first level of testing was the parent level where there are three levels of mission statements and two levels of vision statements. Because there are two levels of vision statements, the second hypothesis can be tested using logistic regression with the two levels of vision statements being the dependent variable and the levels of mission statements being the independent variable. Binary logistic regression is applicable when there is a binary dependent variable and at least one independent variable that is continuous, ordinal, or nominal (Tuffery, 2011). This method has been used in other research such as classifying Norway Spruce Saw Logs (Jappinen & Beauregard, 2000) and in studying motorized versus non-motorized transportation in Ireland (Lawson, McMorrow, & Ghosh, 2013). The model results are shown in Table 5.

Table 5: Likelihood Ratio Test Results for Global Null Hypothesis (Binary Logistic Regression)

Model	-2 Log Likelihood	Chi-Square	DF	Sig.
Intercept only	1066.223			
Final	1060.241	5.9815	1	0.0145

Because the model is significant, the individual levels can then be examined. For this analysis, a step-wise selection approach was used. The results of this are shown in Table 6.

Table 6: Level Significance Test Results (Binary Logistic Regression)

Parameter	Vision Parent Name	DF	Estimate	Standard Error	Chi-Square	Sig	Exp(Est)
Intercept	Spatial	1	-0.5574	0.0903	40.90	<.0001	0.561
Promoters	Spatial	1	0.2176	0.0903	5.81	0.016	1.243

Only the third parent class of mission statements, the Promoters, had a significant result. The table above tells us that the Promoters have a 24.3% greater chance of being identified with a Spatially Oriented vision statement than the others. This is not to say the majority of Promoters are assigned to Spatially Oriented vision statements. Table 1 shows that statement is not true. It only shows there is a greater probability that it will happen. This finding supported Hypothesis 2 on the parent level.

Testing Hypothesis 2 on the child level requires using multinomial logistic regression. Multinomial regression is similar to binary logistic regression except it allows for more than two levels of a dependent variable (Tuffery,2011). Thus, the twenty levels of mission statements can be tested against the 17 levels of vision statements. The results of the model test are in Table 7.

Table 7: Likelihood Ratio Test Results for Global Null Hypothesis (Multinomial Logistic Regression)

Model	-2 Log Likelihood	Chi-Square	DF	Sig
Intercept only	4369.227			
Final	4212.398	156.8295	48	<0.0001

Since the model itself is significant, the individual levels for mission statements can be checked. The coding for mission statements was the same as for Hypothesis 1. Only three of the levels for mission statements were significant – statements 301, 304, and 305. All of these are from the Promoters parent class, the same class that was significant in the parent level test. The results for the individual levels is shown in in Table 8.

Table 8: Level Significance Test Results (Multinomial Logistic Regression)			
Effect	**DF**	**Chi-Square**	**Sig**
Mission301	16	35.3427	0.0036
Mission304	16	39.8244	0.0008
Mission305	16	32.8455	0.0077

To further understand the results, one must look at the individual level results. These results are found in Appendix 6. The table shows the mission 301 type is associated with the vision types 105 and 107 about four times more often than other mission statements except the mission 304 type that is associated with the vision 107 type about 3.4 times more often than other mission statements. The mission 301 type is also associated with the vision statement types 201, 202, 203, 206, and 207 at least 2.2 times more often than other mission statements except the mission statement 304 type that is associated with vision 202 3.6 times more often and vision 207 4.2 times more often. Finally, mission 305 is less often associated with vision 205 than other mission statements by about 61%. Thus, most of the significant relative associations occur between the third parent class of the mission statements (the Promoters statements) and the second vision statement class (the Spatially Oriented statements), supporting the first test for Hypothesis 2. As a result, there seems to be support for Hypothesis 2.

ANALYSIS AND DISCUSSION

Hypothesis 1 was tested in two different ways. First, a Chi-Square test was run on the three parent levels of mission statements and the two parent levels of vision statements. The test showed significance, providing parent level support for Hypothesis 1. Because of small cell counts in analyzing the child levels, the Chi-Square test could not be performed. However, because of the magnitude of computations, the Fisher Exact test could not be performed either. Consequently, a Monte Carlo simulation was used to take 10000 sample of the table, use the Chi-Square test, and compose a confidence interval for the significance of the test. The confidence interval falls very easily into the level of significance providing support for Hypothesis 1 on the child level.

