

A QUANTITATIVE DESCRIPTIVE-COMPARATIVE STUDY:  
THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND  
WORKPLACE DIVERSITY

by

Simone Arnold

Copyright 2019

A Dissertation Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Management in Organizational Leadership

University of Phoenix

The Dissertation Committee for Simone Arnold certifies approval of the following  
dissertation:

A QUANTITATIVE DESCRIPTIVE-COMPARATIVE STUDY: THE RELATIONSHIP  
BETWEEN EMOTIONAL INTELLIGENCE AND WORKPLACE DIVERSITY

Committee:

Leah P. Hollis, EdD, Chair

Patricia D'Urso, PhD, Committee Member

Kimberly Underwood, PhD, Committee Member

*Leah P. Hollis*

---

Leah P. Hollis

*Patricia A. D'Urso*

---

Patricia D'Urso

*Kimberly Underwood*

---

Kimberly Underwood

*Hinrich Eylers*

---

Hinrich Eylers, PhD  
Vice Provost, Doctoral Studies  
University of Phoenix

Date Approved: 5/23/2019

## ABSTRACT

Despite mounting evidence of emotional intelligence on creating positive attitudes, fostering collaboration, and managing conflict, the relationship of emotional intelligence and workforce diversity in women and minorities is not widely known. The proliferation of emotionally intelligent women and minorities in the American workforce misaligns with the current insufficiency in workplace diversity in senior roles at United States (U.S.) firms in the high-tech sector. This quantitative descriptive-comparative study was conducted to examine the relationship between emotional intelligence and workplace diversity. The sample consisted of 330 White, Hispanic, Asian, and Black employees in managerial and leadership roles. Participants' emotional intelligence responsiveness were assessed with the Emotional Quotient Inventory (EQ-i 2.0) assessment. A theoretical framework incorporated foundational theories in emotional intelligence, cultural diversity, organizational, and diversity and inclusion. Descriptive statistical analysis, inferential statistical procedures, MANOVA tests, and post hoc analyses were applied using SPSS Software® to evaluate results. Results show that EI is a predictor to workplace diversity by diverse leader employee group,  $\eta^2 = 0.89$ ,  $X^2(15) = 37.57$ ,  $p = .00$ ; by ethnicity  $\eta^2 = 0.91$ ,  $F(10, 516) = 2.37$ ,  $p = .01$ ; and by race  $\eta^2 = 0.90$ ,  $F(10, 516) = 2.86$ ,  $p = .00$ . Recommendations are presented with varied approaches such as a mixed-method research study, a developmental research study with a longitudinal design, or a qualitative study that can corroborate the current study findings for women and minorities in the high-tech sector.

## DEDICATION

“Faith is the confidence that what we hope for will actually happen; it gives us assurance about things we cannot see (Hebrews, 11:1, New Living Translation).” I dedicate this work to the source of my strength, love, hope, and faith in all things - my Creator. Also, I dedicate this work to my team of angels, my parents: Paul and Stephanie Kelly (RIP), and father-in-law, Clovis Arnold (RIP) for guidance when ideas and physical strength failed me temporarily. To my husband, David Arnold, who provided never-ending encouragement to pursue this dream despite life’s many challenges and interruptions: Yes, we did it! God’s richest blessings to you for doing more than your share. David, you are the tower of my strength and I love you. I bestow this achievement with my children Ayanna-Moné, Naiya Olivia, and Ayden Antonio for their patience and to whom greatness is within reach.

## ACKNOWLEDGEMENTS

I am grateful for the consistent guidance provided by my chair, Dr. Leah Hollis, and committee members: Dr. Patricia D’Urso and Dr. Kimberly Underwood. A chance to contribute to change begins. To my mentors Gustavo Diaz and Dr. Gail Ali who lit a spark in me to see this mission through, I am forever grateful. For Marlene Arnold, mom, now it is well with my soul; I appreciate your support. To my brother, Paul Kelly Jr., who has always said that I have benefitted tremendously from studying alongside him as an adolescent; your leadership then and now have prepared me for a life’s journey of continued learning. Here’s to: “Whatever it takes!” To my sisters Deborah Kelly and Shonette Paisley, thank you for the bouts of laughter. I am forever grateful for my sister Shonette Paisley for her unceasing support over the past four years to finish this undertaking; I love you forever and a day. To Santa Bianchini, I am grateful for all that you have done for me in maintaining my home and caring for Naiya and Ayden-blessings always. To my team of family, faithful friends, and cheerleaders especially Jacqueline McKinnon, Marie Jean, Pastor Miguel Collymore, Avril Wilson, Faye Dinham, June Collymore, Omodara Britton, Carol Cameron-Marques, Nesta Vasell, Donna Guthrie, and Desiree Hodge who called frequently to boost my energy and pray with me, my appreciation is boundless. To my cohort members Dr. Israel Agodu, Dr. James Rankin, Dr. Judie Sherrer, and Cheryl Talley-Black, your commitment to excellence is relentless; I am appreciative for our daily dose of social support. To my coach Henry Washington: here’s to the little engine that could and did. To my lifelong friend and colleague, Ainsworth Clarke, you upheld up my emotional intelligence and kept me motivated to balance my career, family, and a new-found intrigue in research.

Special thanks for the daily encouragement and prayers. To Hazel Prince, God appointed you as “mom.” You listened intently and prayed unceasingly; know that I love you without end.

## TABLE OF CONTENTS

LIST OF TABLES .....	xi
LIST OF FIGURES .....	xii
Chapter 1: Introduction .....	1
Background of the Problem .....	3
Statement of the Problem.....	5
Purpose of the Study .....	8
Sample.....	9
Significance of the Study .....	11
Significance of the study to leadership. ....	11
Nature of the Study .....	12
Overview of the research method .....	13
Overview of the design appropriateness. ....	14
Justification for Research Design .....	15
Research Questions/Hypotheses .....	17
Data Analysis Mechanism .....	20
Theoretical Framework .....	22
Emotional Intelligence Theory .....	23
Assumptions, Limitations, and Delimitations.....	25
Scope of the Study .....	26
Limitations .....	27
Scope of Limitations .....	27
Delimitations.....	28
Chapter Summary .....	28
Chapter 2: Literature Review.....	30
Title Searches and Documentation .....	32
High-Tech Sector .....	32
Role of Education .....	33
Role of Training.....	33
Role of Technology.....	34
The Culture of High-tech .....	36
Women and Minorities in High-tech .....	38
Historical Content .....	42
Emotional Intelligence .....	43

Science of Emotional Intelligence .....	44
Current Content.....	45
Benefits of EI in the Workplace.....	45
Organizational Performance .....	46
Controversies of EI .....	49
Gender and EI .....	52
Minorities and EI .....	53
Dark Side of EI. ....	54
Dark Traits and High-tech .....	55
Ethics and the Dark Side.....	56
Relevant EI Studies.....	57
Literature Review for Workplace Diversity .....	60
Historical Content on Workplace Diversity.....	61
Diversity Management.....	65
Controversies of Workplace Diversity.....	65
Discrimination.....	68
Subtle Biases.....	68
Organizational Theory .....	70
Contingency Theory.....	71
Cultural Diversity.....	72
Diversity and Inclusion .....	74
Network Theory .....	76
Extension of theory and practice.....	78
Methodology Literature .....	80
Conclusions.....	81
Chapter Summary .....	83
Chapter 3: Research Methodology.....	85
Research Method and Design Appropriateness .....	86
Design Appropriateness .....	86
Research Questions and Hypotheses .....	90
Population and Sample .....	92
Population Description.....	92
Justification .....	93
Sample Description .....	93



Sample Data Assumptions .....	94
Sampling Method.....	95
Sampling Frame .....	95
Ethics.....	96
Confidentiality .....	97
Instrumentation .....	97
Internal Validity .....	100
External Validity .....	100
Data Collection .....	102
Data Analysis .....	104
Source of Data.....	105
Missing Data .....	105
Power of MANOVA.....	106
Cross-Products .....	107
Statistics .....	107
Post hoc Analysis .....	107
Summary .....	108
Chapter 4: Analysis and Results .....	110
Descriptive Statistics by Work Region .....	114
Emotional Intelligence Data .....	116
Research Questions and Hypotheses Descriptive Analyses by Group ....	186
Response to Hypothesis for Gender.....	195
Response to Hypothesis for Ethnicity.....	197
Response to Hypothesis for Race .....	198
Summary .....	205
Chapter 5: Conclusions and Recommendations .....	206
Summary of Research Findings .....	206
Discussion on Study Findings.....	209
Implications for Emotional Intelligence .....	213
Implications for Workplace Diversity .....	214
Recommendations.....	216
Recommendations for Future Research .....	216
Summary .....	219
Conclusions.....	219

References .....	222
Appendix A .....	265
Appendix B .....	266
Appendix C .....	267
Appendix D .....	268
Appendix E .....	269
Author's Biography .....	270

## LIST OF TABLES

Table 1: Model of Independent and Dependent Variables .....	14
Table 2: Five composite scales and 15 subscales of EQ-I 2.0 .....	21
Table 3: Gender comparison based on management levels .....	38
Table 4: Ethnicity/Race comparison based on management levels .....	39
Table 5: Top five technology ranking firms .....	42
Table 6: Operational Model of Variable Types .....	89
Table 7: Descriptive Statistics of Study Variables .....	111
Table 8: Decision Tree for Research Questions and Hypotheses .....	187
Table 9: Box's Test of Equality of Covariance Matrices .....	189
Table 10: Results of Levene's test of homogeneity of variance .....	189
Table 11: Results of Tests by Dependent Variables .....	190
Table 12: Results of Multivariate Tests by Group .....	191
Table 13: Results of Structure Matrix .....	191
Table 14: Results of Standardized Canonical Discriminant Function Coefficients .....	192
Table 15: Results of Eigenvalues and Wilks Lambda .....	192
Table 16: Results of Functions of Group Centroids .....	193
Table 17: Descriptive Statistics by Gender .....	195
Table 18: Multivariate Tests by Gender .....	195
Table 19: Descriptive Statistics by Ethnicity .....	197
Table 20: Multivariate Tests by Ethnicity .....	198
Table 21: Descriptive Statistics by Race .....	199
Table 22: Multivariate Tests by Race .....	199
Table 23: Descriptive Statistics by Work Title .....	200
Table 24: Multivariate Tests by Work Title .....	201
Table 25: Eigenvalues and Wilk's Lambda for Work Title .....	201
Table 26: Descriptive Statistics by Work Region .....	203
Table 27: Multivariate Tests by Work Region .....	204
Table 28: Eigenvalues and Wilk's Lambda for Work Region .....	204

## LIST OF FIGURES

Figure 1: Theoretical framework of EI on work diversity in gender, ethnicity/race, work title and region. ....	23
Figure 2: Self-perception on self-regard responses: White Males.....	119
Figure 3: Self-perception on self-regard responses: White Females .....	120
Figure 4: Self-perception on self-regard responses: Hispanic Males .....	120
Figure 5: Self-perception on self-regard responses: Hispanic Females.....	121
Figure 6: Self-perception on self-regard responses: Asian Males .....	121
Figure 7: Self-perception on self-regard responses: Asian Females.....	122
Figure 8: Self-perception on self-regard responses: Black Males .....	122
Figure 9: Self-perception on self-regard responses: Black Females.....	123
Figure 10: Self-perception on self-actualization responses: White Males.....	124
Figure 11: Self-perception on self-actualization responses: White Females .....	124
Figure 12: Self-perception on self-actualization responses: Hispanic Males .....	125
Figure 13: Self-perception on self-actualization responses: Hispanic Females.....	125
Figure 14: Self-perception on self-actualization responses: Asian Males .....	126
Figure 15: Self-perception on self-actualization responses: Asian Females .....	126
Figure 16: Self-perception on self-actualization responses: Black Males .....	127
Figure 17: Self-perception on self-actualization responses: Black Females .....	127
Figure 18: Self-perception on self-awareness responses: White Males.....	128
Figure 19: Self-perception on self-awareness responses: White Females .....	129
Figure 20: Self-perception on self-awareness responses: Hispanic Males .....	129
Figure 21: Self-perception on self-awareness responses: Hispanic Females.....	130
Figure 22: Self-perception on self-awareness responses: Asian Males .....	130
Figure 23: Self-perception on self-awareness responses: Asian Females .....	131
Figure 24: Self-perception on self-awareness responses: Black Males .....	131
Figure 25: Self-perception on self-awareness responses: Black Females .....	132
Figure 26: Self-expression on emotional expression responses: White Males.....	133
Figure 27: Self-expression on emotional expression responses: White Females .....	133
Figure 28: Self-expression on emotional expression responses: Hispanic Males .....	134
Figure 29: Self-expression on emotional expression responses: Hispanic Females.....	134
Figure 30: Self-expression on emotional expression responses: Asian Males .....	135
Figure 31: Self-expression on emotional expression responses: Asian Females.....	135
Figure 32: Self-expression on emotional expression responses: Black Males .....	136
Figure 33: Self-expression on emotional expression responses: Black Females.....	136
Figure 34: Self-expression on assertiveness: White Males.....	137
Figure 35: Self-expression on assertiveness: White Females .....	138
Figure 37: Self-expression on assertiveness: Hispanic Females.....	139
Figure 39: Self-expression on assertiveness: Asian Females .....	140
Figure 40: Self-expression on assertiveness: Black Males .....	140
Figure 41: Self-expression on assertiveness: Black Females .....	141
Figure 42: Self-expression on independence: White Males .....	142
Figure 43: Self-expression on independence: White Females .....	142
Figure 44: Self-expression on independence: Hispanic Males .....	143
Figure 45: Self-expression on independence: Hispanic Females .....	143

Figure 46: Self-expression on independence: Asian Males .....	144
Figure 47: Self-expression on independence: Asian Females .....	144
Figure 48: Self-expression on independence: Black Males .....	145
Figure 49: Self-expression on independence: Black Females .....	145
Figure 50: Interpersonal on interpersonal relationships: White Males .....	146
Figure 51: Interpersonal on interpersonal relationships: White Females .....	147
Figure 52: Interpersonal on interpersonal relationships: Hispanic Males .....	147
Figure 53: Interpersonal on interpersonal relationships: Hispanic Females .....	148
Figure 54: Interpersonal on interpersonal relationships: Asian Males .....	148
Figure 55: Interpersonal on interpersonal relationships: Asian Females .....	149
Figure 56: Interpersonal on interpersonal relationships: Black Males .....	149
Figure 57: Interpersonal on interpersonal relationships: Black Females .....	150
Figure 58: Interpersonal on empathy: White Males .....	151
Figure 59: Interpersonal on empathy: White Females .....	151
Figure 60: Interpersonal on empathy: Hispanic Males .....	152
Figure 61: Interpersonal on empathy: Hispanic Females .....	152
Figure 62: Interpersonal on empathy: Asian Males .....	153
Figure 63: Interpersonal on empathy: Asian Females .....	153
Figure 64: Interpersonal on empathy: Black Males .....	154
Figure 65: Interpersonal on empathy: Black Females .....	154
Figure 66: Interpersonal on social responsibility: White Males .....	155
Figure 67: Interpersonal on social responsibility: White Females .....	156
Figure 68: Interpersonal on social responsibility: Hispanic Males .....	156
Figure 69: Interpersonal on social responsibility: Hispanic Females .....	157
Figure 70: Interpersonal on social responsibility: Asian Males .....	157
Figure 71: Interpersonal on social responsibility: Asian Females .....	158
Figure 72: Interpersonal on social responsibility: Black Males .....	158
Figure 73: Interpersonal on social responsibility: Black Females .....	159
Figure 74: Decision making on problem solving: White Males .....	160
Figure 75: Decision making on problem solving: White Females .....	160
Figure 76: Decision making on problem solving: Hispanic Males .....	161
Figure 77: Decision making on problem solving: Hispanic Females .....	161
Figure 78: Decision making on problem solving: Asian Males .....	162
Figure 79: Decision making on problem solving: Asian Females .....	162
Figure 80: Decision making on problem solving: Black Males .....	163
Figure 81: Decision making on problem solving: Black Females .....	163
Figure 82: Decision making on reality testing: White Males .....	164
Figure 83: Decision making on reality testing: White Females .....	165
Figure 84: Decision making on reality testing: Hispanic Males .....	165
Figure 85: Decision making on reality testing: Hispanic Females .....	166
Figure 86: Decision making on reality testing: Asian Males .....	166
Figure 87: Decision making on reality testing: Asian Females .....	167
Figure 88: Decision making on reality testing: Black Males .....	167
Figure 89: Decision making on reality testing: Black Females .....	168
Figure 90: Decision Making on impulse control: White Males .....	169
Figure 91: Decision Making on impulse control: White Females .....	169

Figure 92: Decision Making on impulse control: Hispanic Males .....	170
Figure 93: Decision Making on impulse control: Hispanic Females.....	170
Figure 94: Decision Making on impulse control: Asian Males .....	171
Figure 95: Decision Making on impulse control: Asian Females .....	171
Figure 96: Decision Making on impulse control: Black Males .....	172
Figure 97: Decision Making on impulse control: Black Females.....	172
Figure 98: Stress Management on flexibility: White Males .....	173
Figure 99: Stress Management on flexibility: White Females.....	174
Figure 100: Stress Management on flexibility: Hispanic Males.....	174
Figure 101: Stress Management on flexibility: Hispanic Females .....	175
Figure 102: Stress Management on flexibility: Asian Males .....	175
Figure 103: Stress Management on flexibility: Asian Females .....	176
Figure 104: Stress Management on flexibility: Black Males.....	176
Figure 105: Stress Management on flexibility: Black Females .....	177
Figure 106: Stress Management on stress tolerance: White Males .....	178
Figure 107: Stress Management on stress tolerance: White Females.....	178
Figure 108: Stress Management on stress tolerance: Hispanic Males.....	179
Figure 109: Stress Management on stress tolerance: Hispanic Females .....	179
Figure 110: Stress Management on stress tolerance: Asian Males.....	180
Figure 111: Stress Management on stress tolerance: Asian Females .....	180
Figure 112: Stress Management on stress tolerance: Black Males.....	181
Figure 113: Stress Management on stress tolerance: Black Females .....	181
Figure 114: Stress Management on optimism: White Males.....	182
Figure 115: Stress Management on optimism: White Females .....	183
Figure 116: Stress Management on optimism: Hispanic Males .....	183
Figure 118: Stress Management on optimism: Asian Males .....	184
Figure 119: Stress Management on optimism: Asian Females.....	185
Figure 120: Stress Management on optimism: Black Males .....	185
Figure 121: Stress Management on optimism: Black Females.....	186
Figure 122: Group Centroids for all employees by group .....	193
Figure 123: Emotional Intelligence -Workplace diversity soft-skill model. Model developed is original from research study findings. ....	211
Figure 124: Emotional Intelligence -Workplace diversity leadership attributes model. Model developed is original from research study findings.....	213

## Chapter 1

### Introduction

Globalization and international brand consumerism have strained the demographic indicators and labor force over the last three decades years. Globalization is multi-layered and assimilates the large-scale, political, socio-economic, cultural, and financial aspects to improve a firm's local and worldwide dexterity enabling broader consumer and business relationships (Choy, 2007; Thoumrungroje & Tansuhaj, 2007). As organizations in the United States (U.S.) shift priorities and approaches to thinking and succeeding domestically and internationally, leaders evaluate the importance of knowledge development, management, and preservation through intervening variables such as talent acquisition, talent retention of knowledge workers in both synchronous and asynchronous environments, and creation of knowledge clusters in highly concentrated technology regions of the nation (Manning, 2013).

One primary source of growth accredited with driving the U.S. economy is the high-tech sector, which the U.S. Equal Employment Opportunity Commission (EEOC, 2016) described as a medley of industries and occupations that require workers to be proficient in computer science, technology, engineering, and mathematics (STEM) to produce goods and services. This sector employs nearly 6% of the U.S. labor force and has demanded close to 25% of the U.S. professional labor force in high-tech regions of the country that include California, Texas, Pennsylvania, New York, and Florida (EEOC, 2016). High-tech employment has centered on two focal issues: (a) the supply of proficiently skilled labor and (b) the factors behind underrepresentation of women and minorities in the labor force (EEOC, 2016). Transformation of the labor force has

contributed to an increase in marginalized populations now broadly characterized in the American mainstream workforce with groups varying in age, gender, ethnicity, race, sexual orientation, and physical and mental abilities among primary factors (Clark & Polesello, 2017; Hollis, 2016; Lang, 2009; Sarwar & Ikram, 2015; Ziek & Simulowitz, 2014).

Individuals skilled in research and design, product development, production, marketing, sales, operations, and customer services form the composite of knowledge workers in high- technology. Salovey and Mayer (1990) submitted that while high-tech workers are typically described as intellectually skilled, workers are deficient in emotional intelligence (EI). Goleman, Boyatzis and McKee (2013) recognized (EI) realms to include personal competencies of self-awareness and self-management. Social competencies dictate how individuals manage relationships and include our self-awareness and relationship management that underwrite spheres of contacts with others. These skills ratify primal leadership and are denoted as multiplicative, not merely additive (Goleman, 1995). Since organizations rely on all diverse voices to connect, make decisions, generate new concepts, implement ideas timely to meet customer needs, understanding the relationship of EI and workplace diversity in women and minorities is paramount.

The purpose of the research was to conduct a quantitative descriptive-comparative study to examine the relationship of emotional intelligence and workforce diversity in White, Hispanic, Asian, and Black leaders at top, publicly-held technology and solutions-based firms in the U.S. For this study, the sampling frame included 330 participants employed in the high-tech sector. The data collection involved the assembling of



demographic information including gender, race, ethnicity, work title, and state of employment. To achieve a confidence level of 95%, and a confidence interval of 5%, a power analysis of .80 was applied against five predictor variables and five dependent variables for four employment groups – at least 157 individuals were needed. This study included completed assessments from 330 participants.

### **Background of the Problem**

Technology is multidimensional, ever-changing, and embarks on a path that pushes and pulls from society, unites people, information, and financial investments (EEOC, 2016). The EEOC acknowledged there is no single high-tech industry. Instead, high-tech syndicates support across various professions and functions in information, telecommunications, navigational, manufacturing, and professional technical services. Integrated ideas, dynamic systems, input from management, and the voice of the customer are synchronized with technology resulting in a service that delivers or supersedes the needs of the end user. As technology decreases space and time between employees across geographic boundaries, the role in business functions and continuity contends with the demand of the fast-changing needs of consumers. Gonzalez and Martins (2016) explained that continuous improvement is enriched by a joint culture of strengthened communication, improved creativity, and increased trust between leaders and followers.

Modern firms in the high-tech sector rely on employees who are highly proficient and capable of commanding cutting-edge technical skills. New products, services, and processes are the mainstay for these knowledge workers who may receive training to use technology to deliver goods and services to customers. The EEOC (2016) signaled that

the high-tech regions or clusters have emerged in pockets of the U.S. and aim to meet the high demands of a growing local and worldwide population and fast-paced needs. Anxiety surrounding education has erupted, which presses for a continual flow of a qualified, skilled, and diverse labor force to meet the goals.

However, Gonzalez and Kuenzi (2012) found that while overall graduate enrollments in science and engineering (S&E) increased 35% over the last decade, enrollments to science and engineering for Hispanic/Latino, American Indian/Alaska Native, and African American students grew by 65%, 55%, and 50%, respectively, though these populations remain underrepresented in the field. Education has been identified as a cause that influences women and minorities into chosen occupations. Experiences with gender bias may be prevalent as high-tech industries employ between 63.5% and 68.5% Whites, 52% to 64% males, and 5.8% to 14% Asian Americans. The EEOC (2016) reported a smaller percentage exists for women (48% to 36%), Blacks (14.4 % to 7.4%) and Hispanics (13.9% to 8%). Bias, among other factors, will be discussed later in this study and has contributed to poor representation of women and minorities in high-tech and creates paucity within senior roles.

Workplace diversity denotes the variability of differences between people in an organization (Patrick & Kumar, 2012; Rice, 2015) and includes self-perceptions and how individuals observe others, which likely interfere with agility, communication, and change. Diversity management includes the principle to value stakeholders, develop, and maintain a positive work environment. Team members need safety and inclusion, support from their leader, order, and structure to be successful (Wheelan, 2016). When these behaviors are absent, members are disconnected, silent, disempowered,

demoralized, and unhappy; members may adopt silence as a safety net and disengage from the joint mission. Senior positions at firms continue to be held by Caucasian males (EEOC, 2016). Catalyst, (2017) reported 30.8% of women and minorities occupy board seats of Fortune 500 companies; 7.9% are Black; 3.8% are minority women; 10.6% are minority men; 3.5% are Hispanic and Latino, and 3.1% are Asian/Pacific Islander, which indicate a disproportionate number for women and minorities in top roles in the high-tech sector.

### **Statement of the Problem**

The general problem is a lack of workforce diversity in senior roles at U.S. firms in the high-tech sector, despite scientific evidence that highlights emotional intelligence differences exist in women and minorities, and therefore, serves to incapacitate both local and global competitive advantage (Lopez-Zafra & Gartzia, 2014; Whitman, 2009; Roberts, Zeidner, & Matthews, 2001). The U.S. Bureau of Labor Statistics (BLS) (2016) reported while 57% of women participate in the labor force, only 27.9% occupied executive roles and 27.2% held roles specific to the technology and information systems sectors. According to the U.S. Bureau of Labor Statistics (2016), Black, Asian, and Hispanic workers make up 12%, 6%, and 16% respectively of the labor force in 2015; Blacks held chief executive roles at 3.4%, while Asians and Hispanics held 6% and 5.6% correspondingly. For technology and information systems, Blacks comprised 6.2%, while Asians and Hispanics made up 15.2 % and 6.7%, respectively. EEOC (2016) reported that executives in high-tech industries account for 80% males and 20% females. In the private sector, 71% are men and 29% are women. These statistics show that a substantial percentage of men

– and especially White men - occupy senior roles in the technology sector versus women and minorities (BLS, 2015, 2016; EEOC, 2016).

Tarr-Whelan (2009) recommended the 30% solution for female representation in leadership roles in government while the Alliance for Board Diversity (Catalyst, 2017) advocates 40% target for women and minorities by 2026. The Global Gender Gap Report (2014) and Nonaka and Nishiguchi (2001) reaffirmed that critical issue resolution necessitates a collaborative outlook from all identified leaders to negotiate risk and profit sharing. Implications of emotional intelligence and impact to the organizational performance across multiple contexts are significant (Goleman, 2006). Apart from the reduction in stress and conflict resolution in relationships, emotional intelligence (EI) may serve as a predictor of other skills including multicultural fitness; Clark and Polesello (2017) indicated that organizational leaders and practitioners could use this insight to elevate the representation of minority groups and embrace a diversity culture in the organization.

The specific problem is that despite mounting evidence of emotional intelligence on creating positive attitudes, fostering collaboration, and managing conflict, the relationship between emotional intelligence and workforce diversity in women and minorities is not widely known (Clark & Polesello, 2017; Cole & Salimath, 2013; Jorfi, Yaccob, Shah, & Resaian, 2012; Whitman, Van Rooy, Viswesvaran, & Kraus, 2009; Yadav, 2014). Furthermore, diverse leaders with higher emotional intelligence contribute to multifaceted ideas, goal congruence, thriving work settings, and intelligent decision making (De Clercq, Bouckennooghe, Raja, & Matsyborska, 2014). With a projected growth of 4% by 2024 in high-tech employment, organizational leaders and practitioners

should accelerate the understanding and application of emotional intelligence (Wolf & Terrell, 2016)

Studies have been conducted to support connections within workforce diversity to the extent that diversity best practices and diversity policy enforcement are employed (Clark & Polesello, 2017; Lopez-Zafra & Gartzia, 2014; McCleskey, 2014; Shehzad, & Mahmood, 2013). Few studies have explored the relationship of emotional intelligence (EI) and workforce diversity using diverse populations in the technology arena (Chiva & Alegre, 2008; Clark & Polesello, 2017; Jada, Jena, & Pattnaik, 2014; Fisher, Russell, Nottingham, & Field, 2005). Much research has examined the role of emotional intelligence and relationship to leadership styles, leader demographic indicators, organizational culture and performance as stand-alone units to organizational development (Chang, Sy, & Choi, 2012; Gondal, & Husain, 2013; Shin-yih Chen, Bian, & Hou, 2015; Shehzad, & Mahmood, 2013; Wang, 2015).

Unreeling the emotional competence of women and minorities may be synonymous to the financial reports and balance sheets in "black" that enables solvency. Learning why diverse leaders who apply individual emotional intelligence and have a positive effect on sustaining strategic and operational optimization but remain underrepresented in this milieu is desired to be known (Francis et al., 2003; Ionescu, 2014; Jacobs, van Witteloostuijn, & Christe-Zeyse, 2013; Verbos & Humphries, 2012, Yadav, 2014). It is necessary to conduct a quantitative descriptive-comparative study to examine the relationship of emotional intelligence and workforce diversity in White, Hispanic, Asian, and Black employees in senior roles at top, publicly-held technology and solutions-based firms in the U.S. in an attempt to bridge a literature gap and to herald

new research, which may yield new talent acquisition, placement, and retention techniques for diverse leaders who are traditionally underrepresented in senior roles. Diverse populations are growing rapidly and therefore cannot be ignored in terms of being positioned for senior roles (Asnawi, Yunus, & Razak, 2014; Clark & Polesello, 2017; Singhal, Garg, & Saxena, 2014; Steele, & Derven, 2015; Subramanian, & Yen, 2013).

### **Purpose of the Study**

The purpose of this quantitative descriptive-comparative study was to examine the relationship between emotional intelligence and workplace diversity in White, Hispanic, Asian, and Black employees in senior roles at top, publicly-held technology and solutions-based firms in the U.S. This topic aligned with a quantitative descriptive-comparative study, which examined the predictable strength of one variable to another to determine if statistical differences exist (Black, 1999). To explore and describe attitudes and behaviors of large groups, the quantitative approach supported disintegration of complex phenomena into smaller, recognizable, and understandable segments. Hofstede (2010) stipulated that dimensions are most congruent to descriptive-comparative designs. Neuman (2011) argued that quantitative approaches measure objective facts, remain centered on the established variables, and deploy statistical analysis to form conclusions, which is the goal of the present study.

This study attempted to corroborate the relationship of emotional intelligence (EI) and workplace diversity in White, Hispanic, Asian, and Black leaders in the high-tech sector at top, publicly-held technology and solutions-based firms in the U.S. Completed

assessments from 330 diverse participants from four work groups were used. U.S. based employees who self-identify as White, Hispanic, Asian, or Black will be included. Participants are employees at a top, publicly-held, U.S. based technology solutions firm and are geographically dispersed across multiple U.S. cities, including California, Texas, New York, Florida, and Pennsylvania. The Census Data Program (2014) identified these states as the top cities with technology workers. From a quantitative approach, organizational leaders verify and measure dependencies and interdependencies with variables such as leader's EI and workforce diversity, and diverse populations to strengthen daily operational readiness, enable new product evaluations, and precipitate speed to market of ideas.

### **Sample**

Neuman (2011) posited that samples form a small assemblage of units, and when gathered and analyzed meticulously produced generalizable results applicable to an entire population. The sample for this study (using a confidence interval of 5% and a confidence level of 95%) applied an a priori power analysis version 3.1.9.2. To enable the determination of the number of participants, a small effect size with power = .80 for a one-way multivariate analysis of variance (MANOVA) with five composite scales was applied. The power analysis indicated 157 individuals were needed to achieve a power of .80 using five predictor and five outcome variables. Three - hundred and forty participants joined the study. Gay (1996) and Simon and Goes (2014) stipulated a 5% sampling error is acceptable in social sciences. When the population is large, a small percentage of the sample is required. Using proportional quota sampling, each categorical variable (i.e., White, Hispanic, Asian, and Black) required a minimum of

39 participants (Greener, 2011; Sedgwick, 2012).

Quantitative variables were incorporated. Gender, ethnicity, race, work title and state of employment were enlisted as independent, categorical variables. The five actors of emotional intelligence were the dependent, continuous variables (i.e., self-perception, self-expression, interpersonal, decision-making and stress management). Using the data from BLS (2016), workplace diversity variables showed the underrepresentation for women, and minorities in technology roles. Precisely why the differences exist across gender, ethnicity, or race are unknown.

Proportional quota sampling was optimal because little assurance could be secured in advance of the study with an alternative random sampling technique (Sedgwick, 2012). Non-random sampling may contribute to over-representation or underrepresentation of strata when directly comparing samples to the population in the top technology regions. Participants were geographically dispersed in several U.S. locations including California, Texas, New York, Florida, and Pennsylvania, which have been identified by the Census Data Program (2014) as vastly concentrated regions for technology workers.

Multivariate analysis of variance (MANOVA) was applied. MANOVA is a statistical procedure that supports a study with one or more independent variable and two or more dependent variables (Field, 2013). For this quantitative descriptive-comparative study, gender, race, ethnicity, work title, and work region were the predictor variables. Five emotional intelligence components were enlisted as the outcome variables: (a) perception, (b) expression, (c) interpersonal, (d) decision-making, and (e) stress management. MANOVA tests for differences in trajectories or directions of the means.



By testing numerous variables at once, the significance of a factor was detected.

MANOVA tests prevent multiple independent tests from being generated and evaluated but demand assumptions to be met: (a) the explanations are independent, (b) the response variables are naturally distributed, and (c) homogeneity for the covariance matrix of the response variables exist across groups (Finch, 2005).

### **Significance of the Study**

This study may be able to provide leaders with insight to support organizational practitioners who apply self-regulation, self-discipline, self-management, and self-motivation to drive individual and group changes that result in successful business outcomes. Arguably, teams in modern organizations rely on diversified teams from various cultures and backgrounds (Jada et al., 2014). Understanding how each person's EI contributes to success in teams is relevant in diverse work settings (Goleman, 1995). Jada et al. (2014) postulated that organizational leaders who hire the employees with good emotional intelligence (EI) skills may operationalize teams and endorse workforce diversity. Understanding leaders' capability of managing personal emotion and that of others may also contribute to new insights on workplace diversity (Clark & Polesello, 2017).

**Significance of the study to leadership.** Anecdotally, studies show persons with higher emotional intelligence report a 94% increase in working through difficult situations while maintaining perspective; a 122% increase in efficiently handling emotions; a 70% increase in restricting avoidance behaviors when situations become grim; a 87% average increase in sales after administration of at least three months training; and a 69% increase in the aptitude to convey customer value (Bradberry &

Greaves, 2009; Emotional Intelligence “wow” factor: Benefits of taking feelings into account, 2012; Walter et al., 2011). With equivalence, diverse leader EI may contribute to improved workplace diversity yielding greater profitability for the firm (Clark & Polasello, 2017).

Among other findings, “minority and female executives are significantly underrepresented across all C-suite roles and particularly are underrepresented among chief executive officers (CEOs) and chief financial officers (CFOs), the two positions most likely to lead to an invitation to join a board,” noted Russell Reynolds Associates, (2014, p. 1). Cole and Salimath (2013) identified 34% of employees fit these underrepresented groups named in this present study. If the leaders at publicly-held, technology solutions-based firms seek to internally and externally revolutionize, then diverse leader representation anchored by leaders who possess EI and contribute to firm’s prowess are indispensable qualities.

### **Nature of the Study**

O’Dwyer and Bernauer (2014) submitted that the research type dictates the method. This is a quantitative descriptive-comparative study with a primary goal to understand if statistical differences exist in the relationship of EI and workplace diversity, in White, Hispanic, Asian, and Black, at top, publicly-held technology solutions firms in the U.S. According to the Census Data Program (2014), the concentration for technology workers are primarily in CA, TX, NY, FL, and PA and ranked at 14.9%, 10.0%, 5.7%, 4.9% and 4.0%, respectively. Sampling occurred from these regions chiefly. From a quantitative approach, organizations can understand the predictive qualities of variables through assessment of the dependencies and interdependencies with distinct variables

through objective frameworks, deductive reasoning, and replicable and verifiable statistical measures found in the multivariate analysis of variance (MANOVA).

An application of multivariate analysis of variance (MANOVA) test reduced the risk of Type 1 error (Donnelly, 2007). Warne (2014) submitted that MANOVA is an outstanding multivariate procedure appropriate for quantitative studies and is significant to quantifying the strength of the variables. MANOVA procedures are beneficial to determining whether the independent variable (i.e., workplace diversity: gender, ethnicity, race, work title, or work region correlated to the outcome variables identified as perception, expression, interpersonal, decision- making, and stress management. Post hoc analysis provided existence of the relation between the variables and across groups.

MANOVA is an extension of the analysis of variance (ANOVA) and includes ANOVA results but emphasizes the substantive nature of the information. MANOVA offers a single overall test to examine the correlated dependent variables of Emotional intelligence awareness scores among women and minorities. Carey (1998) described MANOVA as applicable when the researcher uses the single test approach for correlated dependent variables to find the patterns, if any, of the predictor variables on the outcome variables.

**Overview of the research method.** A quantitative descriptive-comparative approach is appropriate because the numerical data regarding the emotional intelligence scores for leaders in each of the four employee groups will be gathered, evaluated, and compared. Theory-first validation was applied to underwrite the essence of this quantitative study. This study operationalized gender, ethnicity, race, work title, and state of employment region as the independent variables; five emotional intelligence

components were the dependent variables, which countersigned an exploratory model (see Table 1) and foster the utilization of empirical explanations to analyze and interpret the data to determine if predictability is likely.

Table 1

*Model of Independent and Dependent Variables*

Independent Variables	Dependent Variables
Gender	Perception
Ethnicity/Race	Expression
Work Title	Interpersonal
Work Region	Decision-Making
	Stress Management

Qualitative and mixed methods are inappropriate for this study and thus were not considered as the focus of this study. Qualitative studies provide researchers with the cornerstone to launch broader explanations through themes and patterns regarding human behaviors, attitudes, families, kinship, social organizations or even societal change (Greener, 2011, Hollis, 2017; O'Dwyer & Bernauer, 2014; Simon & Goes, 2014). Qualitative approaches include subjectivity, researcher's personal views, and versions of reality that are interwoven with beliefs and values from participants (O'Dwyer & Bernauer, 2014). Neuman (2011) furthered that researchers use the qualitative approach to develop cultural meaning, enlist fusion of theory and data and construct thematic analysis. Mixed methods are designed for integrated studies deploying both qualitative and quantitative approaches to explore complex phenomena, provide a broadened scope of the research, and a balanced application of strengths from either independent method (Blake 1989; Greene, Caracelli, & Graham 1989, Rossman & Wilson 1991).

**Overview of the design appropriateness.** The quantitative approach applied an admixture of descriptive-comparative research design sustained by MANOVA statistical

tests. Descriptive-comparative research supported conclusions that one variable has a predictable strength over another variable but does not equate to causation. Descriptive statistics established the value behind the measures of central tendency, which includes the process to describe whether the frequency is normal or skewed. Additionally, the measures of spread provided a summary of how far the scores are from the mean (Black, 1999). Sample size impacted skewness or self-reporting errors. MANOVA tests support the exploration and interaction between two or more dependent variables (Field, 2013); this study incorporated five predictor variables and five outcome variables.

Patel, Padh, and Bhavsar (2013) explained that MANOVA was a valid substitute for repeated measures when violations to sphericity occurred. Use of ANOVAs would increase the chances of Type 1 error, which is the erroneous rejection of the null hypothesis. Each independent variable was weighted during calculations, and the degrees of variance were inspected. MANOVAs are built on four measures (i.e., Wilk's lambda, Pillai's trace, Hotelling trace, and Roy's largest root). Differences are investigated based on the combinations of the predictor variable on the criterion variable to examine the amounts of variances in the data. When the within subjects' variance is less than the between subjects' variance, the conclusion is made that the predictor variable has a substantial effect on the criterion variable. The nature of the relationship, if any, can be determined by post hoc analysis (Field, 2013).

### **Justification for Research Design**

The researcher found value in the descriptive-comparative design. Since this study aimed to inspect the relationship of emotional intelligence with the listed variables identified in the research questions and hypotheses, a quantitative approach supplemented

by a descriptive-comparative design helped to unravel if statistical differences existed in the employee groups. Burks (1926), Meehl (1970), and Spector, Zapf, Chen, and Frese (2000) upheld the utilization of the descriptive-comparative design as it attests to the researcher's predictability (positive or negative) of one variable over another. Given the efficacy of the Emotional Quotient Inventory (EQ-i 2.0) as this study's instrument, a descriptive-comparative design may underwrite the likelihood of the five composite scales in one group versus another (i.e., gender, ethnicity, race, work title, and work region). These efforts exhumed new knowledge for complex and fast-paced settings undergoing change. The gap in the literature may decrease if the research questions are answered showing significant association of between the variables.

Descriptive statistics included observation studies, descriptive-comparative research, developmental designs, and survey research permitting the researcher to commandeer participant behaviors in an impartial manner through the collection and evaluation of numerical data (Black, 1999). Descriptive statistics, furthermore, complemented the value behind the measures of central tendency, which illustrated whether the frequency was normally or abnormally distributed as declared by the calculations of means, modes, and medians. Researchers use the measures of spread to deliver a summary of how far the scores are from the mean to support correlations across the variables. Methodologists such as Becker et al. (2016), supported this design, which made the approach most apt for this study to interconnect how each women and minorities seeking senior roles used EI to improve workplace diversity in the high-tech sector.

## **Research Questions/Hypotheses**

Research questions steered the study and provided a structured path to follow (Creswell, 2014). The present study used a quantitative descriptive-comparative design and supported the identification of EI factors that were predisposed by components of workplace diversity among women and minorities. Research questions included gender, ethnicity, race, work title, and demographic region classifications to account for women and minorities, respectively. Multivariate analysis of variance (MANOVA) followed by post hoc analysis were used to test multiple independent and dependent variables by linear combinations (Patel et al., 2013). Unambiguously, the following research questions facilitated the goal of the study to be met:

RQ1. What statistical differences, if any, exist in the emotional intelligence (EI) scores by group (i.e., White, Hispanic, Asian, and Black) at top, publicly-held technology solutions-based firms in the U.S?

RQ2. What relationship, if any, exists between EI and workplace diversity by gender (i.e., women versus men) classification at top, publicly-held technology solutions-based firms in the U.S?

RQ3. What relationship, if any, exists between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) and race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S?

RQ4. What statistical differences, if any, exist in the emotional intelligence (EI)

scores by work title (i.e., manager or higher) among women, Hispanic, Asian, and Black at top, publicly-held technology solutions-based firms in the U.S?

RQ5. What relationship, if any, exists between EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) classification at top, publicly-held technology solutions-based firms in the U.S?

The hypotheses used in the research were judiciously worded to focus on the predictions being made regarding the anticipated outcomes in the study. EI levels across diverse leader groups will supplement or enhance workplace diversity in women and minorities. Focus was given to the EEOC's (2016) representation of concentrated high-tech regions as CA, TX, NY, PA, and FL. Based on the stated research questions, the following hypotheses were developed:

H1<sub>0</sub>: There is no statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

H1<sub>1</sub>: There is a statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

H2<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

H2<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

H3<sub>0a</sub>: There is no statistical difference in the relationship between EI and



workplace diversity by ethnicity (i.e., Hispanic versus Asian)  
classification at top, publicly-held technology solutions-based firms in the  
U.S.

H3<sub>1a</sub>: There is a statistical difference in the relationship between EI and  
workplace diversity by ethnicity (i.e., Hispanic versus Asian)  
classification at top, publicly-held technology solutions-based firms in the  
U.S.

H3<sub>0b</sub>: There is no statistical difference in the relationship between EI and  
workplace diversity by race (i.e., White versus Black) classification at top,  
publicly-held technology solutions-based firms in the U.S.

H3<sub>1b</sub>: There is a statistical difference in the relationship between EI and  
workplace diversity by race (i.e., White versus Black) classification at top,  
publicly-held technology solutions-based firms in the U.S.

H4<sub>0</sub>: There is no statistical difference in the relationship between leader EI and  
workplace diversity by work title (i.e., manager or higher) among women  
and minorities at top, publicly-held technology solutions-based firms in  
the U.S.

H2<sub>1</sub>: There is a statistical difference in the relationship between leader EI and  
workplace diversity by work title (i.e., manager or higher) among women  
and minorities at top, publicly-held technology solutions-based firms in  
the U.S.

H5<sub>0</sub>: There is no statistical difference in the relationship between leader EI and

workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top,  
publicly-held technology solutions-based firms in the U.S.

H5<sub>1</sub>: There is a statistical difference in the relationship between leader EI and  
workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top,  
publicly-held technology solutions-based firms in the U.S.

The results of the hypotheses were beneficial to determine whether a relationship existed between the independent variables (i.e., gender, ethnicity, race, work title, and work region) and the dependent variables (i.e., perception, expression, interpersonal, decision-making, and stress management). Multivariate analysis was used to simultaneously examine the relationships between the variables to identify patterns. Participant names were not needed. Instead, gender, ethnicity, race, work title, and work state were integral to data analyses.

### **Data Analysis Mechanism**

Descriptive-comparative analysis was applied and included evaluation of the EI scores among women and minorities to inspect the relationship to workplace diversity. Simultaneous testing of group means reduces the likelihood of a false positive result. Using the 1:5:15 factor of composite and subscales of the EQ-i 2.0 model, MANOVA represented the form of a single statistical test and allowed a *p*-value to be generated, which may help to reject the null hypothesis. This study comprised of five independent variables (e.g., gender, ethnicity, race, work title and demographic region); dependent variables included five EI components (as shown in Table 2). MANOVA testing using one-tailed calculations contributed to understanding how diverse leaders sanctioned increased levels of emotional intelligence (Creswell, 2014).

Table 2

*Five composite scales and 15 subscales of EQ-i 2.0*

Self-Perception	Self-Expression	Interpersonal	Decision Making	Stress Management
Self-Regard	Emotional Expression	Interpersonal Relationships	Problem Solving	Stress Tolerance
Emotional Self-Awareness	Assertiveness	Empathy	Reality Testing	Optimism
Self-Actualization	Independence	Social Responsibility	Impulse Control	Flexibility

*Note.* Reprinted from Multi-Health Systems Inc. retrieved from <http://www.mhs.com> Copyright 1997, 2011.

Hofstede et al. (2010) and Prematunga (2012) clarified that Pearson's  $r$  measures the magnitude and strength in the linear relationship that exists between two variables. Therefore, as X increases, so will Y directionally, which may reflect a positive or negative mooring on a scale of -1 to 1 where 0 represents no relationship between the variables. Pearson's  $r$  must fit on a line. As the slope indicates an upward climb, researchers will be able to detect the presence of a positive relationship. A downward slope denotes a negative relationship. When the line remains parallel, no relationship exists.

