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Title: US Corporations Face a Significant Employee Retention Problem in Their Global Operations.

Abstract

Economists forecast significant growth in global corporations; driven by expansion into developing markets. However, recruitment and retention of qualified staff may become a significant limiting factor, undermining the success of these companies. This problem is further compounded by a corporate trend towards complex matrix management structures. The author hypothesized that social and workplace factors impact employee retention and progression in the management matrix. To fully understand the impact of these factors, the study focused on four areas: Social Drivers, Relationships, the Work Environment, and Economic Drivers. The methodology and methods for this study were Quantitative with a positivist ontology and a realism epistemology. The research included 95,000 participants drawn from the USA and Australia.

The workplace was the greatest area of discovery. Trust between employees and their supervisors and peers raised important questions about motivation, and staff succession and progression. The research found that workplaces that suffer from low trust lose focus on succession and progression; in contrast, companies with a trust-based culture, nurture skilled and experienced employees; who are then willing and able to move through the staff and management ranks, building a strong organizational structure.

The article brings an improved understanding of the unique challenges that global corporations face. The new matrix management model must simultaneously embrace the realities of cultural, economic, and political differences in multiple regions (Asia, North America, and Europe). A key lesson from the study is that the conventional management matrix may not be well-positioned to handle the future.

Key Words: Matrix, Trust, Corporation, Succession, Progression, Global, Job Satisfaction.

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1. Introduction.

1.1 Objective.

This article examines and challenges the conventional thinking and theories of employee retention in US global corporations. In an era of rapid global expansion, the cultural, ethnic, and generational profile of the US corporate workforce is changing, in addition; footprint expansion has driven an evolution of the organization towards matrix management. These changes have drawn attention to a significant employee retention risk for global corporations.

1.2 Paradigm.

Quantitative and Qualitative research differ significantly in terms of research design, execution, and the researcher's role. Qualitative research is inductive, driven by an interpretive mindset. The researcher is focused on understanding people and events, to discover and bring meaning to a phenomenon. Quantitative research is deductive and draws on a positivist philosophy; the researcher is focused on the collection and analysis of mainly continuous data used to prove or disprove a hypothesis (Denscombe, 2017). A deductive approach was considered appropriate for this article.

1.3 Method Selection.

The final choice of “Qualitative, Quantitative, or Mixed Methods research” lies in the hands of the researcher. Critics may argue that qualitative research can be imprecise and use small samples; critics may also argue that quantitative research's reliance on measurable variables; can allow the researchers to ignore critical information (Grix, 2018). However, Quantitative research has a broad range of strengths (Creswell, 2020). This paper leverages the deductive strengths and focuses on Quantitative research; with the recognition of the many benefits of Qualitative and Mixed Methods research.

1.4 Research Design.

The research design is heavily influenced by the primary process; deductive vs. inductive (Creswell, 2020). The design dictates the order in which the researcher approaches the research tasks, particularly the timing of the research question. In this study, the research questions and hypothesis were developed early in the project and drove the research methodology and methods. The research questions were underpinned by hypothesis which sharpened the focus, followed by statistical tests to present the study's conclusions, and predictions.

2. Research Plan Development

2.1 Scope and Data.

To cover the module's scope, the research question contains six sub-questions(below). The research theme was employee progression in global corporations. The research sub-questions were designed to probe people's experience in the workplace, to yield a greater understanding of the factors that drive progression, from the perspectives of the respondents' social and workplace environment.

Q1. Has the population's Socioeconomic ranking changed over time?

Q2. Is there a relationship between employees' trust level and their social standing?

Q3. Has the sample population's perception of their place in society changed in the last ten years?

Q4. Is there a correlation between an employee's social class (rank), and his level of trust in his direct supervisor?

Q5. Is there a correlation between family income and the social and occupational status of key family members (mother, father, and spouse)?

Q6. What are the predictors of family income, and what weight does education, social status, gender, citizenship, ethnicity, spouses' occupation, peer-to-peer and supervisor trust, play in this?

To facilitate the research a broad-based search was made for secondary data that offered a large enough population, and included a broad range of variables to reflect gender, social class, ethnicity, educational level, political bias, and global employment responsibilities; all across a broad time period. Finding and securing access to this type of database was challenging and led to selecting and using two data sets. The primary data set, which yields eighty percent of the study was the GSS US population survey. The survey has over 65,000 records¹ and spans a 30-year period.

The second data set is based on an Australian population². Australia offers valuable insight into a unique workplace culture, in a market with strong influence from Europe and Asia. The data set includes 30,000 records and spans a 5-year period.

2.2 Structure.

The article is subdivided into four main sections: Methodology, Results, Discussion, and Summary. The methodology and methods section details the rationale and arguments that underpin the research question and develops these into the hypothesis used in the article. The results section evaluates the hypothesis using a broad

¹ The GSS dataset has 6,000 variables providing broad subject scope.

² Australian Population Survey (APS).

range of statistical tests; this section also provides interpretation and analysis, and describes the findings in APA format, supported by graphical visualization and data tables. The results section concludes with a regression and hierarchical model interpretation. The discussion section focuses on the key research questions and presents arguments that both support and challenge the conclusion. The summary explores the research limitations and provides both a research conclusion and a pathway for further research.

2.3 Research Question: Is Employee Progression Stifled in Multinational Corporations? What are the Options for US Companies with Global Operations?

Economists forecast significant growth in multinational global corporations. However, access to qualified staff and the ability to retain staff may become a significant limiting factor (Beechler and Woodward, 2009). Employee job satisfaction and job security have become key elements in staff retention and progression. The success or failure of global companies may reside in their approach to staff development (Sebastian Reiche, 2007).

The six sub-questions were designed to provide the researcher with insight into the drivers of employee progression, and the subsequent impact that has on retention. The third-party databases contain raw data gleaned from population surveys; the data was collected via online questionnaires³ and population sampling studies⁴.

The article's research questions, and hypothesis are subdivided into focus areas, and grouped into research themes.

Questions probe both the work environment, (Chart 1⁵); management, trust in the workplace, job security, income, and the social environment; class, gender, marriage, family influences, and ethnicity. These questions are aimed at providing better understanding of the factors that impact employee progression. The author hypothesized that both social and workplace factors impact

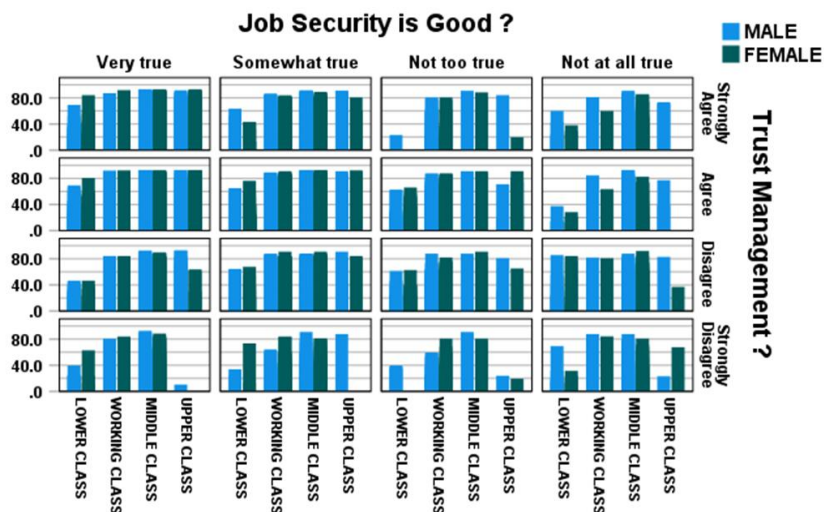


Chart 1 Work Environment

employee progression. The findings of the study, while limited by the data sets, indicate that social background, education, family, and workplace opportunity impact progression.

³ Likert scale formats are used extensively.

⁴ Socioeconomic and Prestige studies.

⁵ The graphic highlights the impact of five of the study variables: Social Class (X axis), Socioeconomic score (Y axis), Gender, Employee Trust in Management and Employee Job Security level.

To fully understand the impact the article focused on four areas: Social Drivers, Relationships, Economic Drivers and the Work Environment.

3. Literature Review

The research question drove a literature search of business reports from industry, global analysts, and scholars on the current and future challenges⁶ corporations face (Gustafsson et al., 2020). What emerged was a list of factors, including economic and social drivers (Hauser and Warren, 1997), relationships, and the work environment (Beechler and Woodward, 2009), all of which impacted employee retention.