Based on the two tests mentioned, there seems to be good support for the supposition there is a general relationship between mission statements and vision statements. If there were no relationship, then the pairings would occur at about the expected cell frequencies. Thus, there seems to be some form of preferred linking of mission statements types and vision statement types. But the specific relationship cannot be determined using these test. This is where hypothesis two helps.

In order to find specific relationships between the mission statement types and the vision statement types, two levels again were tested. On the parent level, since vision statements had two levels, this could be used as the dependent variable of a binary logistic regression. The results of the regression analysis showed a definite relationship between the third level of mission statements – the Promoters – and the second level of vision statements – the Spatially Oriented statements. This is not to say that the Promoters mostly pair with the Spatially Oriented statements. What the results do say is the Promoters are more likely to pair with the Spatially Oriented statements than other mission statements do. This provides support for Hypothesis 2 that there is a form of relationship between the mission statement types and the vision statement types.

The second testing for specific relationships occurred on the child level. Because the dependent variable, vision statement types, was extended to 17 levels rather than two, multinomial

logistic regression was used. The results from this test corroborate the findings from the parent test. The only significant mission statements came from the Promoters which is level three of the mission statement parent taxonomy. Mission statements 301, 304, and 305 were significant and related to vision statements in the Spatially Oriented group, the second parent level in the taxonomy. This lends even more support for Hypothesis 2

The evidence appears to show a dependency relationship between the types of mission statements and types of vision statements. Going even further, this dependency relationship seems to be mostly isolated to three types of Promoter mission statements and their relationship to some types of Spatially Oriented vision statements. As stated by the rationale for Hypothesis 2, these links may be indicators that company has not paid attention to the substance of its statements and instead may have "copied" its statements from other firms.

Finding there was a relationship between mission statements and vision statements was not surprising. What is surprising is the lack of many relationships between types of mission statements and types of vision statements. As stated in the groundwork laid for Hypothesis 1, mission statements and vision statements are theoretically prepared at the same time and would consequently should have a similar focus and wording. This similar focus and wording would translate into similar taxonomic classes and produce a strong relationship between the classes. However, that was not the case. This became evident when the generation of the taxonomies created three parent classes for the mission statements and two parent classes for the vision statements. If most organizations are maintaining a strong linkage between the mission statement and the vision statement, then there should be the same number of taxonomic classes for mission and vision statements and they should be strongly related. To make matters worse the test on the parent level showed a stronger likelihood of Promoter mission statements being paired with Spatially Oriented vision statements than any other statements. Again, if organizations generally had a strong link between the mission and vision statements, then the results would have shown much stronger linkages with more types involved. The tests on the child level showed few relationships.

The implications of these findings is contrary to what authors of textbooks such as Hill, et al (2015) and Grant (2008) have been teaching should be done. The general presumption by researchers such as Braun, et al (2012) is that creation of these statements should be done concurrently to maximize presentation of a common theme and to maximize positive organization results. With the exception of the Promoter-Spatially Oriented linkage, there does not appear to be any relationship between the statements. This may indicate the statements are created independently of each other, whether in different time periods or by different people, without much of a desire to link the two. The worst case scenario is the mission statement and the vision statement present opposing paths for the organization.

This may explain some of the issues researchers have had in the past. Researchers such as Analoui and Karami (2002), David and David (2003), Desmidt, Prinzie, and Decramer (2011), and Sheaffer, et al (2008), show mission statements are definitely related to organization performance. Other researchers such as Amato and Amato (2002), Calfee (1993), Khalifa (2011), and O'Gorman and Doran (1999) claim there is tentative evidence at best to link mission statements to performance. Similar disagreement exists on the vision statement side with Gulati (2016) and Kantabutra and Avery (2010) showing there is a link between the statement and performance and then Shamsi, et al (2015) saying there is no link. The studies demonstrating a positive influence on performance may have included samples where the relationship between the mission statement and vision statement was strong and promoted a boost to performance. The studies that did not

show any influence on performance may well have had samples with weak or no relationship between mission and vision statements and the opposing directions of these statements may have helped eliminate any positive performance benefits.