Five independent variables (i.e., gender, ethnicity, race, work title, and demographic region), and five dependent variables (i.e., emotional intelligence factors) countersigned the Pearson product moment correlation as an appropriate parametric statistic for exploring the enlisted research questions and hypotheses (Leedy & Ormrod, 2013). Categorical variables enable the validation of mode and percentage values. Documented research questions countersigned the existence of statistical differences.

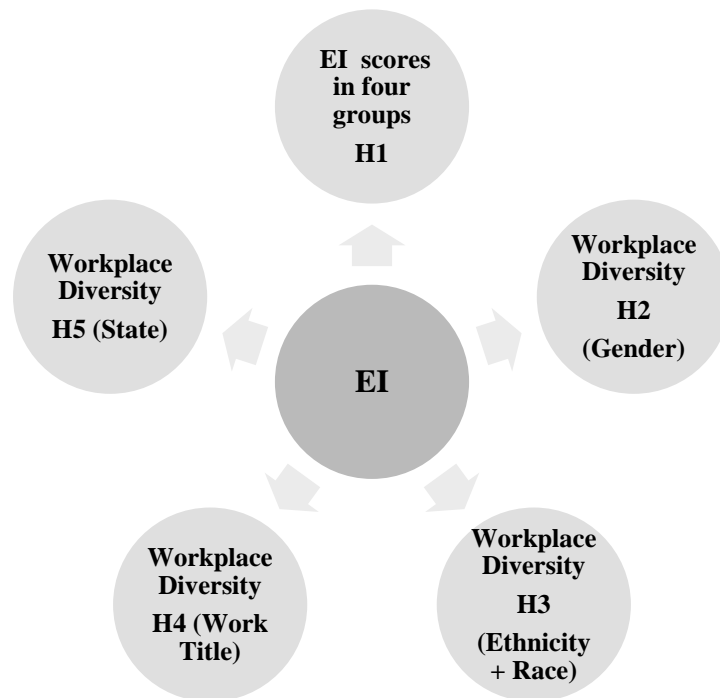
## **Theoretical Framework**

This study was a quantitative descriptive-comparative study using positivist lenses to examine the in-depth understanding of emotional intelligence in diverse leaders and to document if statistical differences exist in correlation to specified variables. Under these lenses, ideas were explored, nomothetic knowledge was promoted as it was believed that scientific evidence countersigned objective accounts of the world and delineation to the relationships of all the fragments behind a social problem. Theoretical frameworks are theory-led studies where all ideas are developed to predict or clarify the recognized variables (Imenda, 2014). In this framework, quantitative approaches flourish and use deductive reasoning to interweave observations. The primary theory (i.e., emotional intelligence) for this present study was sustained by perceptiveness and comprehensiveness to enable predictions. The theory was confirmable and testable with measures of consistency, limited internal threats to validity, and included the possibility to unearth new models (Goleman, 1995).

Researchers have interrogated the capabilities of emotional intelligence in work settings (Goleman, 1995; Mayer & Salovey, 1990). Goleman (1995) found that emotional intelligent individuals possess largely effective problem-solving skills because of one's self-awareness, self-regulated emotions, impulse control, social awareness, and relationship management skills. The Emotional Intelligence Inventory 2.0 (EQ-i 2.0) assesses emotional and social skills that enable effective functioning in the workplace and other settings.

The EQ-i 2.0 instrument was enhanced from a model developed by Reuven Bar-

On's model, a clinical psychologist who steered research on emotional intelligence. The instruments have been used in the United States and various regions of the world and is offered in English and numerous languages. Bratton, Dodd, and Brown (2012) and Multi-Health Systems, Inc. (1997) found the scales of the instrument to have reliability and validity. Reliability is based on the consistency of measurements and the production of the same results over time and validity is countersigned by global replicated studies on job performance and leadership competencies (MHS, 1997). The theoretical framework is displayed in Figure 1.



*Figure 1.* Theoretical framework of EI on work diversity in gender, ethnicity/race, work title and region.

### **Emotional Intelligence Theory**

Emotional Intelligence (EI) necessitates an in-depth comprehension of individual attitudes and behaviors. Mayer et al. (2008) outlined optimism, self-esteem, self-

regulation, and a series of other traits. Mayer et al. (2008, p. 504) illustrated the value for organizations since “EI accounts for over 85% outstanding performance in top leaders.”

In a bi-modal framework, EI involves personal competence and social competence.

Within each branch, additional attributes are identified. Personal competence comprises of self-monitoring and being able to see the bigger picture while social competence envelopes sensing and feeling skills to control emotions (Bradberry & Greaves, 2009; Goleman, 2013). Through a theoretical framework, an inquiry begins to connect the variables, questions, and hypotheses to the possible answer that EI has a positive relationship on business outcomes at publicly held technology solutions firms in the U.S.

### **Definition of Terms**

The following terms and concepts are pertinent to the purpose of this quantitative descriptive-comparative study. It was necessary to provide the readers with a definition to support operationalization of the terms within this study.

**Emotional Intelligence.** “The ability to sense, understand, and effectively apply the power and acumen of emotions as a source of human energy, information, connection, and influence” (Cooper & Sawaf, 1997, p. xiii).

**Descriptive-comparative study.** This study includes the correlations of two or more variables conceivably identified as characteristics in an experiential phenomenon or the exploratory to highlight prevalence of statistical differences within subjects (Black, 1999).

**Diverse Leader.** Diverse leader is a leader who demonstrate respect and acceptance for member differences (Bass, 1999). Leader is defined as a manager, director, vice-

president, senior vice-president, or executive vice president, president, chairman, chief technology officer, or chief executive officer roles.

**Leader.** Persons responsible for the subordinates' steadfastness, motivation, and direction, in an organizational setting (Bass, 1998).

**Self-awareness.** "Knowing what we are feeling in the moment, and using those preferences to guide our decision making; having a realistic assessment of our own abilities and a well-grounded sense of self-confidence" (Goleman, 1998a, p. 318).

**Self-regulation.** "Handling our emotions so that they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; recovering well from emotional distress" (Goleman, 1998a, p. 318).

The subsequent paragraphs describe the assumptions, scope, limitations, and delimitations in this study.

### **Assumptions, Limitations, and Delimitations**

Simon and Goes (2013) hypothesized that assumptions are known, acknowledged outright, or implied in the research process. Researchers venture to test, confirm, or disconfirm assumptions. Documented declarations regarding a study's privacy, confidentiality, secured data collection process, and data storage methods underwrite participants' trustworthiness. Specifically, explicit assumptions were unspecified, which may function as instruments for researchers to bracket bias through accurate disclosure of beliefs (Neuman, 2011). Study generalizations were unjustified in the absence of confirmed findings (Miller & Tsang, 2010; Schommer-Aikens & Hutter, 2002). Miller and Tsang offered that core assumptions may indorse stated theories. Identified tacit assumptions sustained the strength of the methodological framework of the study.

For this quantitative descriptive-comparative study, the assumptions were that the participants held managerial roles, worked primarily in CA, TX, NY, FL, and PA, and were from publicly-traded organizations in the United States. The assumptions were that managers' emotional intelligence were consistently and precisely measured using the EQ-i 2.0 instrument to inspect the relationship between emotional intelligence and workplace diversity in women and minorities. This study included assumptions for race to be White and Black; this study included assumptions for ethnicity as Hispanic and Asian. Assumptions were documented, but it is noteworthy to indicate that some participants were predisposed by individual or exterior factors, which may have influenced suppression of the truth in their responses. The results of the data showed insights to the lack of participation. Participant completion of all 133-items of the EQ-i 2.0 in their responses was also an assumption.

### **Scope of the Study**

The scope of this quantitative descriptive-comparative study was limited to employees who are supervisors, managers, directors, vice presidents, senior vice presidents, or those individuals who serve as executive leaders. Executive leaders were defined as chief operating officers, chief technical officers, chief financial officers, chairperson, and president. Additionally, the scope included women and minorities (i.e., White, Hispanics, Asians, and Blacks) from concentrated regions of technology workers identified by the Census Data Program (2014) to be CA, TX, NY, FL, and PA. Findings were stratified by each group. The focus of the study was to examine the relationship of emotional intelligence and workforce diversity, gender, ethnicity, race, work title and



state of employment among White, Hispanics, Asians, and Blacks. The EQ-i 2.0 instrument was used to measure participants' emotional intelligence.

### **Limitations**

Laerd Dissertations (2012) and USC Libraries (n.d.) indicated that all studies have limitations. The primary responsibility was for the researcher to outline how the limitations are curtailed and measures to circumvent in future research. Limitations incorporate the internal and external validity of the study, which included the rigorous nature of the study and the extent to which generalization can be made. Brutus and Duniewicz (2012) submitted that limitations are factors beyond the researcher's control. Statistical power and generalizability are factors that involve an appropriate sampling frame (Christensen, Johnson, & Turner, 2014).

### **Scope of Limitations**

The scope of the study included participants in managerial roles at publicly-traded organizations in the United States and included workers who identified as women and minorities from concentrated regions in high-tech (CA, TX, NY, FL, and PA) (Census Data Program, 2014). The quantitative descriptive-comparative study examined the emotional intelligence of Whites, Hispanics, Asians, and Blacks who were employed as managers or higher from the primary focused states. Eligibility criteria for participating in this study included a minimum of 18 years of age, full-time or part-time employment at a publicly-traded organization in the high-tech sector and a job title of supervisor/manager or higher. Participants were asked to allocate 20 minutes to complete the Emotional Intelligence Inventory 2.0 using a unique email to avoid duplication of submissions. Participants were encouraged to dedicate uninterrupted time to complete

the survey in one session although participants may have saved responses and returned to the assessment later as needed. The sample frame comprised of 330 completed assessments ( $n = 330$ ).

### **Delimitations**

Delimitations are defined as the factors within the researcher's control (Ellis & Levy, 2009). Furthermore, delimitations about employee titles included supervisor, manager, director, vice president, senior vice president, executive vice president, president, chairman, or chief executive officer. The chosen methodology and design were suitable for the present study and countersigned the evaluation of the research problem. The EQ-i 2.0 instrument was used to collect data and to measure the emotional intelligence of women and minorities against five chief subscales. A demographic form (shown in Appendix C) was used to collect participants' gender, ethnicity, race, work title and work region.

### **Chapter Summary**

The technology industry is fast-paced, demands intelligent decision making, innovation, and involvement for all skilled human resources who can work under pressure while maintaining the vision of the firm. The U.S. workforce remains challenged by the lack of participation of White, Hispanic, Asian, and Black workers in senior roles, which creates asymmetrical leadership to the workforce. Leaders characterized as skilled in EI have a set of skills to self-regulate and the ability to determine the capabilities of others to create positive outcomes in business outcomes. The cogency of emotional intelligence remains a current discussion. Studies showed that leaders who deploy emotional intelligence brought about change in organizations,

eradicated bureaucracies and silos, and enabled teams to march in unison toward a common goal (Christie, Jordan, & Troth, 2015; De Clerq et al., 2014; Fernandez, 2013; Wang, 2015).

The theoretical framework included the foundational theories and historical evaluation of emotional intelligence, diversity and inclusion, culture and diversity, contingency, and network theories. The aim of this study was to examine the relationship of emotional intelligence and workforce diversity in White, Hispanic, Asian, and Black employees in senior roles at top, publicly-held technology and solutions-based firms in the U.S. Understanding the strengths of the relationships across the variables, leaders become equipped with new concepts on the topic that may indorse changes in talent acquisition, placement, promotion, and retention strategies.

## Chapter 2

### Literature Review

Kaye and Jordan-Lewis (2008) and Katz (2017) expounded that teams of the future are likely to have greater complexity than today. Imagine the clashes across members of the distinct groups: Boomers (1946-1964), Generation X (1965-1980), Generation Y (1980-2000), and Generation Z (1995-2010). Furthermore, envisage the potential challenges if team members are from diverse employee groups; each employee group served the organization contrarily. The work ethics of boomers include enthusiasm to work longer hours and generate a reward for their labors. Generation X maintained a work life balance while generation Y was keen to accomplish dreams: although lifestyle focus was foremost. Ozkan and Solmaz (2015) described generation Z as technologically savvy individuals immersed in a highly diverse environment demanding workplace flexibility.

With predictions of women and minorities' labor pool set to increase at a steady pace, and that high-tech employment is projected to increase by 4% through 2024 (Wolf & Terrell, 2016), organizational leaders and practitioners must proactively seek the gainful knowledge, application and inner workings of emotional intelligence. Very few studies have been conducted to trace correlations between emotional intelligence and workplace diversity in women and minorities in senior roles at top, publicly-held technology and solutions-based firms in the U.S (Clark & Polasello, 2017; Jada et al., 2014; Wang, 2015). Additional studies need to be conducted to expand on the role of EI in diverse leaders, and the correlation with the identified variables. If conducted studies attempted to predict correlations between diverse leaders who use emotional intelligence

to yield increased outcomes in the recognized variables, then a greater number of organizations may be able to apply modernized business strategies to remain competitive while balancing the gender and cultural scales at the executive levels (Abrams, 2013; Chiva & Alegre, 2008; Fisher et al., 2005; de Mooij & Hofstede, 2010; Wang, 2015).

Therefore, it was important to pursue the quantitative descriptive-comparative study to investigate the relationship between emotional intelligence and workplace diversity in women and minorities at top, publicly-held technology and solutions-based firms in the U.S. In this chapter, the researcher supplied the title searches and documentation, the historical, current contents and controversies for EI and workplace diversity. A theoretical framework was explored because EI awareness scores, job title and state of employment among women and minorities were tested. Importance rested in operationalizing the independent variable (gender, ethnicity, race, and work state) against the five dependent variables (i.e., emotional intelligence awareness scores) to determine what levels of emotional intelligence existed, and to determine if predictability, strength, and direction of correlation could be established.

Methodology literature and research design included key researchers who supported the quantitative descriptive-comparative design and suitability for this study. There were five chief goals for Chapter two. The aim of this chapter was to: (a) inspect the high-tech sector and illustrate the necessity to test EI, (b) explore prioritizing emotional intelligence as an important topic and business strategy for business leaders in high-tech, (c) understand the recognized relationship between EI and diverse leaders through synthesis from relevant studies, (d) examine the relationship of EI and workplace diversity, and (e) integrate analysis to demonstrate formation of new acumens for

organizational leaders and practitioners to augment strategies for placement and retention at the helm for women and minorities skilled in emotional intelligence.

### **Title Searches and Documentation**

This quantitative descriptive-comparative study used search terms such as diverse leadership, emotional intelligence or (EI), workplace diversity, high- tech, technology, cultural diversity, diversity and inclusion, organizational change, organizational culture, and emotional quotient. Several databases were used during the planning and research phases of this study and included the U.S. Bureau of Labor Statistics, Department of Labor, Catalyst, Alliance Board for Diversity, U.S. Census Data, TalentSmart, ProQuest, EBSCOhost, The Global Gender Report, Hispanic Association on Corporate Responsibility, Deloitte, U.S. Equal Employment Opportunity Commission, books, dissertations, University of Phoenix' Center for Workplace Diversity Research, conference papers, and notes from symposiums.

### **High-Tech Sector**

The Workplace Information Council (WIC) (2003), a group that played a pivotal role in the federal/state Labor Market Information (LMI), described the high-tech sector as industries with vast convergence of workers in STEM (Science, Technology, Engineering, and Mathematics) occupations. Industry data collected from the Occupational Employment Statistics survey and the Current Population Survey are used to calculate the segment of jobs. STEM workers in each industry are characterized as scientists, engineers, IT workers, postsecondary teachers, and managers, entail 5.8% of the jobs in the U. S., encompass of 23% of the nation's output, and comprise 17 million workers or 12% of the U.S. employment using data collected in 2014. The high-tech

sector is regarded as dichotomous: manufacturing and services, but modern shifts from manufacturing to services project an increase in high-tech employment from 52.6% to 56.4% by 2024 (Wolf & Terrell, 2016).

**Role of Education.** EEOC (2016) described the high-tech industry as a specialized pool of workers equipped with precise skills underwritten by education. Gwynne (2016) found that soft skills such as empathy, effective communication, being a good team player, embodying a positive attitude and diverse skills that contribute to critical thinking, innovation, creativity, and the ability to embrace the vision of the firm are fundamentals. A team that collectively acquires new knowledge and training produce enhanced strategic decisions (Katila, Chen, & Piezunka, 2012); similarly, top management teams found that team's search selection and intensity are factors to a firm's innovation (Li, Maggitti, Smith, Tesluk, & Katila, 2013). The U.S. Bureau of Labor Statistics (2017) reported existence of nearly 8.6 million jobs in (STEM), or 6.2% of U.S. employment, which required postsecondary education for entry levels in over 99% of high- tech roles. Terrell (2007) documented that while high – tech jobs may require a high school diploma to a Ph.D., on-the-job training is also crucial. A look at the role of training offers added enlightenment.

**Role of Training.** The U.S. Bureau of Labor Statistics (2017) found training as noteworthy to high-tech field's growth and competitive advantage. In the most recent Survey of Employer-Provided Training (SEPT) conducted in 1993 to 1995, records showed employee training and retraining as decisive components to development and preservation of technologies, policies, and best practices in contemporary firms. Training procedures are formal and informal to stabilize the scales of a skilled workforce. Formal

training was structured and accompanied by a curriculum while informal training was unplanned and resembled job shadowing or peer-to-peer knowledge training. Training ranged from awareness, professional, technical, management, computer, service, or management specific training. Overall costs for formal training was \$12,838,575 while informal training cost was \$24,221,982. On-the-job training enabled competency in the occupation beyond education, work experience, or other qualification (Vilorio, 2014).

**Role of Technology.** High-tech is the central force to delivering services to customers. The repeated nature of pushing, pulling from society, studying effects, and acceptance then curing breaks are important aspects where leaders must maintain focus. Use of technology has evolved over the decades. From being at war with the machines to sustaining growth for firms through complementarity, humans have enabled innovation (Hickman, 2016). Tödtling and Grillitsch (2015) identified that firms such as Apple, rely on new forms of technology to operate and compete locally, regionally, nationally, and globally.

To do so efficiently, leaders maintained high market value through the utility of synthetic, analytical, and symbolic knowledge streams. Synthetic sectors included machinery-based and engineering type organizations who obtained innovation from service firms and suppliers. Symbolic sectors included media and creative industries that were reliant on the tacit knowledge and project-based centers for idea formation and development. Lastly, analytical sectors obtained concepts through research and development. Combining and recombining knowledge sources as an effective method to enhancing design, product, and process competencies, depended on how well humans pull from past inventions to co-create newer ideas that added value for end users.



Montano and Dillon (2005) maintained that technology has challenges for constituents at modern firm settings. The authors contended that far too little work was done on the impacts of the relationship between technology and the individual, groups, and the entire organization. As technology continued to evolve, the effects persisted and may embrace profound complexity and breadth not yet envisioned by mankind. With a host of benefits underscoring power in the firm, leaders and members may struggle with repressed autonomy. Furthermore, as technology changes, so must the relationships within the subsystems of the firm. Human factors are two-fold: (a) unifying, and (b) distinguishing. Montano and Dillon (2005) described unifying as the amalgamation of technology and user connection, membership, and entitlement. Differentiation and customization are pillars of distinguishing factors. Positioning skilled human resources across a multitude of demographic dimensions to serve in the right functions to accomplish goals demands prioritization in the technology field (Francis et al., 2003). A community of diverse leaders characterized by workplace diversity enabled skilled human resources in a fast-paced setting to depict a central force and conveyed solutions that were useable (Drucker, 1986; Greenwald, 2008).

Chun, Kim, and Lee (2014) presented the counter strategy claiming technology has a negative impact on productivity due to misalignment with existing infrastructures, production lines, and intellectual property. Integration of subsystems and skilled, diverse staff across multiple business units form the pipelines to adaptability, flexibility, creativity, knowledge sharing, and peer-to-peer collaboration become thriving symbols of a learning organization. Routley, Athanassopoulou, and Probert (2013) reported the importance of keeping up with the fast-paced learning necessary to retain the firms'

competitive edge, requiring leaders at contemporary firms to plan, reflect on lessons learned, and avoid the vicious cycle of reinventing the knowledge-wheel. An evaluation of the culture of high-tech revealed additional challenges.

**The Culture of High-tech.** The culture of high-tech has been perforated by human challenges (Barak et al. 2016; Hofstede, Hofstede, & Minkov, 2010). Humans have not maintained upkeep with cultural shifts in contemporary environments. Thus, when humans lack an understanding of individual selves, the distance widens between multicultural collaboration. Naqshbandi, Kaur, Sehgal, and Subramaniam (2015) hypothesized that high organization culture promoted innovation and flexibility. Having the right culture was synonymous with organizational performance; and conversely, an organization encountered deficient performance and ultimately fail when the wrong culture was embedded. A high-tech culture demanded external adaptation and internal integration irrespective of competitive instability, market uncertainty, or technology unpredictability (Naqshbandi et al., 2015), which sustained the following outcomes:

1. Culture is integrative where leaders accentuate values of caring for employees, customers, and the environment; standards are imposed for performance and innovation.
2. Culture is hierarchical where leaders underscore goal attainment through enforcement of formal rules, standard operating procedures, and minute supervision.
3. Focus on employee development, innovation, goal congruence, customer orientation, corporate social responsibility, positive attitudes and work behavior.

A diverse workforce endorsed optimistic organization results through measurement and alignment of the organizational culture with that of the industry-related organizational culture. The firm's founding father(s), senior leaders, and fellow members co-scribed the corporate culture (Bielikoka & Misankova, 2014). Francis et al. (2003) speculated that organizational culture was the main tributary leading to transformation. Hackler and Saxton (2007) endorsed leaders to augment internal and organizational capabilities accomplished through the microscopic view of planning, budgeting, staffing, and training, senior management buy-in, and pairing business strategy with an enterprise approach. Such plays hardened the evidence that technology improved workload distribution, management of business objectives, reduced risk, monitor assets, increased business acumen, and sharpened intellectual property. Lin, Chuang, Chang and Yeh (2012) characterized organizational culture in high – tech as the leader's ability to transform the organization through cultivation and fostering of the organizational identification and values.

Decisions built on an enterprise outlook commended an unrelenting learning organization, encompassed enforcement, and assessed the human factors that encircle productivity resulting in a more transparent firm (Bansal, 2009; Brown, & Brudney, 2003). Through the representation of all resource groups, value generation was created; leaders possessed the skills to impartially build strong links to fortify business effectiveness (Abrams, 2013; Birken et al., 2017; Collins, 2001). Dimensions such as age, gender, race, personality, sexual orientation, and education, cognitive style, tenure, organizational function, and background enabled organizations to benefit from shared voices to generate innovative concepts that expeditiously generate and deliver solutions

to the market (Olivares, 2013; Patrick & Kumar, 2012; Saji, 2004; Yerkes, 2010). It serves to review the impact of culture on populations such as women and minorities in high-tech.

**Women and Minorities in High-tech.** Catalyst (2016) reported that women and minorities remain underrepresented in STEM fields, accounting for 25.8% of technical roles. According to 2013 statistics, Asian, and Black women, and Hispanics/Latinas comprised less than 10% of working scientists and engineers in the United States. EEOC (2016) found that men held a greater number of leadership positions and technology jobs than women. Women comprised of 20.44% of executive, senior officials, and managers while male counterparts represented 79.56%. In mid-management positions, women accounted for 30.10% while males encompassed 69.90%. Lastly, in professional and technical roles, women made up 31.89% and 23.74% as opposed to males at 68.11% and 76.26%, respectively (see Table 3).

Table 3

*Gender comparison based on management levels*

Gender	EEO-1				Totals (N)
	Professional	Technicians	Executive	Managers	
	(%)	(%)	(%)	(%)	
Women	31.89	23.74	20.44	30.1	1,846, 801
Men	68.11	76.26	79.56	69.9	3, 494, 798

*Note.* Data from Equal Employment Opportunity Commission, Employee Information Reports (EEO-1 Single, Headquarters, and Establishment Reports, 2014). Numbers may not add up due to rounding. Data arranged to align with variables in this present study.

Hispanics and Blacks were disproportionately fewer in roles of leadership in the high- tech sector. Asians were represented in management and executive positions at lower rates than comparative roles in other occupations nationwide. In a side-by-side illustration of professionals versus technicians by race and ethnicity for executive and management roles, Whites comprise the greatest share in the field at 68.03% and 68.58%, respectively while Asians reported occupancy at 19.5% and 9.68%, Hispanics at 5.28% and 10.23%, shadowed by Blacks at 5.27% and 9.01%, correspondingly (see Table 4). Data for executive versus manager positions showed 83.31% and 76.53% for Whites, 3.11% and 4.91% for Hispanic, 10.5% and 12.98 % for Asian, and 1.92% and 4.12% for Black (EEOC, 2016).

Table 4

*Ethnicity/Race comparison based on management levels*

Ethnicity	Race	EEO-1		EEO-1	
		Professional	Technicians	Executive	Managers
		(%)	(%)	(%)	(%)
	White	68.03	68.58	83.31	76.53
Hispanic		5.28	10.23	3.11	4.91
Asian		19.49	9.368	10.5	4.91
	Black	5.27	9.01	1.92	4.12
	Totals (N)	2,321,969	452, 359	139,575	761,380

*Note.* Data from Equal Employment Opportunity Commission, Employee Information Reports (EEO-1 Single, Headquarters, and Establishment Reports, 2014). Numbers may not add up due to rounding. Order of data re-arranged to align with variables identified in this present study.

Ford (2015) conveyed a lack of diversity in Silicon Valley with 7% of Apple's employees in tech jobs are Black, 11% are Hispanic, and 30% are women. Ford explained that the many organizations who hired employees in STEM fields perform alternative methods such as "acqui-hiring," whereby the entire established business is acquired for the talent, not for the products or services. Traditionally, Ford highlighted males and Whites as the primary knowledge workers thus, countersigning the disproportionate numbers of women and minorities after such acquisitions occur. Black students may select more diverse municipal areas to the suburban Silicon Valley (Ford, 2015). EEOC (2016) noted that high-tech roles are predominantly filled by Whites and Asians. Women comprised 21% in the mid-management role and 25% of women were professionals. A cursory review of the top five high- tech organizations (see Table 5) below affirms greater work is needed to improve workforce diversity among this population.

With 130,000 employees, leaders at Apple planned to hire 3,700 women globally; leaders claimed that 50% of new hires were from underrepresented groups, and 29% of leaders were women (Apple, 2015). Hewlett Packard (HP) employed 29,000, using the website's information (HP, 2012). At HP, the Board contained 40% of women while minorities comprised of 50% of the Board members. Furthermore, the site showed there was a 4% increase in executive level representation for women, and 21% of women were in engineering and information technology. IBM's site had no statistics listed. Strategies included diversity and inclusion philosophies, which documented that leaders commissioned task forces for underrepresented groups in 1995 (IBM, n.d.). Amazon reported there were 18% women in high ranks (20 of 110 in executive roles) and

specified that 45% of the labor pool are women from a total of 154, 100 employees using 2014 data. Women in mid-management and professional roles represented 21% and 25% correspondingly (Amazon, 2014). The site referenced a high percentage of Hispanics and Blacks in frontline positions, but no actual statistics were reported. Lastly, Microsoft employed 93,000 workers, 11.8% were Asians from 17 ethnic groups, 0.8% were Blacks, 25% were women (no levels provided), and 1.29% were Hispanics (Microsoft, 2009).

Previous studies have established that women, Blacks, and Hispanics tend to score higher on EI tests (Roberts et al., 2001; Van Rooy, Alonso, & Viswesvaran, 2005; Whitman, Van Rooy, Viswesvaran, & Kraus, 2009). Though, Whitman et al. (2009) insisted greater attention is needed to ensure that the same constructs are measured for each group Jorfi et al. (2012) specified that with growing numbers of women and minorities in the workforce, considerable attention is warranted to evaluate the distinguishing aspects each will bring. Understanding the role of emotional intelligence and the relationship with workforce diversity in women and minorities may provide greater awareness to this social problem.

Table 5

*Top five technology ranking firms*

2015 Top Five Tech Ranking	Company Name	Number of Employees	Women and Minorities Breakdown
1	Apple	130,000	<ul style="list-style-type: none"> <li>• 29% of leaders were women</li> <li>• 50% of new hires were from underrepresented groups</li> </ul>
2	Hewlett Packard	29,000	<ul style="list-style-type: none"> <li>• Women comprised 4% on Boards</li> <li>• Boards included 50% minorities</li> <li>• Women represented 21% in engineering and IT</li> </ul>
3	IBM	430,000	<ul style="list-style-type: none"> <li>• No statistics shared for these groups</li> </ul>
4	Amazon	154,100	<ul style="list-style-type: none"> <li>• 18% of executives were women</li> <li>• Of 10 board seats, women occupied three; no minorities</li> <li>• 1 in 4 professional and mid-manager level roles were women</li> </ul>
5	Microsoft	93,000	<ul style="list-style-type: none"> <li>• No specific roles were provided</li> <li>• 11.8% Asians</li> <li>• 0.8% Blacks</li> <li>• 1.92% Hispanic</li> </ul>

Note. Data from corporate websites for Diversity and Inclusion: Apple (2015), HP (2012), (IBM (n.d.), Amazon (2014) and Microsoft (2009). Diversity ranking for HP is from *Fortune 500 Board Seats* (2016).

### Historical Content

Goleman (1995) is much-admired as the founding father of emotional intelligence in the workplace, but re-traceability to germinal studies shows that the concept of



emotional intelligence existed prior. Chronologically, Thorndike's work on Social Intelligence in 1920; Doll's Social Competence in 1935; Wechsler's Non-Intellective Intelligence in 1940; Leeper's Emotional Thought in 1948 set the initial foundation. Contribution to EI research has been made by Van Ghen (1961), Leuner (1966), Guilford (1967), Gardner (1983), Bar-On (1985), Saarni (1989); and IQ, EI, and MQ by Dulewicz and Higgs in 1996. In the past two decades, distinguished researchers have added to the body of knowledge resulting in several models and approaches (Bar-On, 1997; Bradberry & Greaves, 2009; Goleman, 1995, 2001, 2013; Petrides & Furnham, 2001; Salovey & Mayer, 1990).

### **Emotional Intelligence**

Emotional intelligence is a leader's anchor enabling buoyancy to marshal self and teams through tumultuous and stable periods (Goleman, Boyatzis, & McKee, 2013). EI warehoused three chief models: "ability, mixed, and trait" (Killgore, et al., 2012, p. 552). The ability model broadly recognized and consisted of four pillars: "emotion perception; emotion facilitation; emotion understanding; and emotion regulation" (Mayer, Caruso, & Salovey, 2016, p. 293). Bar-On's mixed model approach included stress management, mood, flexibility, and personality skills. Goleman et al. (2013) submitted a four-segment cluster: self-assurance, inner strength, self-monitoring, and social competency, which align the personal robustness of one's emotions while connecting with and motivating others' head, heart, and hands (Goleman, 2001). Lastly, trait model consisted of well-being, sociability, self-control, and emotionality. At a lower level, Petrides (2010) described the components as self-esteem, trait happiness, trait optimism, and impulsiveness among others.

**Science of Emotional Intelligence.** Mayer et al. (1997) recognized four segments as significant to providing a foundation to the EI ability model: 1) perceiving emotions (detecting and decrypting), 2) use of emotions (thinking and problem solving), 3) understanding emotions (knowing the gradience of emotions), and 4) managing emotions (regulating emotions) in self and others. Salovey and Grewal (2005) explained that detecting and decrypting are integral to perceiving emotions, thinking and problem solving facilitate thoughts, knowledge of the gradience of emotions (i.e., knowing the difference between happy and ecstatic) are essential to understanding emotions. Regulating emotions are instrumental to managing emotion personally and socially.

By 2016, Mayer et al. revealed refreshed principles for the branches, which demonstrated an ongoing search into what guides perception, cognition, interaction, and reasoning. Enhancements to types of reasoning within each branch showed previously grouped abilities for identification of deceptive and dishonest expressions, ability to distinguish between precise and imprecise expressions, and the capacity to observe content in the environment gained recognition as individualized expanses of reasoning. Furthermore, understanding emotions by context and culture was added as a new aptitude. No changes were recognized for the second branch, facilitating thought using emotion, but changes were introduced for branches three and four, correspondingly.

Understanding emotions encompassed four newly added components for reasoning: (a) capability to evaluate the situation that produces emotion, (b) distinguish between moods and emotion, (c) affective forecasting, and (d) ability to identify cultural differences in the appraisals of emotions. Lastly, managing emotions was re-evaluated to qualify three areas as independent factors: (a) assess plans to preserve or decrease an

emotional response, (b) self-manage emotions to underwrite a desired result, and (c) manage emotions of others to attain a chosen outcome. Current content explores the relationship of EI in individuals and in the workplace and illustrates the impacts on the organization.

### **Current Content**

EI is an invaluable dimension that may contribute to effective decision-making, emotional stability, self-regulation, comprehending others, extrapolating collaboration from others to bring about greater outcomes (Mann; 2012; McCleskey, 2014; Sangeeta, 2014). Mann (2012) further conceptualized stating individuals who anchor EI traits possessed self-awareness, heightened tendencies to manage emotions, pursued self-enthusiasm, and subscribed to compassion and remained knowledgeable in social settings. From a historical context, Mann (2012) approved Daniel Goleman (1996) as the footing with characteristics to include: (a) leveraging open communication, (b) expression of self with consideration to reception from other, (c) endorsing growth in self and others, and (d) accessing and grasping emotional knowledge.

### **Benefits of EI in the Workplace**

For centuries, leaders play the role of assurer and emotional chaperon who refresh poorly constructed emotions that disrupt on the shop floors or in the C-suite (Goleman et al., 2013). Directionally speaking, as the leader's emotions steer, so will the followers. Therefore, a leader's positive attitude toward change and committed focus to plan and execute tasks on time are critical. Goleman (2013) ushered leader's self-awareness as the tiller that endorsed confidence and galvanized one's sense of purpose.

Emotionally intelligent leader apply focus as the centrifuge to environmental turmoil. Goleman posits that such leaders communicate with ease, conjure up social sensitivity essential to leader-member interactions, bring vision to life amidst a storm, and foster a collaborative workplace setting that encourage unselfish performance. Yadav (2014) indicates that environments loaded with emotionally intelligent leaders are positive, foster quality relationships between leader-follower dyads, and embrace fulfillment, and positivity.

**Organizational Performance.** Organizational performance is integral to a firm's survival and sustainability in a global competitive market. Abraham (2004), Murensky (2000), Wolff, Pescosolido and Druskat (2000), and Wong and Law (2002) found that emotional intelligence (EI) subsidized averagely to performance. Through an incorporation of authentic and diverse leadership that espoused the attitudes, beliefs, and behaviors that hearten, interconnect, and stimulate employees' goals with that of the overall firm (Bushra, Usman, & Naveed, 2011; Luthaus & Adrien, 1998; Zare, Azar, Mardani & Arien, 2015), leaders who employ and deploy emotional intelligence (EI) traits remove silos and electrify task forces, which may contribute to increased employee performance and firm advancement (Bradberry & Greaves, 2009).

Organizations succeed when employees contribute to more than task success, but (re) shape the organizational and environmental eco-system to advance all stakeholders (Busso, 2003). Together, EI, job satisfaction, organizational citizenship behavior and environmental factors contribute to organizational performance (Suan, Anantharaman, & Kin, 2015). Furthermore, Suan et al. established that performance is countersigned by an organization's capability to meet the needs of the customers, noting that EI may have

positive or negative effects to achieve that goal. Porter (1998) recognized factors such as socio-cultural, economic, and political and legal are guarantors to organizational performance. An assessment of EI in technology summarized the benefits and challenges.

***Emotional intelligence and technology.*** Technology solutions firms demand a workforce that is high-performing, well-coordinated, and skilled to keep up-to-date in a fast-paced changing environment (Lin, 2015). Innovation, according to Mutlu (2015), is another reason why leaders create teams of qualified, experienced knowledge officers prepared to pose critical questions, breakthrough complexity and locate logical solutions for clients. An adequate number of competent resources need to be on staff to support the phases of innovation: (a) recognizing, (b) aligning, (c) acquiring, (d) generating, (e) choosing, (f) executing, (g) implementing, (h) learning, and (i) developing the organization. Despite, well-structured teams, conflict arises and wedges between task holders and achievement.

***Conflict.*** Conflict played a significant role in enlarged or diminished levels of team performance (Ilevbare, Ojeleye, & Ileybare, 2012), but individuals with emotional intelligence upheld effective team collaboration, cohesion, and mission-possible behaviors and outcomes (Lin, 2015; Prati, Ceasar, Ferris, Ammeter, & Buckley, 2003; Tidd and Bessant, 2013). Prati et al., (2003) acknowledged that social effective constructs such as EI underwrite leadership and overall effectiveness. Thus, leaders who deployed integrating and compromising styles to mediate conflicts possessed abilities to self-assess, self-regulate, and remain self-aware of emotions while course-plotting effective decisions intra-individually and cross-functionally within radically

transformative settings (Bradberry & Greaves, 2009; Jada et al., 2014; Shih & Susanto, 2011; Walter, Cole & Humphrey, 2011, Wang, 2015).

***EI in top management teams.*** Top management teams (TMT) represented the upper echelon of an organization (Awino, 2013). Constituents included executives and a close circle of direct reports responsible for making strategic and quality decisions to enable organizational performance (Homberg & Bui, 2013). Diversity in TMT connected leaders to delivering products and services to a broader variety of customers, which countersigned the foundation to competitive advantage. The role of TMT involves situations that have high risks and uncertainty, which obligated members to use constructive behaviors to manage conflicts (Liu, Fu, & Liu, 2009). But not all individuals incorporate self-regulation and self-awareness to engender prominent member EI or distinguished leader EI known to contribute to increased levels of team performance (Chang et al., 2012) and team emotional stability (Liu et al., 2009). Researchers, leaders, and practitioners continued to appraise the components of EI, which stressed a deep-seated review of attitudes and actions as demonstrated through confidence, self-esteem, and self-regulation.

***High performing teams and EI.*** Chan and Mallett (2012) presented supplementary awareness by connecting the relationship between emotional intelligence and high performing teams, which may rest in the qualities of inspiration, motivation, and a leader's ability to align the members to see, believe, and develop actions toward the common purpose. Pfeffer (2017) charted the core elements for leaders to establish and maintain a high performing work setting as: (a) mutual commitment, (b) investing in employees, (c) rewarding members, (d) placing emphasis on role fitness, (e) member

empowerment, (f) egalitarianism, and (g) effective communication. A firm does not comprise solely of individual contributors who can work in a vacuum to support the outputs by making centralized decisions. Rather, Pfeffer (2017) speculated that with decentralized decision making, organizations yield a faster return when leaders allow skilled front-line staff with decision making to deliver customer satisfaction while feeling empowered and autonomous in task execution. Organizations in the high-tech sector sustain growth when high performing teams demonstrate trust, inclusion, welcome disagreement, and collaborate to attain shared goals.

### **Controversies of EI**

Though, as researchers have noted, not all individuals stockpile or position EI similarly (Locke, 2005; Mayer et al., 2008). The mechanisms of EI are necessary to support the conclusions that motive, emotion, and a broader understanding of EI traits cohabitate to countersign how individuals think and act (Locke, 2005; Mayer et al., 2008). Mayer et al. (2008) retraced the historical nature of EI from the unassuming formation in 1990. Though a wealth of literature now exists, almost three decades later, researchers such as Locke (2005) have challenged the definition.

Mayer et al. provided a translucent path illuminating the perspectives of other researchers and acknowledged that the concept has become too widely dispersed. Locke (2005), however, echoed a dispute, provided a brief definition of EI and a historic glance from the originators before circumnavigating to the statement that some people connect to the concept while others are diminished. Locke developed the argument that EI is too broad, discerned that EI is introspective, and argued that EI springboards from rationality and emotion, not intellect.

Mayer et al. (2008) embarked on an expedition with four stops: 1) the authors addressed the misunderstanding in the field regarding the concept of EI, 2) described their approach to EI, 3) outlined the importance of EI, and 4) identified core guidelines to advance knowledge (2008). Locke (2005) expanded on the invalidity of EI by making three main points: 1) too broad of a defining and lack of meaning, 2) EI is not a form of intelligence, and 3) emotions and reasons are indispensable to attitudes and behaviors. Locke's approach to expand on the research questions was vibrant and translucent, which subsidized strong confutation and critical viewpoint into prospects and alternatives to EI.

Mayer et al. (1990) postulated that an expanded view of EI underpinned by a series of recommendations helped to debunk the misclassifications that EI is invalid or cluttered by too many definitions. Through the five recommendations, Mayer et al. advocated that the cogency of EI and intelligence be aligned with one's abilities, reasoning capacity, and emotions. Locke (2008), on the other hand, prompted for superior research into the role of EI and leadership debating the necessity for intelligence to be incorporated into the list of effective leadership traits among humor, team building, visionary, autonomous, and being a change agent. Mayer et al. extended the idea of EI to include languages that support understanding of perceptions to countersign the foundational success for individuals to manage their own emotions ahead of others. Locke (2005) encouraged the leadership community to be aware of the influence of introspection as an antecedent to self-management and self-regulation. Techniques and sanctions offer variegated angles to view and apply emotional intelligence or alternatives to act rationally.



Further, McCleskey (2014) noted that disagreements remain with the nature of constructs, uses, and measurements of EI enmeshed in EI's hidden complexities.

Cherniss (2010a, 2010b) theorized that EI is beneficial to everyday life, but cautioned that not all individuals perceive, comprehend, use, or manage emotions similarly, thus creating disparities for adaptation and settings, aligning feedback to Locke (2005).

Cherniss proposed ongoing research and examination into both the ability and mixed EI models as satisfactory future steps. Also, a call for more extensive EI assessments are in order citing that EI has greater complexities warranting additional illumination and intuitions. Cherniss (2010b) delineated three major areas of disparagement:

1. Conflicting models and definitions
2. The necessity for improved valuation and measurement
3. Acceptation of EI as a forecaster of leader effectiveness among other business outcomes

Another clash is evident in the tug-o-war between the understanding and appropriations of IQ and EQ (Cherniss, Extein, Goleman, & Weissberg, 2006). In 1883, Francis Galton, an English statistician, introduced "Inquiries into Human Faculty and Its Development" that was later operationalized by Alfred Binet, a French psychologist, who developed a test to assess children in France in 1905. IQ, intelligence quotient or cognitive intelligence (Coetzer, 2015) is a score resulting from the combined ratings of one of several uniformed tests to measure intelligence: Stanford-Binet test, Wechsler, or the Woodcock-Johnson Tests of Cognitive Abilities.

From these measurements, individuals comprehend new situations; how to engage reason and logic, filter unnecessary information, and apply one's knowledge in

each problem through the incorporation of the verbal, mathematical and three-dimensional abilities, which Sternberg (1996) described as imagining, word fluency, verbal relations, use of memory, perceptual speed, initiation, and inference. Coetzer (2015) postulated that cognitive abilities reside in the uppermost level denoted as g or the general mental ability (GMA), which may enable maximum influential forecasting ability for learning and performance in the workplace.

Conversely, EQ or emotional quotient measures one's emotional intelligence, use of cognition and emotion (McCleskey, 2014), and employs a list of skills: instinct, empathy, resilience, leadership, truthfulness, genuineness, stress management, interpersonal, and intrapersonal skills. Goleman (1995) attributed these skills to be part of the limbic system and offered that the utilization of the amygdala was the emotional sentry enabling individuals to acclimatize to dynamic conditions. Interpersonal skills included self-regard, assertiveness, independence, and self-actualization, which Goleman described as the components to understand what motivates people and assess collaboration. For intrapersonal skills, Goleman expounded that the enforcement of an ultraprecise model to live one's life permits empathy, social responsibility, and building successful relationships. Goleman documented that IQ and EQ are independent abilities not contrasting ones. Given the separation of the two entities, persons may have a mix of both; IQ remains static, while EQ changes throughout a person's life.

**Gender and EI.** EI differences exist by gender (Whitman et al., 2009). Shehzad and Mahmood (2013) declared women play a valued role in leadership precipitated by societal transformation, which was predisposed by industrialization and global expansion. In their study with male and female university professors, these researchers found women

possessed a higher level of interpersonal skills, are more emotionally self-aware and are more compassionate in comparison to their male peers. McCleskey (2014) submits that leadership is emotionally laden while Lopez-Zafra and Gartzia, (2014) postulated emotionality is more associated with females than males thus linking the emotive lived experiences to women over men.

While humans embodied varying degrees of both EI and EQ, Goleman (1995, p. 45) argued that EQ “adds far more of the qualities that make us more fully human,” and for those who possessed high EQ abilities, evidence suggests these individuals will be the most capable in top positions. Men with high IQ are considered go-getting and productive, determined and predictable. Men with high EQ are viewed as gregarious and cheery, socially poised, and non-apprehensive. Women with high IQ, according to Goleman possess intellectual confidence, meditative, but are prone to anxiety, and withhold the outward expression of anger. Women with high EQ are outgoing, better decoders of nonverbal cues, self-confident, adapt to stress, demonstrate ease when connecting with new people and forming new relationships, and remain open to sensory experiences (Thory, 2013). Whitman et al. (2009) found that men lagged women in emotional and interpersonal skills. Coetzer (2015) found both IQ and EQ are substantial forecasters of team effectiveness, but EQ is a more fundamental predictor than IQ, and that the contribution of EQ may be moderately independent of IQ. Studying how minorities organized EI delivered profounder insights.

**Minorities and EI.** Previous studies have shown that Hispanics and Blacks score higher on EI tests than Whites (Roberts et al., 2001). Whitman et al. (2009) attributed the difference in the collective and familial environments as akin to minorities while Whites

are generally raised in individualistic settings. Minorities, according to Whitman and al. (2009) use emotion as an instrument to processing and interpretation while Whites may be viewed as emotionally not “in tune” because of self-focus rather than collective. Hofstede et al. (2001) declared that collective societies and cultures emphasize training whereby members seek training opportunities to learn new skills or self-improve; physical conditions should provide good ventilation; skills are fully used by organizations. Conversely, individualistic cultures ranked personal time, freedom, and challenge within degrees of work as important. Vertical individualism described those parties who were preoccupied with distinguishing self from others through accomplishments and competition. Wang, Castro, and Cunningham (2014) hypothesized that vertical individualism, among other factors, was a predictor to decreased levels of cultural diversity awareness. Exploration of the dark triad of EI served as profounder breadth into the construct.