The literature review expanded this list to include peer-reviewed papers that focused on retention via employee motivation and progression and succession (Gordon and Martin, 2018); however, there remain open questions, particularly with multinational global corporations (Lee et al., 2017).

3.1 Economic and Social Drivers.

While corporate workforces in North America and Western Europe are well balanced with stable economic and social structures, and that stability is measured and well documented in socioeconomic and prestige data (Hauser and Warren, 1997), the same is not true for Eastern Europe (Hardy et al., 2018) or Asia Pacific (Akhil and Liu, 2019). The literature reveals significant economic and social disparity driven by cultural and ethnic factors (Pereira et al., 2016), the literature also highlights the impact this disparity has on work practices and the organization of local companies (Akhil and Liu, 2019), and while the literature explores the local resolution, the literature fails to address the employee management impact of a global expansion strategy (Jiang et al., 2009). Case studies highlight business risk and the “cause and effect”; for example, incorporating a factory in Kazakhstan, Mongolia or Micronesia into a US corporation led by predominantly North American executives. While the literature provides extensive coverage of the strategies used to homologate the factory processes, this does not address the challenges of matrix management with a socially, economically, and culturally diverse regional workforce (Strese et al., 2016).

3.2 Organization Structure, Relationships, and the Work Environment.

Scholars and business leaders have debated the work environment and the importance of peer-to-peer and leadership relationships, but global expansion and lean management strategies have added new dimensions to this debate (Beechler and Woodward, 2009); one factor is the rapid evolution of the management matrix. Scholars highlight the significant difference in the management and operating structure of global companies with a matrix organization (Ford and Randolph, 1992).

Global corporations often have a “hub and spoke” configuration, with a single corporate office (hub) located in a major business center, New York, London, etc.,

⁶ Business disruptions, economic cycles, and organizational change.

controlling a broad base of business units (“spokes”). The business units are globally located and are generally positioned close to the corporation’s customer base; in practice, a corporation might have thirty business units spread across twenty countries. Control of this organization requires a complex matrix management structure (Sayles, 1976); employee progression and retention in this structure is not well understood (Gundersen et al., 2012); this presents gaps and open questions which are not covered in the literature. One of the most significant gaps is an understanding of trust in the workplace (Costigan et al., 2013).

3.3 Workplace Trust.

Trust in corporations is perhaps best understood in organizational terms (Matzler and Renzl, 2006). This includes peer-to-peer trust, trust between employees and immediate supervisors, and the more complex but critical trust between employees and the corporations' leaders⁷ (Fulmer and Ostroff, 2017). Scholars acknowledge that understanding trust in corporate organizations is complex (Kähkönen et al., 2021); this is further exacerbated when these organizations are underperforming or have ethical issues. These issues are more commonplace than business leaders acknowledge; examples that are well documented include the US automotive industry collapse in 2005 (Jeffrey and John, 2005), this triggered corporate bankruptcies, resulting in factory closures, and the layoff of 200,000 people. Often more complex are ethical failures which force the collapse or restructuring of major corporations, leaving a lasting mark on employee and public trust; well documented examples are Enron (Sims and Brinkmann, 2003) and Siemens (Eberl et al., 2015). The research and peer-reviewed papers emanating from these events raise fundamental questions about workplace trust. However, the focus has been on US and European organizations, which prompts the question; how will corporations with global footprints and foreign factories, where leadership trust, and cultural norms differ significantly, deal with similar situations? (Nunhes et al., 2020).

3.4 Economic, Social, and Workplace Drivers in Context.

The literature is rich in scholarly works which address individual factors that impact employee retention (Kähkönen et al., 2021); however, the reality is that these factors do not exist in isolation; matrix-managed global corporations force these, and other seemingly unrelated factors to interact, and it is this environment where culture, trust, ethnicity, generational profile touch that the research field is most productive. There is significant debate and controversy on how to address this convergence in a way that fully explores all dimensions of conventional and matrix organizations for global corporations (Hempel and Martinsons, 2009).

The literature review raised important questions and gaps in understanding, particularly in matrix organizations (Sayles, 1976). This article is focused on addressing

⁷ A group that non-management employees seldom, if ever, directly interface with.

one of those gaps, the impact of social and workplace factors on employee progression and retention.

4. Methodology and Methods.

4.1 Research Design.

The methodology for this study was Quantitative in construct, using statistical tests to extract meaning and understanding from the research data. The ontology is positivist, with a realism epistemology.

4.2 Analytical Tools and Data Set Format.

Statistical analysis was conducted using SPSS version 28⁸, supported by the Microsoft Office suite for reporting. The research material was third-party data sets (GSS and APS). These data sets were created using online surveys and interviews. The questions were designed to capture the participant's input across 25 categories, including social and workplace environments, relationships, ethnicity, gender, political bias, the economy, institutional confidence, trust etc. Eighty percent of the questions provided a multiple-choice option (agree, disagree, neither), twenty percent of the questions elicited a response from a dichotomous list (yes, no). Five percent of the questions allowed the participants to enter a written response. The format for the multiple-choice questionnaires followed a Likert scale. The databases handled no responses as a “system missing.”

4.3 Ethics.

A critical element of the study was ethical compliance. Questionnaires and interviews in both databases were anonymized; both databases were constructed and directly managed by federal government agencies⁹. Both databases provided permission for use by independent researchers with the proviso of noncommercial use.

5. Analysis and Findings.

5.1 Data and Variable Selection Criteria.

An important element/criterion of the data and variable selection process was to ensure that the survey respondents, and the range and type of survey questions met the research objective¹⁰. It was important that the sample population included global companies of varying sizes, and featured a workforce that was both gender and ethnically diverse; it was also important to ensure that the sample population represented people from all management, supervisory, and educational levels. A key objective was to probe the participants for their opinions and beliefs on a range of subjects (social, workplace, career motivation, and cultural bias). Given the impact of economic cycles, it was important to include a broad time frame in the survey and include Socioeconomic and Prestige Index data. The research procedure included three phases. In the first phase,

⁸ Tables 2 – 23 and Charts 1 - 7 use data directly derived from IBM SPSS v28.

⁹ These agencies used defined protocols to protect participants and the data collected during the studies.

¹⁰ The overarching objective being to evaluate the impact of management structure (“the matrix”) on employee progression.

the data was checked for normality, validity, and reliability. Phase two focused on the hypothesis with statistical tests. Phase three focused on regression and hierarchical analysis.

5.2 Statistical Tests and Hypothesis

The statistical tests focused on directly answering the research question. To accomplish this six primary hypotheses were developed to challenge the argument that employee job satisfaction, security, and retention are random. The author hypothesized that an employee's decision to leave a company is not random, and is in fact impacted by a broad range of factors; the author also argued that the weighting of these factors can have a profound effect on employees. To test the hypothesis, the author considered both parametric ("Pearson" Correlation, Regression) and non-parametric tests ("Wilcoxon", "Mann-Whitney" and "Kruskal – Wallis"). The tests were selected based on the data type and research question fit.

- Hypothesis 1, and 2 examined independent variables. Hypothesis 1 used a "One Sample t-test" to compare the "Socioeconomic" variable means. Hypothesis 2 used an Independent Samples t-test to assess differences in the "Trust" variable.
- Hypothesis 3 examined two related variables. A "Paired Sample t-test" was selected to understand the difference between the "Rank" variables.
- Hypothesis 4 explored a dependent variable and an independent variable with four groups. The author selected an ANOVA and included a Post Hoc test to understand the variance between the "Management Trust" groups.
- Hypothesis 5a, 5b, 5c, 5d and 5e sought to understand the correlation between key socioeconomic variables. The author considered both Spearman and Pearson correlation, the data was scale and met the requirement for the Pearson test.
- Hypothesis 6 was designed to understand the predictors of Family income and to assess the weight of seven variables. The author selected Linear Regression supported by Hierarchical Analysis.

5.3 Data Preparation

5.3.1 Participants.

The sample populations (Table 1) are discrete, with 65,000 drawn from the United States and 30,000 drawn from Australia. Both populations represent the country's gender and ethnic diversity, and reflect the social and cultural mix, and a broad cross-section of educational and employment levels. The data sets reflect the current profile of two of the world's key regions.