Another discovery in these findings comes from the two types that paired together – the Promoter mission statement type and the Spatially Oriented vision statement type. The Promoter vision statements are focused upon raising the quality of life through treatment or education. This seems to indicate health care firms and education organizations. These firms more likely also adopted the Spatially Oriented vision statement that recognizes a spatial boundary for the firm's existence. The pairing of these two types of statements seems to be natural since health care institutions and education institutions generally seek to improve their clientele, but are also generally limited by geographic boundaries. Thus, the pairing is natural, whether because of practical circumstances or intentional design. This finding supports Gulati's (2016) finding that when examining acute care hospitals, there was a significant relationship between effective vision statements and performance.

Finally, the results here may be indicators illustrating each statement's type upon performance. For example, firms with Spatially Oriented vision statements may have better performance than those firms with Achievementcentric vision statements. The first offers a commitment to meets the needs of a geographic area while the second requires the firm to become the best at some particular goal. This latter vision could introduce stress, anxiety, and negative competition into the organization. Kantabutra and Avery (2010) state that vision statements work best when the vision is shared and the vision has positive effects on all stakeholders. Additionally, Long and Vickers-Koch (1994) state that vision statements work best when the focus is upon customer needs, contrary to the Achievementcentric theme. Thus, there may be organizational performance benefits to those firms adopting a Spatially Oriented vision statement.

Similarly, there may be performance benefits associated with some mission statement types. The Producer statements focus on delivering products or services without much mention of customers. The Partners statements concentrate on working with individuals for the development of those same individuals. The Promoters concentrate on the quality of life through treatment or education. Amato and Amato (2002) state that mission statements that emphasize the quality of life (as do Promoters) connect with internal and external stakeholders and imply that there may be a performance benefit. Bart and Hupfer (2004) note that mission statements with stakeholder content have more of an impact on performance than other content, consequently minimizing the effects of the Partners type of statement. Both of these seem to imply that positive stakeholder content is beneficial in a mission statement and, as Braun, et al (2012) state, positive stakeholder attitudes toward the mission statement create positive organizational outcomes. Thus, Partners mission statements and Promoters mission statements may have performance benefits associated with them more than the Producer statements. In terms of this study, the Promoter-Spatially Oriented link found may be one of the strongest for creating organizational performance benefits.

LIMITATIONS

Every study has limitations and this one is no exception. One limitation is the reliance upon the 798 documents that were collected. These documents were a convenience sample rather than a random sample and, consequently, may not be representative of the population. As a result, some of the findings may be more or even less significant than if a random sample were obtained. Additionally, the sample may not have included firm statements that may have produced another

type for either mission or vision statements. This lack of discovery may also have skewed the results.

Another limitation is the data involved is nominal data rather than continuous data. The statistical tests used for nominal data do not produce as distinct results as the tests for continuous data. Thus, there is some ambiguity in the nominal test results and their interpretation. This is especially true for the results of the logistic regression tests that can provide statistically significant relative test results, but not absolute test results.

Finally, the data used for this study included all types of organizations, both for-profit and not-for-profit. Some of the results might be clearer if the data were solely for-profit or solely not-for-profit. Data within industries might have also painted a better picture of the results.

DIRECTIONS FOR FUTURE RESEARCH

The findings presented in this paper have several implications for research. This section examines some of those ramifications to provide general direction for future research. The taxonomies for mission statements and for vision statements can provide much needed help in extending this research.

One area of potential research is to examine studies that examined one statement with some organizational measure and determine if the same results extend to the other statement. For example, Slack, et al (2010) determined vision was correlated with employee satisfaction. This study could be performed again to determine if the corresponding mission type is correlated with employee satisfaction. Another example is David and David (2003) who found higher financial measures for firms that have well-crafted mission statements than for those that do not. The question then arises as to whether this result would extend to vision statements as well, particularly if the type of vision statement was paired with the corresponding type of mission statement.

Research such as David and David (2003); Desmidt, Prinzie, and Decramer (2011); Green and Medlin (2003); and Sheaffer, et al (2008) show a relationship between a mission statement and some measure of organizational performance. On the other hand, studies such as O'Gorman and Duran (1999) and Calfee (1993) have shown no relationship and Erol and Kanbur (2014) have shown a relationship in some and no relationship in others. These studies beg the question of why the mixture of results. As mentioned in the last section, one possibility lies in whether companies take their statements seriously. The results from this study seem to indicate there are mission-vision pairings that are carelessly created. It may be possible to use the pairings as indicators of which companies do not take their statements seriously. It may also provide a way of explaining why there are so many divergent results in the literature.