**Dark Side of EI.** Jauk, Freudenthaler, and Neubauer (2016) recognized there is a bright side and a dark side to leadership. Resick, Whitman, Weingarden, and Hiller (2009) defined the bright side as leaders who appropriately balance the levels of core self-evaluation (CSE) and narcissism. Elevated levels of CSE suggested the ability to use contingent reward mechanism to stimulate others when the satisfactory requirements were met. Hickman (2016) stated that the reward may be psychological or material. On the other hand, a prominent level of the dark trait described a leader who was fixated on self, individual power, and self-reference. Personality traits were the main components to how a leader acted and influenced others. A grandiose personality and ideas discouraged

others from following willingly or remaining inspired (Resick et al., 2009; Hickman, 2016). Hickman (2016) explained the dark traits are exploitative to others.

Furnham, Richards, and Paulhus (2013) submitted that psychopathy and Machiavellianism accompany narcissism. Psychopathy was considered as emotionlessness, hastiness, and antisocial behavior. Machiavellianism, according to Jauk et al. (2016), represented dishonest and manipulative behavior with one's own interests at heart. Narcissism was branded by an extravagant yet susceptible sense of self-worth, and feelings of dominance. Zhang, Zou, Wang, and Finy (2015) evaluated further indicating that both psychopathy and Machiavellianism were associated with negative measures of the trait EI. Zhang et al. (2015) also found a negative correlation between Machiavellianism and ability EI in Chinese adolescents though, Jauk et al. (2016) cautioned few comparisons could be made to other germane studies on the dark traits to corroborate. An assessment of impacts of dark traits in high tech was revealing.

**Dark Traits and High-tech.** Lee and Lim (2014) argued that for modern organizations to remain competitive, cut-throat technology and cunning behaviors (i.e. narcissism) were present. Narcissistic leaders produced both positive and negative outcomes in high-tech sector (O'Reilly, Doerr, Caldwell, & Chatman, 2014). While grandiosity and dominance were the likely characteristics that distinguished leaders who created change, and embraced the vision, Oreilly et al. (2014) expounded on the detriment these qualities bring to the firm's strategic and operational effectiveness. CEOs in high-tech embody these traits. As an instance, in a 2006 *Fortune Magazine* article, Steve Jobs was characterized as a "prototypical productive narcissist" and "the model CEO for the twenty-first century" (Vogelstein, 2006). Jobs harnessed technology,

assessed and circumnavigated market disruption, mobilized easy-to-use products, and delivered products and services at record speed for end user consumption. Tentatively put, narcissistic leaders aimed to:

“Change the world to fit their view of how things should be, and they have little or no sense of guilt to constrain them from radical, risky ventures that can be creative or destructive at either a high or low level of moral reasoning.”

Under the right situations, narcissism was viewed as inspirational and a foundation for creativity. Conversely, Narcissism inhibited free exchange of information, restricted employee happiness, and infringed on integrity and ethical standards. Exploration into the consequences of unethical standards illustrated additional hindrances for technology and solutions-based organizations.

**Ethics and the Dark Side.** Chan and Mallett (2012) acquiesced that high performing teams were built on a foundation of collaboration and ethics to accomplish goals. Fernandez (2013) further explored diverse teams and unveiled these teams have greater connectivity and harmony. The Global TREE <sup>(SM)</sup> highlighted leader and member trust, respect, empathy, and ethics as the core fibers that permeated diverse team structures (Fernandez, 2013). Wright (2013) and Lawton and Paez (2015) posited that ethical leaders have integrity and credibility. Ethical leaders believe that doing good and doing it for the right reason were central to one’s personal values. Ethical leaders were self-aware, honest, and possess virtues: meekness, courage, decency, compassion, and shrewdness. Great leaders were known to be self-aware, attuned to one’s ideas, discernments, principles, and flanked skills such as ethical values, listening, judgment, vision, and the tenacity to balance the competency scale in any industry. A look at the

evolution of the high-tech industry is initially warranted to assess practicality of such skills. An examination of relevant studies on EI further explored the effects in numerous settings.

### **Relevant EI Studies**

Chiva and Alegre (2008) identified an organizational learning capability (OLC) as a mediating variable between emotional intelligence (EI) and job satisfaction. In their study, the researchers declared that job satisfaction was related to EI and certain work conditions. EI tests and survey results were anecdotal because EI could have either a positive or negative impact on performance, the authors claimed. OLC measures risk taking, environmental influences, dialog, experimentation, and engaged decision making. Authors used three hypotheses to test EI to job satisfaction, EI to OLC, and EI to both job satisfaction and OLC. A Likert-Type scale survey with a range of 1- strongly disagrees to 7- strongly agree was applied to measure 33 emotions. With support from content, discriminant and convergent, and convergent validity measures, the results showed that OLC was a mediating variable between EI and job satisfaction.

Through an assessment of culture importance, Stahl, Maznevski, Voigt, and Jonsen (2010) delved into the common beliefs, actions and values of a group to evaluate task complexity and team size, dispersion, tenure of team members and effects of cultural diversity. From the development of seven hypotheses, the researchers conducted 108 empirical studies on processes and examined performance in 10,632 teams in a theoretical framework. In the end, the researchers concluded that cultural diversity may either be a hindrance or be the solution in team settings.

Gondal and Husain (2013) conducted a comparative study of intelligence quotient (IQ) and emotional intelligence (EI) in a cross-sectional study of 300 employees from different units at a telecom company. In that study, researchers explored the cognitive and emotional connections with performance and the results indicated that EI is more valuable in the workplace than IQ. While IQ provides insight to how a person observes, and interprets, EI includes self-regulation or influence on others to self-regulate and incorporates emotion to make decisions. Researchers found that IQ did not correlate to high employee performance, but EI served as a predictor to firm success.

Ashraf and Khan (2014) conducted a study on workplace bullying and the role of EI possessed by the bullied employee in an Asian setting. The researchers found that bullied employees who possessed high EI reported higher job performance than their peers with low EI. Employees who succumbed to workplace bullying lacked the appropriate level of EI to handle the situation cited Ashraf and Khan (2014). Boland and Ross (2010) submitted that EI was a predictor to leader approaches. If mediation had similarities to leadership, then EI was able to foretell successful mediation schemas. In Boland and Ross' study, results confirmed mediators with high EI pursued the goal of solving the dispute with greater satisfactory agreement and compromise over counterparts with a low EI.

Motivation is a proximal predictor for performance in leaders who deploy EI (Hong, Catano, & Liao (2011). In this quantitative study, researchers tested the relationship between EI, leader emergence and motivation to obtain a greater understanding of leader efficiencies in a changing workplace environment. The researchers used two studies to develop their findings. In study one, 309 participants



completed the study. Then, after one week, 264 participants formed leaderless groups to test individual leadership emergence skills. In study two, 115 participants completed the survey after completing a 14-week course.

Findings from the quantitative study by Hong et al. (2011) showed that participants who scored high on motivation to lead (MTL) eagerly emerged as leaders when no leaders were initially assigned to the group. For long-term assignments, individuals with high social-normative MTL acknowledged the leadership roles. In three models, Hong et al. (2011) found that women scored higher than men in non-calculative motivation to lead. Hong et al. (2011) credited the participants' use of emotions, a factor of EI, which was positively associated to affective-identity and social-normative MTL and meanderingly related to leader emergence.

In Sarwar and Ikram's (2015) study of 180 leaders using transformational style, and organizational citizenship behavior (OCB) served as the contributing factors to inspire and motivate employees resulting in improved employee performance. Stein, Papadogiannis, and Sitarenios (2009) compared the emotional intelligence (EI) scores of 186 executives and outlined correlations between leader EI, net profit, growth management, and employee retention. Similarly, Chang, et al. (2012) reviewed leader EI and group EI against leader and member leader and member trust as variables. The researchers found that increased EI at the group levels translated to operative team performance, communication, coordination, and enhanced cognitive skills, which led to effective decision-making.

Shin-yih Chen et al. (2015) evaluated the importance of leader's transformational style on employee's EI and job performance in a non-western setting.

Previous studies have been inconsistent in their findings to prove the relationship with EI and work performance. In this study, a questionnaire was distributed to 300 military personnel at an R&D institute in Taiwan, and 202 participants completed the survey. The findings confirmed the predictions that EI is indispensable to workplace diversity and work performance.

Wang (2015) posited that contemporary work environments require individual EI, but emphasized the importance for individuals to leverage personal EI strengths with a team. Wang explored the role of EI in a team environment in a laboratory study of 47 teams using the MSCEQT, 141-item ability test. Auxiliary analysis was performed to assess amplified ability of high EI teams that were able to read each other's emotions. Researchers conducting future studies should explore team performance with a mixture of low and high EI member base to answer whether a specific number of high EI performers drive team success.

### **Literature Review for Workplace Diversity**

Patrick and Kumar (2012) described diversity as the encasement of mindful practices and behaviors as individuals seek to understand, acknowledge the interconnection of humanity, cultures, and the natural environment; respect and extract the benefits within the cradled differences to build alliances. Workplace diversity incorporates the representation of people with differences in age, culture, marital status, gender, religious beliefs, race, family situations, language, physical ability, sexual orientation, national origin or economic status (Chrobot-Mason & Aramovich, 2013; Cox; 1993). Diversity within an organization included other differences such as cognitive style, personality, education background, physical appearances, military

experience, IQ level, or organizational function (Harris & Moran, 1999). Choy (2007) explained that organizational diversity may include: (1) occupation, functional or job groups such as accounting, marketing, manufacturing, operations, finance, or production; (2) staff job tenure or seniority; (3) ranking within the organization (for instance, executive or senior management, middle management, and lower management); and (4) work or professional experience. At the examination of the historical content of workplace diversity, several influences, challenges, and countermeasures by organizations were unveiled.

### **Historical Content on Workplace Diversity**

Johnston and Packer's (1987) predictions stirred a whirlwind of actions for U.S. organizational practitioners and leaders who studied preparatory measures to support globalization, shift to a service economy, foretold changes in the workforce with a substantial increase for persons of color and women, and the projected demand for jobs with higher skills. These actions likely spawned the birth of action taken by a considerable number of organizations whose leaders took afoot to implement diversity management programs as an initial attempt to integrate Blacks and Hispanics and sought to understand how to strike a balance for the inclusion of women. An historical reflection highlights the numerous factors involved.

In 1939, Drucker studied the origins of workplace diversity. Initially focusing on challenges with Nazism and fascism, Drucker navigated through woes of oppression and social despotism by promoting collectivism. Communities were encouraged to band together and stand upright to social and political unjust activities (Oyler & Pryor, 2009). Drucker emphasized the moral principles of the common man and argued oneness exists

far beyond race, color, or nationality. Backed by a premise of a free society, Drucker envisioned a free social order that recognized and included all constituents coupled with hereditary factors, logic and good reasoning abilities. The landscape for workplace diversity included creations of impersonal policies seeking performance, ability, and character regardless of education, work experience or other demographic factors.

Demographic profiles have changed tremendously since the turn of the 20<sup>th</sup> Century. Oyler and Pryor (2009) reported that aging U.S. executive leaders were forcing out due to conflict from the Great Depression and World War I. Introduction of varied employee demographics apart from male and Whites have shown growth over the past 30 years. For instance (BLS, 2008) reported that employment of women 65 and older improved by nearly twice as much, ascending to 147%. The number of employed people age 75 and over was moderately small (0.8% of the employed in 2007), but showed the greatest increase, growing 172% between 1977 and 2007. Wars and military engagements in the 1970s countersigned significant changes to the corporate diversification (Oyler & Pryor, 2009). Management practices and mindsets changed from viewing the workforce as variable costs to strategic assets of the firm.

The changing role of women in the workplace is another contributing factor (BLS, 2015). War changed the women's participation in the workforce because men were ushered away to serve on the battlefields. After World War II, fewer than one-third of women were in the labor force. By 1999, women grasped the peak of their labor force attaining a participation rate of 60.0%, (BLS, 2015), which took a steep decline to 57% in 2014. Women accounted for 52% of all workers in professional, management and related professions. For specific occupations, BLS (2015) reported that 20% of women were

software developers, 26% were chief executives, among other fields represented (i.e., law, healthcare, and teaching). Spotlight on other statistics for women in the workplace indicated a significant growth of women in the workforce with 19 million by 1965 in the manufacturing, trade, transportation, and utilities, and local government (BLS, 2011) which later grew to 65 million by 2010.

Yadav (2014) explored that intelligence is the archetypal akin to males. Competitiveness, high energy, determination, and commitment are characteristics associated with males, while traditionally, women are aligned with compassion and self-control. The global workforce subsidized opportunities and trials for organizational practitioners and leaders (Bond & Haynes, 2014) are beyond gender, but include ethnicity and race. Drucker indicated that employee groups were to be accounted for and managed differently in the workplace. Assumptions should not be made using one primary construct, Caucasian (Oyler & Pryor, 2009). Shifts in the 1980s in support of globalization and a quest for sustained competitive advantage produced diverse demographic that bear resemblances to employees, customers, and suppliers and reflected flexibility and inventiveness.

In a 2001 report covering the immigration and migration of minority workers, the U.S. Bureau of Labor Statistics detailed that minorities came to the new colonial U.S. in search of economic gain. Others were indentured servants, criminals, or political nonconformists. The slave trade, independence from the Revolutionary War and assimilating of cultures were underpinnings to political movements endorsing limits on immigration for specific groups. Providing counts for minorities in 19<sup>th</sup> and 20<sup>th</sup> centuries presented a challenge and primarily anecdotal (BLS, 2001). In 1950, racial

categories were underdeveloped, which led to workforce participation to be presented as a percentage for people of color. By 2000, the reports of participation for people of color showed Blacks (65.8%), Hispanics (68.6%), and Whites (67.4%). Recent participation rates for the high-tech sector show broader underrepresentation for race and ethnicity (EEOC, 2016), which is related to the inherent issues with the role attractiveness in favor of White men and a less than hospitable culture that forces women and minorities to occupy other positions in varied industries.

The EEOC's (2016) analysis based on data collected in 2014 presented a challenge in the high-tech sector, which was viewed as a fast-growing segment of the U.S. economy. Moreover, this segment was responsible for new products, services, and processes and employs highly-skilled workers with technical competencies. In exchange, high-tech workers were offered increased compensation and enhanced benefits. However, the labor statistics show the dismal trend at the executive level of the finance industry with 2% to 5.3% of African American, 3.1% to 5.3% for Hispanics, 10.6% to 19.5% for Asians. Women comprised of 20% compared to 80% or male counterparts at the executive level.

EEOC's (2015), report of private sector experiences versus expectations by ethnic group conveyed growth in participation at the executive/senior and first /mid-level officials and managers level from 1966 to 2013. This report reflected an increase from 0.87% to 6.77% for Blacks, 0.61% to 7.39% for Hispanics, 9.43% to 38.57% for women, 0.32% to 5.53% for Asians, and 0.13% to 0.38% for American Indian or Alaskan Natives. Not much difference is visible on later reports. Even in concentrated high-tech demographics such as Silicon Valley, California, Asians represent 36%, Hispanics

comprise 1.6% and African American report less than 1%. Analysts ponder whether challenges exist within talent acquisition processes or talent availability when only four of nine minority high-tech college graduates are placed in senior roles.

**Diversity Management.** Organizational landscapes have increasingly adjusted to be on par with the diversified global workforce empowering organizations to capitalize on human creativity and communicative skills to augment company policies, products, and services the end users (Patrick & Kumar, 2012). Bleinjenbergh, Peters, and Poutsma (2010) expatiated that diversity management programs and an assessment of the effects of expanded diversity on organizational performance and business outcomes. Abrams (2013) delineated that diversity management enables an improved corporate image and sanctions organizational strategic goals. Bleinjenbergh et al. (2010) maintained that social justice is a primary goal of diversity management. Bond and Haynes (2014) offered solutions to include: (a) increase representation of diverse leaders across the organizational pyramid, (b) espouse inclusiveness, and (c) address the social changes that develop from the existence of diversity management. Achieving these best practices highlighted unique challenges for women and minorities.

### **Controversies of Workplace Diversity**

Workplace diversity carries many contentious meanings. Bleinjenbergh et al. (2010) framed diversity management, in the narrowest form, as the descendant of equal opportunity programs and traditional affirmative action. Organizational leaders have applied the focus on social groups through classifications (i.e., age, gender, ethnicity and race) to assist with recruitment practices and regulations. With a broader stroke, diversity management caters to inclusion of ideas and input from varied personnel, which brings

the importance of newer workplace complications to be reviewed. Fryer and Loury (2013) contended that affirmative action provides temporary reprieve and remains commonly debatable. Kurtulus (2012) claimed that affirmative action has two primary functions since being etched into federal law in the 1964's Civil Rights Act Title VII: (a) move women and minorities into employment, and (b) enable greater representation of these populations in the senior roles in organizations. Encircling evidence and the impact of the Glass Ceiling Act of 1991 demonstrated additional barriers for women and minorities.

**Glass Ceiling.** Hymowitz and Schellhardt created the term glass ceiling in a 1986 to characterize the challenges women faced while striving for the highest levels of the organization that appear in reach (Lockwood, 2004). After several decades, the glass ceiling term was widened to include minorities who aspired for executive positions. However, Wilson (2014) claimed that glass ceiling may be a myth as women make different choices, or lack experience, maturity or education (Frazier. 2005). Dowling (2017) identified additional factors that encompass this problem to include:

1. Personality- women were less ambitious and less assertive than male counterparts
2. Lack of female mentors and sponsors – With fewer women in executive roles, the opportunities for internal networks were smaller when compared to the “old boys’ network.”
3. Broad-based social roles deliberately excluded women from senior roles.
4. Parental roles- women have a disproportionate responsibility at home that clashed with the organizational culture and the demands for extended work hours (i.e., nights and weekends).



5. Career path- women were provided opportunities with staff related oversight but lacked the visibility in operational and general management functions that traditionally lead to the role of CEO.

**Sticky Flooring.** Viewed with complementarity to the glass ceiling, (Baert, De Pauw, & Deschacht, 2016; Bond & Haynes, 2014) sticky flooring perpetuated the parallels of low-wage jobs with low-status, which have restricted women and minorities to administrative roles. Sticky floors typified that women had lower probabilities of promotions in terms of four scales: (1) wages, (2) occupational level, (3) job authority, and (4) non-statutory benefits. Baert et al. (2016) furthered that the sticky floor concept prevented women and minorities from climbing the corporate ladder. Reuben, Sapienza, and Zingales (2014) linked men to boasting superior current and future performance trends, which favored men over women in hiring and placement decisions. BLS (2015) found that sticky flooring was well-maintained in the high – tech sector:

1. Asian and White women held roles in high-paying management, professional, and related occupations at the rate of 49% and 43%, correspondingly.
2. White non-Hispanic women held 47.5% of management and professional related jobs compared to Black and Hispanic women who held 35% and 26%, respectively.
3. Lower waged jobs in service-related occupations were occupied by Hispanic (32%) and Black (28%) in comparison to 17% for White non-Hispanic women. Women were more likely than Asian (21%) and White (20 %) to hold service occupations.

**Discrimination.** Fidan, Boztoprak, Usta, Sari, and Guzey (2016) reported gender discrimination was a barrier for women in top management roles. Varied factors contributed to gender discrimination: prejudice concerning gender, gender-role conformity, individual and organizational viewpoints. Traditional gender role portrayal of women as nurturers and caregivers at home discredited them for roles in reaching top management. Men were viewed as autocratic and display more aggressiveness while women were described as softer (Fidan et al., 2016), which projected men as more preferred for top management roles. Fraser, Osborne, and Sibley (2015) stated that views of women as less capable to lead than male counterparts obstructed gender equality in senior roles. Bartow (2016) found that women and minorities, though educated, attested to feeling unwelcomed in STEM roles and reported being pushed out due to gender and race biases.

**Subtle biases.** Bond and Haynes (2014) described subtle biases as an explicit expression of prejudice toward women and minorities. Biases can be in the form of micro aggressions where individuals are undervalued due to sociodemographic group associations, subtle rejections, or given dismissive looks. While these aggressions are difficult to prove, often they are initiated by dominant group members (Bond & Haynes, 2014), which results in deterioration of team functioning and even withdrawal from teams and roles altogether. Hiring practices of similar others may saturate the workforce with more of the same demographics already in the labor pool, which Williams (2015) signposted as the central biases causing women to leave STEM role: isolation among races and ethnicities were prevalent, (b) 75% of women claimed they received support from other women, (c) 66% of women had to prove worth repeatedly, (d) nearly 66% of

women with children reported competence was questioned, and (e) 34% of women were pressured to embody feminine role.

In a study of female scientists, Williams (2015) reported that 557 respondents completed surveys and 60 participated in interviews that revealed two-thirds of women declaring having to demonstrate competences and experiences over and over; 75% Black women reported this peculiarity. Furthermore, 41% of Asian women, but 75% of women overall, were pressured to play a conventionally feminine role. To that end, Black and Latina women were characterized as irate when behaviors recognized as stereotypical to females were abandoned. Moreover, 53% of women indicated receipt of backlash for being too outspoken.

For female scientists with children, Williams (2015) highlighted that nearly two thirds of women reported their obligations and capabilities were questioned; job opportunities diminished after having children. Though women claimed support from other women was present (75%), beliefs that inter-gender group competition was prevalent with 20% reporting they felt as if they were vying against women colleagues for “the woman spot” Williams (2015) declared that this resulted in isolation among the races and ethnicities with 42% of Black women, 38 % of Latinas, 37% of Asian women, and 32% of White women stated that in-group socialization had a negative impact on the competence of women. Insight into the theoretical framework of EI on workforce diversity and surrounding theories may shed further light on the social problem for women and minorities in high-tech.

### **Theoretical Framework**

Francis et al. (2003) postulated that organizational culture was the superior vena

cava to daily organizational effectiveness. Modern firms remain competitive with supporting the cultures and ethnic clusters that encircle teams. To meet and surpass the needs of customers, firms strategically recondition the organizational structure to bear a resemblance to a pre-emptive positioning of soldiers on the warfront. Collins (2001) and Francis, et al. (2003) presented that organizations undergoing radical change situate skilled human resources across a horde of demographic dimensions to serve in the right functions to accomplish goals.

In an environment where teams are engaged, the vision of the firm remained at the forefront. Leaders sifted through the talent review process at hiring and retention checkpoints and displace poor performers or bad actors. Collins (2001) theorized that a disciplined culture is consistent with performance and self-sufficiency, freedom and responsibility, thought and action leaders, *sans* bureaucracy and excessive controls. Examination of cultural diversity, diversity and inclusion, and network theory represent the funnel to the complex phenomena in today's work environment. At the narrowest level, emotional intelligence was tested in the study's sample to understand correlations to improved organizational outcomes.

### **Organizational Theory**

Organizational theory (OT) afforded a compact groundwork of an existence of a mutual belief system (Jones, 2013). Birken et al. (2017) posited that leaders restored descriptions, renovated controls and performed intermittent checkpoints for process improvements. OT is vital in the role as the helm of organizational development, enterprise, thinking, and revolution. Leaders who championed balance, stabilized emotion, and empathy for self and others, ensured skilled and assorted voices were

included to optimize job engagement (Ely & Thomas, 1996). Such leaders were apt in the understanding and collaboration with varied dimensions of local and national cultures (Hofstede et al., 2010).

### **Contingency Theory**

Lawrence and Lorsch (1967, 1969, and 1970) submitted that contingency theory upholds there is no one archetype for organizations to fix problems. Applying the hub and spoke model, contingency approach affords leaders with the flexibility to evaluate impacts and make decisions at the micro levels of the firm. Leaders unleashed decision-making strategies based on practitioner styles, intervention procedures, by the type of encountered problem. Kourteli (2000) posited that contingency theory required experts to know multiple if-then relationships based on different scenarios. With a premise that all organizational systems are open, contingency theory demanded that practitioners were aware of organizational structures and its enveloping events in a fast-paced setting. Scanning the environment using outdated techniques yielded inefficiencies and enabled reactive behaviors in an otherwise dynamic environment.

In today's cutting-edge style, leaders and members skilled in personal and social competences endorse quick-thinking, open-mindedness, and confidence to take risks (Goleman et al., 2013). Moreover, Goleman et al. (2013) argued that leaders who possess the self-awareness and social competence also embodied the intelligence, flexibility, and composure to be prepared mentally, physically, and emotionally for exigencies. A narrower examination of cultural diversity expanded on this concept.

## **Cultural Diversity**

Globalization was described as the integration of people and products to meet market demands (Hill, 2009). To achieve this end, cultures refrained from divergence as in the resemblance to Alfred Wegener's theory of continental drift or plate tectonics. Rather, cultural convergence enabled the formation of organizational values. Common beliefs were mobilized, and guidelines were monitored and enforced (Ely & Thomas, 1996; Hill, 2009; Hofstede, 1980). Political philosophy, language, education, economic factors, religion, and social structure influence cultural diversity.

Hofstede's (1980) explication into four dimensions provided a narrowed scope to assess impacts on organizations. Power distance included an exploration into physical and academic justifications behind unequal lines of power and wealth. Individualism versus collectivist, through Hofstede's lenses, reviewed whether a person elected to act independently or cooperatively in a team setting to accomplish goals. Uncertainty avoidance regarded to what extent a cultural group emphasized ambiguity. Individuals were focused on rules, regulations, policies, and benefits when placed in high uncertainty avoidance settings. Lower uncertainty avoidance cultures were branded as risk takers and demonstrated less emotional impedance to change. Masculinity versus femininity microscopically examined the affiliation between gender and work roles. For masculine cultures, sex roles were plainly demarcated, and outmoded male standards regulate cultural ideals. Across feminine cultures, sex roles were ill-formed (Hofstede et al., 2010).

Bleijenbergh et al. (2010) supported execution of company goals through diversity management. Diversity practices were the conduits to equal opportunities for

underserved groups responding to the age-old question of “What’s in it for me?”

Bleijenbergh et al. (2010) warned, however, that as members energetically engage, they, like leaders must endure the balance between social inequalities within and external from the firm. Leaders must access the horizontal and vertical talent alignment. Ely and Thomas’ (2001) integration and learning revitalized when human resources engaged in job shadowing, knowledge sharing, and job sharing with inter-team and inter-cultural activities.

Ely and Thomas (2013) theorized that integration and learning boosted transparency, countersigned knowledge sharing, and reinforced creative idea propagation, and reduced apathy due to variegated perspectives. Leaders measured success beyond mounting the numbers of diverse leaders in strategic, external facing roles, but by enriching the characteristics of attributes of the firm to be a renewed stratagem for change. While some aspects of cultural diversity contributed to the role of emotional intelligence in diverse leaders and the correlation to business outcomes, applying a patchwork approach with detailed inspection at a lower section of the funnel directed the present study to explore diversity and inclusion theory.

With great similitude, Goleman et al. (2013) postulated that great leaders look within to first set the emotional scales before interacting with others. To that end, a leader’s positive style created an atmosphere of complimentary cultural norms engulfed by respect and an “all-hands, all-hearts” approach to contribute to win-win outcomes. An investigation into diversity theory further develops the necessity for a sea-level comprehension to the role of emotional intelligence.

## **Diversity and Inclusion**

Organizational diversity and inclusion of all perspectives bolster Hsu and Fang's (2009) identification and incorporation of an organization's intellectual capital, which is invaluable to long-term profit and performance. Hofstede's (2001) study delved into cultures and organizations using a four-branched model that inspected individualism - collectivism, power distance, uncertainty avoidance, and masculinity and femininity. Hofstede (2001) examined cultural principles about emotions, attitudes, behaviors, and job performance across nations and intra-organizations. The goals of that study were centered around the ethical loops that are the cornerstone of national societies, explanation of different national cultures and recommendations for management, cultural root analysis and examination into stereotyping and language variances (Cox, 1993; Hofstede, 2001).

Awino (2013) identified age, personality, economic background, sexual orientation, race, gender, education, experience, norms, beliefs, demographic indicators, disability status, and ethnicity as elements of diversity. Gonzalez (2014) reviewed the themes adjacent to diversity and organizational tasks for retaining human capital and likely harmonizes with Steele and Derven's (2015) findings that modern firms need diversity and inclusion (D & I). These paralleled to the earth's axes - dependence on North and South poles or the symmetrical nature of the Yin and Yang characteristics of Chinese principles.

Cole and Salimath (2013) and Yerkes (2010) approved that diversity and inclusion joined by workplace employment patterns may contribute to closing the gap with gender, race, ethnic, and disabilities at the superficial levels of the organization. To



further support, Bleijenbergh et al. (2010) alluded to the benefits of diversification placing it as a necessary additive and influencer to improved inter-team decision making. Acknowledgement of an underserved diverse leadership group bolsters diversity identity and may reduce threats to internal legitimacy and authenticity.

Verbos and Humphries (2012) contended that leaders exercise immense levels of care to avoid “othering.” Underrepresented groups were approved and given inimitable identifiers to circumvent the non-male or non-white dimensions. Leaders realized the benefits of a breathable atmosphere, activities with purpose and a paradigm kaleidoscope increased talent acquisition, talent retention, mentoring, coaching, internetwork building, and succession planning. Francis et al. (2003) and Olivares (2013) advocated for a fusion of diversity with inclusion by plotting a set ground rules where discernments meet reality.

Participative management solidifies when leaders involved members in decision and sense-making to arrive at innovative solutions, augmented outputs, and financial dexterity. Cole and Salimath (2013) posited that fluid, dynamic groups of events, activities, and situations engulf transforming organizations. As firms identified then shaped their identities, the emphasis was placed on norms, values, practices, beliefs, renewed philosophies, and a unified cultural approach to a shared vision. Equipoise was integral to the firm’s identity and long-term success, which required diversity and inclusion to exist far subterranean and wider than at the surface level. Deep-dive integration and leader-member embeddedness in the firm’s policies, values, ethical models, and objectives were necessary (Cole & Salimath, 2013).

When firms renovate as in a case of a privately-held to a publicly traded transition, business reengineering, or internal restructuring, leaders remodel internally to

construct a well-oiled structure equipped with the right resources, infrastructure, and leadership to impact future growth. Amidst the transformation, firms may evaluate the leadership team to resemble distinct demographic indicators of a diverse firm. These demographic pointers serve as a foundation for the formation of a global footprint to meet customer requirements with diverse leadership and multicolored ideas (Saji, 2004). Through delineation of age, gender, sexual orientation, and education, the leaders recognize the value of shared voices, which generate innovative ideas to expeditiously bring solutions to market (Olivares, 2013; Saji, 2004; Yerkes; 2010). Beyond the constructs of cultural diversity and diversity and inclusion, network theory further illustrates why additional theories and concepts support an assorted framework.

### **Network Theory**

George Simmel (1955 trans.) described network theory as the wisdom and balance compulsory for leaders to evaluate connections with people, procedures, and purposes. Network theory provided the substance for interpersonal relationships and interconnected humans with technological structures within a firm or an entire industry. Isolated members of an organization may possess varied appreciation levels towards a goal and shared a different view from those who worked communally on tasks. Network theory was a practical methodology for modern firms to improve both leader and member trust. Simmel's theory collaborated within leader-member dyads and worked in concert with other theories to explore the role of emotional intelligence in diverse leadership and its effect on business outcomes. To assist, the examination of emotional intelligence construct was vital to the present study's purpose and resolution to answer the research problem at hand.

Empathic teams fostered team spirit and established healthy working relationships that enabled goal attainment. Furthermore, empathic teams shared camaraderie that underpinned team effectiveness Goleman et al. (2013). Teams brainstormed collectively to evaluate issues and identified holistic solutions for enterprise working groups. Team members applied listening skills. Each member was responsible for keeping the team on track with critical milestone dates. Examining the components of emotional intelligence shed additional light into the benefits of workforce diversity. Jacobs et al. (2012) postulated that no one cure-all theory existed. Challenges remained prevalent in both internal and external milieus suggestive of multiple factors, ideas, theories, and techniques were to be deployed by leaders.

### **Contribution to Knowledge**

In an ethnically diverse labor force, considerations were made regarding White, Hispanic, Asian, and Black to avoid discrimination, glass-ceiling, “sticky-floor,” skill-evaluative predispositions, prejudice, micro aggressions, stereotypical-based expectations, and social biases (Bond & Haynes, 2014). Leaders and practitioners stimulated new standards to support underrepresented populations in executive roles at top, publicly-held technology and solutions-based firms in the U.S. The study attempted to contribute knowledge by identifying new talent acquisition, placement, and retention strategies for diverse leaders skilled with emotional intelligence. Firms undergoing transformation chose to reposition existing personnel or hire new talent to accomplish tasks (De Clerq et al., 2014). Understanding which leader or team member possessed higher emotional intelligence was an impetus for increased workforce diversity to indorse benefits for firms (Chang et al., 2012). Placement of decision makers who channeled

positive relations and behaviors across the firm was a critical mechanism to organizational effectiveness.

Bradberry and Greaves (2009) delineated that individuals who incorporated self-awareness and self-management as part of personal competence strived to manage emotions in demanding situations. Such individuals comprised 83% of top performers. Social competence included social awareness and relationship management. Bradberry and Greaves (2009) found that individuals with this foundational skill understood and perceived emotions of others through observation and social interaction, which led to improved communicative strategies, conflict resolution, and task attainment. If evidence existed that women and minorities skilled in EI could significantly influence positive business outcomes on workplace diversity, organizational practitioners and leaders will have newer techniques to address the gap of underrepresentation in these populations in senior roles in the high-tech sector.

**Extension of theory and practice.** This study attempted to extend the theory that diverse leaders who possessed emotional intelligence and influenced teams for advanced performance should be widely dispersed at higher levels of the organization. Sabharwal (2014) posited the relationship between diversity management and inclusion controlled the performance in the workplace. Sabharwal advocated for firms to leverage open communication and collaborative discussions that contributed to organizational change. Organizational Inclusive Behaviors (OIB) provided a portal for firms to assess team identities. Understanding OIB offered organizations the foundation to engage teams with inter-team activities and successful outcomes. Leaders who assimilated OIB across team

members allowed annexation of varied perspectives intercompany policies, procedures, and practices that promoted growth.

Improvements to organizational development techniques where employees were engaged, and their feelings were understood, fortified the value found in Gestalt Therapy, which encouraged awareness of the firm's emotional intelligence strengths and opportunities. Bradberry and Greaves (2009) submitted emotional intelligence was the necessary factor to connect the workforce to increased performance. In a study with half of a million front-line employees, senior executives, and managers from multiple industries on six continents, results showed that middle managers possessed the highest levels of emotional intelligence at 77% (Bradberry & Greaves, 2009). For directors, the emotional intelligence scores were 75%, vice presidents the scores were 73%, and chief executive officers' scores were 71%. Improved effort appeared to be needed to ensure that diverse leaders who possessed emotional intelligence were strategically placed throughout the firm to create a task force that outperforms.

Goleman (2013) explained that 80% of adult 'success' was derived from emotional quotient and with 85-95% leader's success was attributable to emotional intelligence, leaders at modern firms should press forward to understand how to identify these leaders then position them for the firm's greatest success. To close the gap in the literature and to gain a closer comprehension to the social problem, this quantitative descriptive-comparative study demonstrated that diverse leaders with increased emotional intelligence competencies significantly contributed to business outcomes. An increase in this population at senior levels of top, publicly-held technology solutions-based firms in

the U.S. high-tech sector signaled an added difference to the firms' organizational culture, primal leadership, and preparedness for a diverse American workforce.

### **Methodology Literature**

This quantitative descriptive-comparative study investigated the relationship of emotional intelligence on workplace diversity in women and minorities in senior roles at top, publicly-held technology and solutions-based firms in the U.S. The aim of the study included determining the potential strength between the independent variable, emotional intelligence; dependent variables include workplace diversity, gender, ethnicity/race, or state as taken from the nominal dependent variables, White, Hispanic, Asian, and, Black. The value of an objective, numerical data-driven, theory-first mechanism is the cornerstone of a quantitative approach, which can be standardized and summarized for analysis and interpretation (Neuman, 2011).

### **Research Design Literature**

Burks (1926), Meehl (1970), and Spector, Zapf, Chen, and Frese, (2000) defend operationalization of the descriptive-comparative design as it attests to the strength of the researcher's predictability (positive or negative) of one variable over another. Leedy and Ormrod (2013) and Neuman (2011) outlined that covariance between two data points or characteristics are achieved through a descriptive-comparative coefficient. This makes for a firm case in support of this study with 5 research questions and related hypotheses where emotional intelligence scores from four employee groups are examined using classifications such as: (1) gender, (2) ethnicity, (3) race, (4) work title, and (5) work region.

Descriptive-comparative design was befitting because answers to confirm or disconfirm the strength or direction of the relationship between the independent and dependent variables were likely to be found. This quantitative descriptive-comparative study included multiple dimensions based on the identified independent and dependent variables. Hofstede et al. (2010) posited that dimensions and correlations were bundled and enabled researchers with insights to insulate from potential causes while providing assurances in predicting the relationship between the variables. Correlation coefficient used endpoints of -1.00 and +1.00. Christensen et al. (2014) wrote that the farther the correlation is from zero, the stronger the strength. Positive scores move in the same direction across variables, while negative scores mean the variables move in opposite directions or a converse covariance. Data linearity were prerequisites.

### **Conclusions**

Robust quantitative studies were centered on the research questions and hypotheses. From objective and deductive standpoints, researchers move from a broader shell to a narrowed scope of the problem at hand. Once the problem was delineated, the research questions steered the method and outlined the design, which was linked to the study's purpose. In applying both theoretical and conceptual framework, several theories and concepts were developed.

Douglas McGregor (1960) conveyed insight to the harmony between individual and organizational needs. Above and beyond the description, this theory countersigned leader- follower engagement through talent acquisition, retention, strengthening, and laddering at a firm. Fisher et al. (2005) theorized that organizational functions improve

when skilled personnel were appropriately staffed in the right roles throughout the organization.

Similarly, Paul Lawrence and Jay Lorsch (1967) studied differentiation and integration in organizations. Contingency theory included multiple prospects or attributing reasons that may contribute to a firm's success. The argument: there was no single archetype to be deployed to attain set goals. Leaders who positioned this theory sought to understand the dissimilarities across the organization and the value between institutions and the environment. Leaders investigated the different environmental factors that drive change in their firms. To accomplish goals and a close fit, leaders used a customized design to address internal and external forces of the organization. Changes occurred rapidly forcing firms to respond to changes in technology, politics, debt reduction or elimination, and organic growth.

Diversity and Inclusion (D & I) approaches provided a balanced scorecard to leadership, quality decisions, and organizational prowess. Testing the theories helped leaders to disentangle the web of benefits for D & I. Challenges existed for diverse teams who endeavored to meet internal consensus to augment customer satisfaction. Leaders maintained persistence to assimilate varied perceptions that undergird, long-term growth, healthy competition in the marketplace to sustain organic growth irrespective of the leader style as transactional or transformational (Awino, 2013; Gonzalez, 2014; Payne, McDonald, & Hamm, 2013; and Steele & Derven, 2015).

The role of emotional intelligence appeared to endow benefits for diverse leaders who pursued outcomes for increased workplace diversity. Altogether, these vignettes contributed to a series of orchestrated steps to pursue the answers into the role of EI in



diverse leaders and the correlations to those attributes and business performance indicators. Bradberry and Greaves (2009) theorized that diverse leader EI might confirm increased job engagement, generating higher cost-effectiveness and success for the firm. To this end, leaders who promulgated EI traits and attributes eradicated organizational barriers, consolidated functions, and electrified teams.

### **Chapter Summary**

The literature review provided a background to workplace diversity factors as the independent variables and the emotional intelligence components as the dependent variables. Additional theories and concepts were developed as part of the theoretical framework of the study. Summaries of relevant studies, recent findings, and gaps in the literature were explored. Clarke and Polesello (2017) reported positive correlations between emotional intelligence and workplace diversity. Mayer and Salovey (1990) also indicated that leaders and members with positive moods have the capabilities to collaborate in team settings, process information with ease, and extend creativity though not all individuals have the same distribution of emotional intelligence skills or expert level. Emotional intelligence and diversity skills co-scribed necessary daily competences for managers and leaders to thrive in today's work environment. Fostering and promoting a diverse workplace environment may increase and sustain the organization's competitive advantage (Abrams, 2013) while improving the firm's image as a representative to the employees, customers, and suppliers. Still, researchers argue the importance for firms to understand the risks of workplace diversity and beseech the enforcement of diversity management. In the presence of employee safety and inclusion, the meaningfulness of one's role, and psychological availability, employees are engaged

due to inherent workplace behavioral qualities of emotional intelligence, which may improve team performance and camaraderie among constituents. Supporting evidence for a descriptive-comparative study were analyzed to show that data linearity were preconditions to determining strength and direction of the correlation between emotional intelligence, workplace diversity in women and minorities. Chapter three incorporated the descriptions of the research methods and design for this study.

## Chapter 3

### Research Methodology

The purpose of this quantitative descriptive-comparative study was to investigate the relationship between emotional intelligence and workplace diversity in White, Hispanic, Asian, and Black employees in senior roles in the high-tech sector at top, publicly-held technology and solutions-based firms in the U.S. Previously, Chapter 2 included the literature review relevant to the present quantitative study and supported the historical content, current findings of emotional intelligence and controversies surrounding the nature of this construct. As it pertained to the high-tech sector, workforce diversity and women and minorities, evidence was provided indicating the strength of EI in these variables countersigning the necessity for a study in this milieu to understand why these populations are underrepresented in senior roles in the high-tech sector.

Chapter 3 contained the summary of the applied method and the appropriateness of the chosen descriptive-comparative design, which aimed to highlight the relationship between emotional intelligence (EI) and workplace diversity in women and minorities at top, publicly-held technology and solutions-based firms in the U.S. The goal was to develop a predictive model to support placement for underrepresented diverse leaders skilled in emotional intelligence in management and senior roles. Also, the chapter encompassed the reason, discussion, and defense for the combined utility of the multivariate analysis of variance (MANOVA) statistical procedures. Post hoc analysis was also conducted to validate MANOVA results. The description of the population and the sample, accompanied by the method for data collection, considerations to the internal

and external validity problems, and threats to validity, data analysis, and a chapter summary were included.

### **Research Method and Design Appropriateness**

The central motivation for the research study was to examine the relationship of emotional intelligence and workplace diversity in women and minorities at top, publicly-held technology, and solutions-based firms in the U.S. White, Hispanic, Asian, and Black – were the four employee groups. Women and minorities are traditionally underrepresented in senior roles in the technology sector (BLS, 2015; EEOC 2016). The applied methodology in the quantitative study was a descriptive-comparative design, which Black (1999) defined as the correlations of two or more variables identified as characteristics in an experiential phenomenon to highlight the prevalence of statistical differences within subjects. Quantitative research provided an approach to test theory deductively, measure relationships between variables, and to statistically quantify collected data (Simon, 2006). Numeric data were gathered, analyzed, and compared as required for a quantitative descriptive-comparative study (Black, 1999). Multivariate analysis of variance (MANOVA) tests were applied to evaluate and compare the group means, which were thereafter verified by post hoc analysis.

### **Design Appropriateness**

A descriptive-comparative design was appropriate for the study because a non-experimental causal-comparative design enabled identification of the relationship among the variables. Descriptive-comparative research studies contain: (a) no manipulation of the predictor variable, (b) no random assignment to groups, and (c) a comparison group

(Cantrell, 2011). Gender, ethnicity, race, work title, and work region were listed as the independent variables and emotional intelligence factors were the dependent variables.

Descriptive statistics were generated for each employee group then compared to determine if any statistical differences existed. General information from each group was reported because the aim of descriptive statistics was to present meaningful statistics and provide sense-making about numerical results (Black 2011). Shadish, Cook, and Campbell (2002) acknowledged that a between-participant approach was necessary for reviewing differences between participants at a single point in time. Descriptive statistics steered a path for researchers to establish the value behind the measures of central tendency, which included the process to define whether the frequency was standard or nonstandard performed through the interpretation of the means, modes and medians. The measures of the spread offer a summary of how far the scores were from the mean (Leedy & Ormrod, 2013).

Multivariate analysis of variance (MANOVA) was principally suitable when the researcher has collected an arrangement of dependent variables to support a multivariate hypothesis and the difference in two or more vectors of means are tested (Field, 2013). This system was "loosely defined as a collection of conceptually interrelated variables that, at least potentially, determines one or more meaningful underlying variates or constructs" (Huberty & Morris, 1989, p. 304). MANOVA was practical for this study because the researcher tested for differences in the directions of means. Simultaneously, the investigation was completed to discriminate the significance level of a factor, which thwarts the necessity for multiple independent tests. Application of a ratio of a matrix, the MANOVA enabled the comparison of systematic and unsystematic variances

between the dependent variables (Field, 2013). Pillai-Bartlett Trace, Hotelling's  $T^2$ , Wilk's Lambda, and Roy's largest root were four applied statistics, which were followed by post hoc analysis.

A qualitative design was inappropriate because it utilized researcher reflexivity, subjectivity, holistic accounts, participant meanings, and varied sources for data collection, which were used to interpret an event or central phenomenon (Creswell, 2014). Researchers observed participants in natural settings, reviewed documents and conducted interviews to gain the perspective on human behavior, norms, and relationships. An experimental design would create misalignment because random assignments were not possible. The descriptive-comparative design was reinforced as suitable because the study comprised of several comparison groups who were exposed to the predictor variable (i.e., gender, ethnicity, race, work title and work region), then each group's emotional intelligence score was measured using five chief components: (a) perception, (b) expression, (c) interpersonal, (d) decision- making, and (e) stress management to determine whether any main effects or significant interactions existed (Black, 1999; Cantrell, 2011; Field, 2013).

### **Research Questions/Hypotheses**

This study included eleven research questions and related premises. Correspondingly, each research question had a pairing of a null hypothesis, which indicated there was no difference between the variables. An alternative hypothesis states there was a substantial relationship between the variables that did not occur by coincidence (Black, 1999). Work titles for participants included manager, director, vice-president, senior vice-president, or executive vice president, president, chairman, chief

technology officer, or chief executive roles. Populations representative of women and minorities from concentrated regions of high tech (i.e., CA, TX, NY, PA, and FL) were involved (Census Data Program, 2014; EEOC, 2016). Table 6 illustrated measurement of the variables to fortify answering the research questions.