Table 1

Database	GSS	APS
Participants.	65,000	30,000
Region.	North America	Asia Pacific
Country.	USA	Australia
Mean Age.	46	45
Gender M/F %.	M 58% / F 42%	M 40% / F 60%
Social Class Mean.	Middle Class	Middle Class

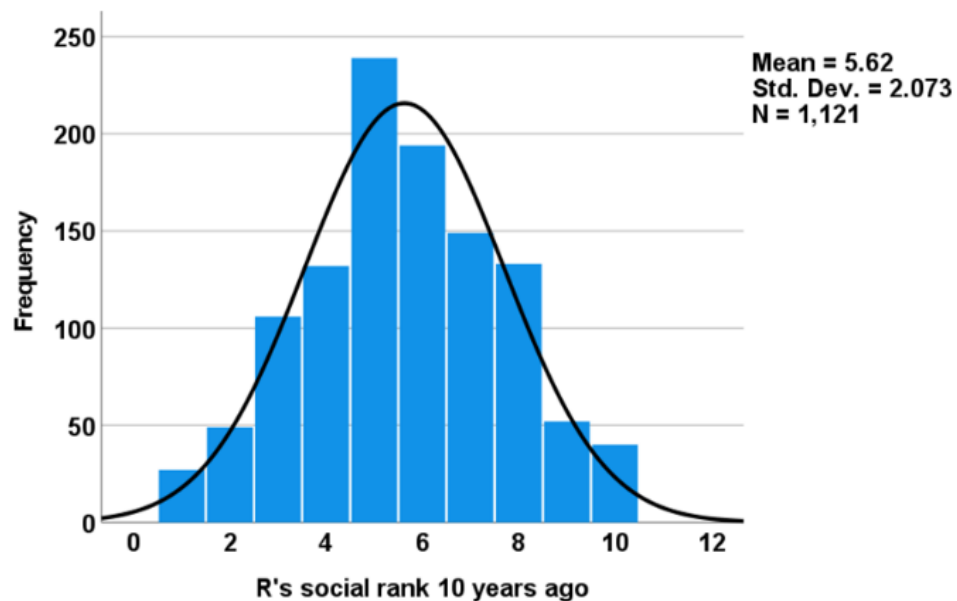
5.3.2 Distribution / Normality.

Table 2 provides descriptive data for eleven of the key variables used in the research analysis. This includes the sample population mean Income (16.72)¹¹, Education level (BA or above) and Citizenship (55% US). Socio-Economic, Prestige Index scores, Trust and Generation Bias variables were used to support the six research questions and ten hypotheses. In addition, a number of variables were used for specific tests, for example, Hypothesis 3 evaluated the change in respondents' social status over a 10-year period using the Rank 10 variable (Chart 2). All variables were part of the GSS data set and met the requirements for analysis. The Skewness¹² and Kurtosis are within the range expected for the GSS data set and within a range accepted for parametric tests (Field, 2009, Gray, 2021)¹³. The Socioeconomic and Prestige Indexes were compared to prior studies and were within acceptable norms.

Table 2

Descriptive Statistics		
	Mean	Std. Deviation
Total Family Income.	16.72	5.754
Respondent "R" Income.	14.57	5.960
Education - Highest degree R has earned	2.30	1.306
Ethnicity / Citizenship - R born in this USA ?	1.09	0.289
Relationships - "Can people be trusted ?"	1.67	0.559
Gender.	1.36	0.479
Social Impact. Generation Bias.	1948	21.263
Socio-Economic Index - Respondent.	43.89	21.820
Socio-Economic Index - Spouse.	46.08	21.697
Workplace - R Prestige Score.	44.32	12.890
Workplace - Spouse Prestige Score.	42.99	12.970

Chart 2



¹¹ Family Income is a continuous ranked variable, income level is \$34K.

¹² Skewness and Kurtosis measure the symmetry of the distribution.

¹³ P248, P635 and Kim (2013)

5.3.3 Reliability, Validity, and Effect Size.

Tests of Reliability (Cronbach Alpha), Validity, and Effect size, (Cohen's *d*) were conducted for the survey respondents and provide an initial view of the quality of the data.

5.3.4 Reliability.

The Cronbach Alpha test measures the consistency of measurement (Gray, 2021); a measurement is said to be reliable if it produces the same results repeatedly under consistent conditions. An acceptable reliability is a repeatable Alpha score of .8 to .9. A pretest was conducted on the constant income variables (Table 3), returning a Cronbach Alpha value of .891. A key question in the research was the impact of social factors on the sample population, as part of the reliability review the variable R socioeconomic Index 2010 was introduced into the sample (Table 3).

Table 3

Item Statistics			
	Mean	Std. Deviation	N
Family income in constant \$	36268.254	30467.7314	36511
R's income in constant \$	22597.105	28876.3899	36511
Family income in constant \$	51541.384	37353.2743	36511
R's socioeconomic index (2010)	45.971	22.0036	36511

While this impacted the Cronbach Alpha score, reducing it slightly below .8 (Table 4) this was considered acceptable.

Table 4

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N
0.792	0.835	4

5.3.5 Validity.

Validity measures the appropriateness of a test (Denscombe, 2017). The GSS data contained 6,000 variables, of which 20 were used. Each variable chosen was selected based on its ability to answer the research question and hypothesis. The variables "SEI0", "RIncome", "Rank", questioned income, and social profile of the sample population. The variables "Trust" "Jobsat", "Jobseck" and "Anomia8", questioned the population's trust in management, peer-to-peer trust, job security and job satisfaction. The variables "Supervis", "Level", and "Supnum"; probed rank and responsibility in the workplace. Each of these variables was considered appropriate, both in format, and the range of options to address the questions being asked, and the ability to provide clarity to the survey participants.

5.3.6 Effect Size.

Effect size is used to probe how meaningful the relationship between two variables is. Effect size is measured and expressed as Cohn's *d*. "Dr Cohen defined the range in three categories, < .20 small effect, .21 to .49 medium effect, and > .49 large effect".

5.4 Results - Statistical Testing and Analysis.

Using the hypotheses, the author explored the research question in three main groupings.

5.4.1 Group 1 Social Change. Hypothesis 1: Population Status Change Over Time.

The author argued that the 1980 and 2010 Socioeconomic Index's (SEI) are related.

- *Null Hypothesis 1: H0 - There Is no significant difference between the 1980 SEI mean, and the 2010 SEI mean.*

The author compared the 1980 and 2010 SEI indexes to understand if the population's status changed over time. A "One-Sample T-Test" was selected to compare the means of both index's¹⁴. The Mean of the 1980 Socioeconomic Index was 48.42; this was used as the T-test comparator.

The "One-Sample T-test" results (Table 5) indicate a statistically significant difference between the SEI Means of 1980 (*M* 48.42, *SD* 19.18), and 2010 (*M* 43.89, *SD* 21.82), *t* (60048) = -50.854, *p* < .001. The Null Hypothesis H0 was rejected and H1 was accepted.

Table 5

One-Sample t-Test	Test Value = 48.42				
	t	df	Significance		Mean Difference
			One-Sided p	Two-Sided p	
Socioeconomic Index (2010)	-50.854	60048	0.000	0.000	-4.5293

The Mean difference between the two surveys was 4.53 SEI index points. The 2010 mean (*M* 43.89) was lower than the 1980 mean (*M* 48.42), suggesting lower overall income and employment confidence, possibly driven by the 2010 US recession.

Effect Size Cohen *d*¹⁵.

The effect size (Table 6) was -.208. Based on the Cohen's guidelines, this represents a small effect size. Reflecting the dataset and variables used for this test.

Table 6

One-Sample Effect Sizes			
		Standardizer ^a	Point Estimate
Socioeconomic Index (2010)	Cohen's <i>d</i>	21.8249	-0.208
	Hedges' correction	21.8252	-0.208

¹⁴ Both index's meet the criteria of independence, distribution, and homogeneity.

¹⁵ The Cohen *d* index is derived from the formulae - Mean difference (-4.529) / Standard deviation (21.824) = -.208

5.4.2 Group 1 Social Change. Hypothesis 2: Personal Relationships.

An important aspect of the social environment is relationships. Hypothesis 2 was focused on understanding the sample populations relationships, both in the family, and in the circle of their acquaintances. The hypothesis explored the sample population's relationships from a trust perspective to better understand the impact that trust might have on the respondents at varying income and social levels.

The author developed the hypothesis using the data set variable "SEI 2010" and the variable "Trust"; this dichotomous variable posed the question, "Can people be trusted?", the sample population input was recorded as 1 = Yes, or 2 = No. The responses provided valuable insight into the population's view of the relationships and environment in which they live and work. The author argues that there is a relationship between trust and the population's social status (SEI).