The question also arises whether the types of mission statements and types of vision statements are related to other types of organizational statements. For example, Allison (2015a) developed a taxonomy for ethics statements and Allison (2015b) developed a taxonomy for values statements. Since these statements all have taxonomies, it is now possible to determine if there is a relationship between any and all of them. It would be necessary to find organizations that have all the statements being tested.

Mission statements and vision statements have been identified as part of strategic management and of strategic communication (Allison, 2017a; Allison, 2017b). These studies also developed the natural language taxonomies used in this study. But language is an integral part of organizational culture (Schein, 1983; Costanza, Balcksmith, Coats, and DeCostanza, 2015). It may be possible to now determine if there is a relationship between the pairings of mission-vision

types and the types of organizational culture. For example, it might be possible that Daher's (2016) mechanistic culture might be related to a particular mission-vision pairing or group of pairings while the organic culture might be related to other pairings. The same study could be done on Cameron and Quinn's (2006) Clan, Adhocracy, Hierarchy, and Market types of culture.

SUMMARY

This purpose of this paper was to provide unique findings by examining mission and vision statements using the taxonomies of Allison (2017a) and Allison (2017b) and how these relationships affect performance. The mission statement taxonomy of Allison (2017b) had to be extended in this paper to allow comparison of child classes of the respective statements. The goal was to compare the parent classes of the two taxonomies and the child classes of the two taxonomies in order to find relationships between them. Two hypotheses were generated that proposed these relationships.

The importance of this paper lies in the results of the hypothesis tests. Both hypotheses were supported by the tests at the parent level as well as the child level. As a result, it has been established that there are specific relationships between the mission statement types and the vision statement types, but not nearly as many as expected. The lack of a relationship between types of mission and vision statements seems to indicate firms do not always strategically link the two and may not gain performance synergies from such a linkage. In fact this paper suggests the close linkage of the Promoter mission statement with the Spatially Oriented vision statement creates superior performance in firms adopting those types.

Finally, this paper has contributed not only to the body of knowledge regarding mission statements and vision statements but also to the fields of strategic management, strategic communication, and quite possibly organizational culture. Unique taxonomies for the statements were used for the first time to determine a relationship between these two textual constructs. Knowing there is a way to measure these relationships and knowing there is a relationship between these two constructs may help extend theory into areas not possible until now.

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APPENDIX 1

The child classes for the mission statement taxonomy. The key words are in descending order based on relevance.

Name of Class	**Key Words**	**Description**
Partners (Parent)		
Child 1 – 101	Development, staff, systems, management, project, training, expectations	These statements focus on working to develop people in other organizations
Child 2 – 102	Cancer, patients, treatments, lives, help, improve, solutions, develop	These statements focus upon helping cancer victims live a better life.
Child 3 – 103	Life, quality, world, well, building, work, opportunities, seek, improve	These statements focus on helping people create a better quality of life
Child 4 – 104	Values, produce, drive, grow, leadership, stakeholders, product, core, innovation, profitably	These statements focus on working with stakeholders to grow the organization.
Child 5 – 105	Women, serve, businesses, members, providing, growth, promote, dedicated, opportunities, environment	These statements focus on providing growth opportunities for women
Child 6 – 106	Create, relationships, design, guests, services, trusted, goal, world, customers, leader	These statements focus on generating relationships
Child 7 – 107	Programs, community, education, children, students, focused, process, families, lives, enhanced	These statements focus on community programs to enrich peoples' lives
Child 8 – 108	Service, level, achieving, team, strive, aim, deliver, vision, work, businesses, goal	These statements focus on accomplishing some organizational goal
Child 9 – 109	Supply, chain, experience, delivering, markets, solutions, offer, employee, systems, best	These statements focus on working with those inside the organizational value chain