Table 6

*Operational Model of Variable Types*

Independent Variables (IV)	Hypothesis	Dependent Variables (DV)	Data Source
Group (Women, Hispanics, Asians, Blacks)	H1	EI awareness scores	EQ-i 2.0 Survey Demographic Form
Gender (male versus female)	H2	Perception Expression Interpersonal Decision-Making Stress Management	
Ethnicity (Hispanic versus Asian)	H3a		
Race (Black versus White)	H3b		
Job title (manager and higher)	H4		
Work Region (CA, TX, NY, FL, PA)	H5		

## **Research Questions and Hypotheses**

RQ1. What statistical differences, if any, exist in the emotional intelligence (EI) scores by group (i.e., White, Hispanic, Asian, and Black), at top, publicly-held technology solutions-based firms in the U.S?

H1<sub>0</sub>: There is no statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

H1<sub>1</sub>: There is a statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

RQ2. What relationship, if any, exists between EI and workplace diversity by gender (i.e., women versus men) classification at top, publicly-held technology solutions-based firms in the U.S?

H2<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

H2<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

RQ3. What relationship, if any, exists between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) and race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S?

H3<sub>0a</sub>: There is no statistical difference in the relationship between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) classification at top, publicly-held technology solutions-based firms in the U.S.



- H3<sub>1a</sub>: There is a statistical difference in the relationship between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) classification at top, publicly-held technology solutions-based firms in the U.S.
- H3<sub>0b</sub>: There is no statistical difference in the relationship between EI and workplace diversity by race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S.
- H3<sub>1b</sub>: There is a statistical difference in the relationship between EI and workplace diversity by race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S.
- RQ4. What statistical differences, if any, exist in the emotional intelligence (EI) scores by work title (i.e., manager or higher) among women, Hispanic, Asian, and Black at top, publicly-held technology solutions-based firms in the U.S?
- H4<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by work title (i.e., manager or higher) among women and minorities at top, publicly-held technology solutions-based firms in the U.S.
- H4<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by work title (i.e., manager or higher) among women and minorities at top, publicly-held technology solutions-based firms in the U.S.
- RQ5. What relationship, if any, exists between EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) classification at top, publicly-held technology solutions-based firms in the U.S?
- H5<sub>0</sub>: There is no statistical difference in the relationship between leader EI and

workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top, publicly-held technology solutions-based firms in the U.S.

H5<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top, publicly-held technology solutions-based firms in the U.S.

### **Population and Sample**

The context of the study included the location, environment, or setting adjacent to the groups in this present study. Grisham (2015) cited that the U.S. employs 6.5 million technical workers. Firms such as Apple, Google, Hewlett Packard, IBM, Amazon, and Microsoft rounded off the top five of 20 on the Fortune 500 listing for top technology companies in the U.S. for the same timeframe. The population represented the entire body of people who represented (Howell, 2004), an infinite amount of data to collect and analyze. Sampling was an appropriate measurement for researchers to draw inferences and generalizations on the broader population (Neuman, 2011). The non-random sample in this present study consisted of current or former personnel who are based in the United States and worked in management roles at a technology and solutions- based organizations.

### **Population Description**

The US Census identified workers as part of the US civilian labor force, which represented full-time or part-time employees above 16 years of age and work at least 35 hours per week for 50 to 52 weeks (Census Data Program, 2014). The civilian labor force contains workers across a myriad of occupations including, management and professional, service, sales and office, farming, fishing, forestry, manufacturing,

construction, transportation, and production. EI scores for each sample group were calculated. Group means were compared to rank EI levels. Gender, ethnicity, race, work title, and work region were used as predictor variables to assess the correlation to outcome variables.

**Justification.** The rationale for selecting this population rested on the possible diverse leaders that typically do not occupy executive level roles in major corporations. Elliott, Leck, Rockwell and Luthy (2013) emphasized the topic of minority representation at top levels has been long debated by policy makers and researchers. Still, gender, and racial-ethnic groups are underrepresented. As an instance, Hispanic Association on Corporate Responsibility (2016) reported that Latinas represent less than 1% of executives in the United States. In 2017, Catalyst (2017) reported fewer than 15% of all board seats in the Fortune 500 companies were occupied by minorities, including Hispanics/Latino(a)s, African Americans/Blacks, and Asian/Pacific Islanders. Van Rooy, Alonso, and Viswesvaran (2005) found that females, Blacks and Hispanics reported a higher EI score than males or Caucasian in a study that used the unidimensional 33-item Emotional Intelligence Scale (EQS).

**Sample Description.** Power analysis integrated a small effect size, a power of .80 (Cohen, 1988), a confidence interval of 5%, and the confidence level of 95% against five predictors and five outcome variables, which yielded a sample size of 157 persons. This study included completed survey responses from 330 participants and achieved generalizability for the four employee groups. The focus of this quantitative descriptive-comparative study centered on participants who worked in managerial

roles and higher at top, publicly-held technology, and solutions-based organizations and were titled as a supervisor, manager, director, vice president, senior vice president, executive vice president, president, chairman, or chief executive officer. Participants included White, Hispanics, Asians, and Blacks. Since this present study employed a descriptive-comparative design, participants who were male and female were included. Data were collected using the Emotional Quotient Inventory 2.0 instrument, which supplied 133-item survey questions for each respondent to complete. Participants provided gender, ethnicity, race, work title, and work region via a demographic form as shown in Appendix C.

To successfully perform comparative analysis for race, male and female participants were invited to participate using the advertisement in Appendix D. The sample population was sourced from social media platforms (i.e., Facebook and LinkedIn) as shown in Appendix E. Managerial employees who matched the job titles and worked primarily in California (14.9%), Texas (10.0%), New York (5.7%), Florida (4.9%), and Pennsylvania (4.0%) were eligible to participate. The Census Data Program (2014) indicated that high-tech traverses several sectors and may be concentrated in these regions. Age, salary, or other demographics (i.e., educational level) were excluded as factors in this study.

**Sample Data Assumptions.** Nominal data identified types of objects or subjects (Christensen et al., 2014). Nominal data applied to the categorization for each employee group. However, these numbers were used as markers and did not represent quantity. Leedy and Ormrod (2013) posited that nominal data tolerated no significance to ranking among the groups. Additionally, nominal scales sanctioned calculations of mode and

percentage values appropriate to the descriptive statistical references in this study.

Pearson's  $r$  determined normality, linearity, absence of outliers and homoscedasticity (Leedy & Ormrod, 2013). Assumption was that scores ranged within -1 and +1, which determined a positive or negative strength across independent and dependent variables.

**Sampling Method.** A demonstrative sample fits the characteristics of persons to be studied. Proportional quota sampling was used to divide groups based on five strata: gender, ethnicity, race, work title and work region. Proportional quota sampling enabled representation of the top technology regions (i.e., CA, TX, NY, FL, and PA) and solved for heterogeneity in the population (Evans, Mkpandiok, & Okonna, 2017). The proportional quota sampling technique supported a balanced number of cases within the categorical or quantitative variables. Sampling method included the proportionate quota sampling to allocate greater than the minimum required participants into each group to support the power of .80.

**Sampling Frame.** Four groups were used in this study: White, Hispanics, Asians, and Blacks. While Hispanics and Asians included a lower number of participants in comparison to Whites and Blacks, all groups met the minimum number of participants to support power analysis of .80 (Cohen, 1988). For each classification, females and males comprised the gender classification; Hispanic and Asians comprised the ethnicity group; and White and Black denoted race. White males were included for comparative purposes in gender and race classifications. Sedgwick (2012) described this sampling method aimed to be representative of a designated population. Work titles included manager, director, vice-president, senior vice-president, executive vice-president, and chief executive officer. Technology epi-centers included technology workers primarily

in CA, TX, NY, FL, and PA (Census Data Program, 2014; EEOC, 2016). So, 75% of the sample was recruited from high concentration and 25% from other regions (Nikfarjam, Shokoohi, Shahesmaeili, Haghdoost, Baneshi, Haji-Maghsoodi, & Tarjoman (2016).

The Emotional Quotient Inventory 2.0 (EQ-i 2.0) instrument was used to measure the emotional intelligence in eligible participants who were 18 years or older, supervisors or higher employed at publicly-traded technology organizations from concentrated tech regions such as CA, TX, NY, FL, and PA (Census Data Program, 2014), and identified as women or minorities on their demographic forms. The EQ-i 2.0 instrument measured five factors of emotional intelligence scales consisting of: (a) self-perception; (b) self-expression; (c) interpersonal; (d) decision making; and (e) stress management (Stein & Bock, 2011).

**Ethics.** Ethical concerns about social science data are centered on what data to collect while striving to diminish the risks to human subjects (Einwohner, 2011). Colnerud (2013) shared that ethical challenges may persist even at the formation of the research problem, or at identification of themes. Researchers are to be versed in ethical principles, upholding respect for persons, protection of confidentiality and privacy of human subjects. When applicable, informed consent should be safeguarded. Cone and Foster (2006) stated that informed consent, protecting data, debriefing participants, and obtaining approval from the Institutional Review Board (IRB) are all crucial aspects of the research method segment.

### **Informed Consent**

In adherence with the research study classification as exempt, no informed consent forms were used for this quantitative descriptive-comparative study. Use of

informed consent would prevent anonymity linking personal identifiable information to the participants in this study. An advertisement used to solicit potential study participants provided insight to the study's purpose and methodology to maintain anonymity. Study participants who demonstrated willingness to complete a survey were assigned a six-digit identification code. Participant demographics was captured directly or indirectly.

Directly, participants completed a demographic form (See Appendix C), which encompassed gender, ethnicity, race, work title, and work state. Indirectly, no demographic forms were supplied when participants' social media profiles displayed demographic details (i.e., gender classification, documentation of work state, work title, or association with a community by race, ethnicity or profession). The coded credentials prevented any personal identifiable information from being recorded or stored.

Anonymity was maintained using the six-digit code for each participant. The same code designated for each participant's demographic data were linked to the individual survey for consistency and compliance.

**Confidentiality.** Upholding the participants' rights to confidentiality and privacy is a topmost principle to research (APA, 2002; 2010). Participants' information was coded by numbers or other relevant cataloging. Identity-specific information was limited to classifying participants by group (i.e., gender, race, or ethnicity). The researcher maintained no personal access to confidential participant information.

### **Instrumentation**

The instrument to measure emotional intelligence in this present study was the Bar-On's (1997) Emotional Intelligence Quotient Inventory (EQ-i 2.0) later enhanced by Stein and Bock (2011). Multi-Health Systems, Inc. (MHS) granted permissions to use

the instrument as a researcher, which aided a reduced price for the cost of each survey (See Appendix A). The survey encompassed 133-items for five components to measure participants' emotional intelligence: (a) self- perception; (b) self-expression, (c) interpersonal; (d) decision making; and (e) stress management. The EQ-i 2.0 provides global, business-centric language with relevant vocabulary for communicating with diverse audiences. Survey questions were brief, yet wide-ranging, which endorsed participants' comprehension and faster replies (See Appendix A).

The EQ-i 2.0 instrument was based on the original model by Reuven Bar-On (Bar-On, 1997). The EQ-i 2.0 was an enhanced version of the EQ-i 1.0 model, adapted norms precise reliability and validity studies, and included changes to assessment items. This model comprised of a psychometric assessment used to measure emotional intelligence on a global scale. MHS (2011) noted that over 1,000,000 people in 66 countries have taken the assessment over the past fourteen years. Researchers have studied human performance in the workplace to understand and predict leadership and organization development, selection, team building, and executive coaching.

The EQ-i 2.0 instrument accommodated seven choices for setting norm regions, which represented groups from across the globe to compare results from study participants. The norm region selected for this quantitative descriptive-comparative study was U.S./Canada. The study participants were technology workers in managerial positions at publicly-held organizations in the U.S. Participants were compared at a professional norm level, which is representative of factors such as age, education level, gender, ethnicity, working and non-working individuals (MHS, 2011). This study relied



on the meaningfulness of professional norm data pertaining to gender, ethnicity, and associated post-secondary education generally related to managerial roles.

The EQ-i 2.0 instrument provided adaptability in utilization and applications (MHS, 2011). In workplace settings, organizational leaders used the insights to acquire personnel with optimal emotional fitness, which when combined with other assessments and interviews enhanced the dependability and efficacy of job recruitment and selection. To examine individual and group development, leaders used the EQ-i 2.0 tool to measure the correlation and effectiveness of organizational change or restructuring through identifying and leveraging individual strengths (MHS, 2011).

### **Reliability and Validity**

Reliability and validity statements were keystones to social research and the scientific method. Researchers rely on such statements to understand how conclusions were formed for an applied instrument, ascertain challenges, identify concerns with associated participant groups, and assess limitations encountered by fellow researchers and scientists. Reliability was present when significant findings were repeatable and produced the same results regardless of location, individual, measurement setting or location (Kaplan & Saccuzzo, 2005; Olsen, 2012). Validity requires consistency in meanings and stressed that scores in one measure applied to another (Cone & Foster, 2006). The EQ-i 2.0 assessment tested with over 19,000 people across the globe and accounted for gender, age, cultural, career, and environmental factors (MHS, 2011). This tool has established a high consistency validated through confirmatory factors and discriminatory analyses (Stein & Bock, 2011),

## **Internal and External Validity**

Research methodology, design, data collection methods and instrumentation were factors that influence in internal validity (Neuman, 2013). When the independent variable predicted the outcome variable, then internal validity was present. Confounding variables of artifacts were nonconformities from the internal validity and a sign of a potential threat. Neuman (2013) acceded that external validity indicated the degree to which a study was generalized. Studies that lack external validity were constrained by the context and setting included in that study, which prohibited broader statements to be made for other studies with similar variables and demographic populations.

**Internal Validity.** Christensen et al. (2014) defined internal validity as the projected truth about implications about cause and effect relationships. The study had internal validity confirmed by the presence of a relationship between the variables and a low level of error in statistical evidence. Instrument corroboration was valid for measuring the effect of the independent variable on the dependent variable. The EQ-i 2.0 has been proven to be valid to predict job performance and leadership proficiencies in the workplace (MHS, 2011).

**External Validity.** The generalizations that were made on the study support external validity. Campbell and Stanley (1963) claimed the degree to which claims about cause and effect relationships exist pertained to external validity. During this inferential process, generalizations were likely that White, Hispanic, Asian, and Black employees in dissimilar roles, or at various levels of an organization (apart from technology and solutions-based firms in the U.S., as in this present study) have comparable results when studied in multiple milieus and at separate times. From an external validity perspective,

researchers take into consideration the following factors: (a) population generalization, and (b) reactivity or the Hawthorne effect.

**Threats to Validity.** The seminal works of Donald Campbell and Julian Stanley charted the threats to internal validity common to a quantitative descriptive-comparative study: selection interaction effects, history effects, attrition, maturation, instrumentation, and statistical regression (Campbell & Stanley, 1963). Selection interaction occurred when one group had a higher mortality rate than another. Due to the nature of this present study, this threat was increased for Blacks (Population Reference Bureau, 2002). Due to ‘immigrant advantage’ associated with healthier and more optimistic individuals, mortality rates for Hispanics and Asians were reduced (Population Reference Bureau, 2002). History was an influence in the data collection method and impacted the results when data were collected over a widespread period. For this study, differential history was a potential threat as not all groups experience discrimination, stereotypes, prejudice, or ethnocentrism, which were common barriers to workplace diversity (Patrick, & Kumar, 2017). Attrition or mortality includes the drop-out rate, which were diminished as participation in the present study designated employee group participants from specific regions of the high-tech sector enabled anonymity. Maturation referred to the individual’s biological and psychological changes over time. Participants may have encountered natural changes that predicted EI and workplace diversity. Threats to validity for instrumentation occurred when scores taken from a measure had deficiencies in levels of consistency or low reliability. This risk was lessened in the present study due to the overall number of completed assessments.

By examining the results, Shuttleworth (2008) established that external validity was evaluated by causal relationships and whether generalizations can be made from the study. The generalizations from the study refer to White, Hispanic, Asian, and Black employees in senior roles at top, publicly-held technology and solutions-based firms in the U.S. A duplication of the study using mid-level managers or supervisors in another setting could provide for generalizations. Threats to validity were limited because the researcher validated the collected information for accuracy and relevancy (Shuttleworth, 2008, Shuttleworth, 2009). Time to completion, inconsistency index (IncX), positive and negative impression, response to item 133, and omitted items were validity indices (MHS, 2011). MANOVA and post hoc statistical techniques protected against Type I errors that would have likely occurred if multiple ANOVA's were conducted individually and disclosed differences not discovered by ANOVA tests (Donnelly, 2007).

### **Data Collection**

The research design comprised of sampling a diverse segment of the population of technology workers to respond to the listed research questions for this quantitative descriptive-comparative study. Ahead of data collection, permission was attained from the following organizations: (a) Multi-Health Systems Inc. (MHS) to use the EQ-i 2.0 instrument to measure emotional intelligence; and (b) Organizations or special interest groups provided in Appendix 8. The chief social media outlets for this study included: (a) Facebook; (b) LinkedIn; and (c) University of Phoenix Connect Communities. Permissions were granted for an initial post followed by one reminder post at a three-week interval.

An advertisement was posted to the social media pages for special interest groups. The advertisement (See Appendix D) listed the study's purpose and the eligibility criteria, which comprised of participants who were at least 18 years of age and held managerial positions at publicly-held technology or solutions-based organizations in the U.S. Data pool solicited participants from U.S. regions with high concentration for technology workers primarily employed in designated states (i.e., CA, TX, NY, FL, and PA) (Census Data Program, 2014). Anonymity was signposted. Participants were asked to allocate 20 minutes to voluntarily complete the survey on emotional intelligence in one, uninterrupted setting (Stein & Bock, 2011).

Data collection comprised of two parts: (a) demographic data gathering using a form and (b) issuance of an electronic link for the EQ-i 2.0 survey questions. The researcher required the demographic form as a separate document to collect participants' job title, gender, race, and ethnicity because Multi-Health Systems, Inc. (MHS) prohibited any altering to the existing EQ-i 2.0 instrument to incorporate additional information. The EQ-i 2.0 survey optionally includes participant's first name, last name, and age, which were suppressed when inadvertently populated by the participant. Gender identification was common in both the demographic form and the demographic data in the survey, which created duplicative effort for respondents for that data element. Respondents provided ethnicity or race, work title and work state using the demographic form. For professional or social communities (i.e., Phoenix Connect Communities) whereby participants publicly disclosed association or identification with a racial, ethnic, or affiliation with technology as an occupation, no demographic form was required to be submitted.

All respondents received a six-digit identification number, which safeguarded anonymity. No participant names were used. Every participant received an initial welcome email with an assigned six-digit identification number. Multi-Health Systems, Inc online portal aided distribution of the emotional intelligence surveys. Electronic distribution of the survey included the same six-digit identification number linked to participants' demographic data for consistency. In each survey link, MHS affixed a written explanation of emotional intelligence, length of survey, and confidentiality to study participants. Each participant was granted one week to complete the survey. A maximum of six electronic reminders were issued. Data collection occurred between July – November.

### **Data Analysis**

In this quantitative descriptive-comparative study, the goal was to investigate the relationship between emotional intelligence and workplace diversity using diverse workers (i.e., White, Hispanics, Asians, and Blacks). Participants were managers or higher working in concentrated regions for technology workers (i.e., CA, TX, NY, FL, and PA) (Census Data Program, 2014). Data analysis employed descriptive and inferential statistical techniques (Christensen et al., 2014). Descriptive statistics were used to identify core issues with assembled data enable calculations of the central tendency (mean, mode, and median), measures of dispersion (standard deviation, scatter, and spread), measures of relative position, (z score and percentile), and measures of association (assess correlation and co-variance).

Bedeian (2015) endorsed validations of the stated standard deviations to ensure the variables do not surpass their highest score. Conversely, small standard deviations

may restrict or limit correlations from being stated. Attentiveness to unidirectional and bidirectional scales delineate asymmetric frequency distribution where the mean is not a representative score. Inferential statistics is an alternative technique used to make interpretations about populations based upon the data collected on the selected sample (Black, 1999).

**Source of Data.** The EQ-I 2.0 model provided 133-items for participants' responses. Completed assessments were scored using the Multi-Health Systems, Inc. (MHS) reporting portal. Scored data were exported to datasets in Excel and then analyzed in the Statistical Package for the Social Sciences (SPSS, version 24.0) software to find the descriptive statistical data. Chen (2012) declared that SPSS software is commonly used by social scientists to conduct quantitative researches.

**Missing Data.** Gibbs (2014) identified four reasons for missing data: 1) data may not be applicable due to filtering, 2) respondent declines to answer, or may find the question too personal and refuses to divulge, 3) respondent lacks a standpoint on the topic due to unfamiliarity, and 4) data were skipped purposely or mistakenly. Field (2013) recommended that coding yields support, but the coded value should never match an exact response. Missing data lowered the power of a study, introduced bias, and decreases precision (de Goeij, Moniek van Diepen, Jager, Tripepi, Zoccali, & Dekker 2013). Scores were not considered when the following occurs: (a) nine missing items in the entire assessment; (b) three missing items in any composite scale; or (c) one missing items on any subscale (MHS, 2011). The assessment was deemed invalid when the overall omission score is greater than 8% (MHS, 2011).

**Outliers.** Outliers were scores that are different in comparison to others

(Field, 2013). A single score that was vastly different to all others can bias parameter evaluations. Outliers produced shifts in a curve and influenced the sum of squared error and standard deviation calculations. Graphs, boxplots, and histograms were an efficient method to plotting data to detect presence of outliers. Z-scores also added efficiency and aided as broader standards, which were applied to any data regardless of the original mean and standard deviation. StatisticsSolutions (n.d.) presented that outliers can be univariate or multivariate in nature. Univariate outliers have one extreme variable, while multivariate outliers have numerous uncommon variables. Data entry errors and incorrect placement of a case are among the causes that generate extreme data dispersal than normal.

**Power of MANOVA.** MANOVA tests are adequate when comparing differences in groups and support the development of a linear composite of the data (Field, 2013). MANOVA tests measured the dependent variables (i.e., workforce diversity in women and minorities) in a single experiment and identify the strength of the predictor variable (i.e., emotional intelligence) (Field, 2013). MANOVA was followed by discriminant analysis to answer the research questions and provide evidence to support the stated hypotheses (Field, 2013).

Field (2013) delineated that several assumptions are made when using MANOVA: (a) residuals should be statistically autonomous, and (b) residuals have multivariate normality. Because sample sizes in this present study will be the same, the Levene's test was used to test deviations from normality and homogeneity. A bell curve was expected for normal distributions. Leech, Barrett, & Morgan (2008) advocated for



verification using Box's M to measure the multivariate equivalent to the homogeneity of variance and homogeneity of covariance matrices.

**Cross-Products.** MANOVA facilitated the ratio of a matrix to compare the systematic variance of all dependent variables to the unsystematic variance. Cross-products characterized the difference in scores and means in one group multiplied by another. Field (2013) noted that cross-products were central to the auxiliary role and indicated the strengths for correlation in the dependent variables. Correlations among dependent variables were determined by cross-products, which applied to emotional intelligence awareness scores, work title, and work region.

**Statistics.** Four statistics are integral to MANOVA tests were applied to this present study: (a) Pillai-Bartlett trace, (b) Hotelling's T<sup>2</sup>, (c) Wilk's lambda, and (d) Roy's largest root. In small to moderate sample sizes, these statistics do not vary. When the differences in a group were founded on the first variate, Roy's largest root had the greatest power followed by Hotelling's T<sup>2</sup>, Wilk's lambda, and Pillai-Bartlett trace. When the differences across groups were linked to more than one variate, then Pillai-Bartlett trace was applied first, and Roy's largest root was last.

**Post hoc Analysis.** To prevent erroneous rejection of a multivariate null hypothesis, post hoc procedural analysis was applied (Warne, 2014). Discriminant descriptive analysis (DDA) was an adequate post hoc procedure that produces a set of uncorrelated linear equations to model the differences among groups, which provided exclusive insights about the differences (Stevens, 2002). After the MANOVA test was performed, the DDA included the reason for the rejection of the null hypothesis (Huberty & Morris, 1989).

## **Summary**

The nature of the topic, specific problem, and the desire to test the relationship, if any, between emotional intelligence and workplace diversity, led the researcher to select the most appropriate method and design for the present research study. A quantitative descriptive-comparative method and design were deployed. Data collection were enabled by individuals in managerial roles primarily from concentrated tech regions CA, TX, NY, FL, and PA at publicly-held technology organizations who completed surveys on emotional intelligence the EQ-i 2.0 instrument. Survey responses provided insights to answer all stated researcher questions and related hypotheses. No additional instrumentation was warranted.

The purpose of chapter 3 was to explain the methods used to determine the relationship of emotional intelligence and workplace diversity and to assess if statistical differences exist in emotional intelligence (EI) levels across four employee groups at top, publicly-help technology solutions firms in the U.S. Numerical data were gathered on the participants EI scores, are statistically analyzed (Black, 1999), then compared between participants who were grouped by gender, race, or ethnicity. Stratification of findings by employee levels (i.e., manager, director, or executive role) were examined.

Multiple dimensions within each group are best studied using descriptive-comparative designs (Hofstede, 2001). Olsen (2012) noted that comparative studies were useful when the researcher assigned a theme and identified a set of cases to evaluate. Research design, goals, and data collection and analyses were aligned to suit the overall themes of the study and underwrite that a fair comparison can be made across the selected groups. MANOVA tests served as chief statistical techniques followed by post

hoc analysis for verifications (Field, 2013). Data analysis from collected survey responses and interpretation precede the findings of the study as outlined in Chapter 4. Evaluative statements to determine if the hypotheses were supported or not supported will be revealed.

## Chapter 4

### Analysis and Results

This quantitative descriptive-comparative study was deployed to examine the relationship, if any, between emotional intelligence and workplace diversity.

Participants' emotional intelligence was measured using the Emotional Quotient Inventory 2.0 (EQ-i 2.0 instrument). The EQ-i 2.0 model was used to collect information from individuals in managerial positions to measure their emotional intelligence. The total sampling frame included 330 individuals, 18 years or older, full time or part time workers from concentrated tech regions such as CA, TX, NY, FL, and PA at publicly-held technology organizations. Diverse participants who identified as White, Asian, Hispanic, and Black anonymously completed surveys on emotional intelligence and shared demographic information that included gender, race, ethnicity, work title, and work region.

A total of 330 ( $n = 330$ ) participants completed the survey; power analysis using a confidence interval of 5%, and the confidence level of 95% required no less than 157 participants to achieve a power of .80 (Cohen, 1988). Factors influencing completion status included: (a) participant's timing on a survey; and (b) incomplete or invalid responses on survey responses (MHS, 2011). To protect internal validity and reliability standards, only completed data were used for data analysis in this research study. Data collection and analyses are structured as follows: (a) participants' demographic data; (b) emotional intelligence data; (c) the application of MANOVA tests and post hoc analyses, which underwrite the answers to the registered research questions and hypotheses.

The sample size comprised of 330 ( $n = 330$ ) individuals in managerial positions primarily from concentrated regions of tech workers in CA, TX, NY, FL, and PA at publicly-held technology organizations in the United States. The participants comprised of 35.15% ( $n = 116$ ) males and 64.85% ( $n = 214$ ) females. White participants comprised of 29.70% ( $n = 98$ ); Hispanic participants comprised of 18.49% ( $n = 61$ ); Asian participants represented 13.33% ( $n = 44$ ); and Black participants represented 38.48% ( $n = 127$ ). Breakdowns by work titles and work states were presented in Table 7.

Table 7

*Descriptive Statistics or Study Variables*

Variable	Label	N	Total
Race	White	98	225
	Black	127	
Ethnicity	Hispanic	61	105
	Asian	44	
Gender	Female	214	330
	Male	116	
Work Title	Manager	237	330
	Director	62	
	VP	20	
	SVP	6	
	EVP	3	
	CEO	2	
State of Employment	CA	11	330
	TX	5	
	NY	56	
	FL	224	
	PA	34	

Demographic data by race, ethnicity, and work title for female participants was reviewed. The highest of participants were identified as Black managers (68, 31.77%). The second highest participation for managers were from participants who identified as White (38, 17.76%). A closely following third highest group identified as Hispanic (35, 16.36%). The final group identified as Asian comprised (19, 8.88%). For work title, the

highest participation was among White directors (24, 11.21%). The second highest participation was derived from Black directors (13, 6.08%). A smaller number of Hispanic and Asian directors participated equally at (2, 0.93%) and (2, 0.93%). At the vice-president level, the highest participation was Black (4, 1.87%). The second highest was tied at White (2, 0.93%) and Hispanics (2, 0.93%). No Asians at the vice-president participated in this study. At the senior vice-president level, the only participation came from White (4, 1.87%). At the executive vice-president level, the sole participant was White (1, 0.47%).

Overall, managers, irrespective of race or ethnicity comprised of the highest participation (160, 74.77%). The second highest ranking by work title comprised of directors (41, 19.16%). The third highest participating group by work title was vice-presidents (8, 3.74%). Senior vice-presidents accounted for the fourth highest participating group by work title (4, 1.87%). Finally, executive vice-presidents reported the lowest participation level (1, 0.47%). Inferring from the data, altogether, the higher the senior position, fewer women and far fewer minorities were represented using the sample size ( $n = 214$ ).

Next, demographic data by race, ethnicity, and work title for male participants were examined. The highest of participants identified as Black managers (30, 9.10%). The second highest participation for managers were from participants who identified as Asian (18, 5.46%). A closely following third highest group identified as Hispanic (16, 4.85%). The final group identified as White comprised (13, 3.94%). For work title at the director level, the highest participation was among White directors (8, 2.42%). The second highest participation resulted from Black directors, reporting (7, 2.12%). A

smaller number of Hispanic and Asian directors participated correspondingly at (4, 1.21%) and (2, 0.61%). At the vice-president level, the highest participation was tied for Whites and Blacks with the same number of participants (4, 1.21%) in each group. Asians accounted for (2, 0.61%) while Hispanics accounted for (1, 0.30%). For senior vice presidents, there were three participants among Whites (2, 0.30%) and Blacks (1, 0.30%). At the executive vice-president level, the participants were White (1, 0.30%) and Hispanic (1, 0.30%). Lastly, at the CEO level, two participants identified as White (1, 0.30%) and Asian (1, 0.30%). The total number of male participants was 116 ( $n = 116$ ).

Overall, male managers, irrespective of race or ethnicity comprised of the highest participation (77, 66.38%). The second highest ranking by work title comprised of directors (21, 18.10%). The third highest participating group by work title was vice-presidents (11, 9.48%). Senior vice-presidents accounted for the fourth highest participating group by work title (3, 2.59%). Executive vice-presidents and CEO had the lowest participation with each reporting at (2, 1.72%).

Comparing the data results in by gender, male participation at the executive vice-president level was higher than females. Overall, female participation showed highest concentration at the manager level. The higher the position, the lower the representation of Blacks, Hispanic, and Asian. No male representation at the executive vice-president level for Asians and Blacks and only one White female was reported. Two male CEOs participated; neither identified as female.

### **Descriptive Statistics by Work Region**

The demographic data results by work region were calculated and reviewed. The highest participation by region was Florida (224, 67.88%). The second highest participation was New York (56, 16.97%). The third highest participation was Pennsylvania (35, 10.30%). Participants from California ranked fourth highest (11, 3.33%) while participation from Texas ranked fifth (5, 1.52%). The data results indicated that the dominant participating group were Blacks in Florida (98, 29.70%). The second highest participating group by race was Whites in Florida (56, 16.97%). The third highest participating group for Florida was Hispanic (47, 14.24%). The fourth highest participation was Whites in New York (27, 8.18%), which was closely followed by Asians in Florida (23, 6.97%). From the Census Data Program (2014) calculation on concentrated regions for tech workers, Florida ranked third at 4.9% behind Texas at 10.0% and California at 14.9%. Gender differences by work region were not measured. Demographic data proved indispensable to test the stated hypotheses 2, 3, 4, and 5 in this research study:

H2<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women vs. men) at top, publicly-held technology solutions-based firms in the U.S.

H2<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women vs. men) at top, publicly-held technology solutions-based firms in the U.S.

H3<sub>0a</sub>: There is no statistical difference in the relationship between EI and



workplace diversity by ethnicity (i.e., Hispanic versus Asian)  
classification at top, publicly-held technology solutions-based firms in the  
U.S.

H3<sub>1a</sub>: There is a statistical difference in the relationship between EI and  
workplace diversity by ethnicity (i.e., Hispanic versus Asian)  
classification at top, publicly-held technology solutions-based firms in  
the U.S.

H3<sub>0b</sub>: There is no statistical difference in the relationship between EI and  
workplace diversity by race (i.e., White versus Black) classification at top,  
publicly-held technology solutions-based firms in the U.S.

H3<sub>1b</sub>: There is a statistical difference in the relationship between EI and  
workplace diversity by race (i.e., White versus Black) classification at  
top, publicly-held technology solutions-based firms in the U.S.

H4<sub>0</sub>: There is no statistical difference in the relationship between leader EI and  
workplace diversity by work title (i.e., manager or higher) at top, publicly-  
held technology solutions-based firms in the U.S.

H4<sub>1</sub>: There is a statistical difference in the relationship between leader EI and  
workplace diversity by work title (i.e., manager or higher) at top, publicly-  
held technology solutions-based firms in the U.S.

H5<sub>0</sub>: There is no statistical difference in the relationship between leader EI and  
workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top,  
publicly-held technology solutions-based firms in the U.S.

H5<sub>1</sub>: There is a statistical difference in the relationship between leader EI and

workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top,  
publicly-held technology solutions-based firms in the U.S.

The next paragraph denotes a description of the emotional intelligence data collected and assessed.

### **Emotional Intelligence Data**

The Emotional Quotient Inventory 2.0 (EQ-i 2.0) was used to measure the participants' Emotional intelligence. This model applies a 1-5-15 factor structure that comprises of one total emotional intelligence score, five composite scores and fifteen subscales to measure: (a) self-perception, (b) self-expression, (c) interpersonal, (d) decision making, and (e) stress management. These scores were useful in establishing how effective the leaders were in observing and articulating, developing and sustaining relationships, and managing through challenges (MHS, 2011). The emotional intelligence scores were imperative to test hypotheses 1 in this research study and provided insights to the participants' high and low functioning:

H1<sub>0</sub>: There is no statistical difference between EI scores (i.e., self-perception, self-expression, interpersonal, decision making, and stress management) by group at top, publicly-held technology solutions-based firms in the U.S.

H1<sub>1</sub>: There is a statistical difference between EI scores (i.e., self-perception, self-expression, interpersonal, decision making, and stress management) by group at top, publicly-held technology solutions-based firms in the U.S.

A prerequisite to validity of the results included the evaluation of the validity indices: (1) Time to completion, (2) Inconsistency Index (IncX), (3) Positive and Negative Impression, (4) Item 133, and (5) Omitted Items.

**Time to Completion.** For a survey to be deemed valid, participants needed to take no less than 7 minutes and no greater than 90 minutes. The shorter timeframe suggested random responses occurred. The longer duration indicated the participant may have been had challenges with understanding the items, instructions, or was otherwise preoccupied (MHS, 2011). Completed surveys that met the time to completion requirements were included.

**Positive and Negative Impression.** Positive and Negative Impression indexes denote participants with overstated responses either aspect of the spectrum. For any scores of 3 or higher on the positive scale, the EQ-i 2.0 were carefully evaluated for inclusion as these were possible warning of self-deception or lack of personal insight. Three or more on the negative impression scale is also cautionary. Participants may exude low self-esteem or portraying a self-critical image (MHS, 2011). Assessments matching this validity index criteria were suppressed.

**Responses to Item 133.** Item 133 in the survey denotes that the participant attests to being truthful on all preceding questions on the survey. A score of three or lower suggests the results are invalid because answers were deceitful. Assessments that matched this criteria were excluded.

**Omission.** The EQ-i 2.0 instrument is designed in a simple manner so that participants may answer all questions. It is likely, however, that omission for items may still occur. An 8% omission rate and lower at the composite scale and subscale levels are acceptable. Acceptable factors include: total of 9 items missed across the assessment; (b) three missing items in any given composite scale; and (c) one item is missing on any subscale (MHS, 2011). Across the sampling frame, one assessment for a Hispanic female was

labeled as not scored due to three missing items in a scale ( $n = 1$ ); associated assessment scores were removed.

**Responses to Survey Questions.** The questions on the EQ-i 2.0 comprised of the five-point Likert type scale, 1-5, whereby 1 is the lowest and 5 is the highest. A value of one translated to never/rarely, two is occasionally, three is sometimes, four is often, and five is always/almost always. The EQ-i 2.0 is a 133-item instrument. Summary for each of the dependent variables showed insights by participating group.

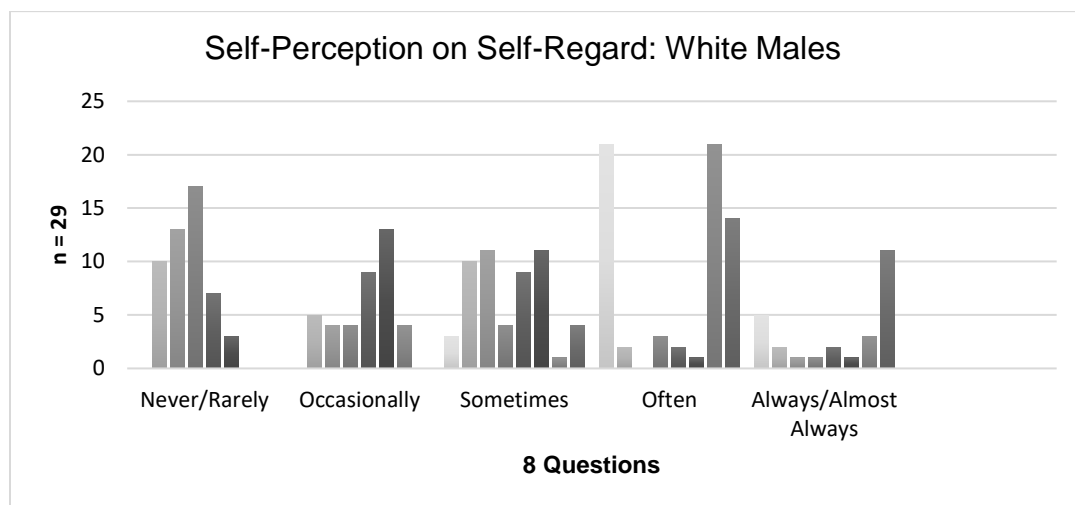
### **Self-Perception on Self-Regard**

The self-regard subscale is associated with an individual's strength and self-confidence (Bar-On, 1997). Figures 2 to 9 show participants' responses across the groups (i.e., White, Hispanic, Asian, and Black). Responses from White males recorded as often, which indicates individuals are in touch with their own emotions and can perceive distinctions between different emotions. White female participants' responses recorded occasionally, sometimes, and often, which may be reflective of lower self-confidence than White males. Participants' responses from Hispanic males and females showed clustered frequency of responses for often and always. Participants' responses from Asian males and females showed highest frequency of scores for sometimes and often. Participants' responses for Black males and females showed occasionally, sometimes and often.

The EQ-i 2.0 employs both positive and negative impressions. Positive impressions may reflect an exaggerated view of oneself while negative impressions may designate low self-esteem or a self-critical response style and reflect mixed responses of never/rarely and occasionally across this subscale. Higher scores are indicative of a well-

developed identity (MHS, 2011). Participants' lack of self-regard asserts deficiencies in being in touch with his or her feelings or may not comprehend the emotional landscape (MHS 2011). Leaders with a low self-regard pose a challenge to organizational performance and contribute limitedly in motivating self or others to bring about the highest potential.

Self-perception on self-regard emotional intelligence awareness scores for White males (n = 29) were illustrated in Figure 2.



*Figure 2.* Self-perception on self-regard responses: White Males

Self-perception on self-regard emotional intelligence awareness scores for White females (n = 69) were illustrated in Figure 3.

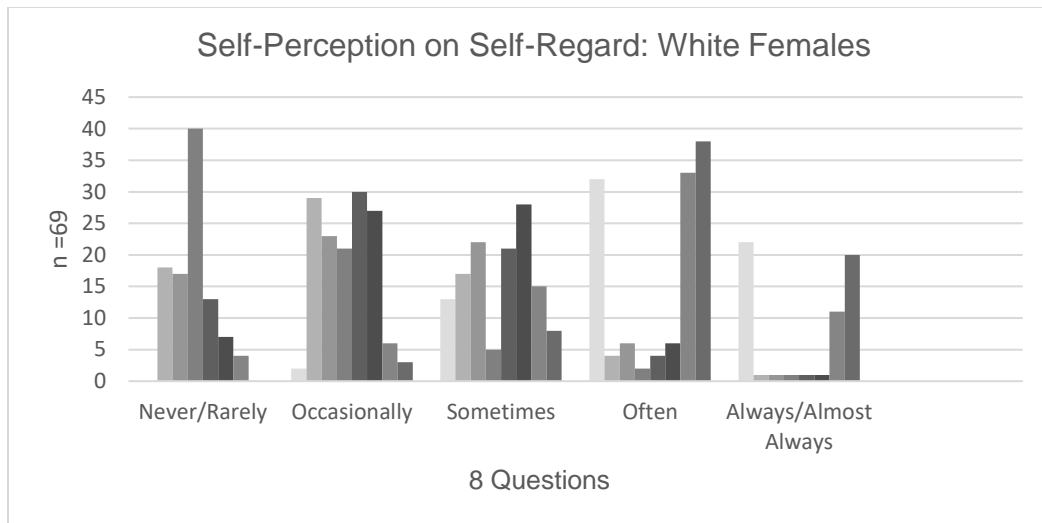


Figure 3. Self-perception on self-regard responses: White Females

Self-perception on self-regard emotional intelligence awareness scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 4.

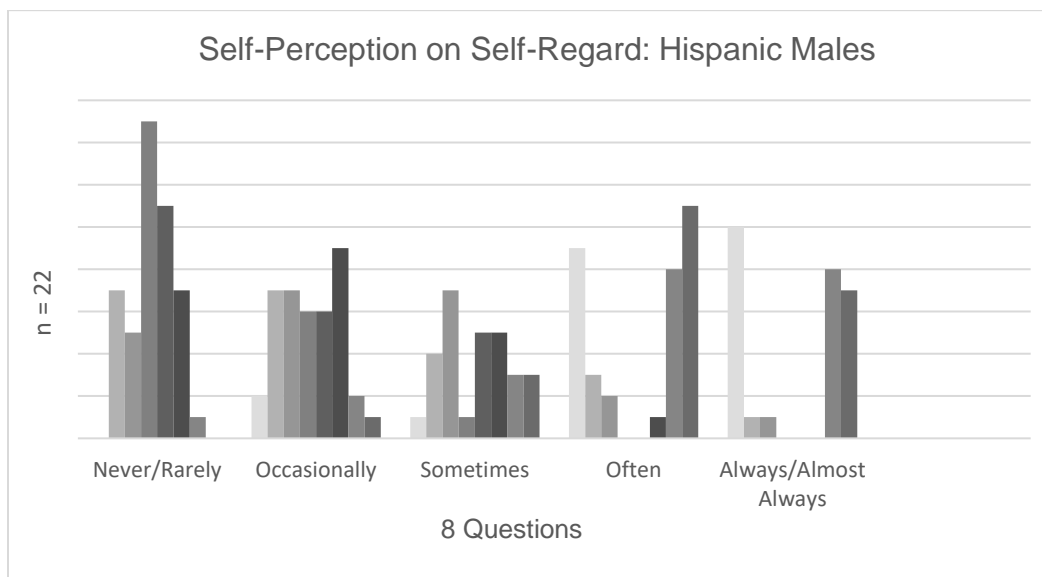


Figure 4. Self-perception on self-regard responses: Hispanic Males

Self-perception on self-regard emotional intelligence awareness scores for Hispanic females males ( $n = 39$ ) were illustrated in Figure 5.

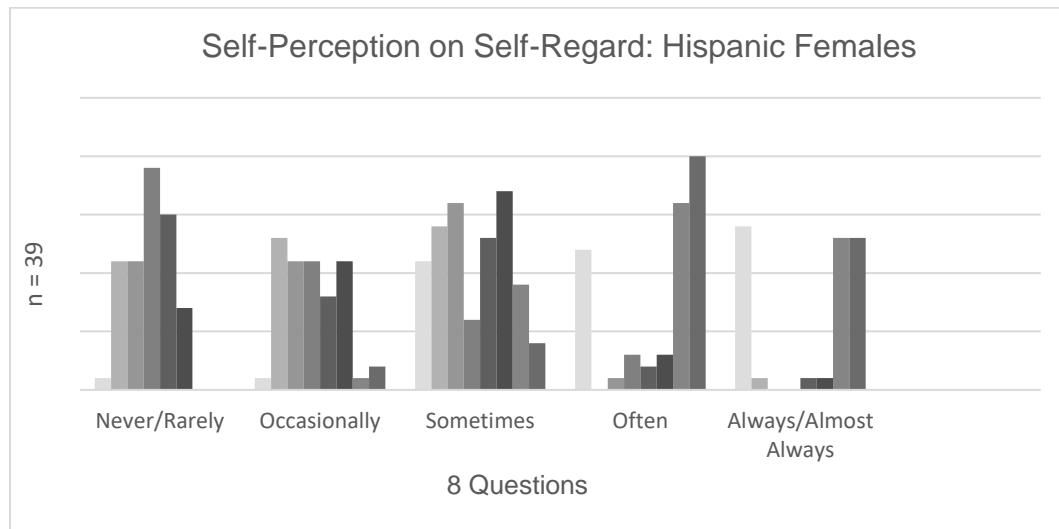


Figure 5. Self-perception on self-regard responses: Hispanic Females

Self-perception on self-regard emotional intelligence awareness scores for Asian males ( $n = 23$ ) were illustrated in Figure 6.