- *Null Hypothesis 2: H_0 - There is no relationship between "Trust in people" and the Socioeconomic Index (SEI).*

An "Independent T-test" was used for statistical robustness; both variables satisfied the test requirements for independence. The dependent variable was SEI 2010, and the independent variable was "Trust in people".

A "Levene's¹⁶" test (Table 7) was conducted to assess the equality of variances. The "Levene's test" was significant ($F = 10.937$, $p = .001$), and equal variance was not assumed.

Table 7

Independent Samples Test									
Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance p		Mean Difference	Std. Error Difference
						One-Sided	Two-Sided		
R's Socioeconomic index (2010)	Equal variances assumed	10.937	0.001	4.165	692	0.000	0.000	6.7472	1.6201
	Equal variances not assumed			4.250	635.947	0.000	0.000	6.7472	1.5876

The Independent T-test was significant, $t(635.947) = 4.250$, $p < .001$, (Table 7¹⁷) rejecting the Null Hypothesis. The alternate Hypothesis H_1 was accepted, underpinning the argument of a statistically significant relationship between the Socioeconomic Index and the sample population's "trust in people".

Further analysis using the group statistics (Table 8) indicates that respondents who answered "Yes" (59.8%) to the survey question¹⁸ had an SEI score of 43.80. In comparison, respondents who answered "No" (40.2%) had an SEI score of 37.06,

¹⁶ The Levine's test is used to measure equality of variances. If $p < .05$ the results are significantly different and equal variances are not assumed.

¹⁷ 95% Confidence Levels. Lower = 3.6297, Upper = 9.8648.

¹⁸ The survey question asked - "Can people be trusted?"

possibly suggesting that those with higher education and better jobs have greater trust in the people they come into contact with.

Table 8

Group Statistics					
Can people be trusted		N	Mean	Std. Deviation	Std. Error Mean
R's socioeconomic index (2010)	YES	415	43.804	21.7607	1.0682
	NO	279	37.057	19.6175	1.1745

5.4.3 Group 2 The Workplace. Hypothesis 3: Perception of Social Rank in Society.

Hypotheses 3 sought to understand workplace relationships through the lenses of education, social class/rank, and income. The author argued that social rank has an impact on employee progression. The author also argued that social rank may change over time in the US population.

Social Class (Rank).

The respondent's perception of their social class was of interest in the context of their willingness, or ability to seek advancement in the workplace. Survey participants were asked to self-rank their social class on a Likert scale, the survey asked two questions: "self-rank your social class today", and the second question was, "rank your social class 10 years ago". The authors argument that social rank may change over time is captured in the following hypothesis.

- *Null Hypotheses 3: H0 - There is no difference in the respondent's current social rank and their social rank 10 years ago.*

The hypothesis calls for a dependent variable assessment¹⁹; a "Paired Sample T-Test" was selected to evaluate the hypotheses. The variables met the test criteria²⁰.

Results (Table 9). The test was significant, $t(1116) = 8.873$, $p < .001$, the Null Hypothesis was rejected. The H1 Hypothesis was accepted, supporting the argument that social rank may change over time.

Table 9

Paired Samples Test										
R's self ranking of social position. R's social rank 10 years ago.		Paired Differences					<i>t</i>	<i>df</i>	Significance <i>p</i>	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval				One-Sided	Two-Sided
					Lower	Upper				
Pair 1		0.483	1.818	0.054	0.589	0.376	8.873	1116	0.000	0.000

The paired samples test statistics (Table 10) indicated that the respondent's self-ranking score had changed over the 10-year period, moving from 5.62 to 5.14, a

¹⁹ Current social rank and prior social rank are dependent on the respondent's perception.

²⁰ Both variables (Rank and Rank10) are continuous ordinal scaled.

deterioration of 0.48 or 8.5%. This change acknowledges that the respondents' perception of their social standing / class was impacted by factors that changed over time. While this test did not attempt to identify specific factors, further research is recommended to evaluate the effect of the economy, unemployment levels, and domestic trends to understand their impact on social ranking.

Table 10

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	R's self ranking of social position	5.14	1117	1.772	0.053
	R's social rank 10 years ago	5.62	1117	2.075	0.062

5.4.4 Group 2. The Workplace.

Hypotheses 4 sought to understand the workplace relationship factors that impact the population. The author argued that employee progression (income/rank) is impacted by trust in the workplace, and modified by education and social class.

The literature supports the premise that when employees lose trust in their direct management, this impacts morale, motivation, progression, and employee turnover (Costigan et al., 2013).

Workplaces that suffer from low morale and increasing turnover may lose focus on the process of succession and progression²¹, and the ability to foster an upwardly mobile population, where skilled and experienced employees are willing and able to move through the staff and management ranks (Groves, 2007). However, while the literature seems to align on this subject, one outstanding question remains: Does this phenomenon affect staff at all levels; shop floor, managers, and executives? This article attempted to take the first step in a wider evaluation of the population, and poses the question; in the sample population, do employees trust their direct management? A One Way ANOVA was used (Table 11) with the variables Trust and Income; the ANOVA provides insight into trust across a broad range of levels in the organization.

The data set variable Trust uses a four-point Likert scale; respondents were asked "If they had trust in their management?", responses ranged from Strongly Agree to Strongly Disagree. The variable Employee Income²² indicates the respondent's level and responsibility in the company. The author argued that there was a relationship between trust in direct management and employees at varying levels in the organization. Using income as an indicator of level and progression, the argument is captured in the following hypothesis:

²¹ A defined corporate program to support employee promotion.

²² Continuous scale variable.

- *Null Hypothesis 4: H0 - There is no relationship between a respondent's trust in management and the respondent's income.*

The One-Way ANOVA²³ was selected to demonstrate its use with group populations in the data set. The dependent variable was Income, the independent variable (factor) was "Trust in Direct Management".

The ANOVA was significant, $F(3, 5231) = 5.382$, $p = .001$ (Table 11), indicating that there was a significant difference "somewhere" between the groups. The Null Hypothesis H0, was rejected and H1 was accepted, supporting the argument that there is a statistically significant relationship between Trust in Management and Income (level)²⁴. A Post-Hoc²⁵ test was used to identify the differences between groups (Table 12).

Table 11

ANOVA					
R income in constant dollars					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24119217016	3	8039739005	5.382	0.001
Within Groups	7.81404E+12	5231	1493795406		
Total	7.83816E+12	5234			

"Post Hoc Test - Multiple Comparisons."

Table 12

Post Hoc Tests		Multiple Comparisons			
Dependent Variable.	R income in constant dollars				
Independent Variable.	R trust management at work		Mean Difference	Std. Error	Sig.
Tukey HSD	Strongly Agree	Agree	3827.187*	1246.244	0.012
		Disagree	4606.545*	1664.544	0.029
		Strongly Disagree	8122.582*	2642.949	0.011
	Agree	Strongly Agree	-3827.187*	1246.244	0.012
		Disagree	779.358	1533.565	0.957
		Strongly Disagree	4295.394	2562.479	0.336
	Disagree	Strongly Agree	-4606.545*	1664.544	0.029
		Agree	-779.358	1533.565	0.957
		Strongly Disagree	3516.036	2789.961	0.588
	Strongly Disagree	Strongly Agree	-8122.582*	2642.949	0.011
		Agree	-4295.394	2562.479	0.336
		Disagree	-3516.036	2789.961	0.588

The Post Hoc test (Table 12) provided a significance level for each group combination: for example, Agree and Disagree $p = .957$, and Agree and Strongly Disagree $p = .366$, were not significant, in contrast to Strongly Agree and Agree $p = .012$, Strongly Agree and Disagree $p = .029$ and Strongly Agree and Strongly Disagree

²³ ANOVA ("Analysis of variance") is used to compare unrelated groups; The one-way ANOVA uses one independent variable and two or more dependent variables.

²⁴ Salary is not directly related to responsibility level, however, in a corporate structure income provides a directional measure.

²⁵ Post Hoc tests are used interpret the results from an ANOVA. The Post Hoc test analyzes the relationships between groups by testing each pair of groups (Ref Table 12)

$p = .011$; which were all significant. The group comparisons are highlighted in the Homogeneous subset (Table 13) and Chart 3 (page 19).

Homogeneous Subsets.