Child 10 – 110	People, working, strive, brands, share, meet, spirit, performance, work, live, help	These statements focus on helping people where they need help
Child 11 – 112	Company, growth, manner, leading, aim, guests, meet, practices, standards, building	These statements focus on relationships through keeping standards and regulations
Child 12 - 113	Industry, lead, value, leading, partner, committed, trusted, profitability, responsibility	These statements focus on building trust and commitment
Producers (Parent)		
Child 1 – 201	Customer, quality, deliver, business, development, service, leader	These statements focus on delivering products or services that are high quality or the best in the market
Child 2 – 202	Customers, excellence, shareholders, value, needs, employees, providing	These statements focus on delivering products or services that create value for stakeholders and customers
Child 3 – 203	Products, world, differentiated, entertainment, consumer, information, people, industry	These statements focus on delivering products or services that are unique
Child 4 – 204	Services, client, contracting, security, clients, needs, class, software, individuals	These statements focus on delivering products or services to meet client needs
Promoters (parent)		
Child 1 – 301	Health, research, improve, support, promote, education, community, system, excellence	These statements emphasize health, education, and community programs
Child 2 – 302	Technology, success, employees, company, customer, development, making, committed, needs	These statements emphasize need fulfillment through technology
Child 3 – 303	Care, organization, providing, physicians, quality, committed, business, customer	These statements emphasize quality health care
Child 4 – 304	Communities, serve, healing, families, spirit, healthcare, well-being, caring, quality services	These statements emphasize community well-being through the healthcare system
Child 5 – 305	Mission, students, world, help, energy, technology, innovation, life, growth, learning, people	These statements emphasize helping people learn and grow as individuals

APPENDIX 2

The following are the rules by which mission statements are classified.

Parent Class Rules

Step 1: If any of the following are true, the mission statement is a Promoter. If none of these are true, go to Step 2.

a. The statement does not have the word “products”, does not have the words “customers” or “customs”, and has “health” in the same statement.
b. The statement has “mission” or “missions”; does not have “customer” or “custom”; does not have “products”; does not have “delivery”, “delivers”, or “deliver”; does not have “delivery”, “delivers”, or “deliver”; and does not have “solutions” or “solution”.
c. The statement has the word “clients”, has either “achieves” or “achieve”, and does not have “services”.
d. The statement has either “care” or “cares” and does not have “customs” or “customers”.

e. The statement does not have “products”, it does not have “solution” or “solutions”, it does have “technology”, and does not have “customs” or “customers”.
f. The statement does not have “products”, it does have “clients”, it does not have “solution” or “solutions”, and it does not have “services”.
g. The statement does not have “value” and has “research”.

Step 2: If any of the following statements are true, the mission statement is one of the Partners statements. If none of the statements are true, the mission statement is of the Producers class.

a. The statement contains “member”, “members”, “treatment”, “treatments”
b. The statement does not contain “mission” or “missions”, does not contain “products”, does contain “people” or “peoples”, does not contain “solution” or “solutions”, does not contain “customs” or “customer”, and does not contain “health”.
c. The statement does not contain “products”, does not contain “customs” or “customers”, and does contain “industry”.
d. The statement contains “values” and it does not contain “customs” or “customers”.
e. The statement contains “run” or “runs” but not “value”.
f. The statement contains “program” or “programs” and it contains “skill” or “skills”.
g. The statement contains “steel” but not “communities”.
h. The statement does not contain “missions” or “mission” but does contain “women”.

APPENDIX 3

The rules for classifying mission statements of the Producers parent class

Step 1: If the rule below is true, the statement belongs to the second child class of the Producer statements: the statement does not contain “customer” or “custom”, does contain “products”, and does not contain “deliver” or “delivers”

Step 2: If the rule below is true, the statement belongs to the fourth child class of the Producer statements: the statement does not contain “business”, it does not contain “improve” or “improved”, it does not contain “growth”, it does not contain “customers” or “customs”, it does contain “services”, and it does not contain “return” or “returns”.

Step 3: If any the rules below are true, the statement belongs to the first child class of the Producer statements. Otherwise it belongs to the third child class.

a. The statement contains “solution” or “solutions”, it does not contain “customs” or “customers”, and it does not contain “services”.
b. The statement contains “deliver” or “delivers”, it does not contain “customs” or “customers”, and it does not contain “services”.
c. The statement contains “strive”, “strives”, or “strides” and it does not contain “services”.
d. The statement contains “business” and “development”.
e. The statement contains “natural” and does not contain “services”.
f. The statement contains “competitive” or “highest”.