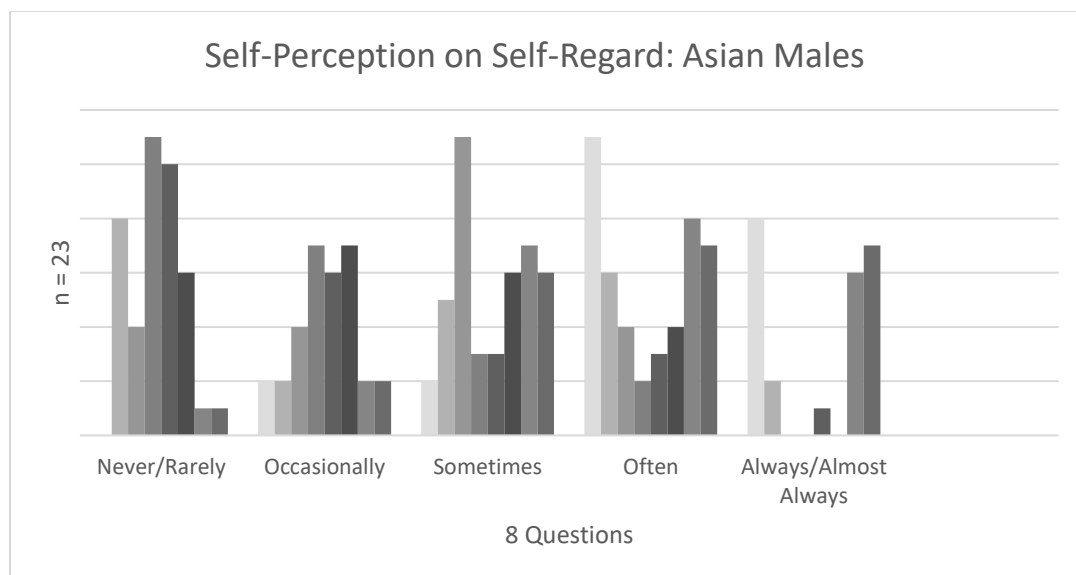


Figure 6. Self-perception on self-regard responses: Asian Males

Self-perception on self-regard emotional intelligence awareness scores for Asian females ( $n = 21$ ) were illustrated in Figure 7.

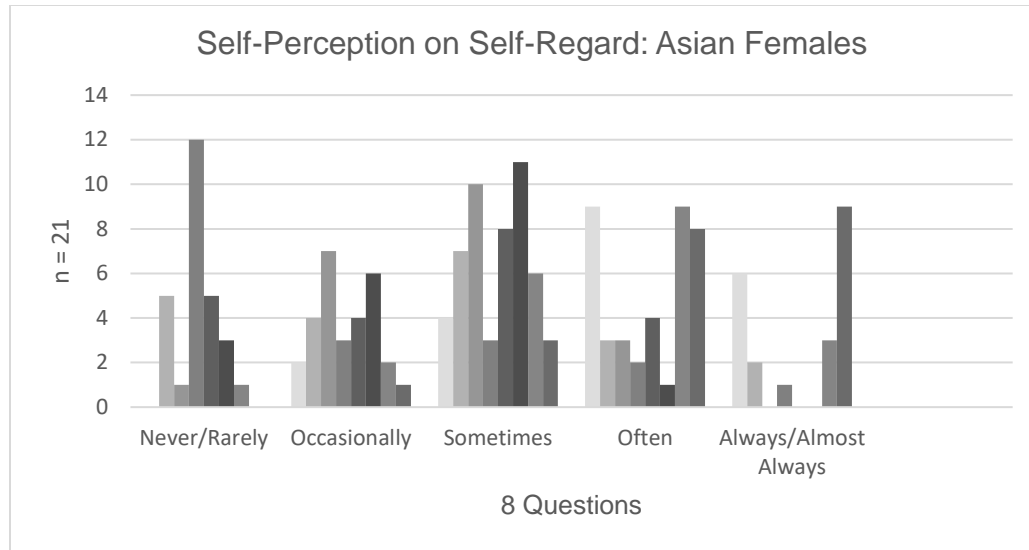


Figure 7. Self-perception on self-regard responses: Asian Females

Self-perception on self-regard emotional intelligence awareness scores for Black males ( $n = 42$ ) were illustrated in Figure 8.

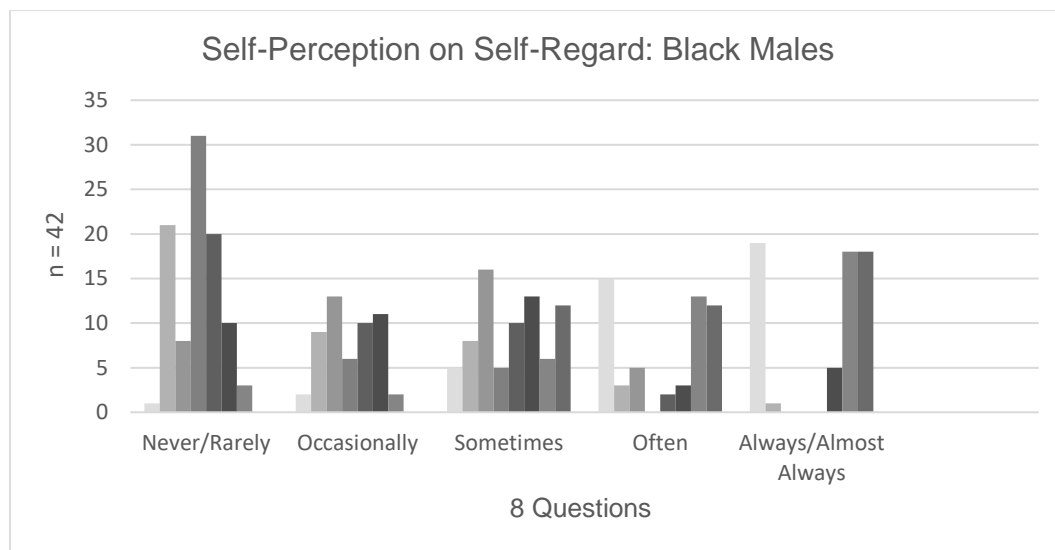


Figure 8. Self-perception on self-regard responses: Black Males



Self-perception on self-regard emotional intelligence awareness scores for Black females ( $n = 85$ ) were illustrated in Figure 9.

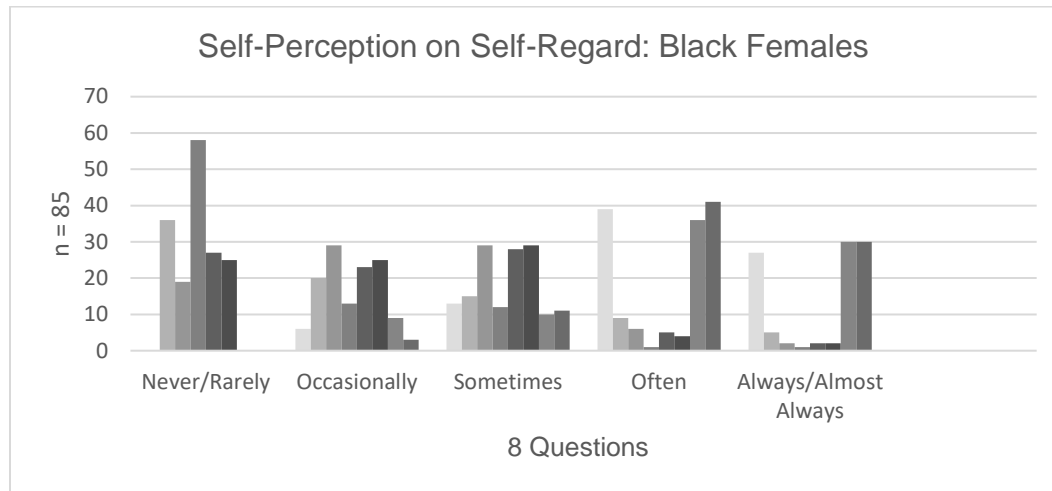
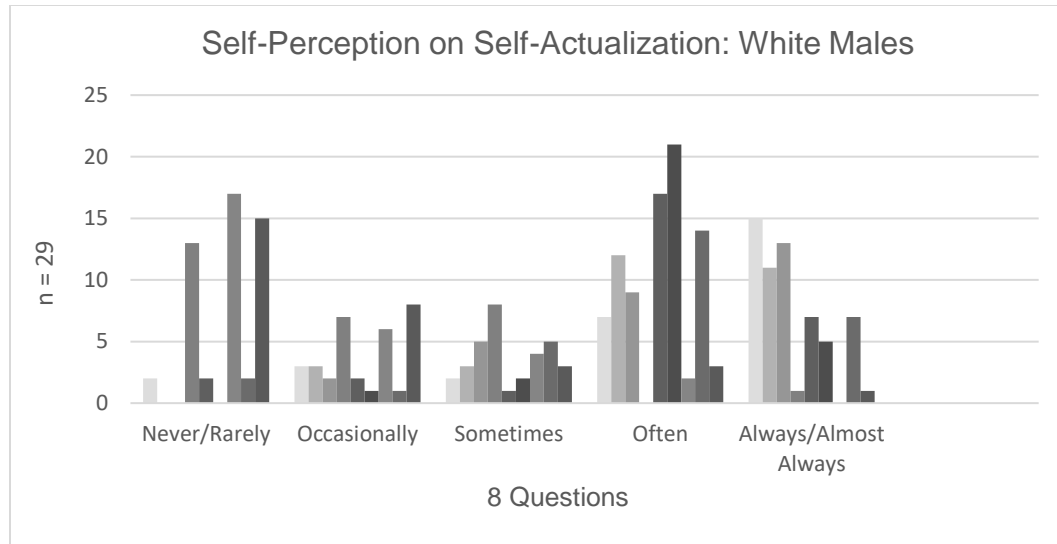


Figure 9. Self-perception on self-regard responses: Black Females

### Self-Perception on Self-Actualization

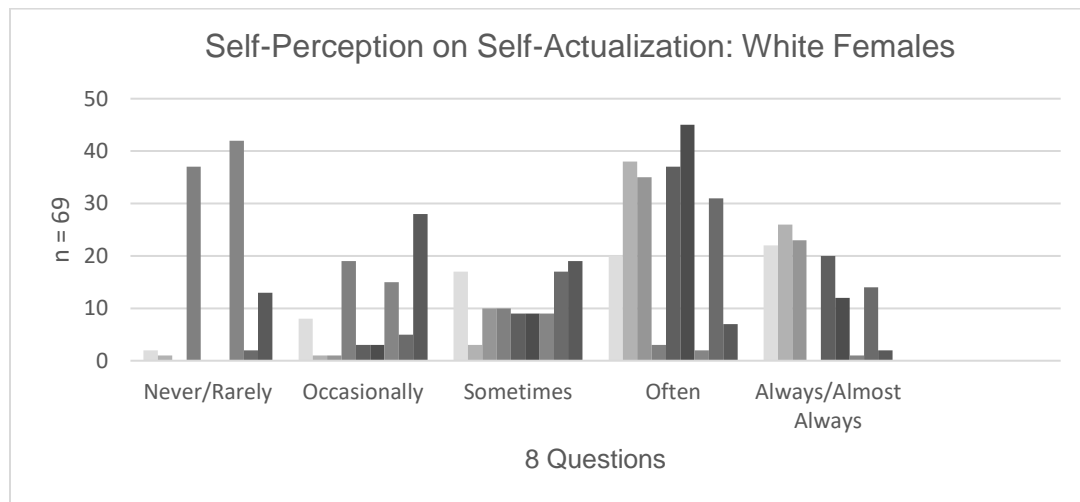
The self-actualization subscale involves the persistence toward self-improvement and the continued engagement to chase relevant goals for an enjoyable life (Bar-On, 1997). Figures 10 to 17 represent the participants' responses for the groups. Participants' responses peaked on often and always/almost always for Whites, Hispanics, Asians, and Blacks, suggesting that individuals act with a greater sense of purpose and are on a journey of continuous learning and personal growth (MHS, 2011). These data were consistent with participants' abilities to set meaningful and inspiring goals. As it pertains to leadership, individuals with low self-actualization fails to apply personal strengths to achieve individual and organizational objectives.

Self-perception on self-actualization emotional intelligence awareness scores for White males ( $n = 29$ ) were illustrated in Figure 10.



*Figure 10.* Self-perception on self-actualization responses: White Males

Self-perception on self-actualization emotional intelligence awareness scores for White females ( $n = 69$ ) were illustrated in Figure 11.



*Figure 11.* Self-perception on self-actualization responses: White Females

Self-perception on self-actualization emotional intelligence awareness scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 12.

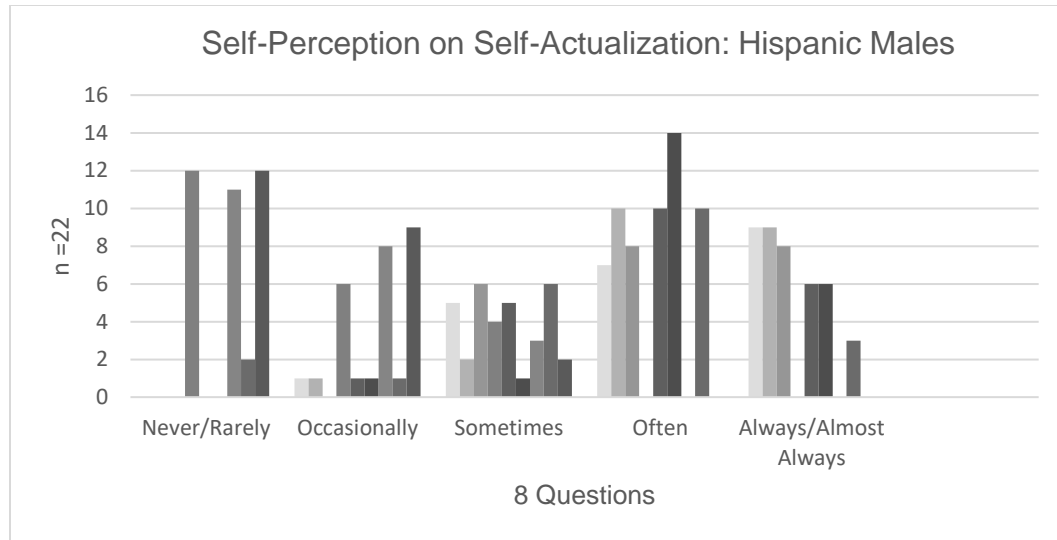


Figure 12. Self-perception on self-actualization responses: Hispanic Males

Self-perception on self-actualization emotional intelligence awareness scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 13.

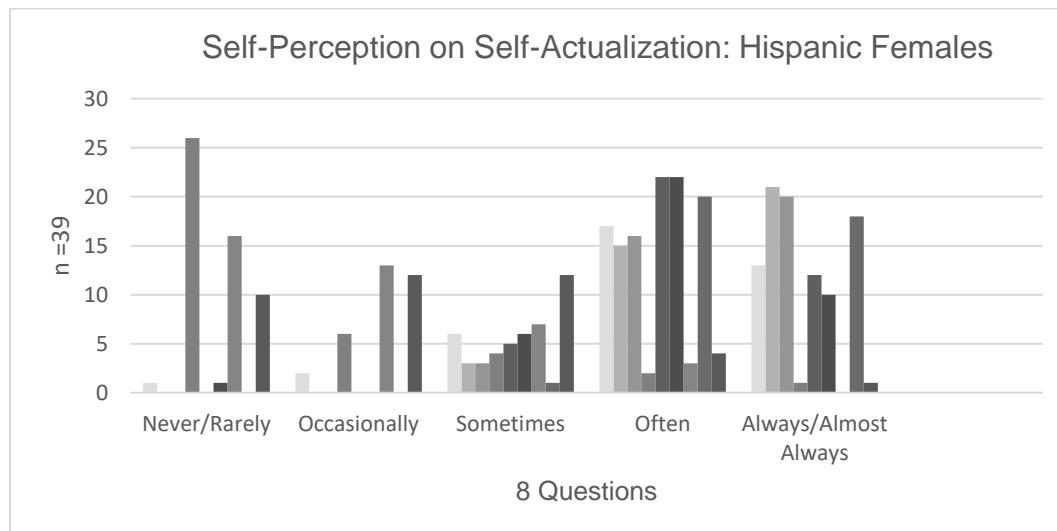


Figure 13. Self-perception on self-actualization responses: Hispanic Females

Self-perception on self-actualization emotional intelligence awareness scores for Asian males ( $n = 23$ ) were illustrated in Figure 14.

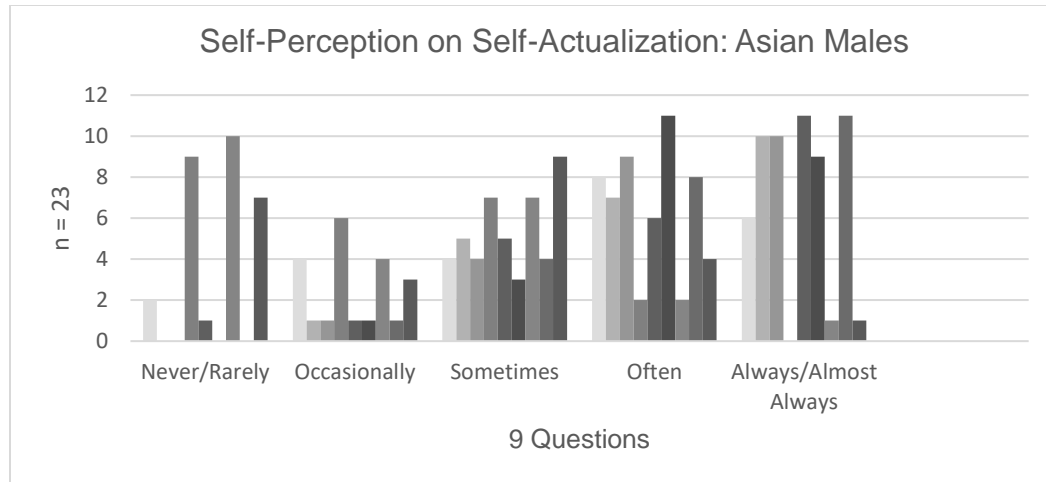


Figure 14. Self-perception on self-actualization responses: Asian Males

Self-perception on self-actualization emotional intelligence awareness scores for Asian females ( $n = 21$ ) were illustrated in Figure 15.

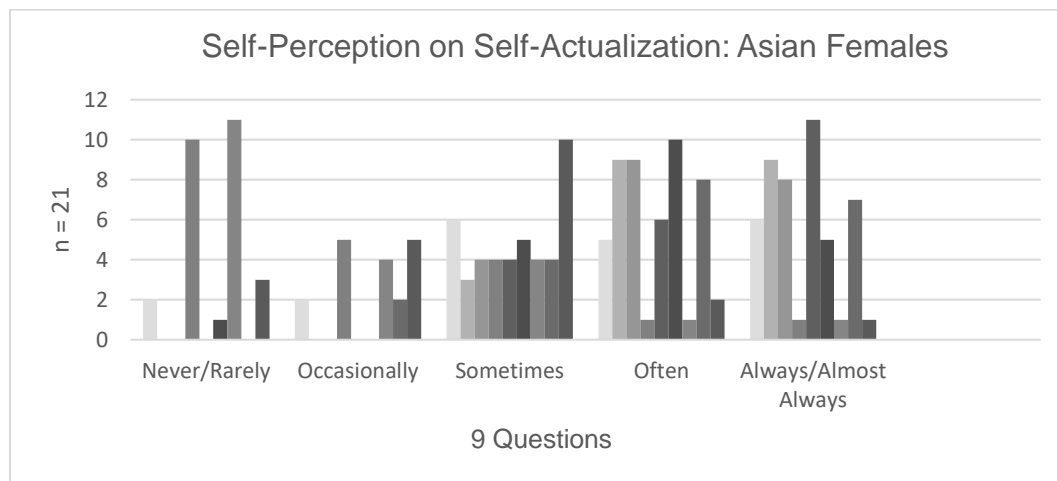


Figure 15. Self-perception on self-actualization responses: Asian Females

Self-perception on self-actualization emotional intelligence awareness scores for Black males ( $n = 42$ ) were illustrated in Figure 16.

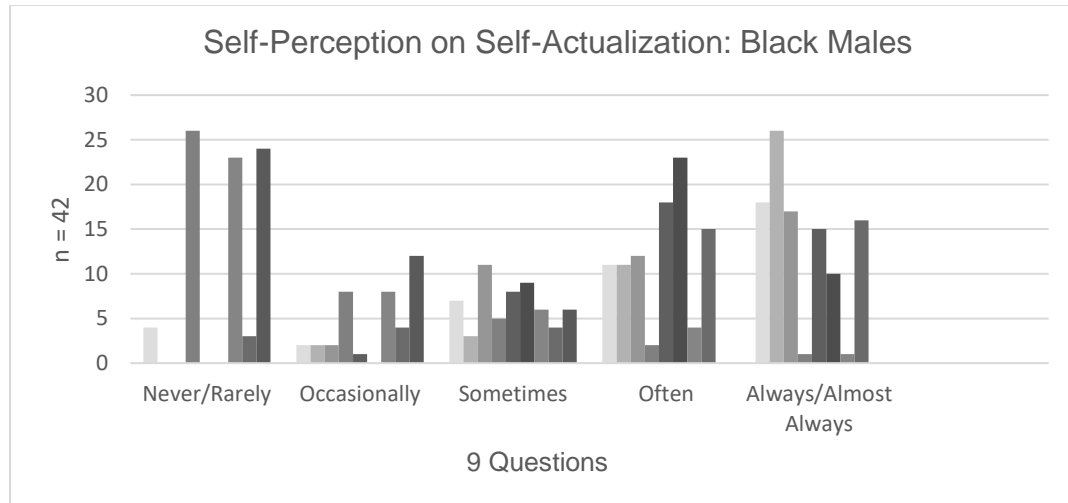


Figure 16. Self-perception on self-actualization responses: Black Males

Self-perception on self-actualization emotional intelligence awareness scores for Black females ( $n = 85$ ) were illustrated in Figure 17.

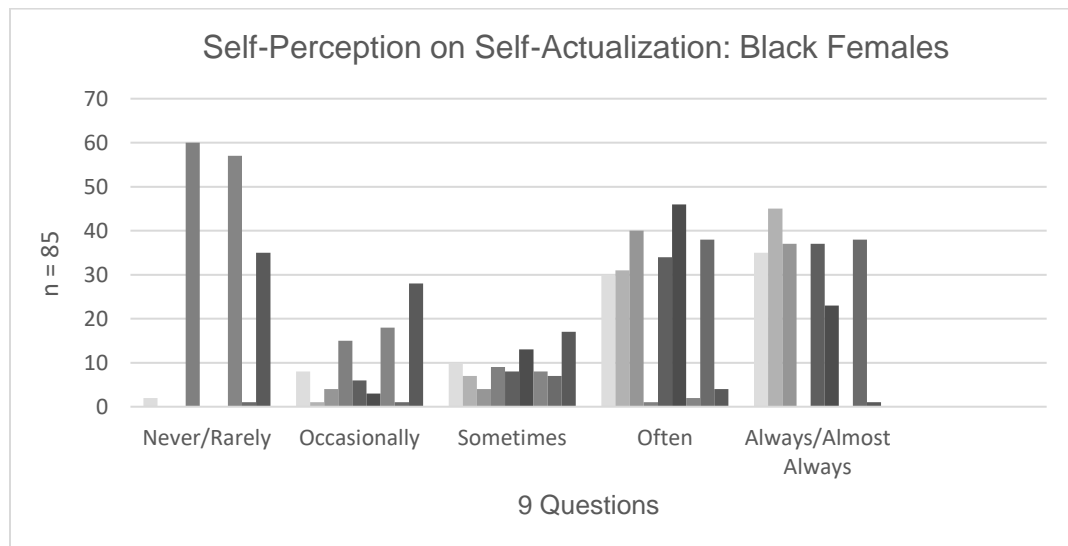


Figure 17. Self-perception on self-actualization responses: Black Females

### Self-Perception on Self-Awareness

The emotional self-awareness subscale incorporates the understanding and distinguishing one's own emotions, and knowing the correlation of emotions with thoughts and actions on self and others (Bar-On, 1997). Figures 18 to 25 represent the participants' responses, which peaked favorably at often and always/almost always for Whites (males and females), Hispanics (males and females), Asian males, and Blacks (males and females). Asian females reported clustered scores on sometimes, signaling some degree of detachment from experiencing emotions (MHS, 2011). In the context of leadership, individuals with low emotional self-awareness lack positive job attitudes and lack tendencies to be strong performers or successful in the workplace (Atwater & Yammarino, 1992).

Self-perception on self-awareness emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 18.

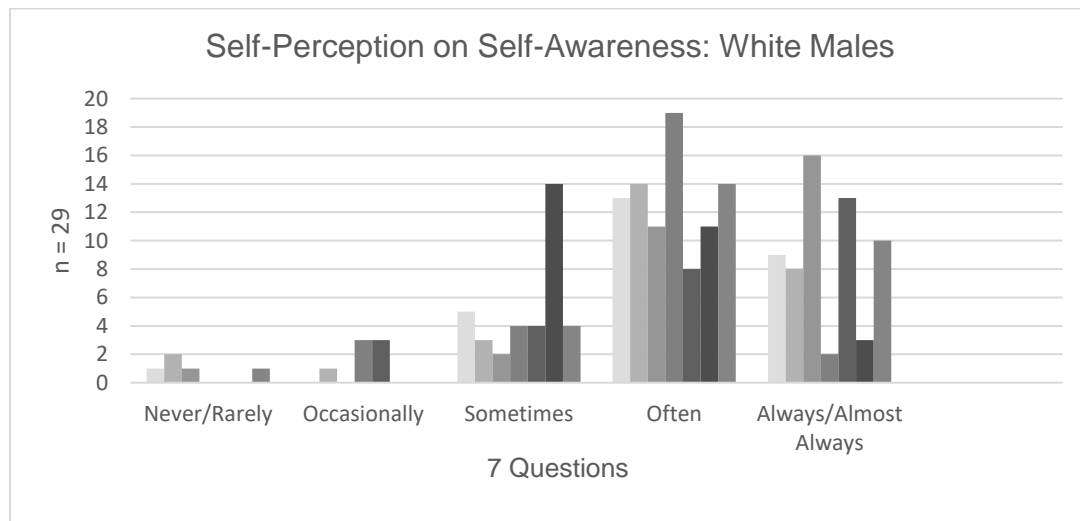


Figure 18. Self-perception on self-awareness responses: White Males

Self-perception on self-awareness emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 19.

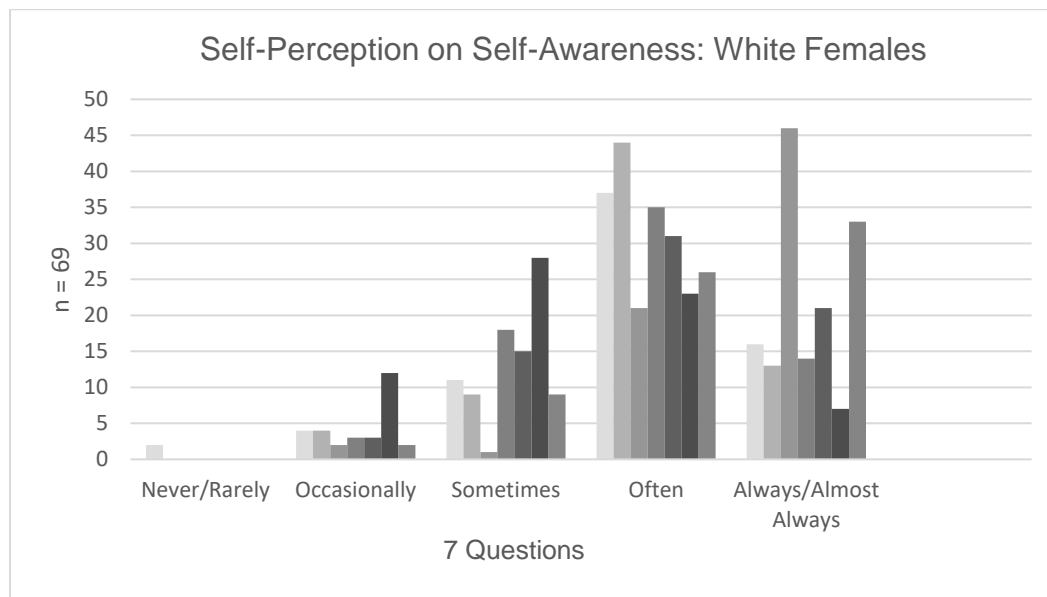


Figure 19. Self-perception on self-awareness responses: White Females

Self-perception on self-awareness emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 20.

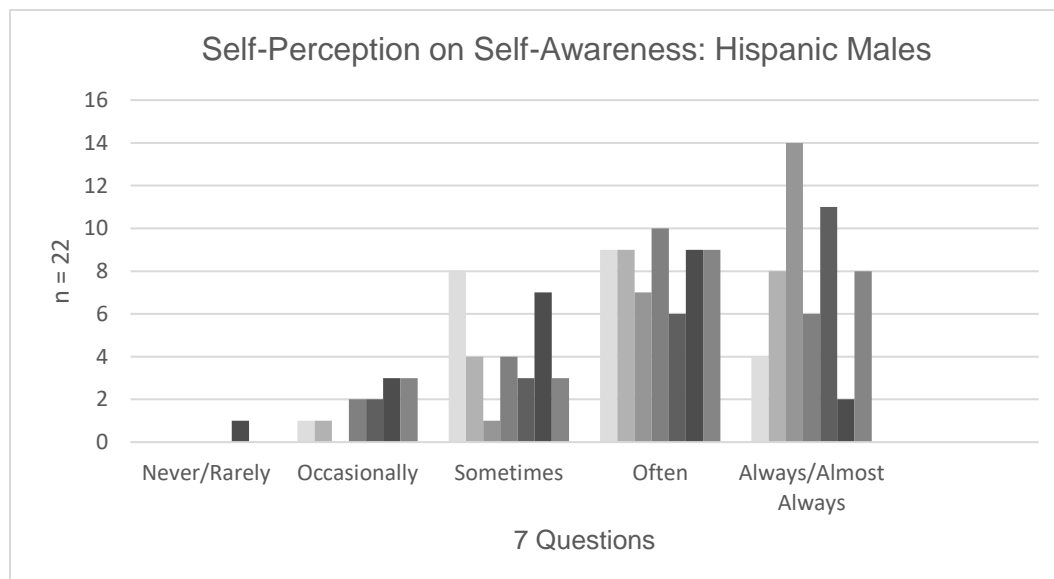


Figure 20. Self-perception on self-awareness responses: Hispanic Males

Self-perception on self-awareness emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 21.

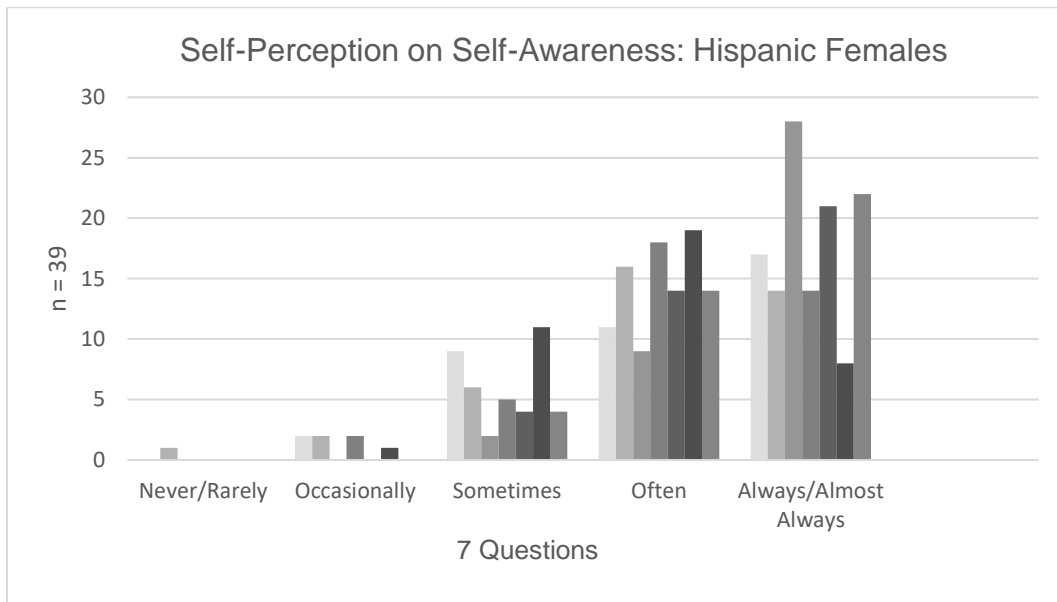


Figure 21. Self-perception on self-awareness responses: Hispanic Females

Self-perception on self-awareness emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 22.

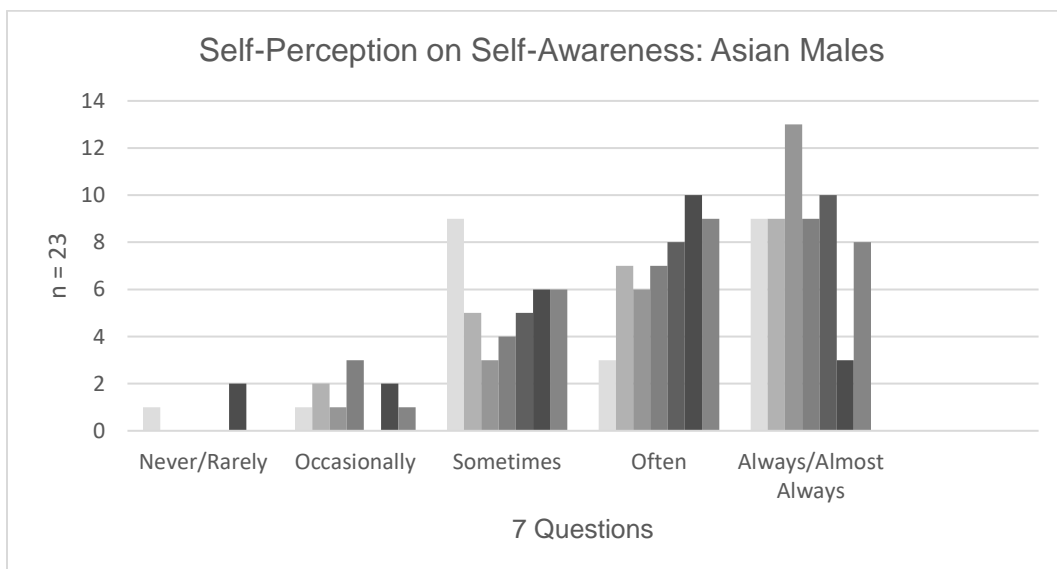


Figure 22. Self-perception on self-awareness responses: Asian Males



Self-perception on self-awareness emotional intelligence scores for Asian females ( $n = 31$ ) were illustrated in Figure 23.

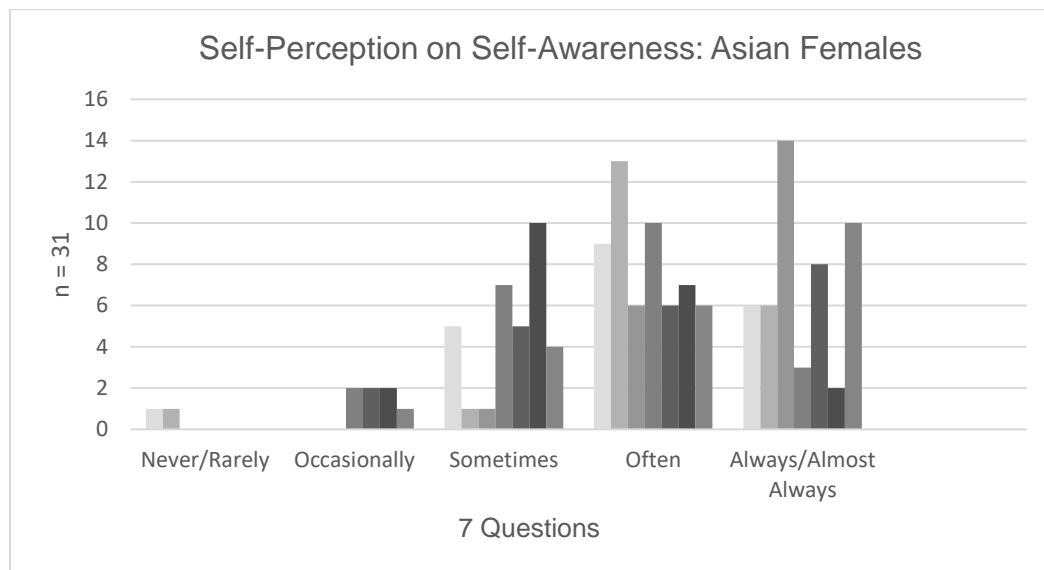


Figure 23. Self-perception on self-awareness responses: Asian Females

Self-perception on self-awareness emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 24.

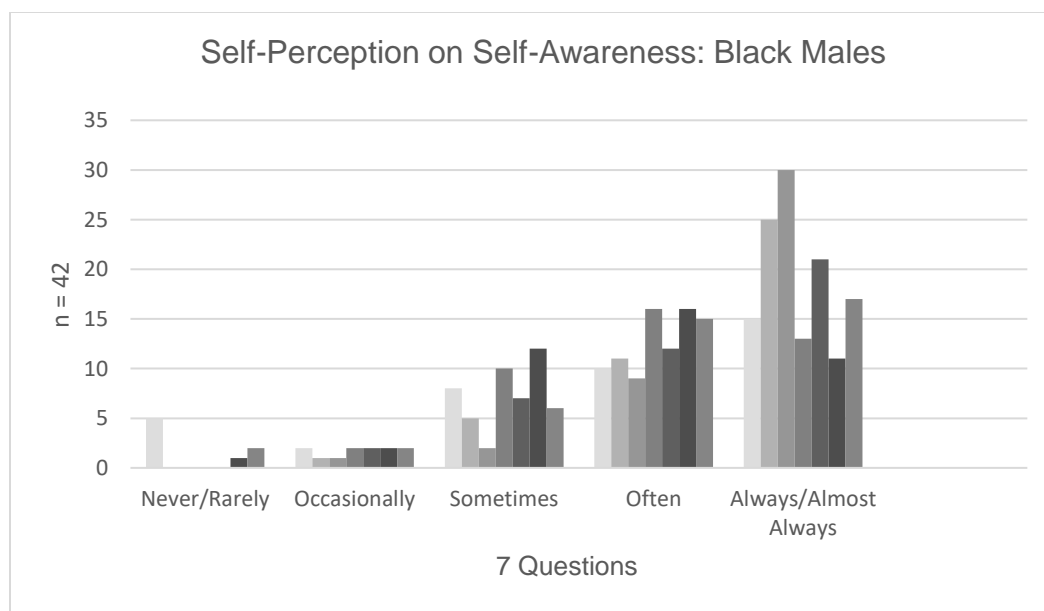


Figure 24. Self-perception on self-awareness responses: Black Males

Self-perception on self-awareness emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 25.

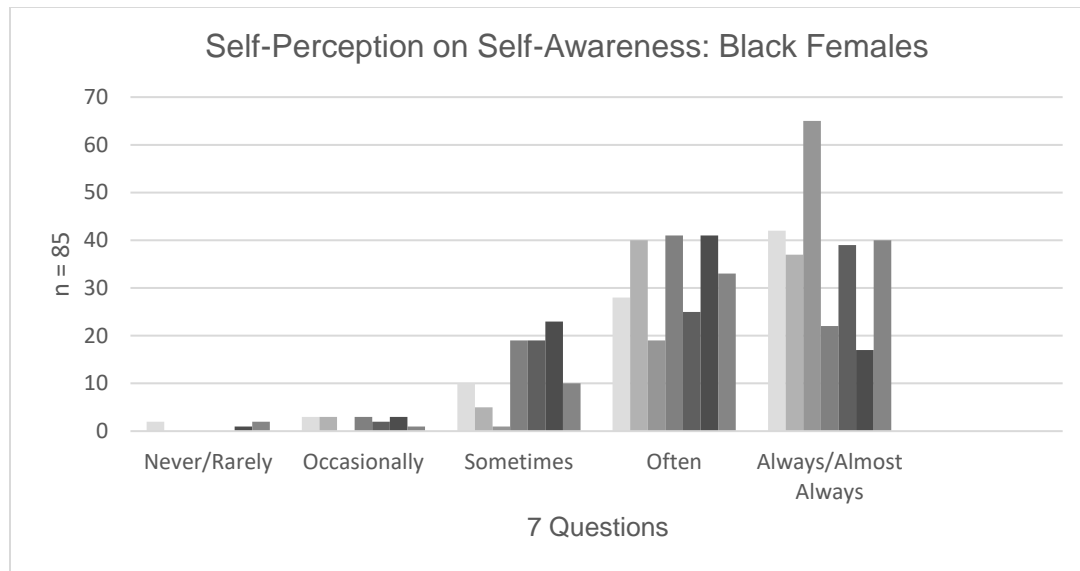


Figure 25. Self-perception on self-awareness responses: Black Females

### Self-Expression on Emotional Expression

The emotional expression subscale encompasses openly communicating one's feelings verbally and non-verbally (Bar-On, 1997). Figures 26 to 33 represent the participants' responses, which peaked positively at never/rarely for all groups. Participants lacking the ability to be openly expressive experience challenges with communication. Males and females communicate differently. Jorfi et al. (2012) found, and this study confirms, females scored higher in emotional intelligence than males, which enables positive outcomes in organizational settings.

Self-expression on emotional expression emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 26.

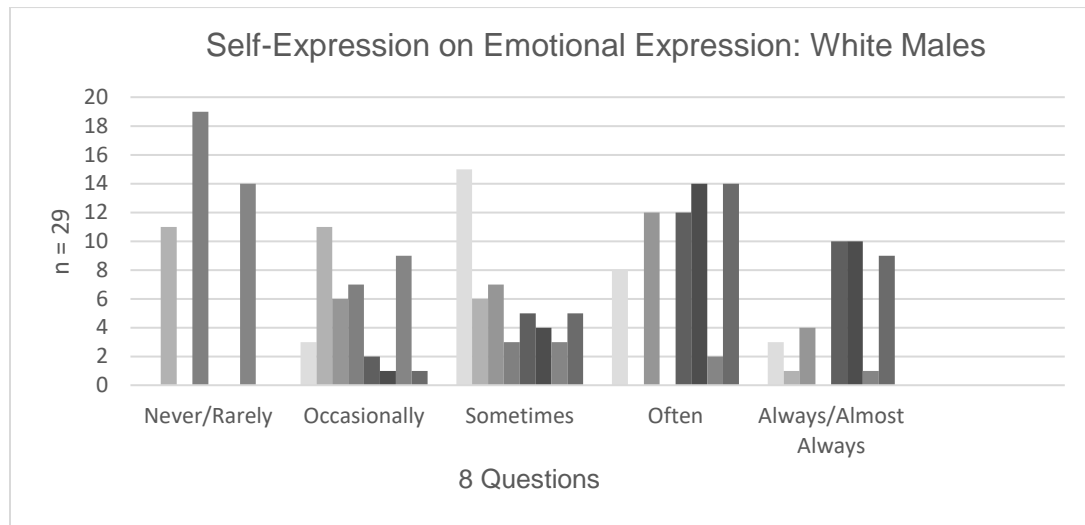


Figure 26. Self-expression on emotional expression responses: White Males

Self-expression on emotional expression emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 27.

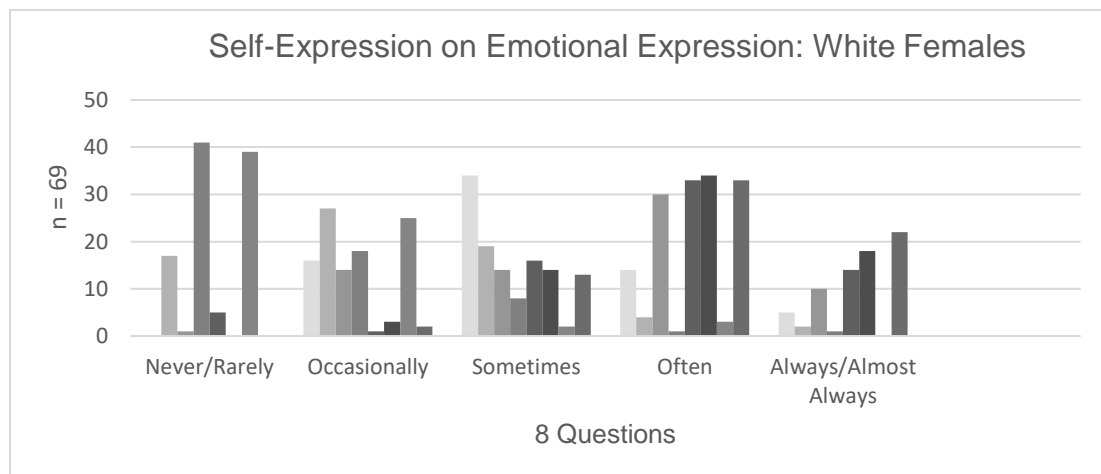


Figure 27. Self-expression on emotional expression responses: White Females

Self-expression on emotional expression emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 28.

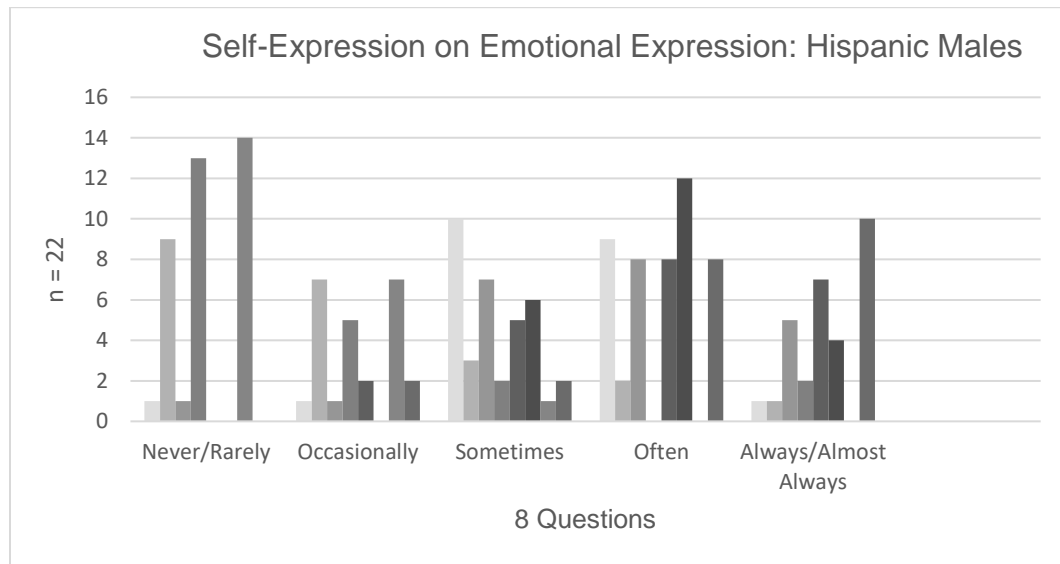


Figure 28. Self-expression on emotional expression responses: Hispanic Males

Self-expression on emotional expression emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 29.