The Homogeneous Subsets (Table 13) separates the comparison into two models. Model 1 contains the relationships Strongly Disagree, Disagree and Agree. Model 2 contains the relationships Disagree, Agree and Strongly Agree. The relationships in Model 1 are not significantly different from one another, the relationships in Model 2 are also not significantly different from one another; however, the groups, Group 1, and Group 2, are significantly different from one another. This is highlighted in Table 13 and Chart 3.

Table 13

Homogeneous Subsets				
Respondent income in constant dollars				
R trust management at work		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	Strongly Disagree	249	33392.98	
	Disagree	837	36909.02	36909.02
	Agree	2634	37688.38	37688.38
	Strongly Agree	1515		41515.56
	Sig.		0.193	0.143

Hypothesis 4 Summary.

The Descriptive (Table 14) details the group's differences at both sample population and the respondent's "R" Income levels, this is further highlighted in Chart 3.

Income levels from \$33K to \$41K per annum were captured in the ANOVA. The results suggest that respondents with higher income and possibly greater responsibility have higher trust in their direct management. 4,149 respondents in the salary range \$37K to \$41K (Table 14) answered either Agree, or Strongly Agree, to the survey question "Do you have trust in management?"; compared to 1,086, lower paid employees who expressed low or no trust in management.

Table 14

Descriptives				
Respondent income in constant dollars	N	Mean	Std. Deviation	Std. Error
Strongly Agree	1515	41515.56	46754.602	1201.208
Agree	2634	37688.38	36558.303	712.325
Disagree	837	36909.02	30840.870	1066.016
Strongly Disagree	249	33392.98	27697.387	1755.251
Total	5235	38467.04	38698.157	534.850

Chart 3



5.4.5 Group 3 – Progression Drivers.

Hypotheses 5 and 6 sought to understand the future income trajectory of the sample population through regression analysis, and then understand the weight of the social and workplace drivers on this trajectory through hierarchical analysis.

In preparation for the regression study, the author sought to understand the relationships between key elements of the data, particularly the social impact of the respondent's family background on their current social status.

The first evaluation in this group was designed to understand if there was a relationship between the respondent's SEI score, and the respondent's immediate family (mother, father, and spouse), and if that relationship extended to the respondent's Prestige Index. Also included in this study were comparisons between the respondent's 1980 and 2010 SEI scores, and their Prestige Index. Finally, the author sought to understand the impact of age and family income. A Pearson correlation test was selected to evaluate the arguments.

Analysis and Results.

Hypothesis 5a and 5b – Family SEI Relationships (Respondent and Immediate Family). The author argued that there is a relationship between the respondent's SEI scores, and their immediate family, and that relationship impacts income, this argument is captured in Hypotheses 5a and 5b.

- *Null Hypothesis 5a: H0 - There is no relationship between the Respondent's 2010 SEI score and Family income.*
- *Null Hypothesis 5b: H0 - There is no relationship between the Respondent's family (mother, father, and spouse) 2010 SEI scores, and Family income.*

The results of the Pierson correlation (Table 15²⁶) indicate that there is a positive correlation between Family Income, and the survey respondents "R" 2010 Socioeconomic Index ($M = 43.89$, $SD = 21.82$). $r(11075) = .445^{**}$, $p < .001$.

²⁶ Summary table shown, Note: Correlation is significant (**) at .01. Complete table included in the attachments.

The results (Table 15) also show a positive correlation between the respondent's immediate Family 2010 SEI and Family Income, Mother ($M = 38.76$, $SD = 22.38$). $r(6730) = .185^{**}$, $p < .001$, Father ($M = 44.11$, $SD = 19.37$). $r(8210) = .224^{**}$, $p < .001$, and Spouse ($M = 46.08$, $SD = 21.70$), $r(5009) = .440^{**}$, $p < .001$. Therefore, the Null Hypothesis 5a and 5b were rejected and the alternate Hypothesis H1 was accepted.

Table 15

		Mean	Std Deviation	1	2	3	4	5	6	7	8	9	10	11
Respondents Income	1	14.57	5.96	--										
Total Family Income	2	16.72	5.75	.682**	--									
R's 2010 Socioeconomic Index.	3	43.89	21.82	.485**	.445**	--								
R's 1980 Socioeconomic Index.	4	48.42	19.18	.414**	.413**	.830**	--							
R's 2010 Occupational Prestige Score.	5	42.99	12.97	.405**	.366**	.825**	.695**	--						
R's Mother's 2010 Socioeconomic Index	6	38.76	22.38	.139**	.185**	.237**	.238**	.185**	--					
Mothers 2010 Occupational Prestige.	7	41.22	12.90	.121**	.153**	.208**	.211**	.172**	.826**	--				
R's 2010 Father's Socioeconomic Index.	8	44.11	19.37	.153**	.224**	.273**	.280**	.225**	.388**	.350**	--			
Father's 2010 Occupational Prestige	9	43.71	12.08	.123**	.173**	.215**	.222**	.184**	.324**	.302**	.843**	--		
R's 2010 Spouse's Socioeconomic Index.	10	46.08	21.70	.242**	.440**	.363**	.355**	.316**	.204**	.184**	.252**	.192**	--	
Spouse Occupational Prestige Score (2010)	11	44.22	12.89	.203**	.360**	.314**	.303**	.287**	.171**	.158**	.215**	.172**	.832**	--
Age of respondent	12	46.10	17.54	.209**	.023*	.042**	.013*	.045**	-.143**	-.157**	-.119**	-.077**	0.009	-0.001

Summary. The correlation between Family Income and 2010 Socioeconomic Index (Table 15) for both respondent and Spouse ($r = .445$, $p < .001$, $r = .440$, $p < .001$) was stronger than the correlation between Family income and Socioeconomic Index for the respondent's Mother and Father ($r = .185$, $p < .001$, $r = .224$, $p < .001$). The variance in correlation strengths may indicate a greater alignment between the respondent and spouse's social rank²⁷ ($M = 43.89$ and $M = 46.08$), when compared to the respondent's father and mother ($M = 44.11$ and $M = 38.76$). The alignment of the respondent and spouse 2010 SEI scores and income, presents opportunity for further research; as it has the potential to impact family income trajectory.

²⁷ Mean difference R and Spouse is $M = 2.19$ vs $M = 5.35$ for Mother and Father.

Hypothesis 5c and 5d. The Relationship between Prestige Score and Family Income.

While the Socioeconomic Index provides good insight into social rank and status, the Prestige Index provides greater insight into the impact of the respondent's occupation on social status.

The author argued that there is a relationship between the sample population's Prestige scores and family income.

- *Hypothesis 5c: H0 - There is no relationship between the respondent's 2010 Prestige score and Family income.*
- *Hypothesis 5d: H0 - There is no relationship between the respondent's immediate family 2010 Prestige scores (mother, father, and spouse) and Family income.*

The correlation²⁸ between Family income and Prestige scores was significant for both the respondent $r(11075) = .366^{**}$, $p < .001$, and immediate family, Mother $r(6730) = .153^{**}$, $p < .001$, Father $r(8210) = .173^{**}$, $p < .001$ and Spouse $r(5009) = .360^{**}$, $p < .001$; the Null Hypothesis for 5c and 5d were rejected and the H1's were accepted; however, the strength of the correlation between family income and SEI, and Family income and Prestige scores was lower, in particular for the Father (Socioeconomic score $r = .224$, $p < .001$, Prestige score $r = .173$, $p < .001$) a 23% reduction, while this reduction was also seen in other family members, the magnitude varied (e.g., Spouse reduction 18%). This may indicate that the fathers' occupation had a lower impact on his socioeconomic status.

Hypothesis 5e. The Impact of the Respondent's Age on SEI Scores.

The author argued that there is a relationship between the respondents age and the respondent's 2010 SEI scores, and this may impact family income.

- *Hypothesis 5e: H0 - There is no relationship between age and the respondent's 2010 SEI scores.*

The correlation results (Table 15) were significant, $r(59867) = .042^{**}$, $p < .001$; the Null Hypothesis H0 was rejected and H1 was accepted. However, the strength of the correlation was weak, suggesting that age has a limited impact on SEI scores

5.4.6 Group 3 – Regression.

Hypothesis 6 Sought to Understand the Drivers of Family Income.

In this analysis, the author asked if there was a significant relationship between the respondent's income, and family income. The research looked closely at the respondent, to understand the respondent's motivation for seeking advancement in the company; one driver might be that the family is heavily dependent on the respondent's income; alternatively, family income may be driven by the spouse, or shared between the

²⁸ Ref Table 15 and attachment.

respondents, spouse, adult children, or parents. The author argued that there is a relationship between the respondent's income and family income.