APPENDIX 4

The rules for classifying mission statements of the Partners parent class

Step 1: If the following rule is true, then the statement belongs to the eleventh child class of the Partners statements: the statement contains “company”.

Step 2: If the following rule is true, then the statement belongs to the seventh child class of the Partners statements: the statement contains “program”, “programs”, “children”, or “community”.

Step 3: If the following rule is true, then the statement belongs to the eighth child class of the Partners statements: the statement contains “service”, “achieving”, or “vision”.

Step 4: If either of the following rules are true, then the statement belongs to the ninth child class of the Partners statements.

a. The statement contains “supply”.

b. The statement does not contain “people” but does contain “experience”, “experienced”, or “experiences”.

Step 5: If the following rule is true, then the statement belongs to the twelfth child class of the Partners statements: the statement does not have “people” but does have “industry”.

Step 6: If the following rule is true, then the statement belongs to the second child class of the Partners statements: the statement contains “cancer”, “patients”, “patient”, “help”, or “helps”.

Step 7: If the following rule is true, then the statement belongs to the third child class of the Partners statement: the statement contains “life”.

Step 8: If the following rule is true, then the statement belongs to the sixth child class of the Partners statements: the statement contains “creates”, “created”, or “create” and does not contain “work” or “works”.

Step 9: If the following rule is true, then the statement belongs to the fifth child class of the Partners statements: the statement contains “women”, “providing”, “committed”, “dedicated”, “members”, or “member”.

Step 10: If the following rule is true, then the statement belongs to the tenth child class of the Partners statements: the statement contains “people”.

Step 11: If the following rule is true, then the statement belongs to the fourth child class of the Partners statements: the statement contains “values”, “leadership”, “grow”, “grows”, or “innovation”. Otherwise the statement belongs to the first child class.

APPENDIX 5

The rules for classifying mission statements of the Promoters parent class

Step 1: If the following rule is true, then the statement belongs to the second child class of the Partners statements: the statement contains “customer”, “customers”, or “technology”.

Step 2: If the following rule is true, then the statement belongs to the third child class of the Partners statements: the statement contains “client” or “clients”.

Step 3: If the following rule is true, then the statement belongs to the first child class of the Partners statements: the statement contains “research”, “system”, “health”, or “healthy”

Step 4: If the following rule is true, then the statement belongs to the fifth class of the Partners statements: the statement contains “communities”, “serves”, or “serve”.

Step 5: If the following rule is true, the statement belongs to the fourth child class of the Partners statements: the statement contains “care” or “cares” but not “communities”. Otherwise, the statement is a member of the sixth child class.

APPENDIX 6

These are the level results from the multinomial regression test. Significant variables are italicized.

Parameter	Vision Type	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq	Exp(Est)
Intercept	209	1	-0.801	0.7951	1.01	0.3138	0.449
Intercept	208	1	-6.586	97.6404	0	0.9462	0.001
Intercept	*207*	*1*	*-2.1272*	*0.9572*	*4.94*	*0.0263*	*0.119*
Intercept	206	1	-11.6142	79.6047	0.02	0.884	0
Intercept	*205*	*1*	*1.6301*	*0.6524*	*6.24*	*0.0125*	*5.105*
Intercept	204	1	-16.2308	90.4946	0.03	0.8577	0
Intercept	203	1	-0.3522	0.7158	0.24	0.6227	0.703
Intercept	202	1	-6.9947	53.6228	0.02	0.8962	0.001
Intercept	201	1	-0.2671	0.6778	0.16	0.6935	0.766
Intercept	108	1	-7.0044	63.9246	0.01	0.9127	0.001
Intercept	107	1	-6.9952	56.0945	0.02	0.9008	0.001