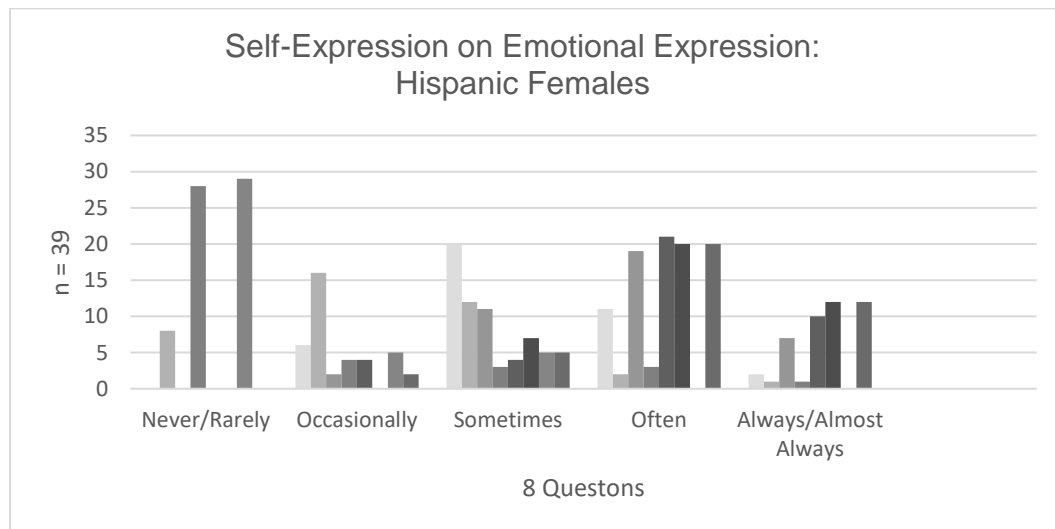


Figure 29. Self-expression on emotional expression responses: Hispanic Females

Self-expression on emotional expression emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 30.

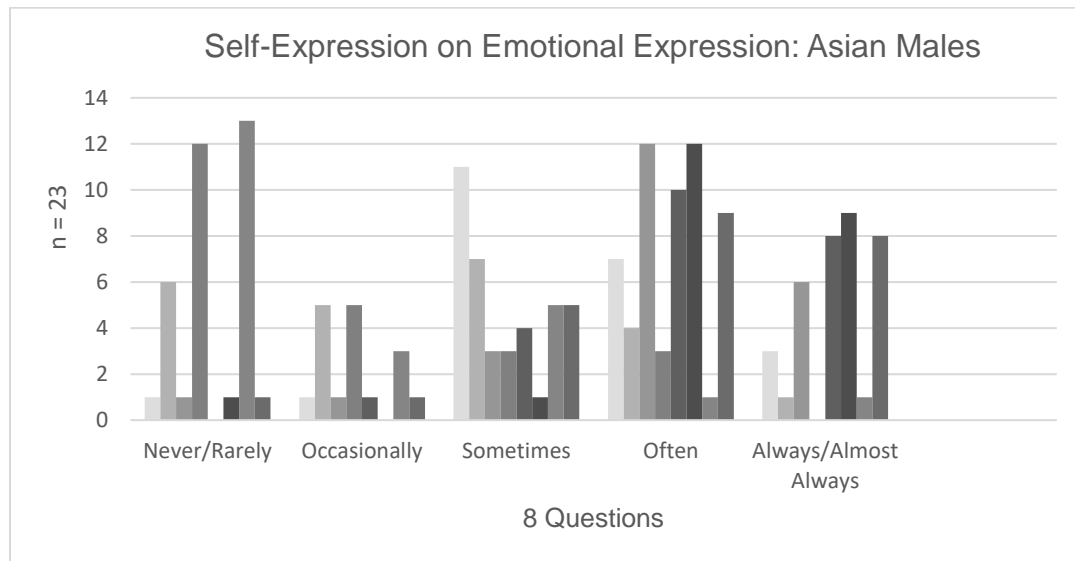


Figure 30. Self-expression on emotional expression responses: Asian Males

Self-expression on emotional expression emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 31.

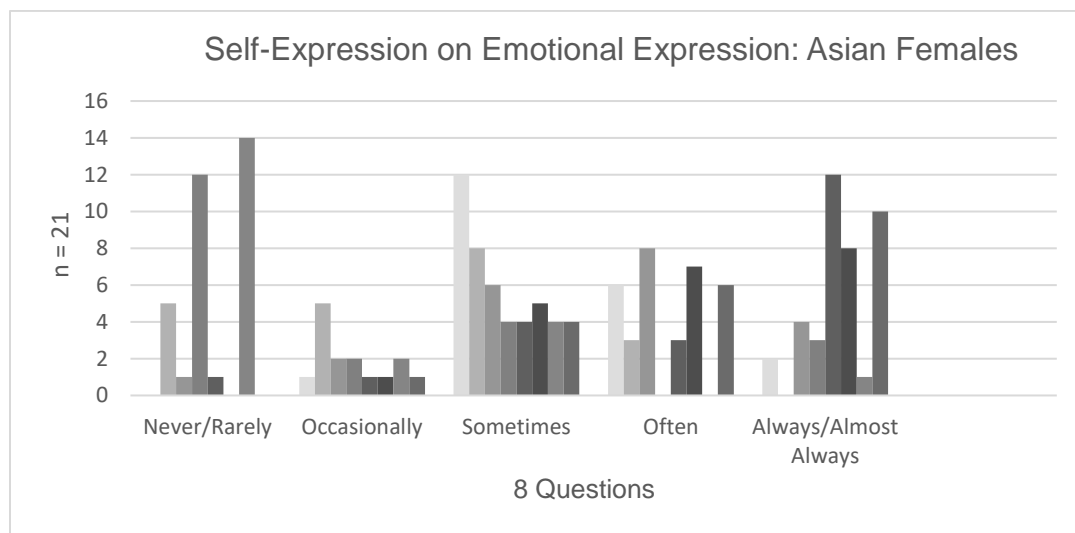


Figure 31. Self-expression on emotional expression responses: Asian Females

Self-expression on emotional expression emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 32.

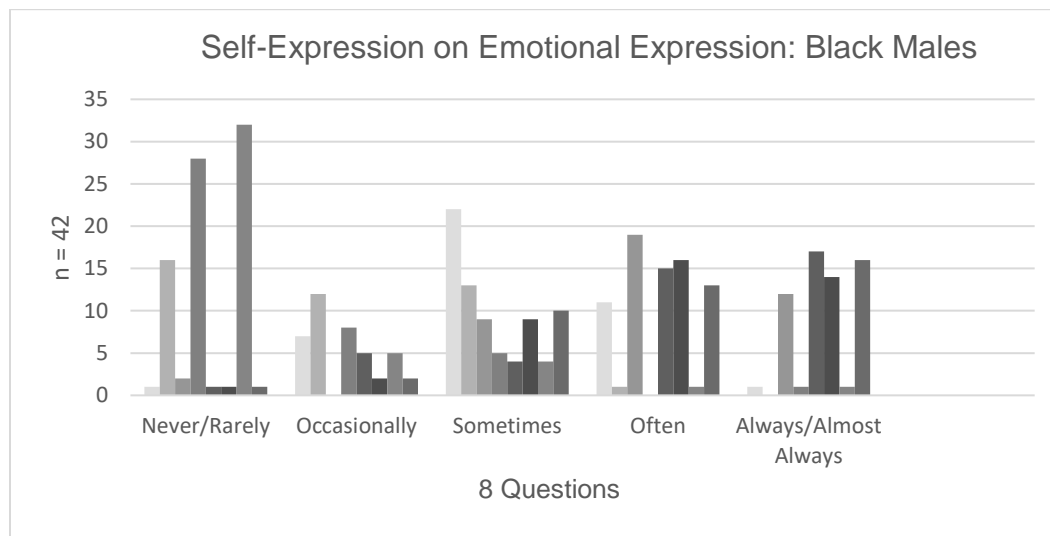


Figure 32. Self-expression on emotional expression responses: Black Males

Self-expression on emotional expression emotional intelligence scores for White males ( $n = 85$ ) were illustrated in Figure 33.

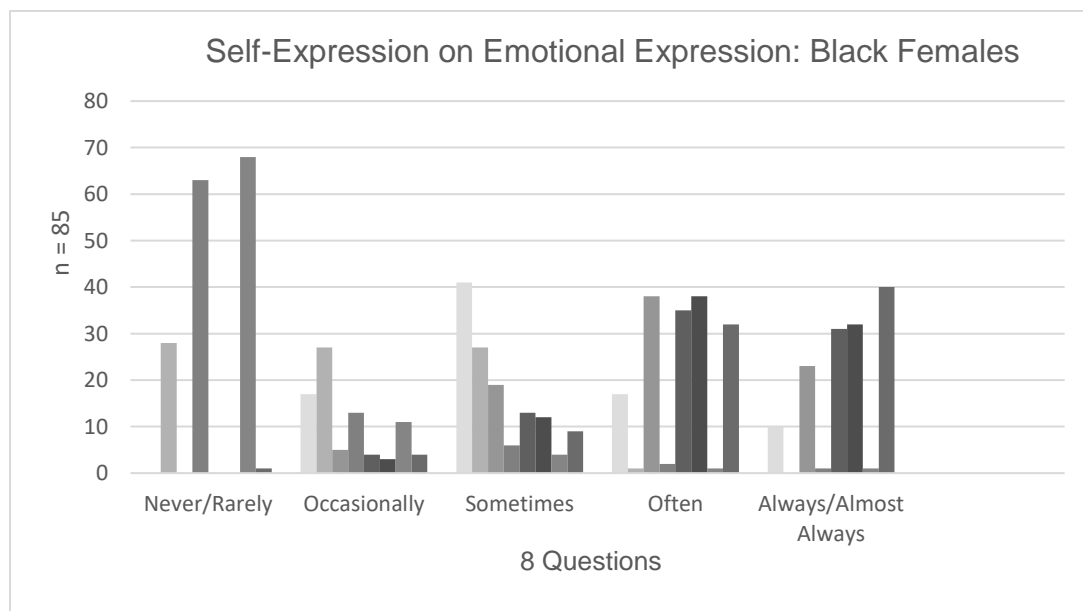


Figure 33. Self-expression on emotional expression responses: Black Females

### Self-Expression on Assertiveness

The assertiveness subscale includes communicating one's feelings and beliefs non-offensively (Bar-On, 1997). Figures 34 to 41 represent the participants' responses for assertiveness. Participants with low scores display passive behaviors and demonstrate incapability to articulate needs. Participants with high scores communicate ideas and thoughts to others in a constructive manner and with clarity. In business settings, leaders who monitor assertiveness levels develop a happy medium amidst extremes such as accommodating or aggressiveness, which contribute to healthy interpersonal relationships.

Self-expression on assertiveness expression emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 34.

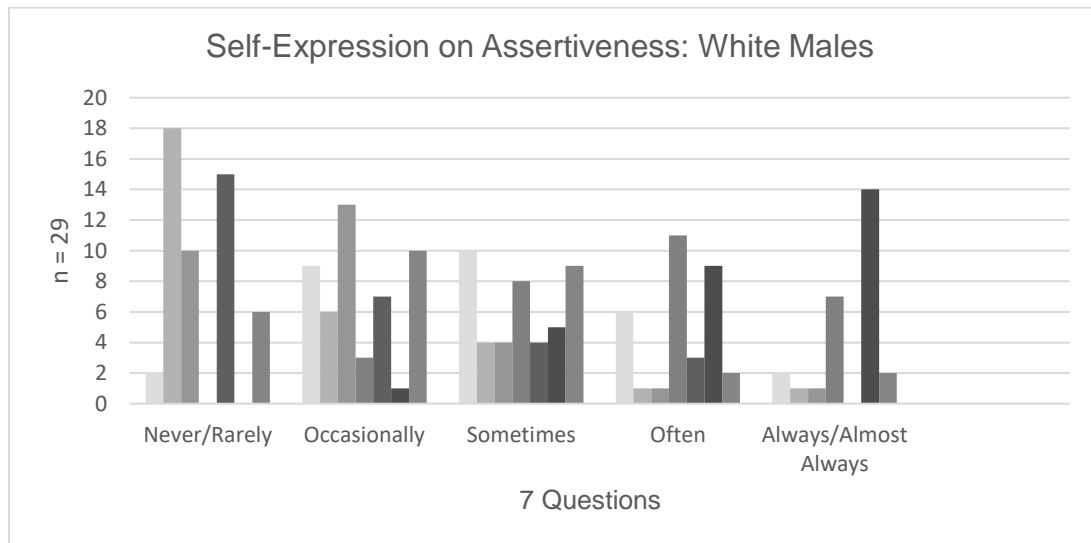
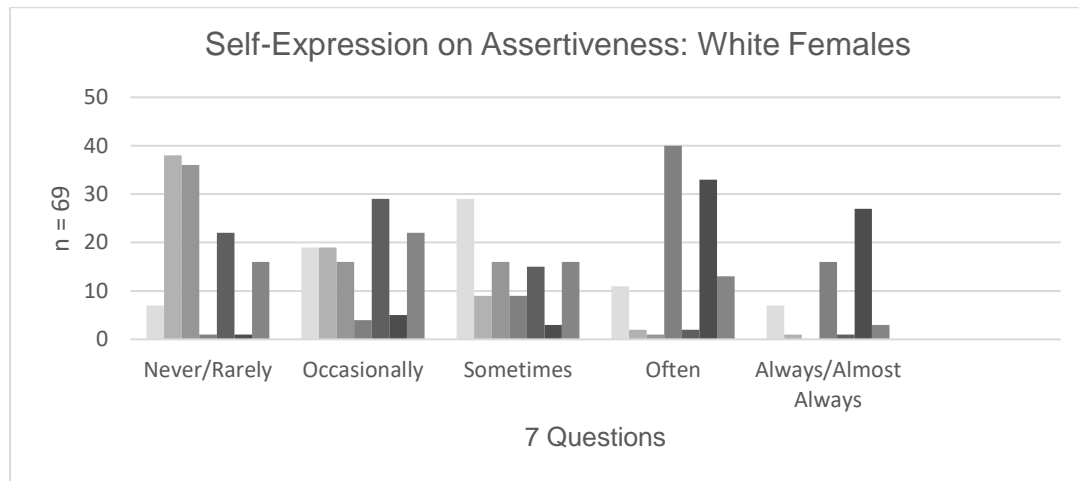


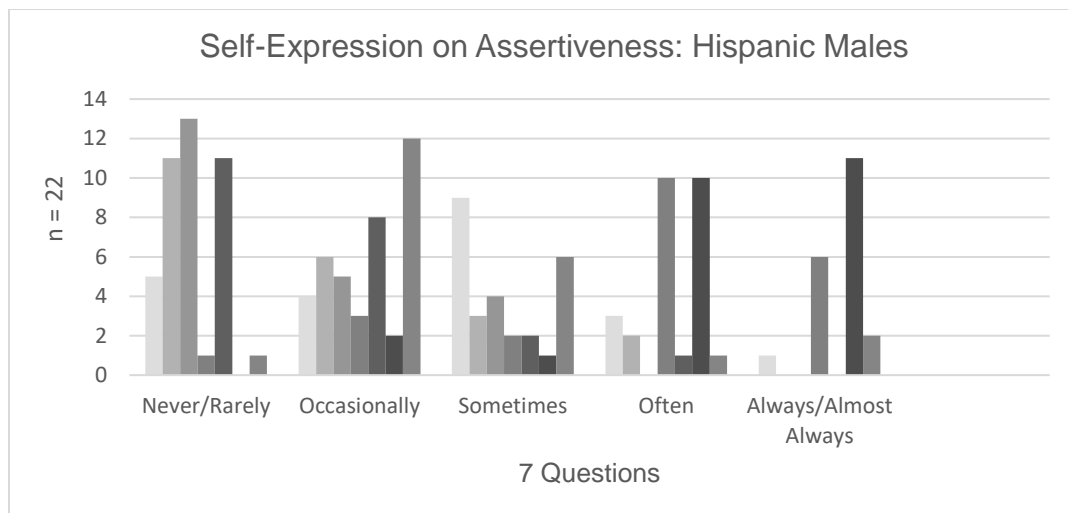
Figure 34. Self-expression on assertiveness: White Males

Self-expression on assertiveness expression emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 35.



*Figure 35. Self-expression on assertiveness: White Females*

Self-expression on assertiveness expression emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 36.



*Figure 36. Self-expression on assertiveness: Hispanic Males*



Self-expression on assertiveness expression emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 37.

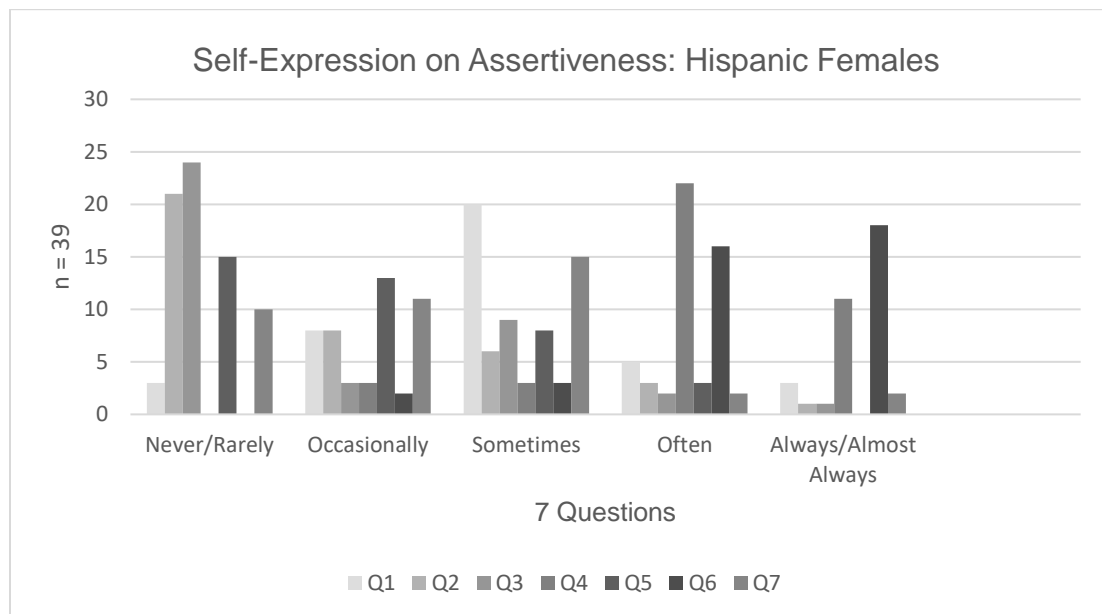


Figure 37. Self-expression on assertiveness: Hispanic Females

Self-expression on assertiveness expression emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 38.

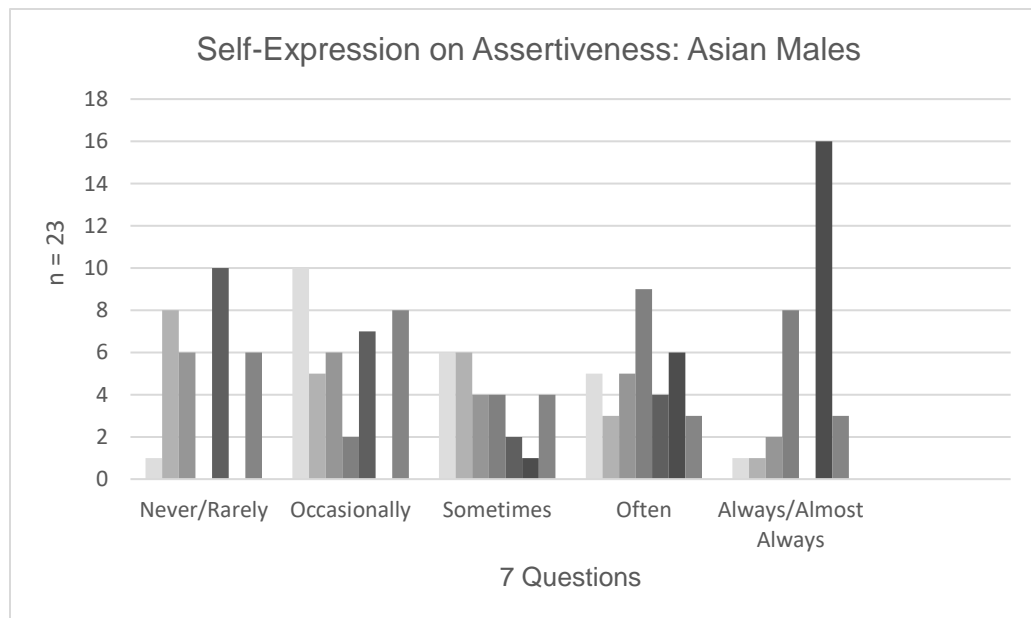


Figure 38. Self-expression on assertiveness: Asian Males

Self-expression on assertiveness expression emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 39.

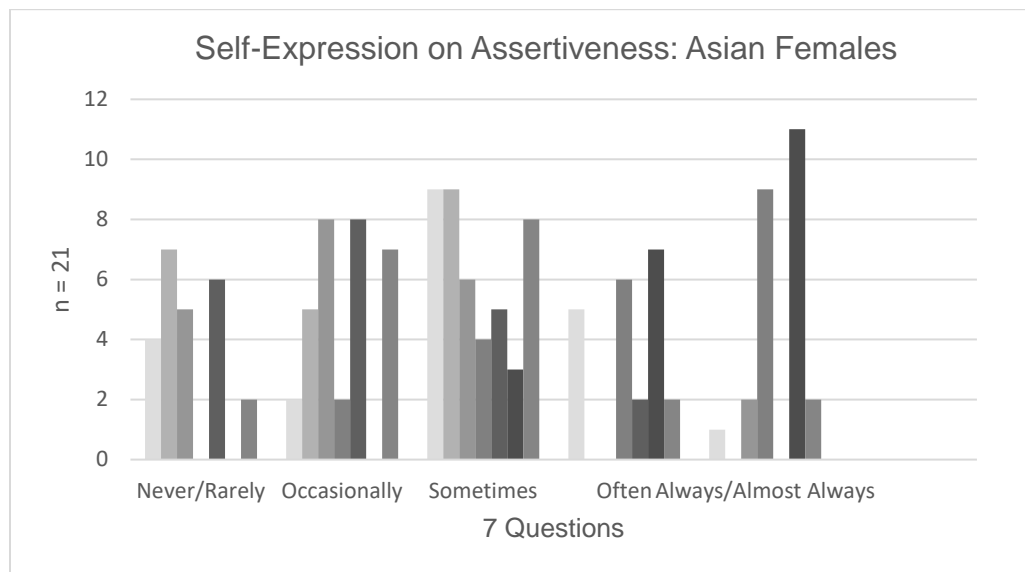


Figure 39. Self-expression on assertiveness: Asian Females

Self-expression on assertiveness expression emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 40.

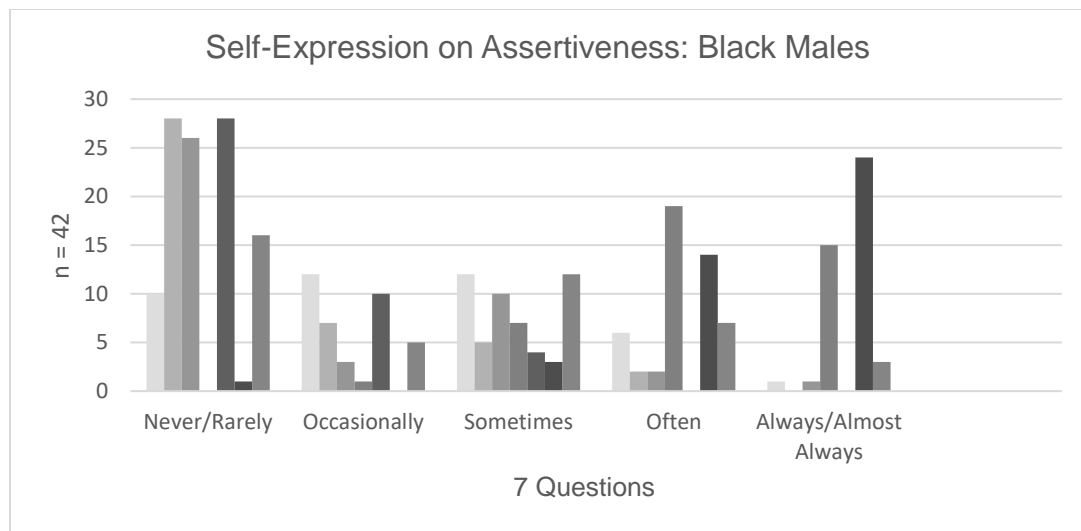


Figure 40. Self-expression on assertiveness: Black Males

Self-expression on assertiveness expression emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 41.

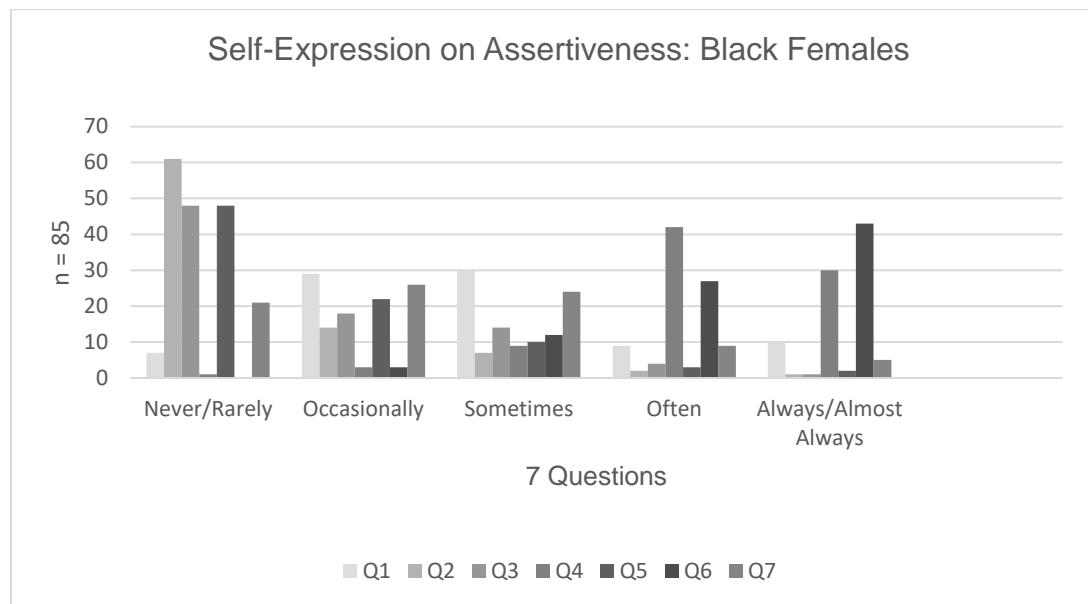


Figure 41. Self-expression on assertiveness: Black Females

### Self-Expression on Independence

The independence subscale involves one's autonomy and emotional self-determination to effectively plan, make decisions, complete tasks independently and free of emotional reliance on others (Bar-On, 1997). Figures 42 to 49 represent the participants' replies for independence. Participants with low scores display need of reassurance and support from others and individuals may demonstrate behaviors of heavy reliance on others to make decisions (MHS, 2011). Participants with high scores, on the other hand, make decisions independently and void of emotional entanglement from others. In business settings, leaders who monitor their independence levels develop harmony in being decisive and directive - underwriting accountability; vice versa, low levels of independence may lead to groupthink and lack of individual innovation and creativity.

Self-expression on independence emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 42.

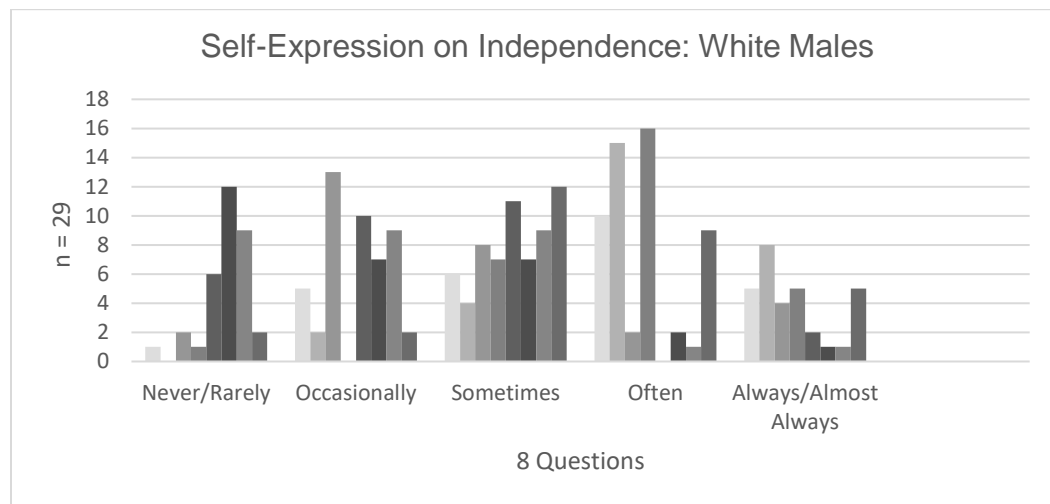


Figure 42. Self-expression on independence: White Males

Self-expression on independence emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 43.

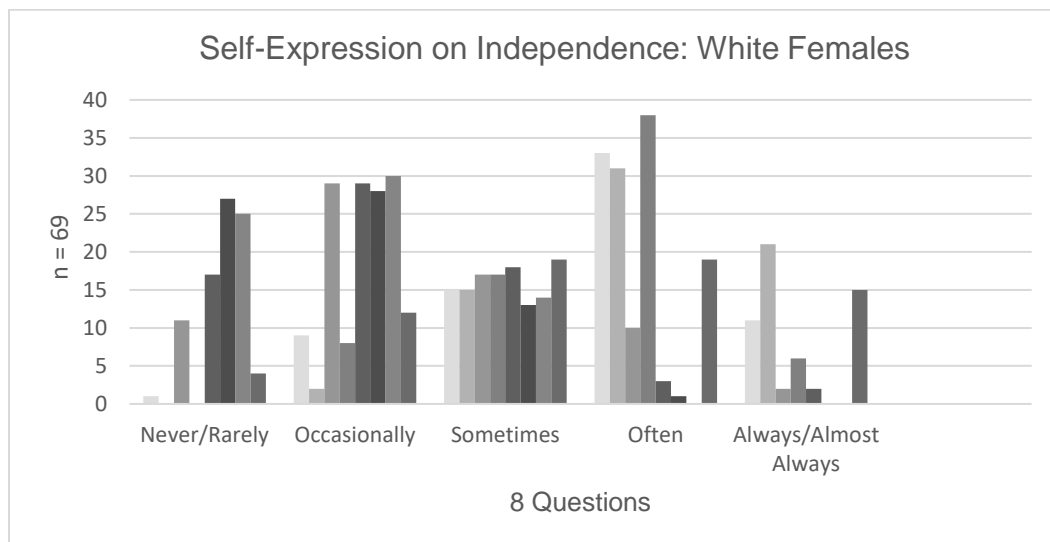


Figure 43. Self-expression on independence: White Females

Self-expression on independence emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 44.

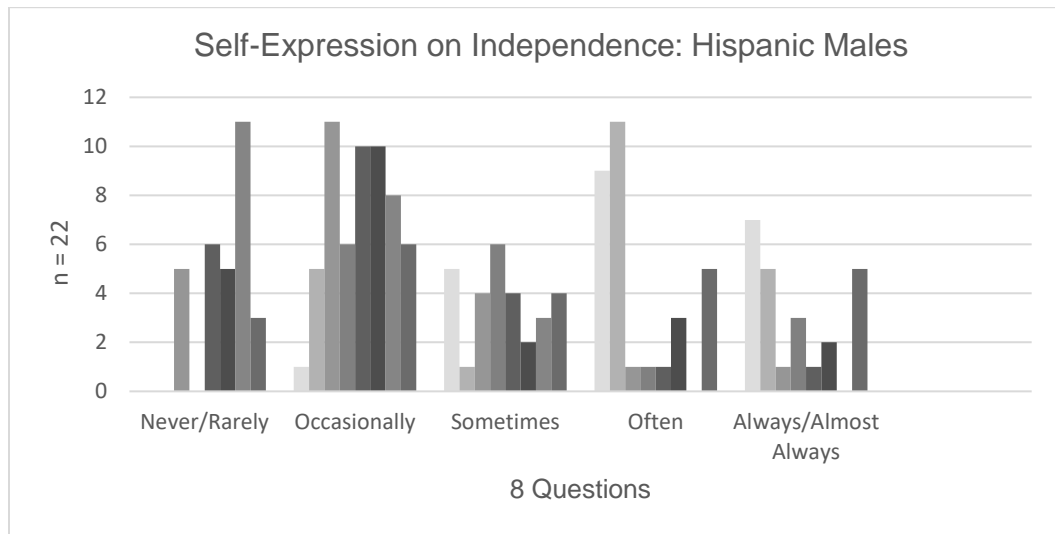


Figure 44. Self-expression on independence: Hispanic Males

Self-expression on independence emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 45.

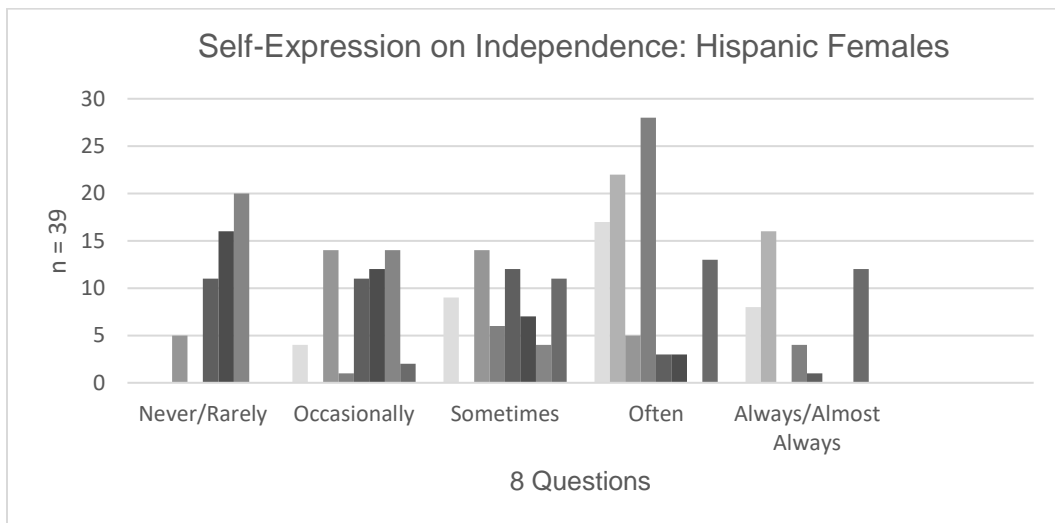


Figure 45. Self-expression on independence: Hispanic Females

Self-expression on independence emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 46.

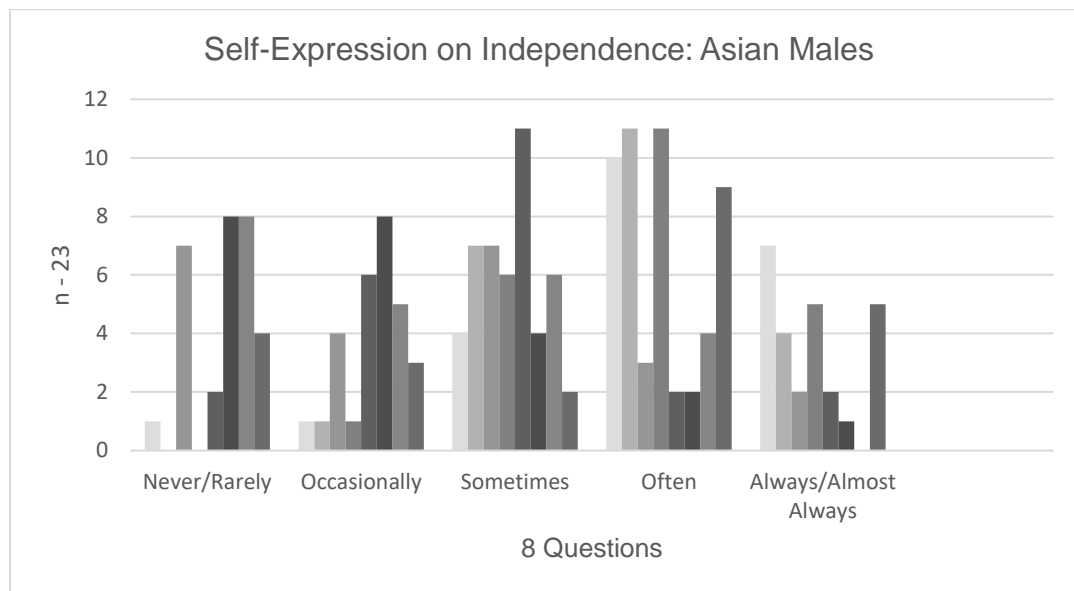


Figure 46. Self-expression on independence: Asian Males

Self-expression on independence emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 47.

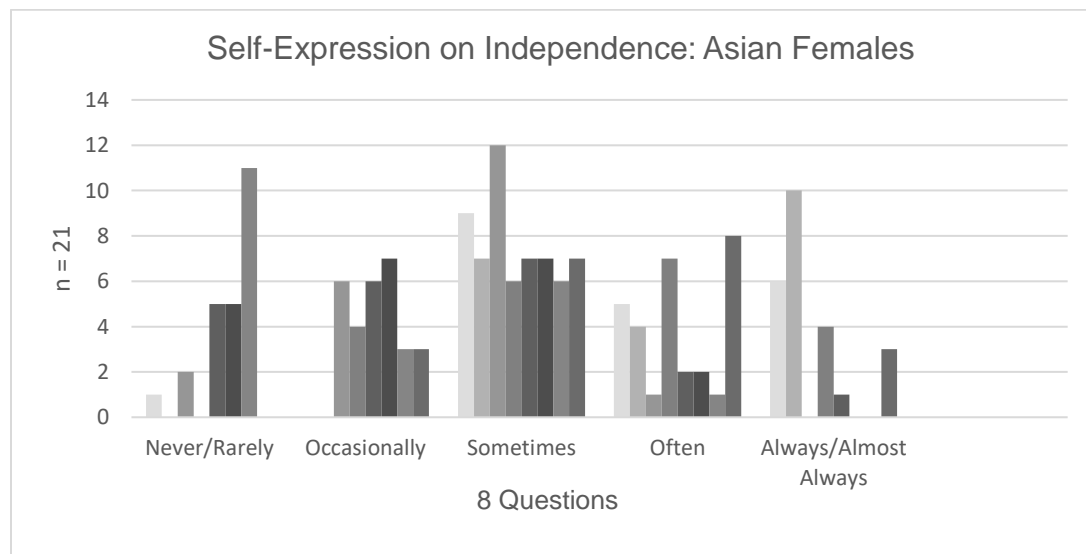


Figure 47. Self-expression on independence: Asian Females

Self-expression on independence emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 48.

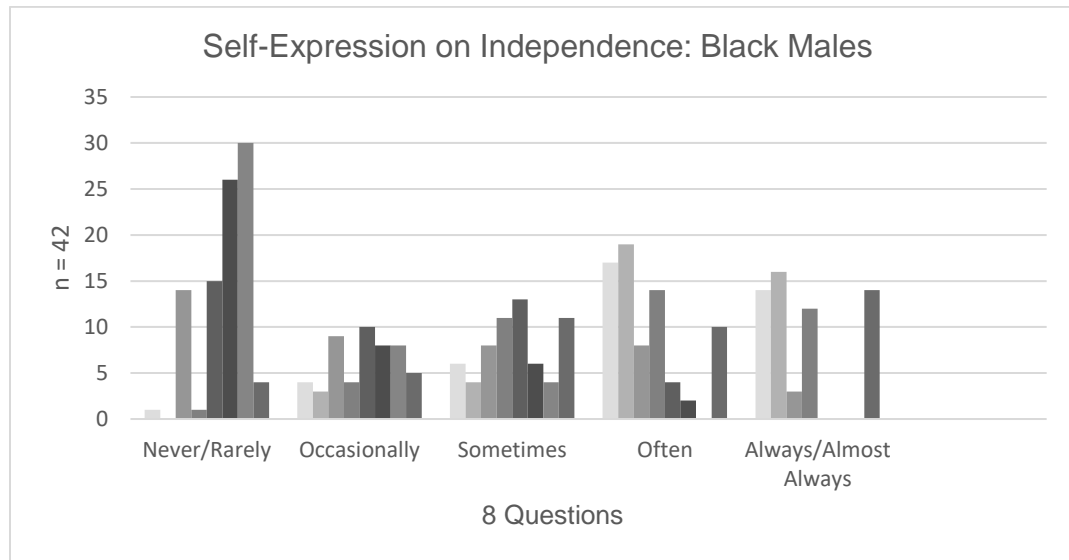


Figure 48. Self-expression on independence: Black Males

Self-expression on independence emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 49.

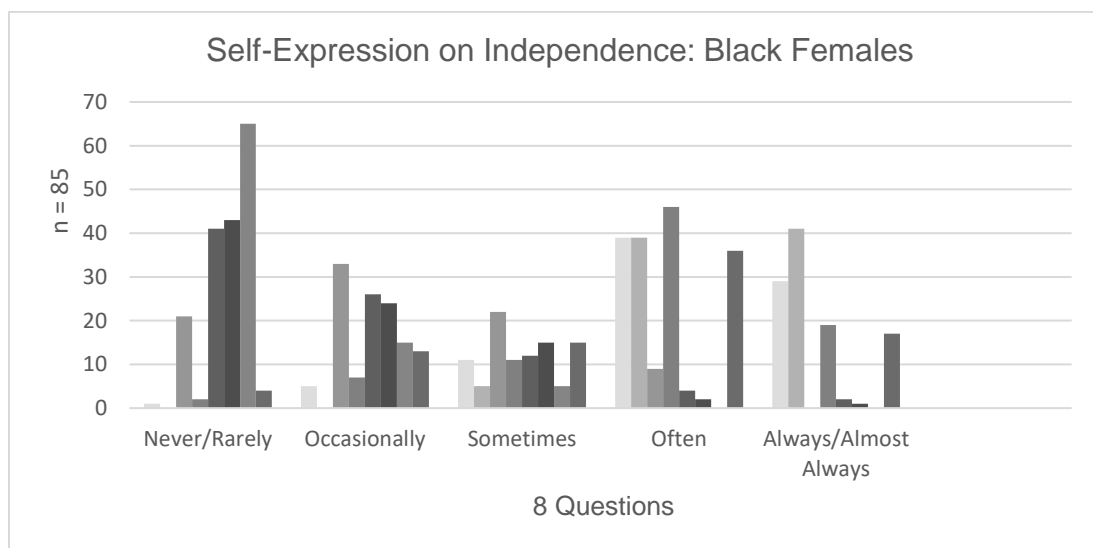


Figure 49. Self-expression on independence: Black Females

## Interpersonal on Interpersonal Relationships

The interpersonal relationships subscale involves the characteristics of trust and compassion to build and maintain healthy relationships (Bar-On, 1997). Figures 50 to 57 represent the participants' responses for interpersonal relationships. Low scores indicate the respondent is more likely to be defensive, skeptical, or hold relationships that are lacking in trust (MHS, 2011). High scores unveiled respondents who are socially and generally fun to be with (MHS, 2011). Whites (males and females), and Hispanics (males and females) reported scores as often, indicating a depth to established relationships. Asian (males and females) and Blacks (males and females) favored always/almost always, confirming participants' dedication to investing in relationships. Responses from Black males and females also peaked on never/rarely, signaling some respondents may be lacking a network to cope with demanding work environments. In the context of leadership, mutually sustaining interpersonal relationships are the keystone to developing relationships with depth, meaning, and compassion between clients, investors, and employees.

Interpersonal on interpersonal relationships emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 50.

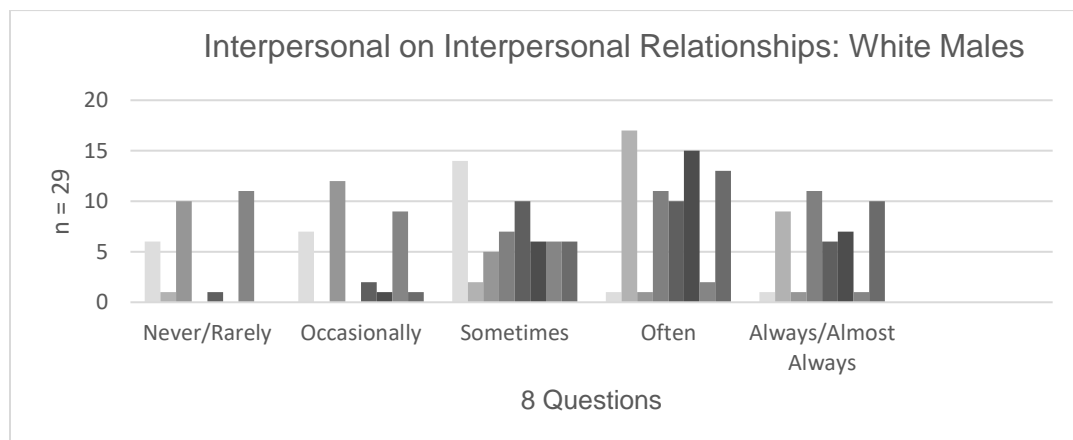


Figure 50. Interpersonal on interpersonal relationships: White Males



Interpersonal on interpersonal relationships emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 51.

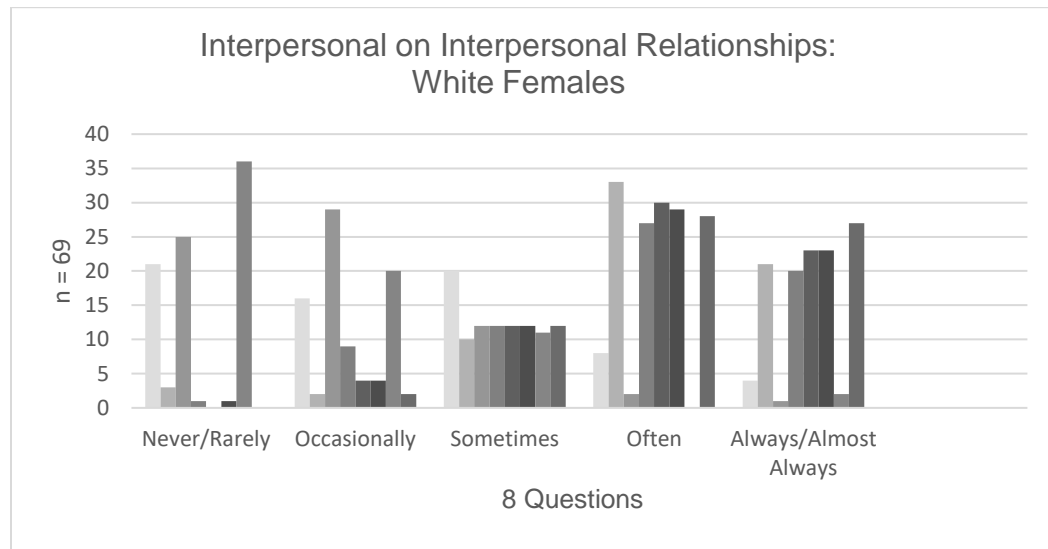


Figure 51. Interpersonal on interpersonal relationships: White Females

Interpersonal on interpersonal relationships emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 52.