- *Null Hypothesis 6: H0: The Respondent's income is not a predictor of Family Income.*

To understand the impact of the respondent's income on family income simple regression was selected; this was followed with more advanced modeling, and hierarchical analysis.

Regression Results and Analysis - Descriptive.

Population Descriptive: The population sample size was 7,543, Table 16. Family income Mean was $M 17.99^{29}$ (\$39,950); this included income from all sources. The Respondent's Mean Income was $M 14.69$ (\$24,224).

Table 16

Descriptive Statistics			
	Mean	Std. Deviation	N
Total family income	17.99	4.946	7543
Respondents income	14.69	5.898	7543

Regression Results and Analysis - ANOVA.

Family income was used as the regression Dependent variable(a), and the Respondents' income was used as the Predictor (b). The results of the ANOVA (Table 17) were significant, $F(1, 7541) = 6559.32$, $p < .001$. The Null Hypothesis H0 was rejected, and H1 was accepted, the respondent's income is a significant predictor of family income.

Table 17

ANOVA ^a					
Model 1	Sum of Squares	df	Mean Square	F	Sig.
Residual	85840.090	1	85840.090	6559.321	.000 ^b
Residual	98687.061	7541	13.087		
Total	184527.152	7542			

a. Dependent Variable: Total family income. b. Predictor R Income
b. Predictors: (Constant), Respondents income

Regression Model.

Model 1 (Table 18)³⁰ details the correlation coefficient R ($R = .682$). R^2 defines the amount of variance in the dependent variable (Family income) that is accounted for by the predictor ("R" income). The test indicates that 46.5% of Family income can be

²⁹ The income variable was a continuous ranked scale.

³⁰ Table 18 also includes R^2 change (0.465) which is significant. $F(1,7541) = 6559.32$, $p < .001$.

explained by the respondent's income. The respondents income is a statistically significant predictor of Family income, $F(1, 7541) = 6559.32$, $p < .001$, $R^2 = .465$.

Table 18

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.682 ^a	0.465	0.465	3.618	0.465	6559.321	1	7541	0.000
a. Predictors: (Constant), Respondents income									
b. Dependent Variable: Total family income									

Regression Coefficients.

Table 19 Includes both unstandardized and standardized coefficients. While the table can be used to express the regression results, $\beta = .682$, $t(7541) = 80.99$, $p < .001$, $R^2 = .465$. The coefficient table was used to develop the regression equation.

Table 19

Coefficients ^a							
Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	9.584	0.112		85.698	0.000	9.365	9.803
Respondents income	0.572	0.007	0.682	80.990	0.000	0.558	0.586
a. Dependent Variable: Total family income							

Regression Equation.

Having established that the Respondent's income is a predictor of Family Income. The regression equation was developed using the unstandardized coefficients in Table 19.

Regression Equation. $\hat{Y}^{31}$ **Family income = 9.584 + .572("R" Income).**

A cross check was conducted using the mean value of the respondent "R" Income M 14.69 (\$24,224) and the regression equation. The results are:

$$\text{Family Income} = 9.584 + .572(14.69) = M 17.99 (\$39,950^{32}).$$

³¹ The "Y hat" symbol is used to represent the predictor variable in the regression formulae.

³² The cross check confirms R Income as a predictor of Family Income ref Table 16.

5.4.7 Group 3 Multiple Regression and Hierarchical Analysis.

While correlation and simple regression (Hypothesis 5a - 5d and 6) provided valuable insight into the research question and the subsets, the reality is that the research must embrace and comprehend the complexities of a matrix organization. This complexity manifests itself through factors that influence both the organization and the staff (race, class, education, tenure, social status, management level, etc.). Analyzing these factors in isolation ignores the fact that they have the potential to influence each other; in both a positive and negative direction. To address this the research question was reviewed in the context of a “real world” environment with multiple factors in play. Factors (variables) were introduced and analyzed using hierarchical analysis; individual factor effect was isolated and measured in the regression models. This provided a realistic view of the impact and effect of multiple variables.

Regression Variables.

An evaluation of the environment in which global companies operate drives a variable list that includes socioeconomics, culture, race, gender, education, and class; all of which can impact employee progression. Employee progression can be identified and measured in many ways. For this regression, income was used, as it captures many of the drivers unique in global corporations.

Population Profile.

Tables 1 and 2 provide insight into some of the key descriptors for the data sets, Table 20 shows the variables used in the hierarchical regression. From a social and educational standpoint, 60.5% of the sample held a BA or Master’s degree, 82.9% were white, and 65% were male. 55% were born in the USA. From a workplace perspective, 38.2% held a supervisory role. 75.5% of the employees in this sample believe that “people can be trusted”. Of those who voted in the 2016 US election the population had a small bias (3%) towards the democratic candidate (“Clinton 53%”).

Table 20

Variables
Total Family Income.
Gender.
Workplace - R Prestige Score.
Workplace - Spouse Prestige Score.
Relationships -"Can people be trusted ?"
Education - Highest degree R has earned
Ethnicity / Citizenship
Social Impact. Generation Bias.
Socioeconomic Index - Respondent.
Socioeconomic Index - Spouse.

ANOVA.

Table 21 details the results of the ANOVA. The regression yielded six models. The dependent variable was Family income in US dollars. The model progression was designed to evaluate the impact of key factors (predictors) on the population's family income. Each model focused on a specific factor group. Model 1: Social Status (SEI), Model 2: Occupation (Prestige Index), Model 3: Education Level, Model 4: The impact of Birthplace, Model 5: Workplace Relationships – Trust, Model 6: Gender and Generational Group.

Table 21

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2649.277	3	883.092	190.966	<.001 ^b
	Residual	3107.556	672	4.624		
	Total	5756.833	675			
2	Regression	2665.025	5	533.005	115.503	<.001 ^c
	Residual	3091.808	670	4.615		
	Total	5756.833	675			
3	Regression	2717.927	6	452.988	99.723	<.001 ^d
	Residual	3038.906	669	4.542		
	Total	5756.833	675			
4	Regression	2719.788	7	388.541	85.460	<.001 ^e
	Residual	3037.045	668	4.546		
	Total	5756.833	675			
5	Regression	2737.563	8	342.195	75.596	<.001 ^f
	Residual	3019.270	667	4.527		
	Total	5756.833	675			
6	Regression	2870.406	10	287.041	66.131	<.001 ^g
	Residual	2886.427	665	4.340		
	Total	5756.833	675			

The predictors, (Table 20 and 22) were introduced using a rationale³³ which matched them to the individual model objectives, providing greater insight into their weight, impact, and their contribution to the overall regression model.

The models were evaluated using moderated regression; Table 21 shows that all models were significant, $p < .001$. Model 6 included all predictors, and was significant, $F(10, 665) = 66.13$, $p < .001$, $R^2 = .499$. (Table 22). Model 6 is a statistically significant predictor of Family Income.

³³ For example, R and Spouse Prestige scores grouped together in Model 2. - In terms of analysis the author initially used the SPSS "Stepwise" regression function but used the "Forward" function for final testing to ensure the highest level of accuracy.

Regression Model.

Table 22 and 23 detail the contribution that the predictors make to the models. Model 6, $R = .706$, $R^2 = .499$, provides the strongest result, predicting 49.9% of Family income. However, the incremental improvement in R^2 achieved from Models 2, 4, and 5 is small, further highlighted by the adjusted³⁴ R^2 , and the change statistics (“ F change and Sig F ”), indicating that while R and R ’s spouse Prestige scores and citizenship are predictors, their impact is small.

Table 22

Model Summary ⁹									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	$df1$	$df2$	Sig. F Change
1	.678 ^a	0.460	0.458	2.150	0.460	190.966	3	672	0.000
2	.680 ^b	0.463	0.459	2.148	0.003	1.706	2	670	0.182
3	.687 ^c	0.472	0.467	2.131	0.009	11.646	1	669	0.001
4	.687 ^d	0.472	0.467	2.132	0.000	0.409	1	668	0.523
5	.690 ^e	0.476	0.469	2.128	0.003	3.927	1	667	0.048
6	.706 ^f	0.499	0.491	2.083	0.023	15.303	2	665	0.000

a. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010)

b. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010), R ’s occupational prestige score (2010), Spouse occupational prestige score (2010)

c. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010), R ’s occupational prestige score (2010), Spouse occupational prestige score (2010), The highest degree R have earned

d. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010), R ’s occupational prestige score (2010), Spouse occupational prestige score (2010), The highest degree R have earned, Was R born in this country

e. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010), R ’s occupational prestige score (2010), Spouse occupational prestige score (2010), The highest degree R have earned, Was R born in this country, Can people be trusted

f. Predictors: (Constant), R ’s spouse’s socioeconomic index (2010), Respondents income, R ’s socioeconomic index (2010), R ’s occupational prestige score (2010), Spouse occupational prestige score (2010), The highest degree R have earned, Was R born in this country, Can people be trusted, Gender of 1st person, Year of birth

Coefficients.