Intercept	106	1	-6.2706	63.1756	0.01	0.9209	0.002
Intercept	105	1	-6.4392	45.1482	0.02	0.8866	0.002
Intercept	104	1	-11.8502	89.7541	0.02	0.895	0
Intercept	103	1	-11.988	116.2	0.01	0.9178	0
Intercept	102	1	-11.0261	93.3427	0.01	0.906	0
Mission301	209	1	0.7982	0.4634	2.97	0.085	2.222
Mission301	208	1	6.0394	97.6374	0	0.9507	419.656
Mission301	*207*	*1*	*1.2352*	*0.4579*	*7.28*	*0.007*	*3.439*
Mission301	*206*	*1*	*1.2909*	*0.5807*	*4.94*	*0.0262*	*3.636*
Mission301	205	1	-0.4464	0.3933	1.29	0.2564	0.64
Mission301	204	1	6.1305	55.8566	0.01	0.9126	459.688
Mission301	*203*	*1*	*0.8093*	*0.4128*	*3.84*	*0.0499*	*2.246*
Mission301	*202*	*1*	*1.4237*	*0.5798*	*6.03*	*0.0141*	*4.153*
Mission301	*201*	*1*	*0.9609*	*0.3832*	*6.29*	*0.0122*	*2.614*
Mission301	108	1	6.1062	63.919	0.01	0.9239	448.622
Mission301	*107*	*1*	*1.3777*	*0.5805*	*5.63*	*0.0176*	*3.966*
Mission301	106	1	6.0688	63.1714	0.01	0.9235	432.154
Mission301	*105*	*1*	*1.3873*	*0.5804*	*5.71*	*0.0168*	*4.004*
Mission301	104	1	6.1185	63.919	0.01	0.9237	454.19
Mission301	103	1	6.1062	90.3947	0	0.9461	448.622
Mission301	102	1	0.3843	0.3914	0.96	0.3261	1.469
Mission304	209	1	0.4513	0.4399	1.05	0.3049	1.57
Mission304	208	1	0.2758	0.4941	0.31	0.5767	1.318
Mission304	*207*	*1*	*1.4392*	*0.5961*	*5.83*	*0.0158*	*4.217*
Mission304	206	1	5.763	50.47	0.01	0.9091	318.308
Mission304	205	1	-0.7332	0.4061	3.26	0.071	0.48
Mission304	204	1	5.7745	45.1419	0.02	0.8982	321.983
Mission304	203	1	0.6661	0.4371	2.32	0.1275	1.947
Mission304	*202*	*1*	*1.2809*	*0.5975*	*4.6*	*0.0321*	*3.6*
Mission304	201	1	0.6161	0.3832	2.58	0.1079	1.852
Mission304	108	1	1.112	0.5987	3.45	0.0633	3.04
Mission304	*107*	*1*	*1.2355*	*0.5984*	*4.26*	*0.039*	*3.44*
Mission304	106	1	1.0866	0.5991	3.29	0.0697	2.964
Mission304	105	1	5.7465	45.1419	0.02	0.8987	313.088
Mission304	104	1	1.1243	0.5986	3.53	0.0603	3.078
Mission304	103	1	5.7501	73.0542	0.01	0.9373	314.232
Mission304	102	1	5.7078	59.181	0.01	0.9232	301.2
Mission305	209	1	0.4523	0.5274	0.74	0.391	1.572
Mission305	208	1	0.414	0.6401	0.42	0.5178	1.513
Mission305	207	1	1.2317	0.6294	3.83	0.0504	3.427
Mission305	206	1	5.7566	61.5581	0.01	0.9255	316.279
Mission305	*205*	*1*	*-0.9383*	*0.4551*	*4.25*	*0.0392*	*0.391*
Mission305	204	1	5.7681	55.0595	0.01	0.9166	319.93
Mission305	203	1	0.2037	0.4468	0.21	0.6484	1.226

Mission305	202	1	5.7506	53.6167	0.01	0.9146	314.373
Mission305	201	1	0.6139	0.4581	1.8	0.1802	1.848
Mission305	108	1	0.9102	0.6342	2.06	0.1512	2.485
Mission305	107	1	5.7489	56.0887	0.01	0.9184	313.843
Mission305	106	1	0.1879	0.4621	0.17	0.6842	1.207
Mission305	105	1	0.6918	0.5237	1.74	0.1865	1.997
Mission305	104	1	5.7561	63.0067	0.01	0.9272	316.104
Mission305	103	1	0.5625	0.6387	0.78	0.3784	1.755
Mission305	102	1	5.7014	72.1829	0.01	0.937	299.28