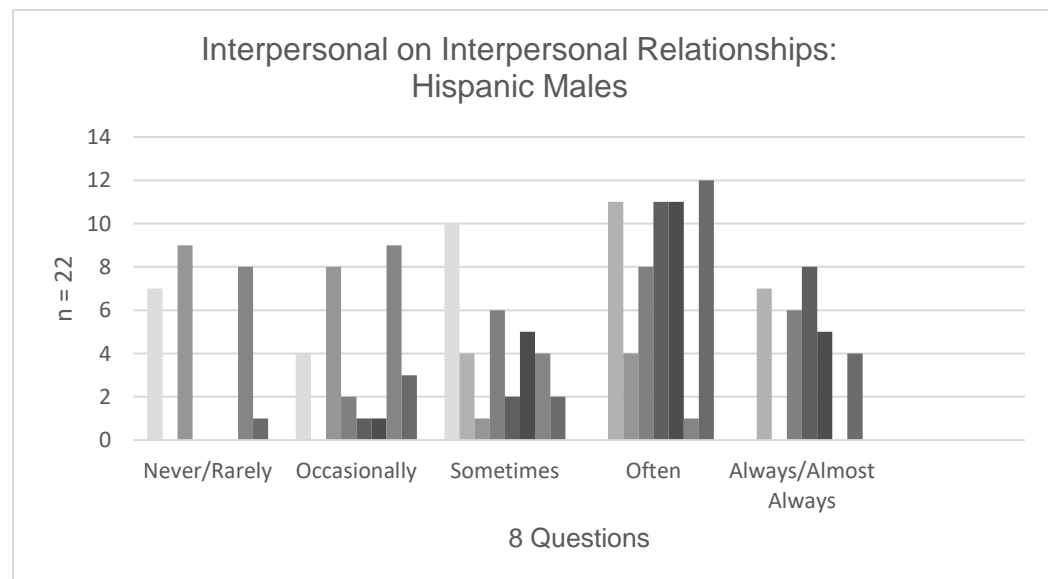


Figure 52. Interpersonal on interpersonal relationships: Hispanic Males

Interpersonal on interpersonal relationships emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 53.

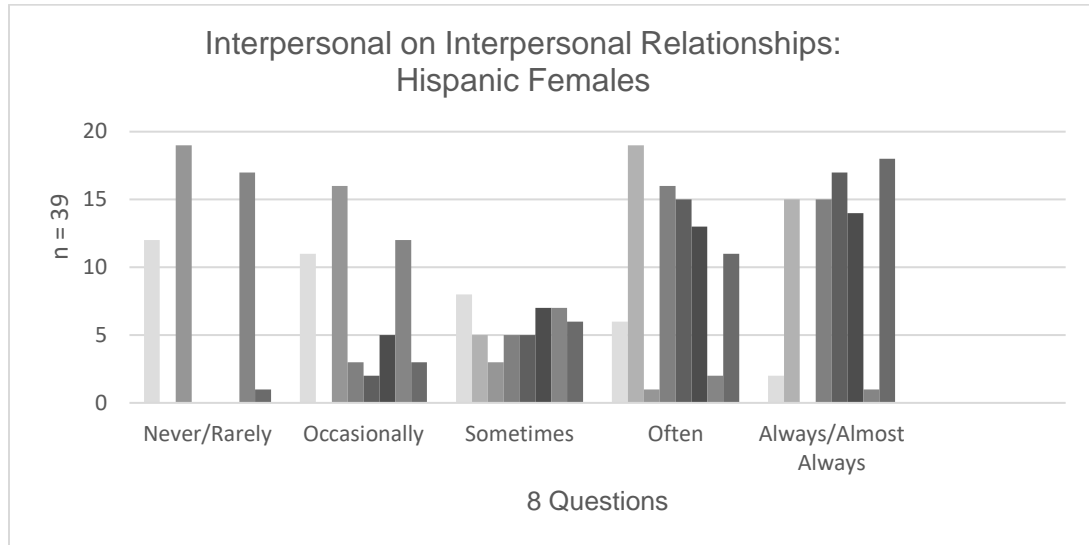


Figure 53. Interpersonal on interpersonal relationships: Hispanic Females

Interpersonal on interpersonal relationships emotional intelligence scores for Asian males ( $n = 21$ ) were illustrated in Figure 54.

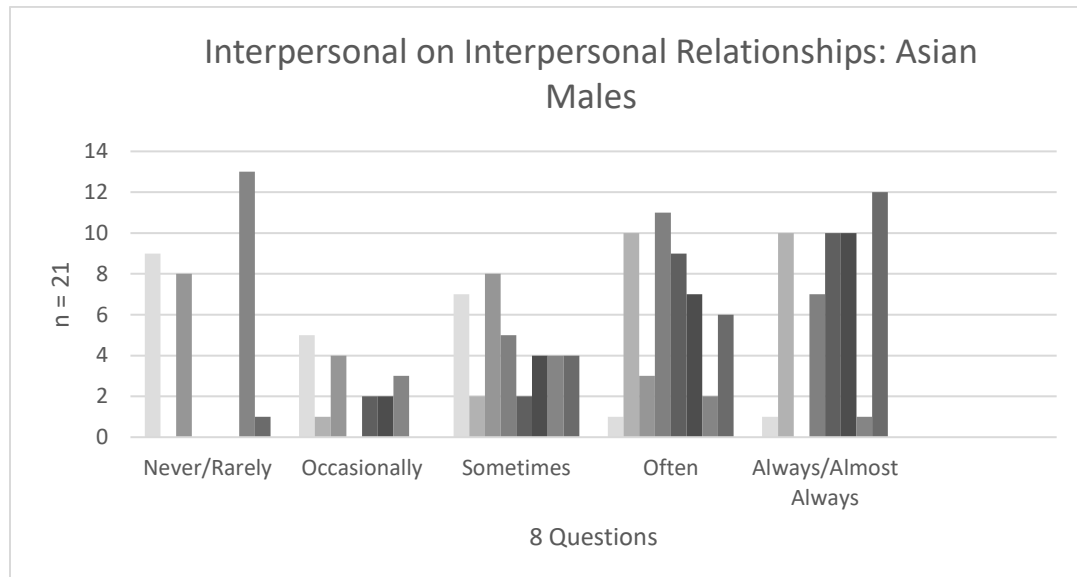


Figure 54. Interpersonal on interpersonal relationships: Asian Males

Interpersonal on interpersonal relationships emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 55.

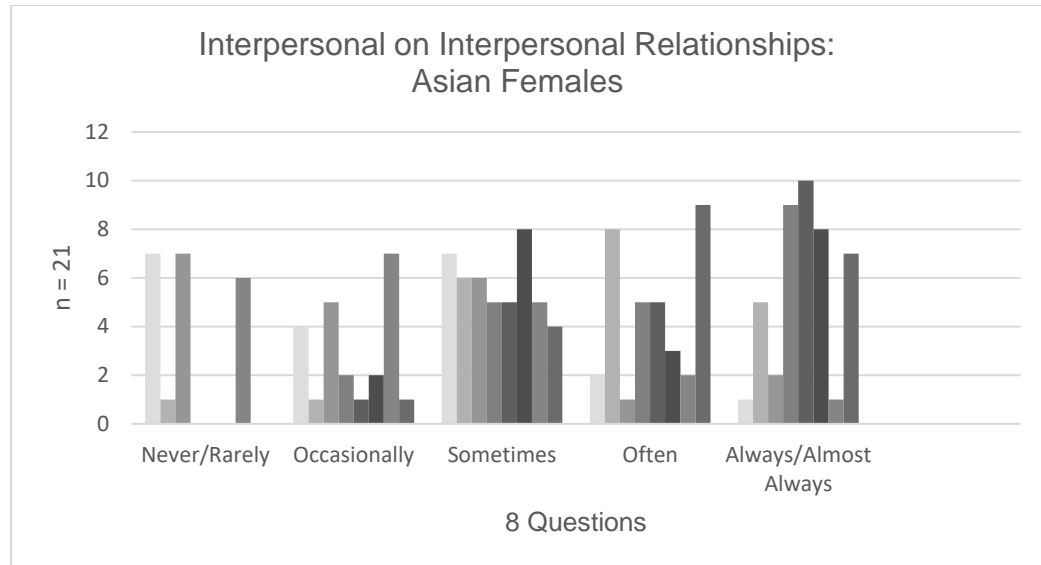


Figure 55. Interpersonal on interpersonal relationships: Asian Females

Interpersonal on interpersonal relationships emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 56.

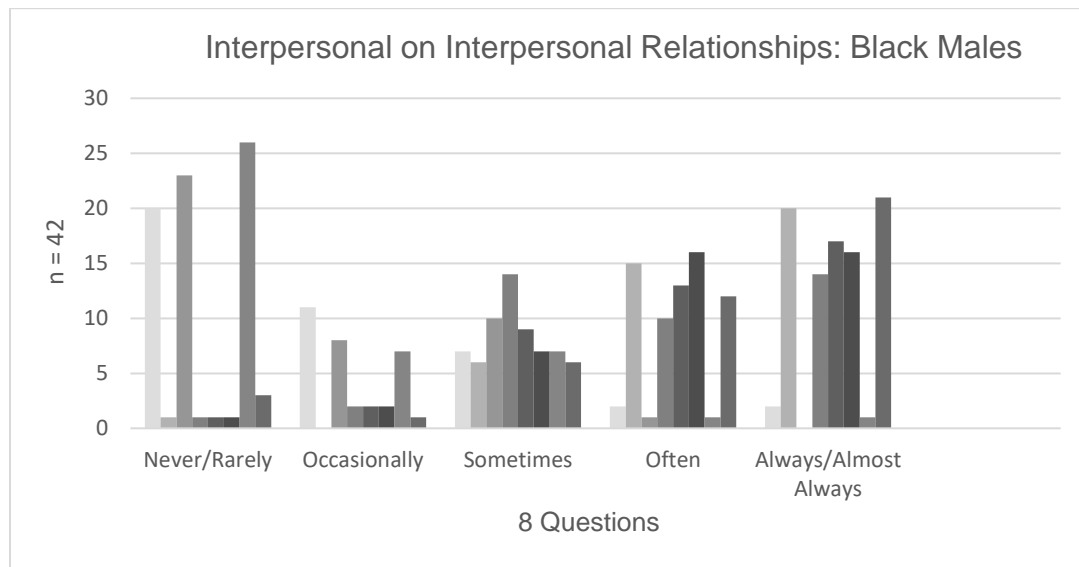


Figure 56. Interpersonal on interpersonal relationships: Black Males

Interpersonal on interpersonal relationships emotional intelligence scores for Black females ( $n = 22$ ) were illustrated in Figure 57.

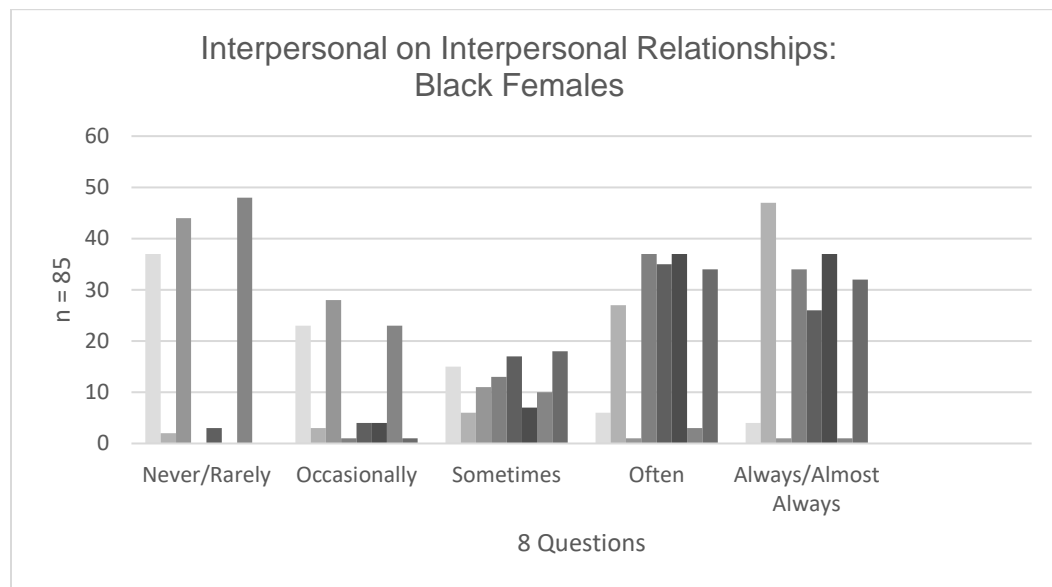


Figure 57. Interpersonal on interpersonal relationships: Black Females

### Interpersonal on Empathy

The subscale of empathy involves knowing, understanding, appreciating how others feel, and being respectful of others' feelings (Bar-On, 1997). Figures 58 to 65 represent the participants' responses for empathy. Low scores indicate the respondent struggles to comprehend how others feel while high scores indicate a caring, compassionate, and considerate individual (MHS, 2011). Participants' responses overwhelmingly favored often and always/almost always for all groups, which demonstrate the collective commitment to establish and advance working relationships through teamwork. In the context of leadership, empathy is a powerful skill but requires boundaries to avoid loss of focus while circumnavigating difficult (emotional) situations. Boundaries are helpful for leaders to prevent emotional burn-out.

Interpersonal on empathy emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 58.

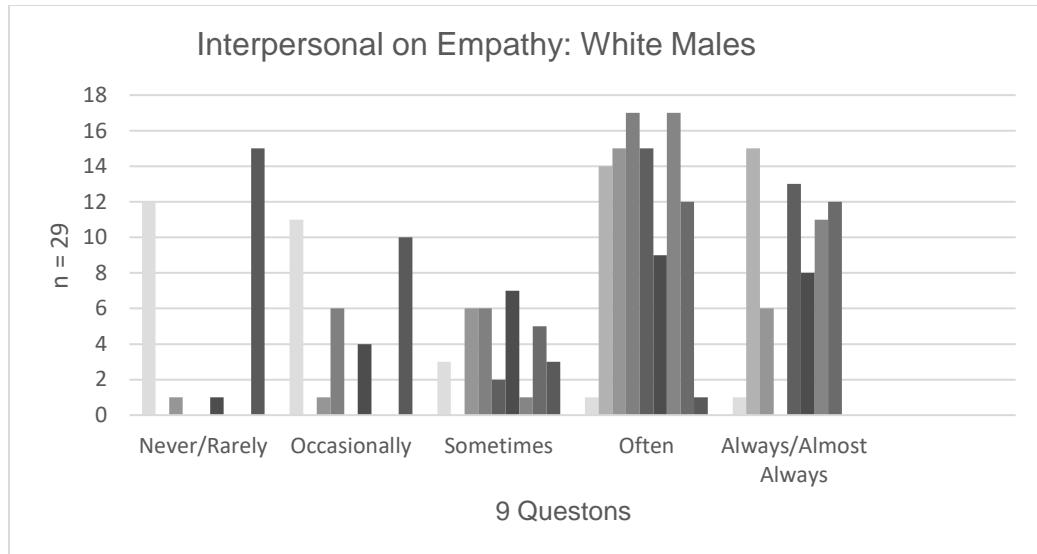


Figure 58. Interpersonal on empathy: White Males

Interpersonal on empathy emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 59.

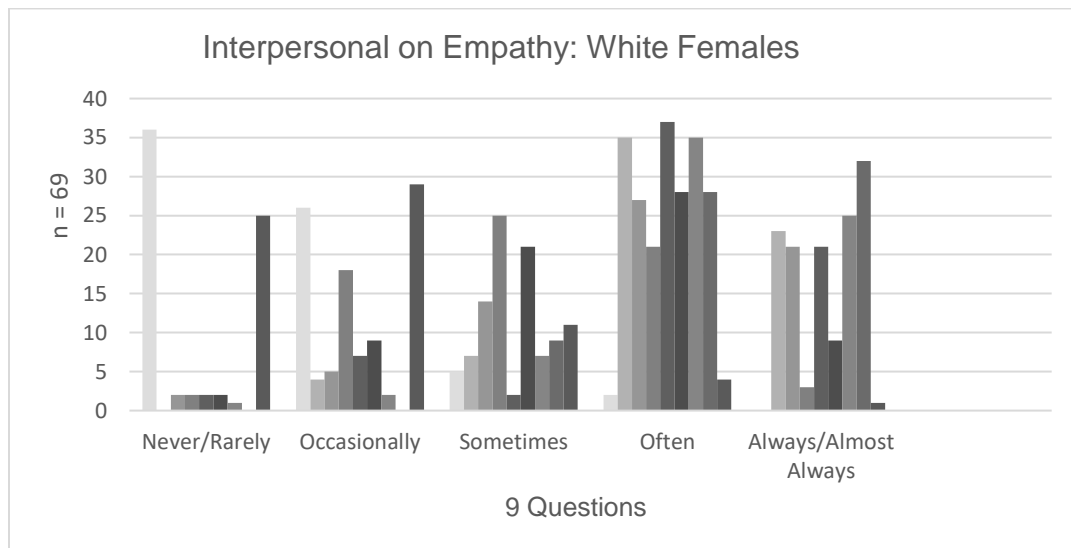


Figure 59. Interpersonal on empathy: White Females

Interpersonal on empathy emotional intelligence scores for Hispanic males  
( $n = 22$ ) were illustrated in Figure 60.

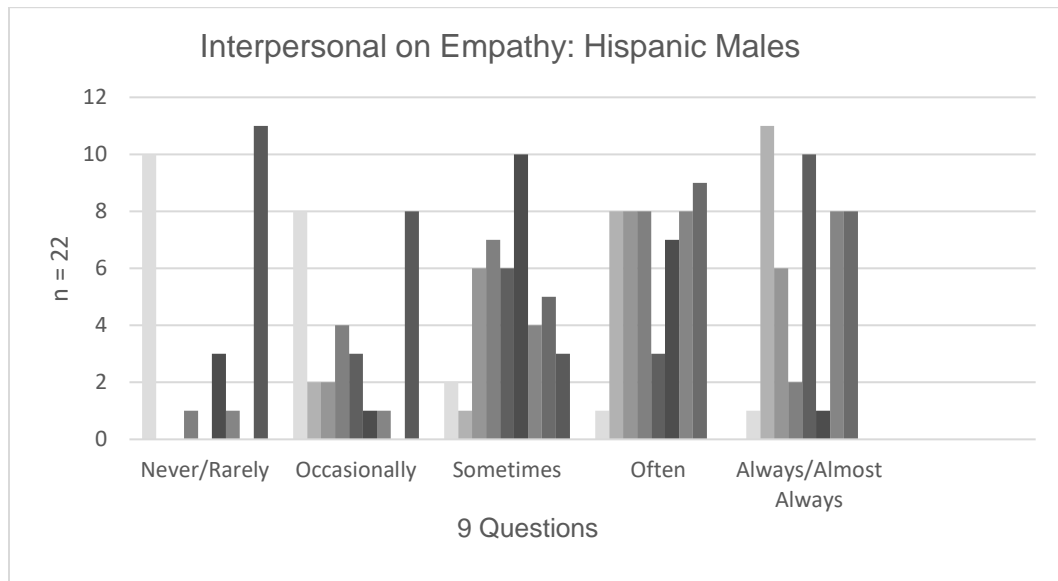


Figure 60. Interpersonal on empathy: Hispanic Males

Interpersonal on empathy emotional intelligence scores for Hispanic females  
( $n = 39$ ) were illustrated in Figure 61.

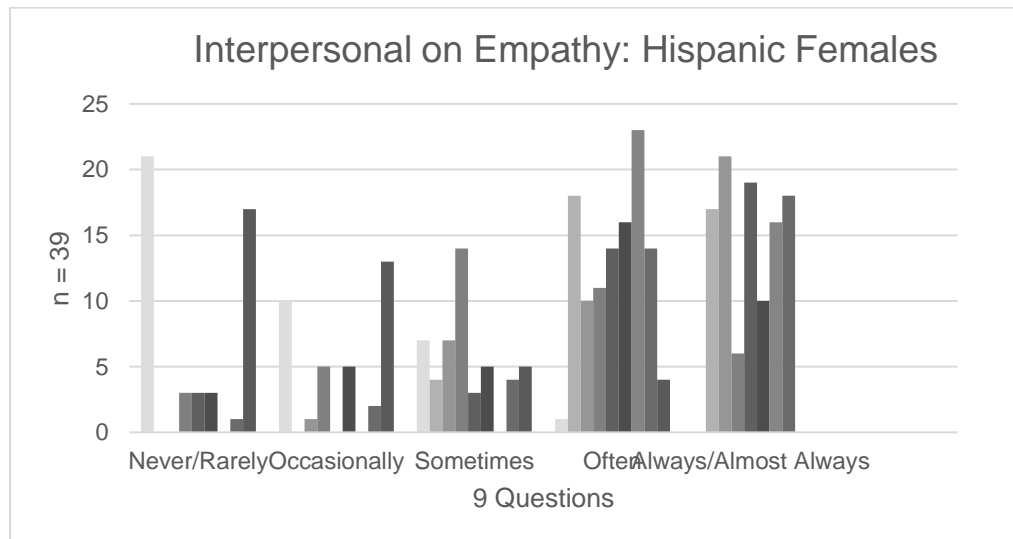


Figure 61. Interpersonal on empathy: Hispanic Females

Interpersonal on empathy emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 62.

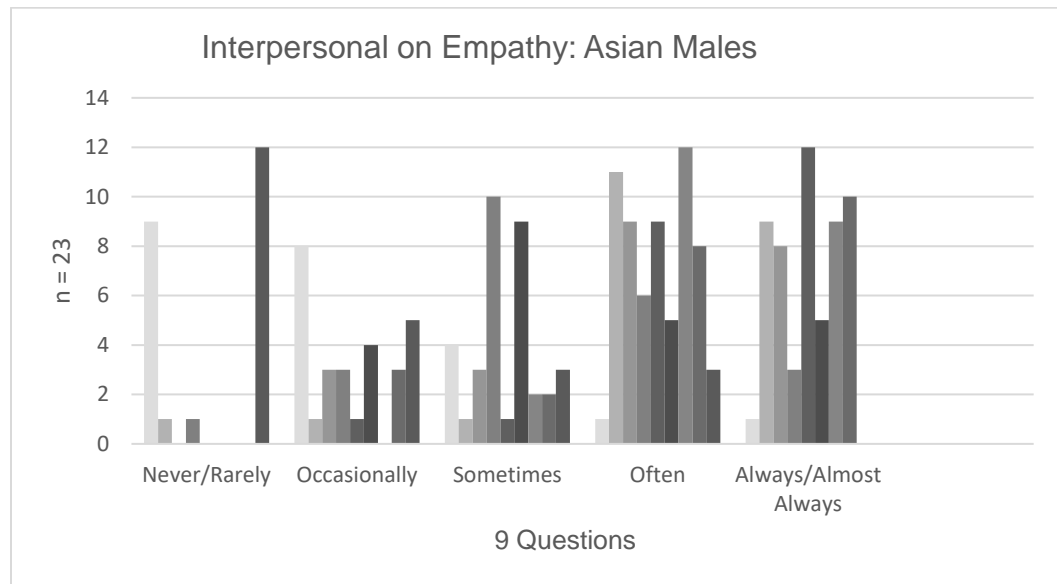


Figure 62. Interpersonal on empathy: Asian Males

Interpersonal on empathy emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 63.

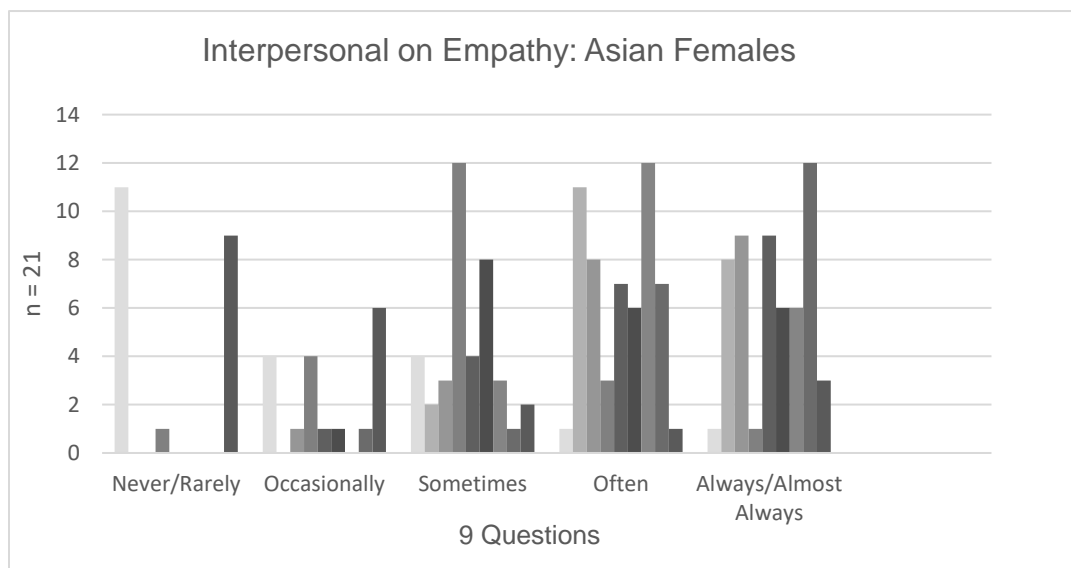
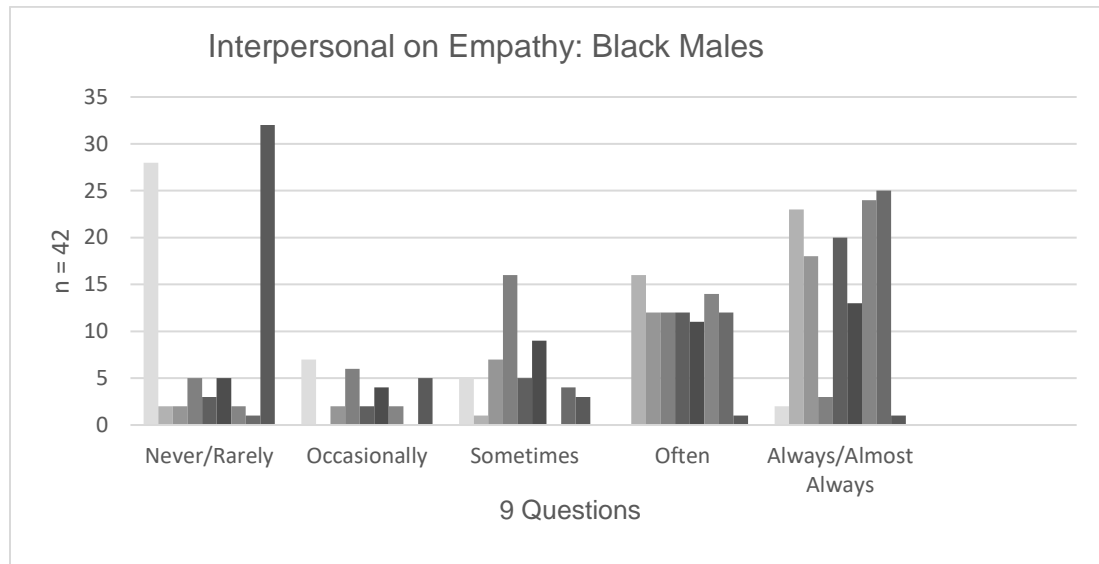


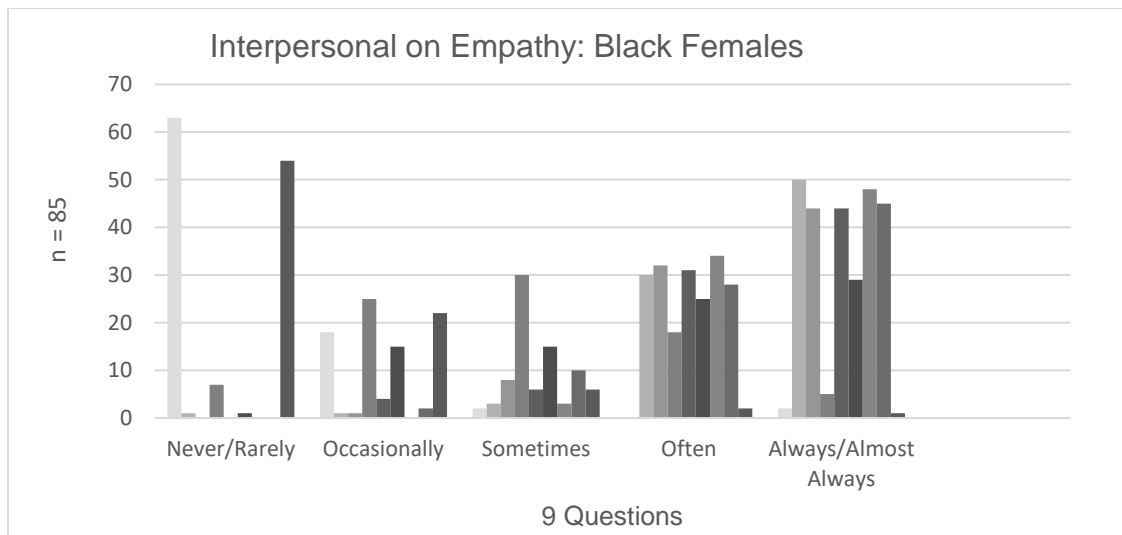
Figure 63. Interpersonal on empathy: Asian Females

Interpersonal on empathy emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 64.



*Figure 64.* Interpersonal on empathy: Black Males

Interpersonal on empathy emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 65.



*Figure 65.* Interpersonal on empathy: Black Females



### Interpersonal on Social Responsibility

The social responsibility subscale involves social consciousness, inclination to contribute to society and overall demonstration of concern for the community at-large (Bar-On, 1997). Figures 66 to 73 represent the participants' responses for social responsibility. Low scores indicate the respondents prefer competitive rather than collaborative settings. Participants' responses with high social responsibility scores indorse the utilitarian principle (MHS, 2011). Participants' responses for Whites (males and females) and Hispanics (males and females) favored occasionally.

Responses from Asian males favored often while Asian females registered as sometimes. Blacks (males and females) registered responses as never/rarely. Social responsibility resides in harmony with empathy, self-actualization, and interpersonal relationships, which cosign a leader's ability to remain conscious of the impact of his or her own emotions and actions toward personal and organizational goals and performance.

Interpersonal on social responsibility emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 66.

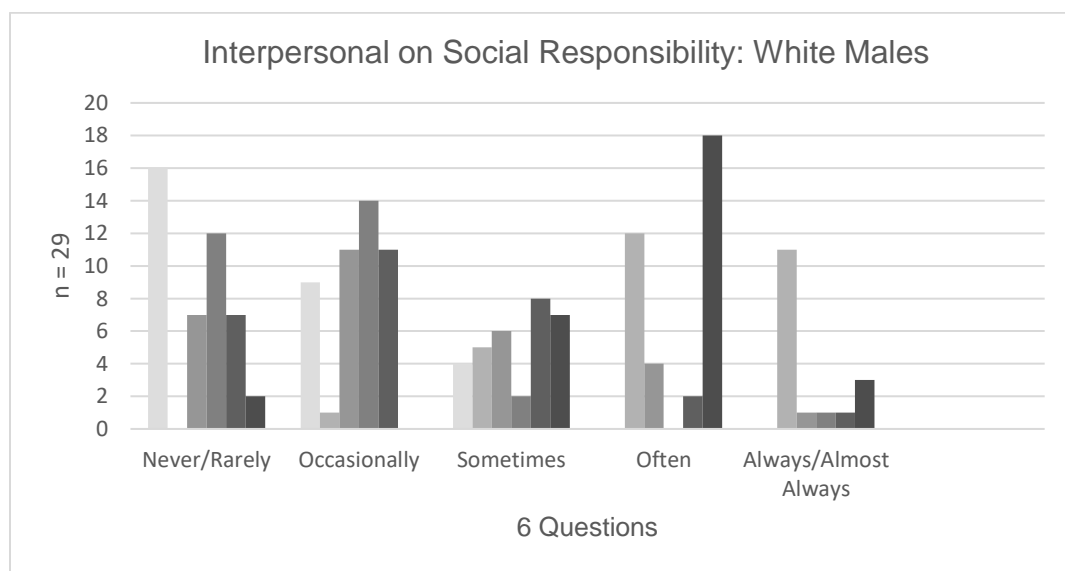


Figure 66. Interpersonal on social responsibility: White Males

Interpersonal on social responsibility emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 67.

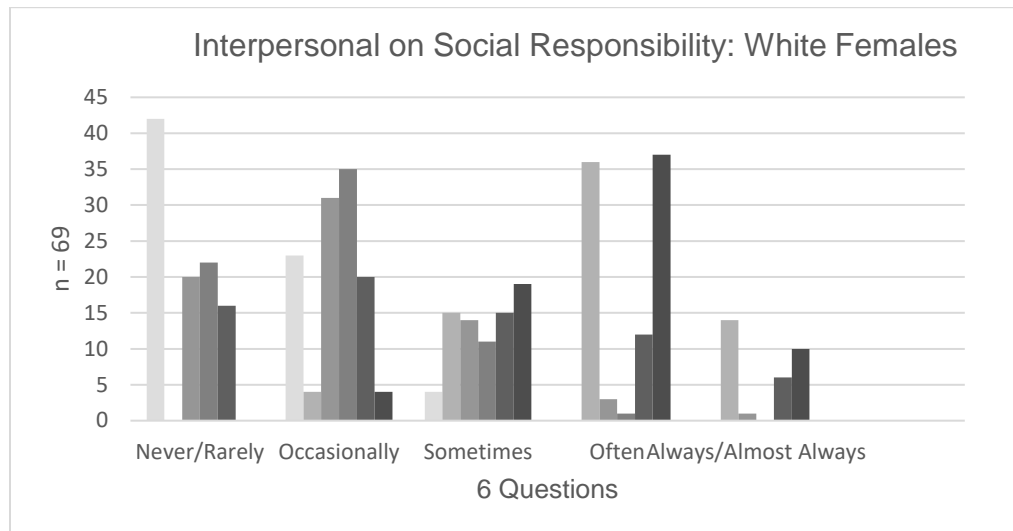


Figure 67. Interpersonal on social responsibility: White Females

Interpersonal on social responsibility emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 68.

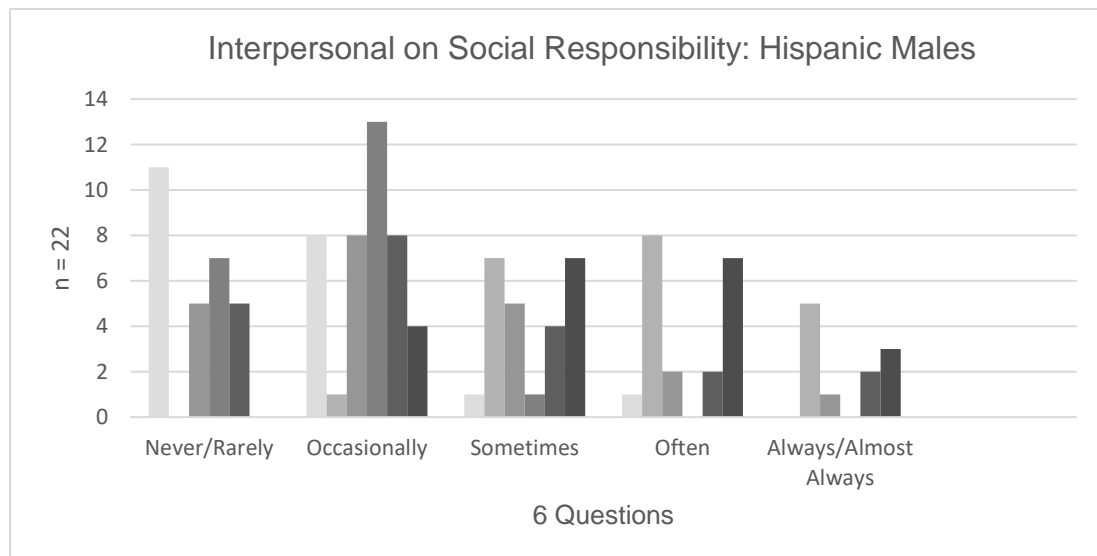


Figure 68. Interpersonal on social responsibility: Hispanic Males

Interpersonal on social responsibility emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 69.

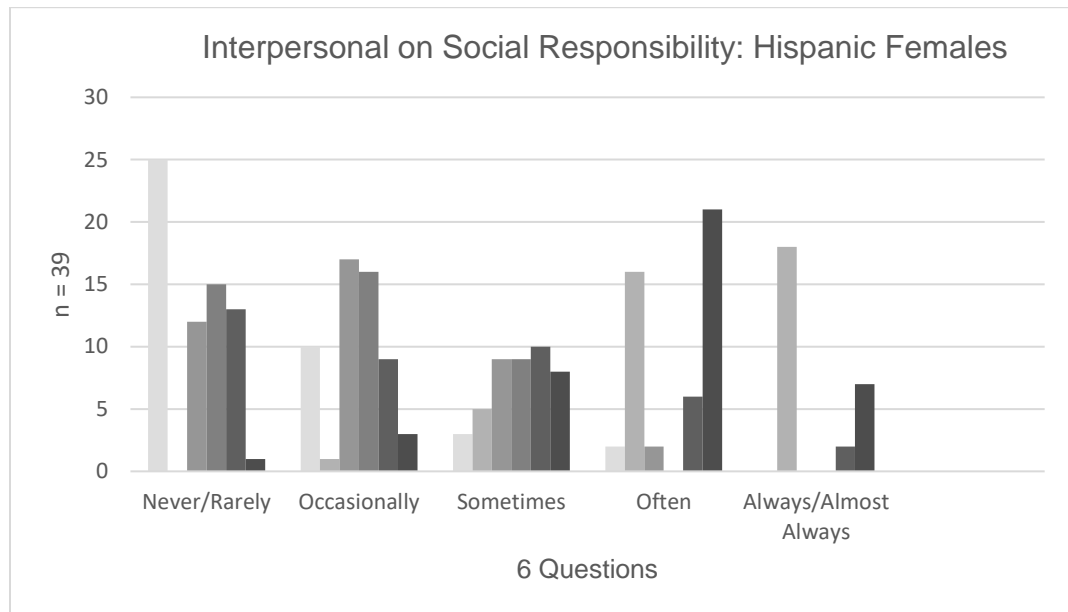


Figure 69. Interpersonal on social responsibility: Hispanic Females

Interpersonal on social responsibility emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 70.

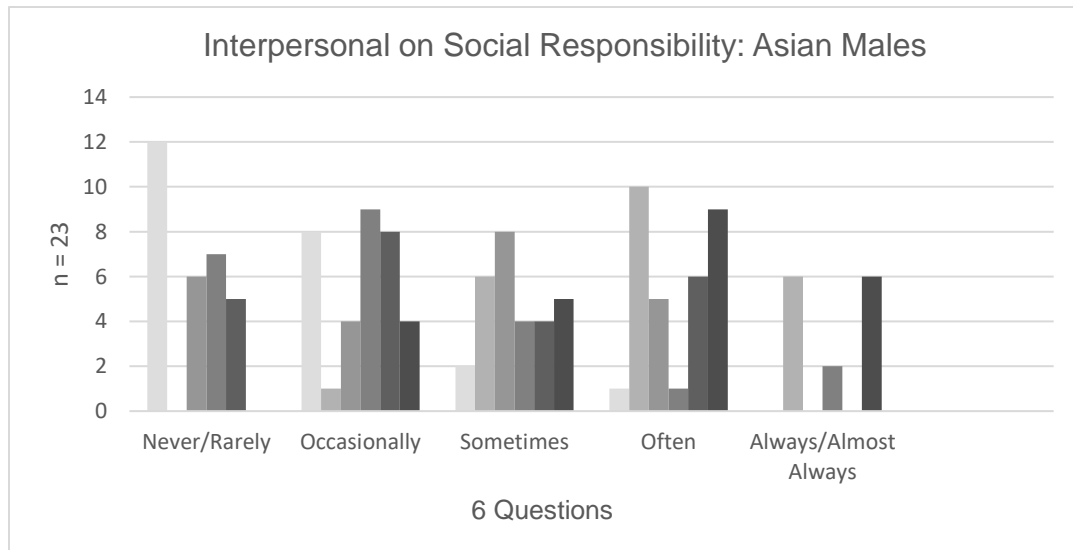


Figure 70. Interpersonal on social responsibility: Asian Males

Interpersonal on social responsibility emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 71.

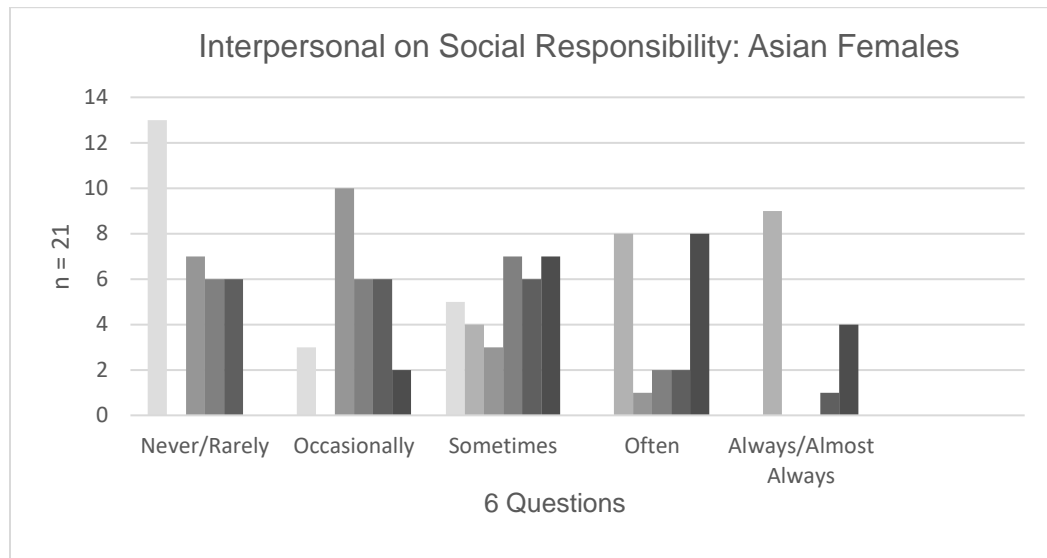


Figure 71. Interpersonal on social responsibility: Asian Females

Interpersonal on social responsibility emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 72.

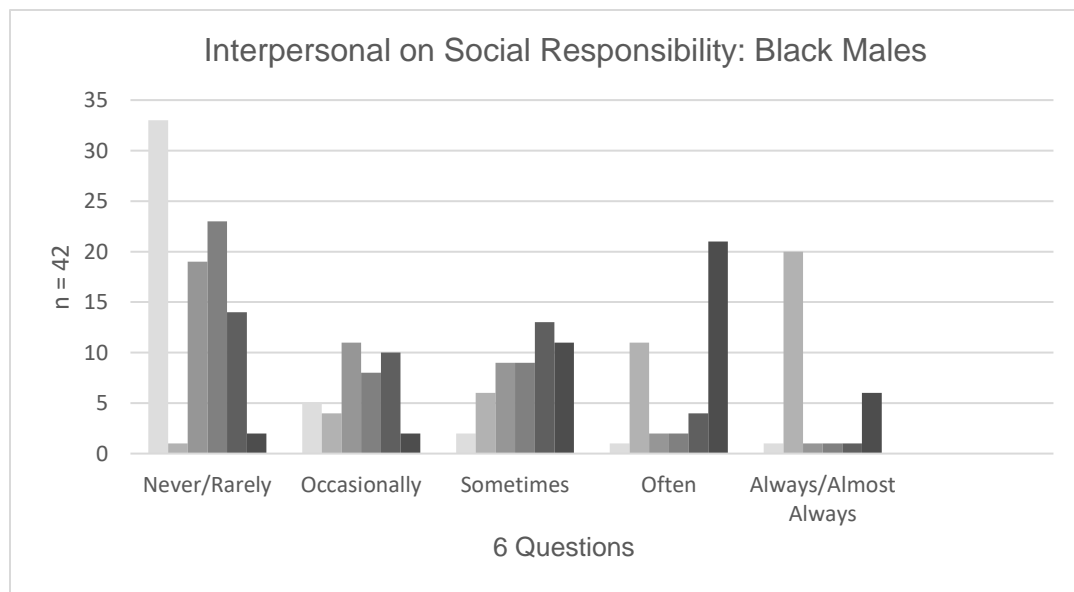


Figure 72. Interpersonal on social responsibility: Black Males

Interpersonal on social responsibility emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 73.