The Coefficients (Table 23³⁵) provides a view of the exact (unique) contribution that each factor makes to Model 6 predictions. The table highlights the significance of the respondent’s income “ R ”, $p < .001$, Spouses SEI, $p < .001$, Generational Bias $p < .001$, Education $p = .006$, all are significant predictors of Family income. The coefficients table also highlights that R ’s SEI score $p = .940$, Spouse Prestige score $p = .114$, and Gender $p = .076$, were not significant predictors of Family income.

³⁴ Adjusted R square indicates the contribution that a model change makes to R^2 . Example Model 6 adjusted R^2 (.023) is a stronger than Model 2 adjusted R^2 (.003). Model 2 Change in $R^2 = .F(2,670) = 1.706$, $p = .182$.

³⁵ Note all SEI and Prestige variables are year 2010.

Table 23

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
6	(Constant)	86.253	13.529		6.376	0.000
	Respondents income.	0.317	0.017	0.565	18.673	0.000
	Socio-Economic Factors R's Socioeconomic score.	-0.001	0.007	-0.004	-0.075	0.940
	Socio-Economic Factors Spouse Socioeconomic score.	0.042	0.006	0.311	6.485	0.000
	Work: Occupational Factors - Spouse Prestige score.	-0.017	0.011	-0.074	-1.582	0.114
	Work: Occupational Factors - R Prestige score.	-0.010	0.011	-0.044	-0.958	0.338
	Education - Highest degree R has earned.	0.179	0.064	0.087	2.783	0.006
	Social / Workplace Citizenship Was R born in USA.	-0.052	0.233	-0.006	-0.223	0.823
	Workplace - "Can people be trusted"	-0.153	0.142	-0.031	-1.075	0.283
	Gender.	0.312	0.176	0.049	1.775	0.076
	Social Impact. Generation Bias.	-0.037	0.007	-0.150	-5.291	0.000

5.5 Group 3 Summary: Regression Hypothesis 5 and 6.

The regression conducted in this article provides a directional view, and highlights the impact of SEI, education, and social class. Further research is warranted, and there are open questions on the impact of trust in the workplace and the impact of peer-to-peer relationships in the management matrix. Chart 4 further highlights how the sample population³⁶ struggles with trust; with the working class having lower trust³⁷ than employees in higher social classes.

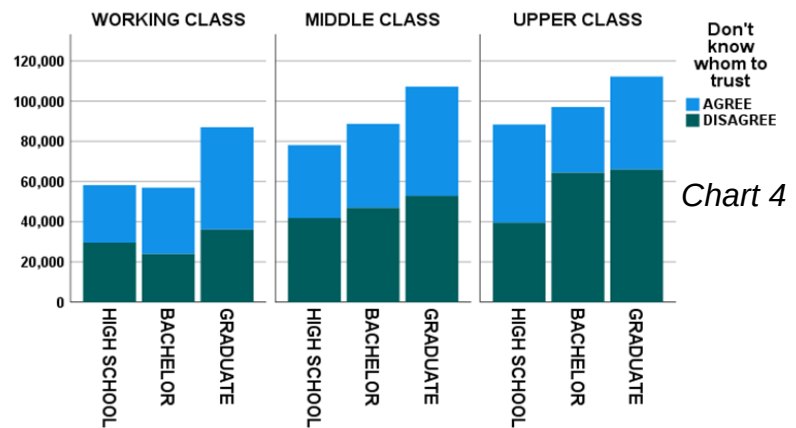


Chart 4

³⁶ Graphic was produced using the variables Trust, Education, Income and Social Class.

³⁷ Over 65% of Working Class answered the question "Do not know who to trust in the workplace" with the response "Agree".

6. Discussion.

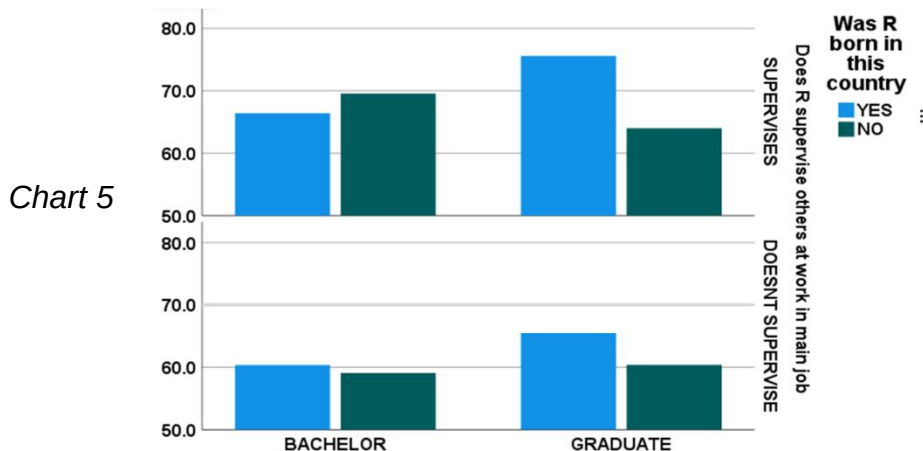
The author hypothesized that social and workplace factors impact employee progression. Using a quantitative study, four factor groups were evaluated (Social Status, Relationships, Economics, and the Workplace) to determine their impact on the research questions. While there is scholarly debate on the influence and weight of these factors (Lee, 2017), (Gordon, 2018), the research found a relationship between employee progression and the four factors. The findings support the work of Costigan (2013) and Fulmer (2017), and while not proved in the management matrix, Hypothesis 6 shows alignment with the work of Matzler (2006)

6.1 Interpretation.

Hypothesis 1 through 6 developed the argument that respondent progress is impacted by the workplace; combined with social, and relationship factors.

6.1.1 Workplace Responsibility Level.

Respondents with higher SEI scores, and a graduate degree, born in the USA (Chart 5). were more likely to hold supervisory positions and manage larger staffs with greater responsibility. Regression Model 1 (Table 22) highlights the weight of the respondent's "R" SEI score, and Income as a predictor.



6.1.2 Education and Socioeconomics.

Survey respondents with lower education levels and lower social status ranking had lower salaries, and less confidence in their work environment, Chart 4 (page 27).

6.1.3 Trust.

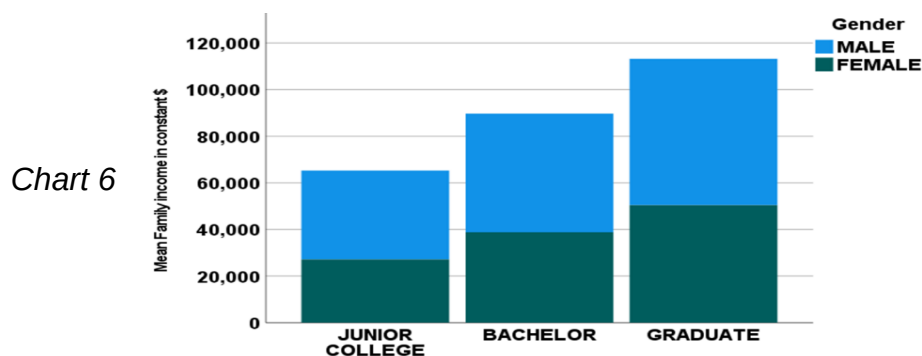
Hypothesis 2 drew attention to trust in the workplace and explored the relationship between SEI scores and trust, finding that survey respondents with higher SEI scores had greater trust in people. Hypothesis 3 develops the argument that trust in management and employee responsibility are related; this is in line with Costigan (Costigan et al., 2013), and Gustafsson (Gustafsson et al., 2020).

6.1.4 Family.

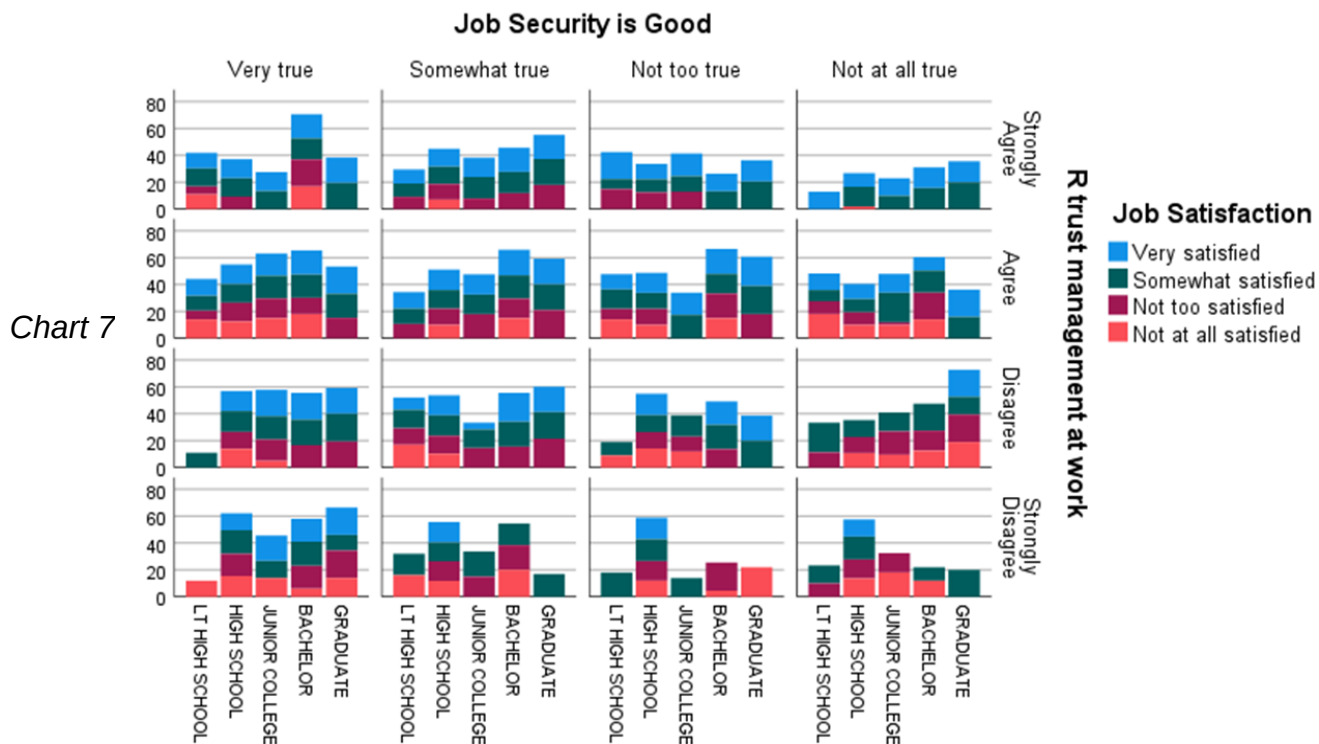
The immediate family impact was difficult to judge; there was a moderate relationship between parents' social standing and children (Table 15). However, Hypothesis 5a and 5b showed there was a much stronger relationship between respondents and their spouses (SEI) both from an income and relationship standpoint.

6.1.5 Gender.

Women with higher education, and higher SEI and prestige scores had higher incomes, but still tended to earn less than men (Chart 6).



6.2 Discovery and Impact. The workplace impact was the greatest area of discovery. Trust between the respondents and their supervisors and peers raised important questions about motivation, succession, progression, turnover, and job security (Fulmer, 2017). Chart 7 draws attention to this, as does Hypotheses 4, and the regression analysis.



However, the complexities of trust in the management matrix requires a much more detailed study to understand both quantitative and qualitative drivers.

The input gleaned in this study suggests that where trust levels are inconsistent between staff and supervisors, the result is a general lack of trust at all levels (Eberl (2015). Chart 7 also highlights the relationships between job security, education, and job satisfaction; employees with higher income levels and higher academic credentials reported a feeling of greater job security (Chart 7, panel 1), perhaps indicative of their inclusion in company succession and progression programs that provide management feedback (Lee, 2017). While the limitations of the variables, survey questions and data set, did not allow a detailed analysis of the impact of trust in the matrix, or trust in Asia Pacific (Akhal, 2019); the literature review raised important questions. In conclusion, the study results are broadly in line with Beechler (Beechler and Woodward, 2009); however, the results raise some questions on the staff retention views of Hempel in Asia (Hempel and Martinsons, 2009).

7. Summary.

7.1 Did the Study Meet the Research Objectives?

The research confirmed statistically significant relationships between employee progression, education, social class, trust, and SEI; this supports the research argument that both social and workplace factors impact progression; however, the research also raised questions concerning management in the corporate matrix, which remain unanswered. Perhaps the most urgent question is the organizations' ability to remain effective in an era of increased globalization and structural change, Sebastian (2007), Beechler (2009) and Gordon (2018).

7.2 What Does the Article add to the Current Knowledge Base?

The key addition is an improved understanding of the unique challenges that global corporations face. The new matrix management model must embrace multiple regions (Asia, North America, and Europe), all of which are dynamic, driven by factors which are not in sync, (economy, culture and political agenda). A key lesson is that the conventional management matrix may not be well positioned to handle the impact of key social and workplace factors, and the matrix design may negatively impact employee progression.

7.3 What Does the Study Allow us to Understand Better?

The study highlights the importance of including both social and workplace factors in the analysis, it also underpins the value of the SEI and Prestige indexes. The research also clarifies the importance of employee trust in management, the value of peer-to-peer trust, and "Tone at the top" (Schwartz et al., 2005).

8. Limitations and Further Research

8.1 Survey Questions

The third-party data set questionnaires were not specifically designed to explore complex matrix structures, and this limited some aspects of the study; however, the data set allowed research into critical areas, including socioeconomics and the workplace.

8.2 Further Research

The study revealed a number of open questions and areas for further research. One area that the author believes is fundamental to the understanding of employee progression, is trust in complex organizations. In a matrix structure, workplace trust has both horizontal and vertical dimensions; this adds complexity. A greater understanding of the dynamics and “cause and effect” would, in the author's view add value to both the subject and global corporations.

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10. Addendum: Statistical Data

Table 15.

		Mean	Std Deviation	1	2	3	4	5	6	7	8	9	10	11	12
Respondents Income	1	14.57	5.96	--											
				.7729											
Total Family Income	2	16.72	5.75	.682**	--										
				0.000											
R's Socioeconomic Index (2010)	3	43.89	21.82	.485**	.445**	--									
				0.000	0.000										
R's Socioeconomic Index (1980)	4	48.42	19.18	.414**	.413**	.830**	--								
				0.000	0.000	0.000									
R's Occupational Prestige Score (2010)	5	42.99	12.97	.405**	.366**	.825**	.695**	--							
				0.000	0.000	0.000	0.000								
R's Mother's Socioeconomic Index (2010)	6	38.76	22.38	.139**	.185**	.237**	.238**	.185**	--						
				0.000	0.000	0.000	0.000	0.000							
Mothers Occupational Prestige Score (2010)	7	41.22	12.90	.121**	.153**	.208**	.211**	.172**	.826**	--					
				0.000	0.000	0.000	0.000	0.000	0.000						
R's Father's Socioeconomic Index (2010)	8	44.11	19.37	.153**	.224**	.273**	.280**	.225**	.388**	.350**	--				
				0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Father's Occupational Prestige Score (2010)	9	43.71	12.08	.123**	.173**	.215**	.222**	.184**	.324**	.302**	.843**	--			
				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
R's Spouse's Socioeconomic Index (2010)	10	46.08	21.70	.242**	.440**	.363**	.355**	.316**	.204**	.184**	.252**	.192**	--		
				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Spouse Occupational Prestige Score (2010)	11	44.22	12.89	.203**	.360**	.314**	.303**	.287**	.171**	.158**	.215**	.172**	.832**	--	
				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Age of respondent	12	46.10	17.54	.209**	.023*	.042**	.013*	.045**	-.143**	-.157**	-.119**	-.077**	0.009	-0.001	--
				0.000	0.015	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.128	0.811	
				.7716	<u>11503</u>	59869	31205	59869	21022	21022	50958	50950	31231	31231	64586

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

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