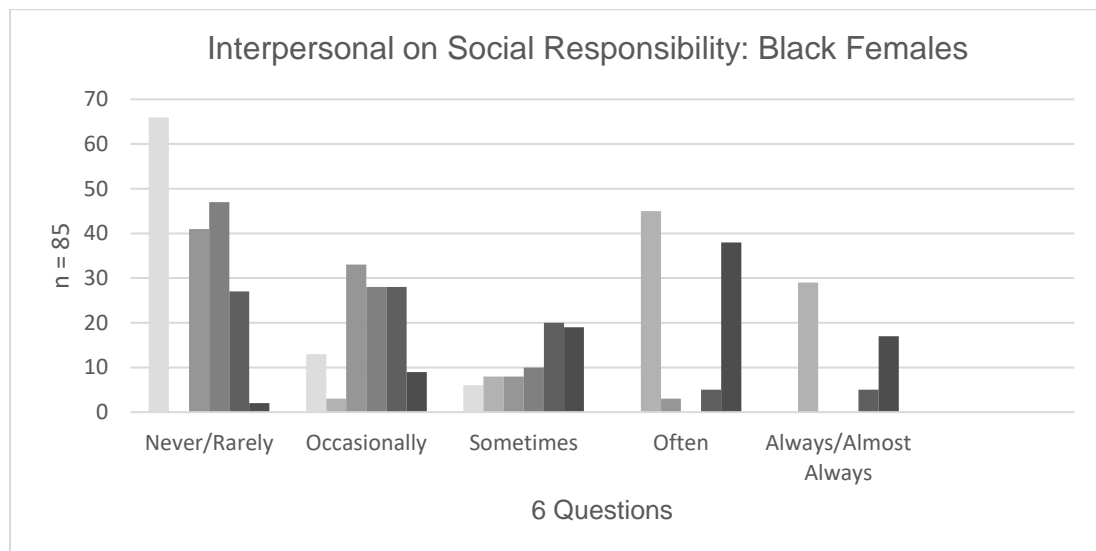


Figure 73. Interpersonal on social responsibility: Black Females

### Decision Making on Problem Solving

The problem-solving subscale involves finding solutions in emotional situations and knowing how emotions can predict decision making (Bar-On, 1997). Figures 74 to 81 represent the participants' responses for problem solving. Low scores signpost the respondents' anxiety or inability to move past the emotions involved in a problem (MHS, 2011). High scores are indicative of a focused demeanor toward organizational success. Participants' responses for Whites (males and females) and Hispanics (males and females), Asian males and Black females peaked in favor at often and always/almost always. Asian females and Black males registered scores at often. In the context of leadership, problem solving countersigns individual and organizational success when aligned with independence, reality testing, flexibility, and stress tolerance subscales.

Decision making on problem solving emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 74.

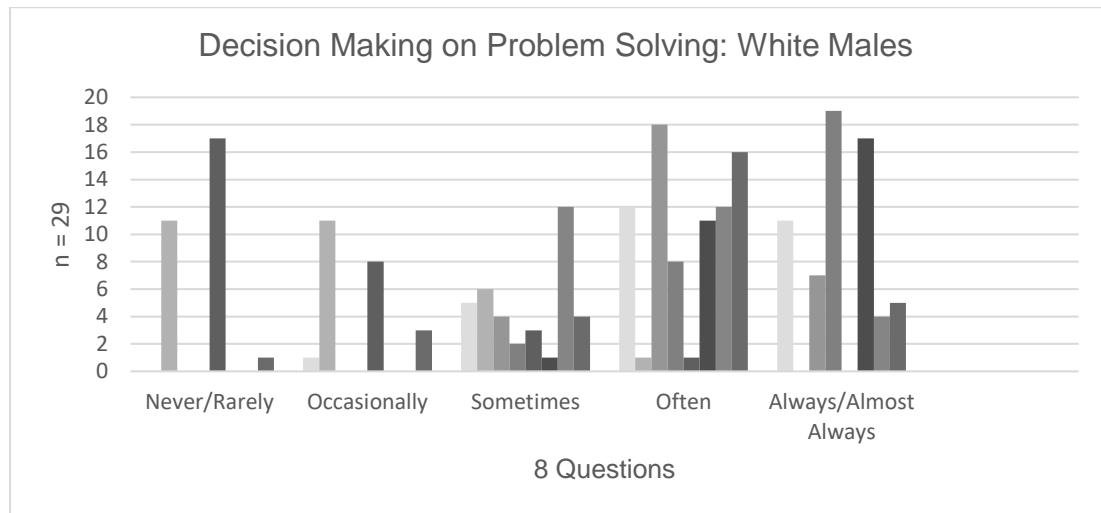


Figure 74. Decision making on problem solving: White Males

Decision making on problem solving emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 75.

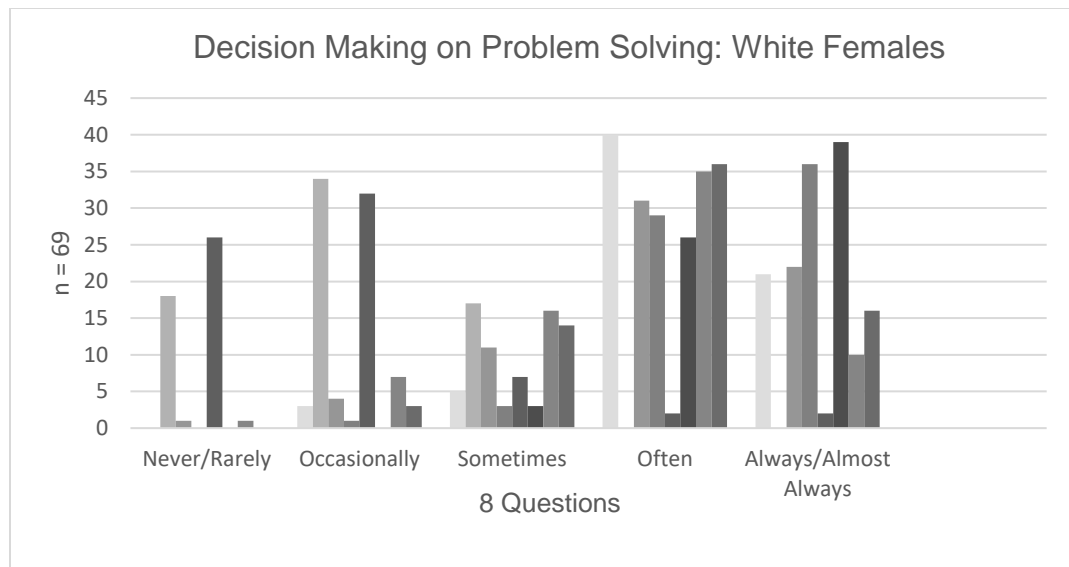


Figure 75. Decision making on problem solving: White Females

Decision making on problem solving emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 76.

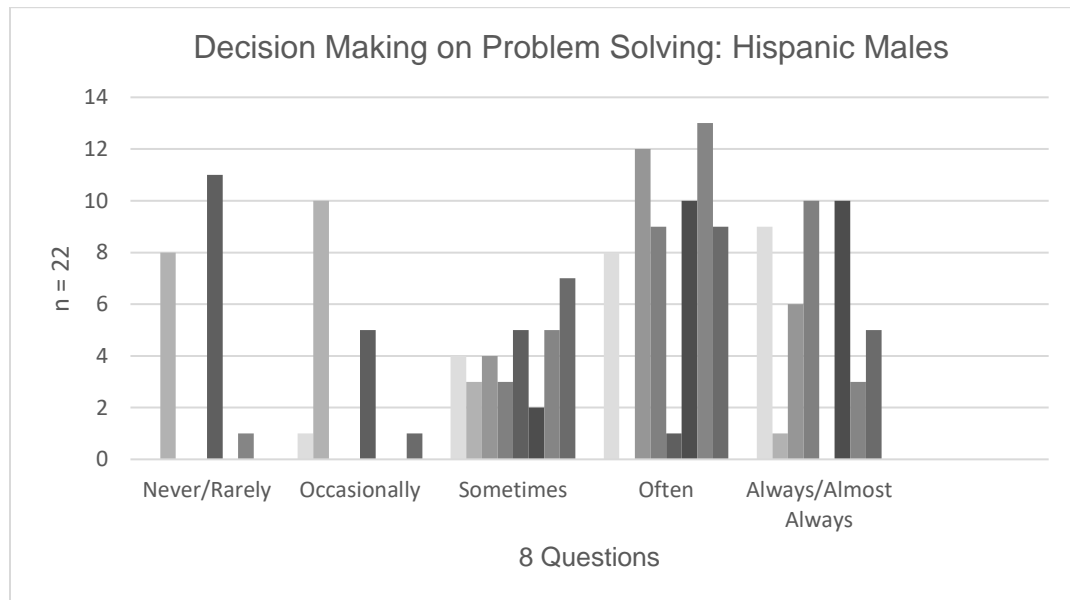


Figure 76. Decision making on problem solving: Hispanic Males

Decision making on problem solving emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 77.

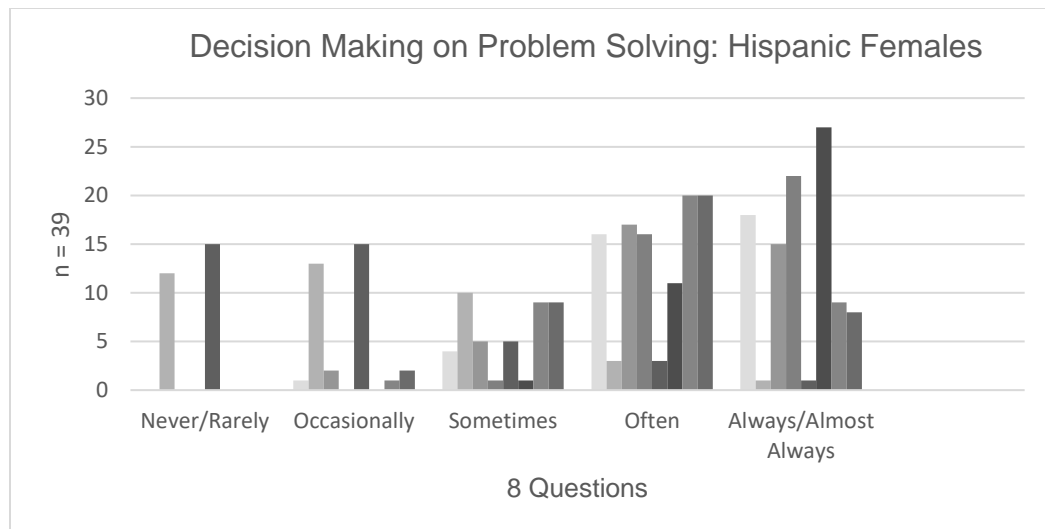
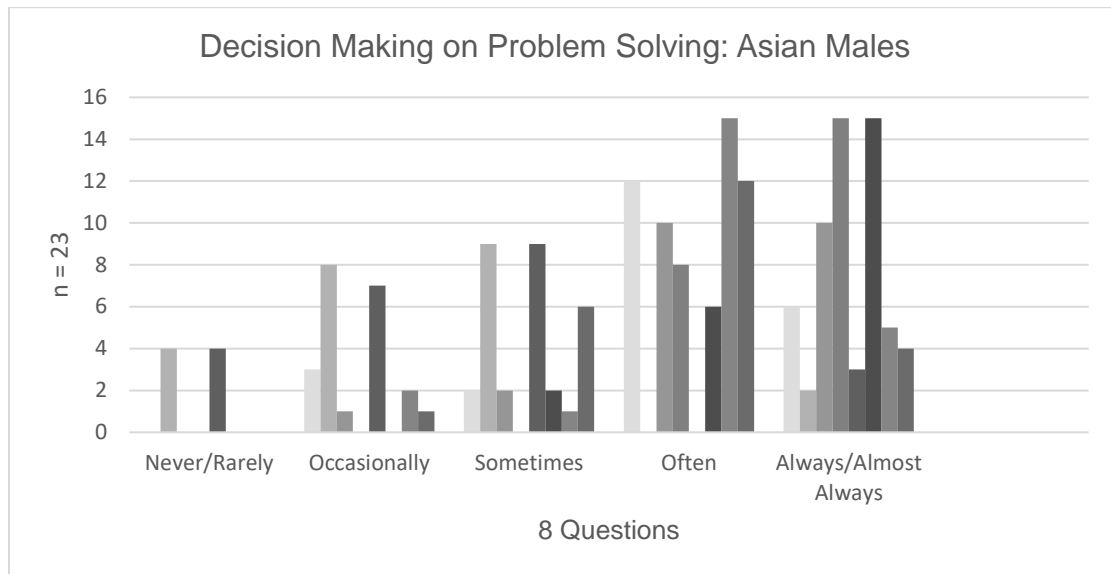


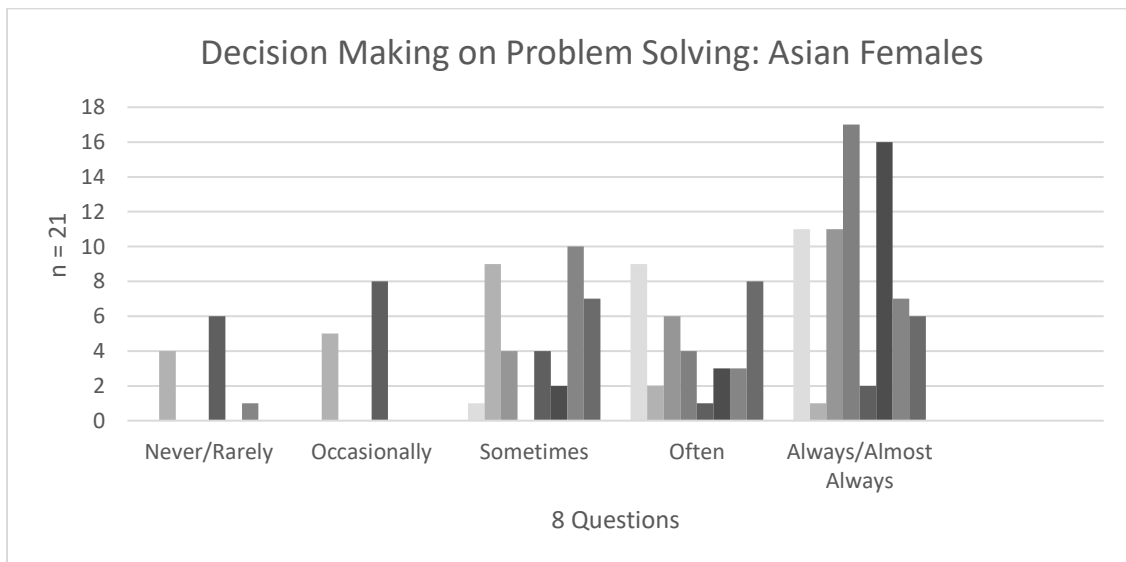
Figure 77. Decision making on problem solving: Hispanic Females

Decision making on problem solving emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 78.



*Figure 78.* Decision making on problem solving: Asian Males

Decision making on problem solving emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 79.



*Figure 79.* Decision making on problem solving: Asian Females



Decision making on problem solving emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 80.

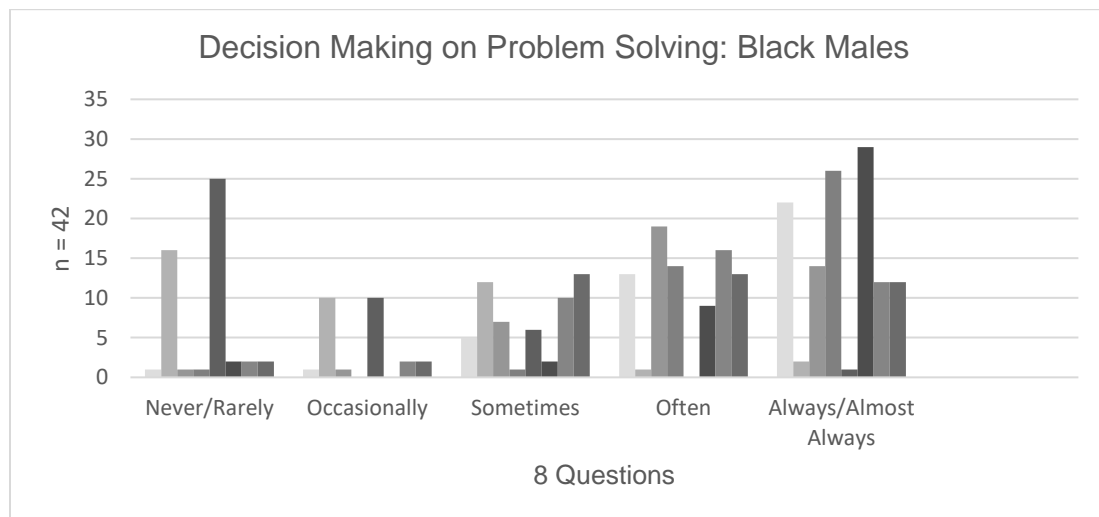


Figure 80. Decision making on problem solving: Black Males

Decision making on problem solving emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 81.

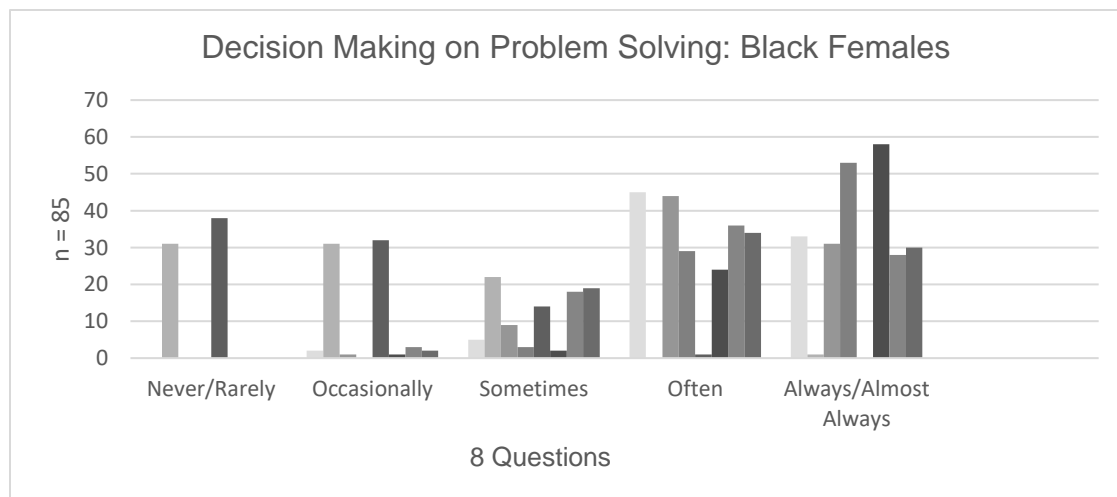


Figure 81. Decision making on problem solving: Black Females

### Decision Making on Reality Testing

The reality testing subscale encompasses one's ability to remain objective in emotional situations; keeping bias at a distance (Bar-On, 1997). Figures 82 to 89 represent the participants' responses for reality testing. Low scores indicate the

respondent inner battles to remain objective; high scores are evident when individuals resist impulses to act (MHS, 2011). Participants' responses peaked in often for Whites (males and females), Asian (females); Hispanics (males and females), Asian males, and Blacks (males and females) favored always/almost always, confirming the collective abilities to make sensible decisions and set realistic goals (MHS, 2011). Participants' responses for negative impressions showed a consistent response for all groups at never/rarely regarding staying persistent under pressure. In the context of leadership, reality testing contributes to a leader's skill to leverage emotions for effective decision making and problem solving.

Decision making on reality testing emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 82.

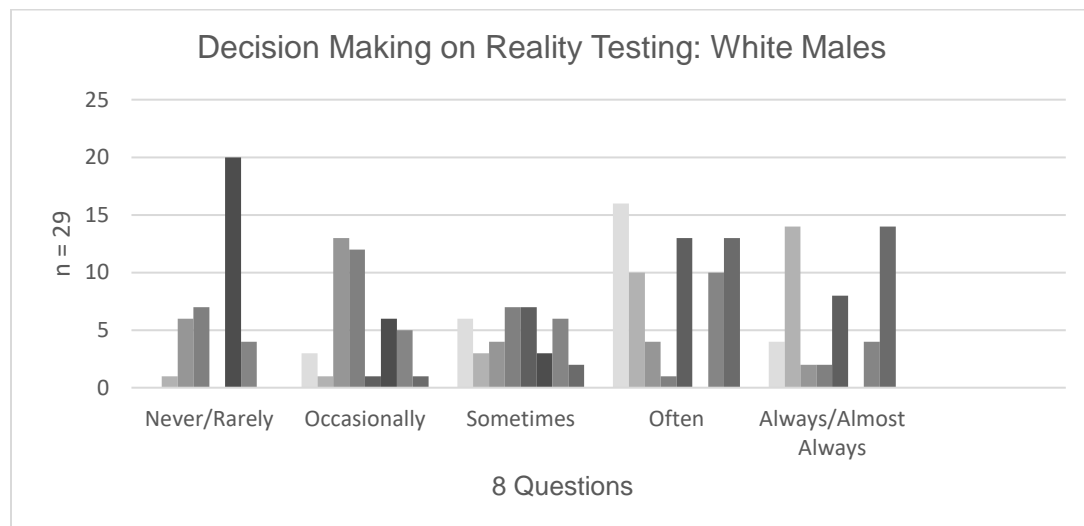


Figure 82. Decision making on reality testing: White Males

Decision making on reality testing emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 83.

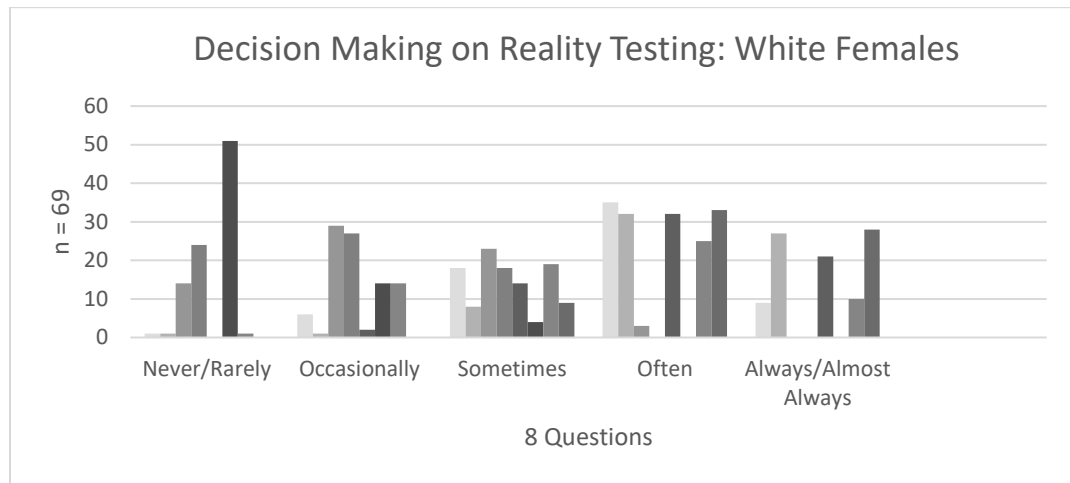


Figure 83. Decision making on reality testing: White Females

Decision making on reality testing emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 84.

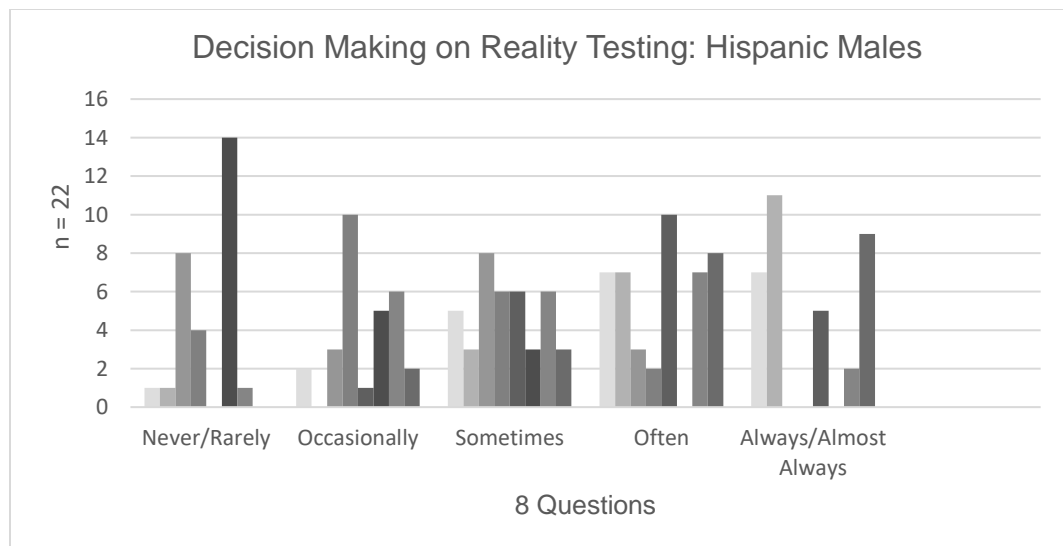


Figure 84. Decision making on reality testing: Hispanic Males

Decision making on reality testing emotional intelligence scores for Hispanic females ( $n = 21$ ) were illustrated in Figure 85.

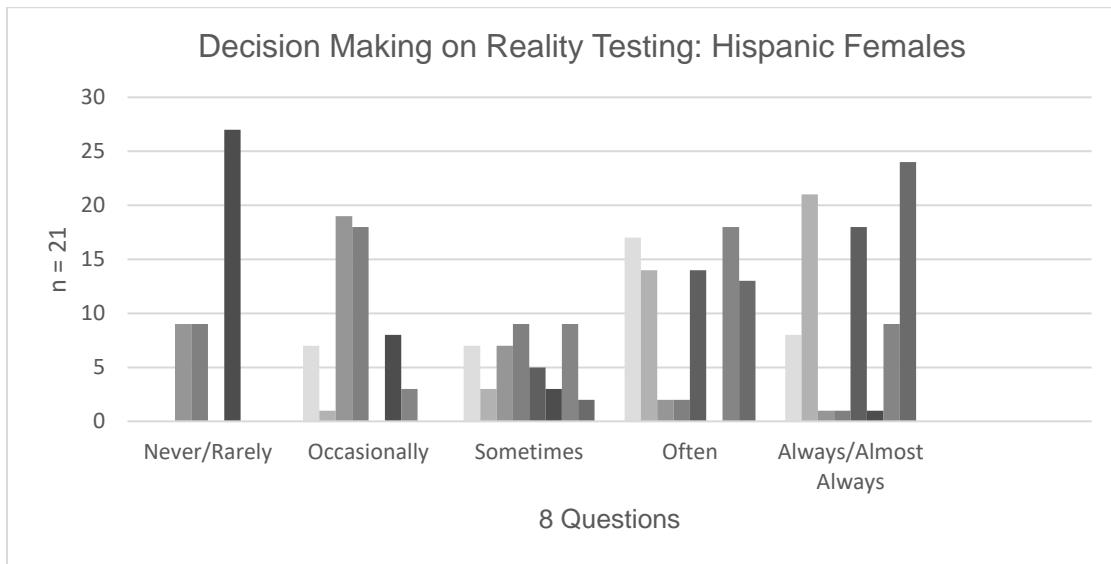


Figure 85. Decision making on reality testing: Hispanic Females

Decision making on reality testing emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 86.

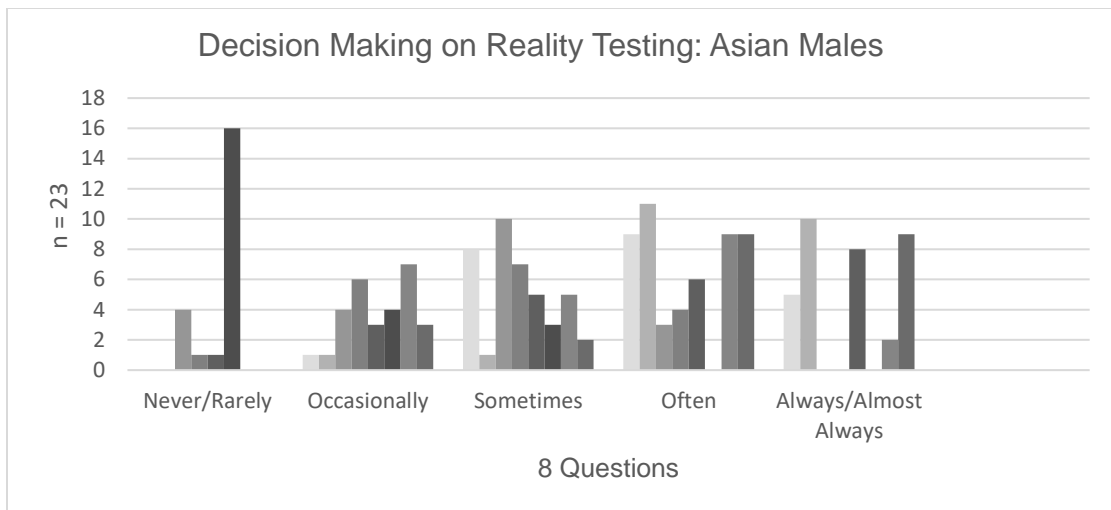


Figure 86. Decision making on reality testing: Asian Males

Decision making on reality testing emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 87.

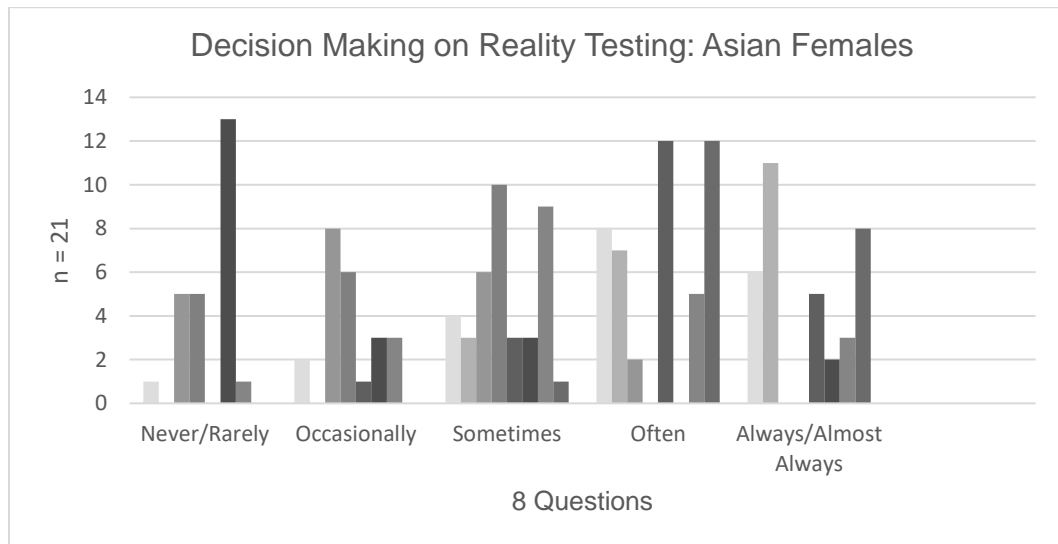


Figure 87. Decision making on reality testing: Asian Females

Decision making on reality testing emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 88.

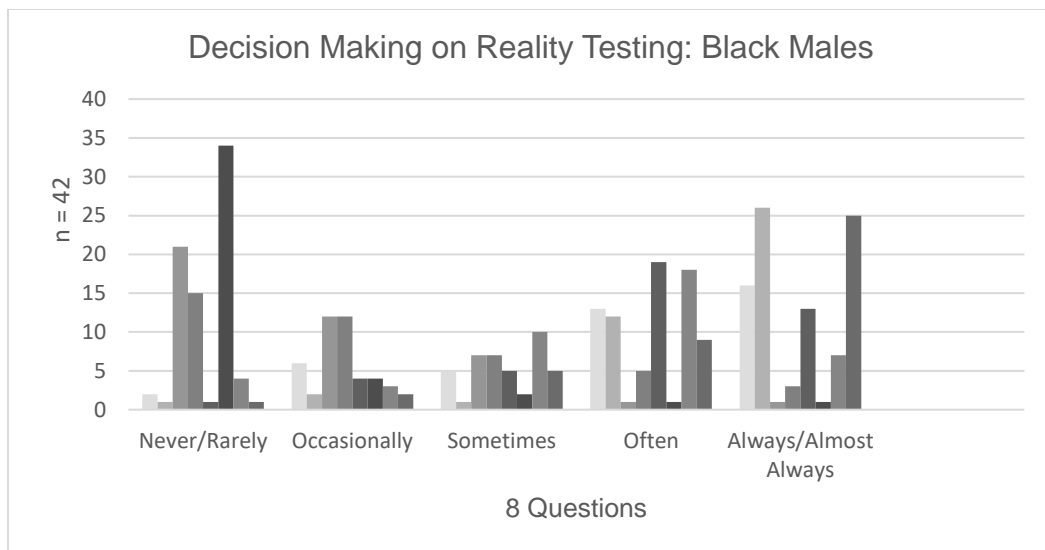
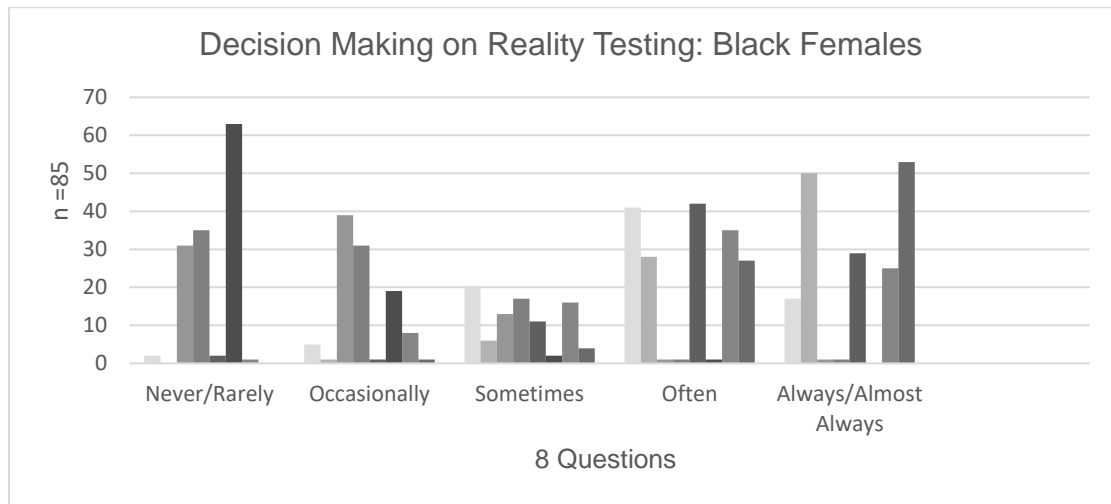


Figure 88. Decision making on reality testing: Black Males

Decision making on reality testing emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 89.



*Figure 89.* Decision making on reality testing: Black Females

### **Decision Making on Impulse Control**

The impulse control subscale involves delaying irrational, impulse actions or imprudent decision making (Bar-On, 1997). Figures 90 to 97 represent the participants' responses for impulse control. Low scores indicate the respondents' ability to avoid rash decision making; high scores reflect participants' adaptability to change (MHS, 2011). Participants' responses peaked in occasionally, sometimes, often, always/almost always for Whites (males and females), Asian (males and females), Hispanics (males and females), while Blacks (males and females) registered at always/almost always confirming predictable behavior echoed by patience and calmness among the respondents. Participants' responses for negative impressions showed a uniformed response across all respondents at never/rarely regarding self-awareness and self-acceptance. In the context of leadership, impulse control underwrites a leader's composure and premeditated actions in decision making and problem solving.

Decision making on impulse control emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 90.

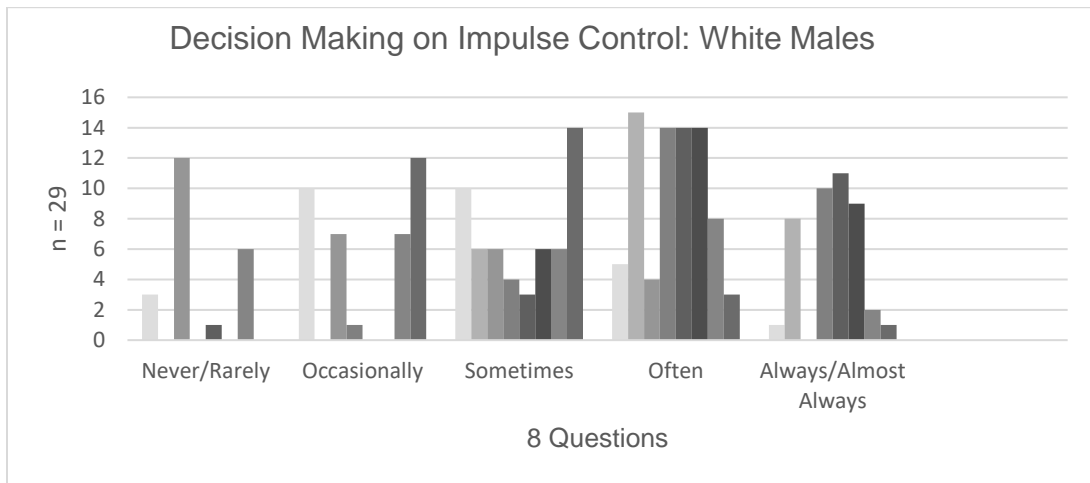


Figure 90. Decision Making on impulse control: White Males

Decision making on impulse control emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 91.

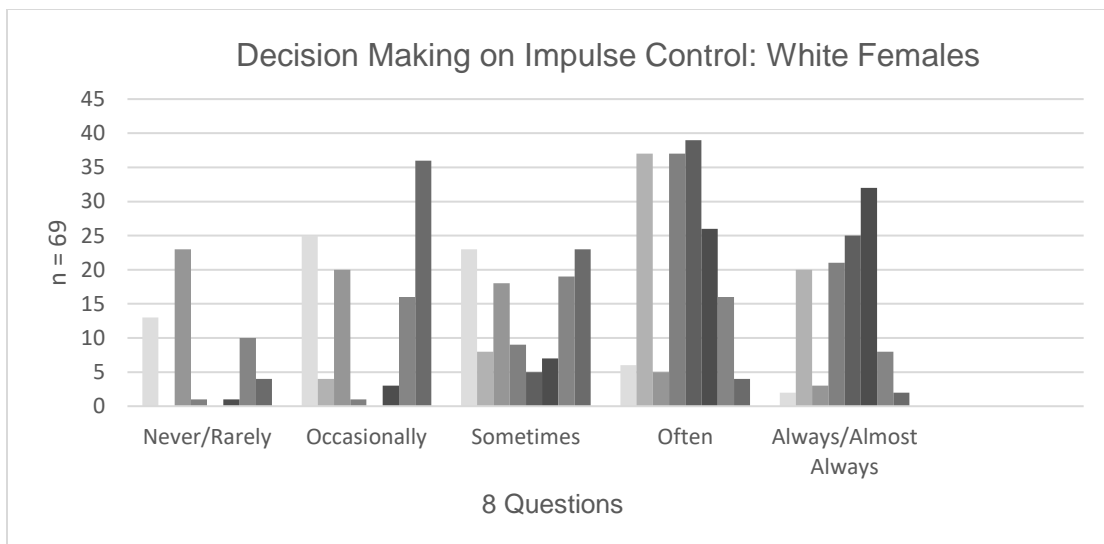
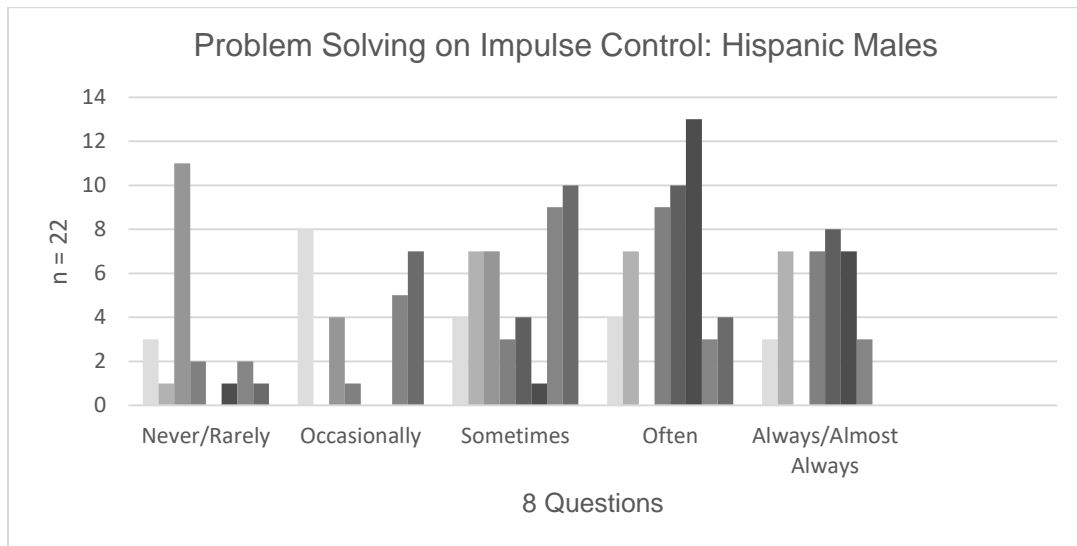


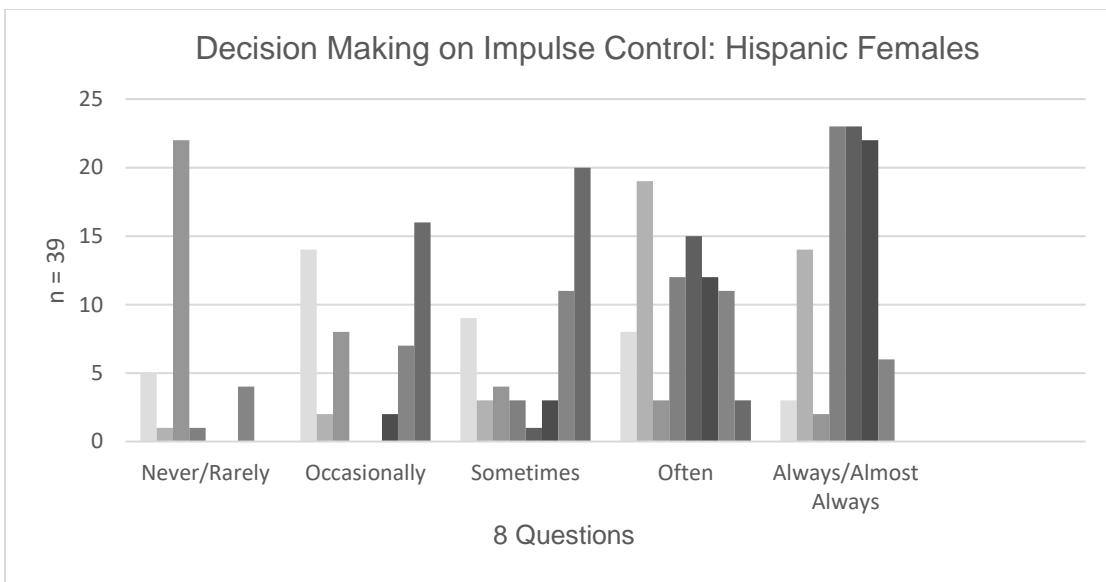
Figure 91. Decision Making on impulse control: White Females

Decision making on impulse control emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 92.



*Figure 92.* Decision Making on impulse control: Hispanic Males

Decision making on impulse control emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 93.



*Figure 93.* Decision Making on impulse control: Hispanic Females



Decision making on impulse control emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 94.

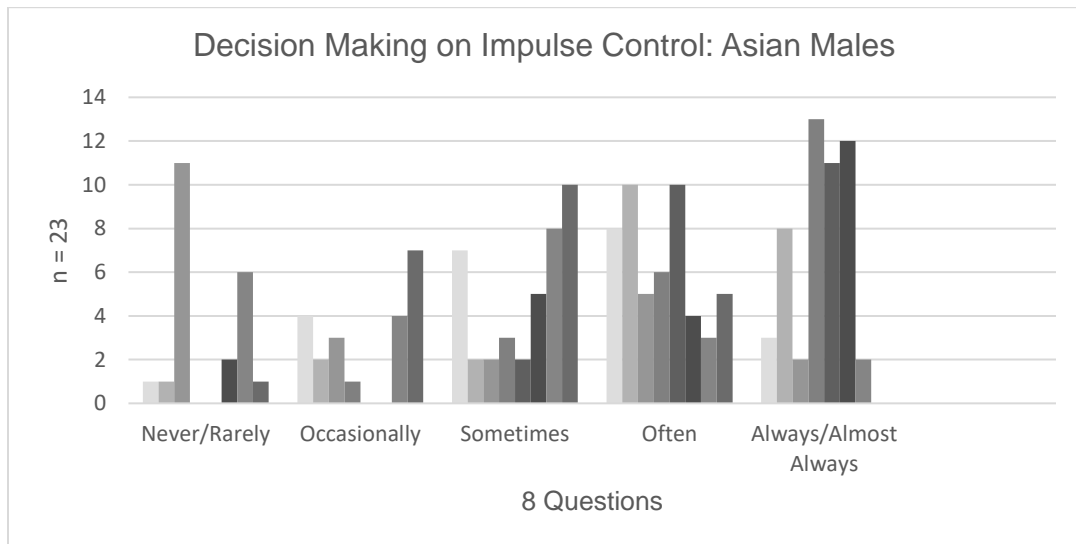


Figure 94. Decision Making on impulse control: Asian Males

Decision making on impulse control emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 95.

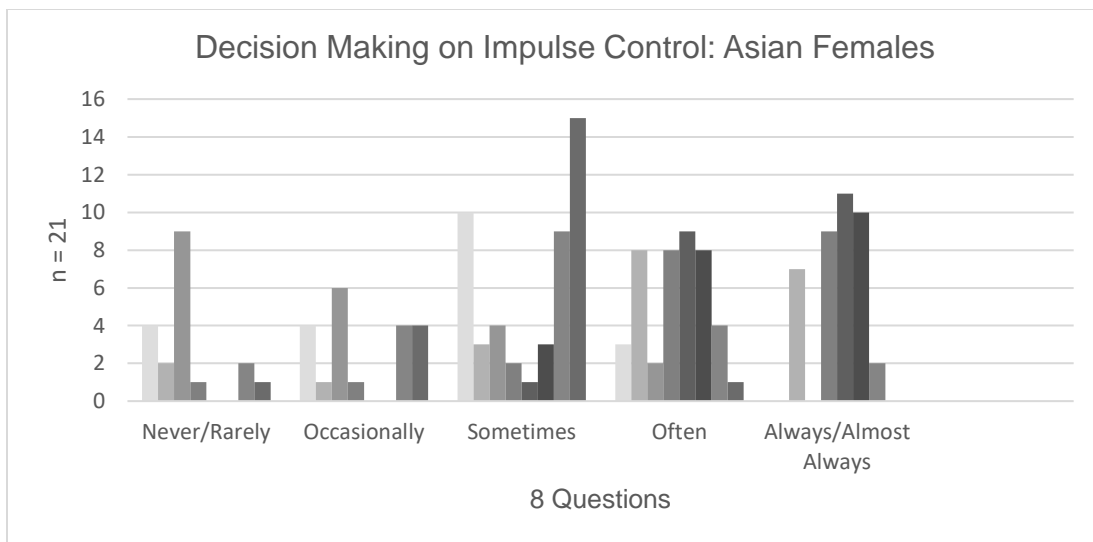


Figure 95. Decision Making on impulse control: Asian Females

Decision making on impulse control emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 96.

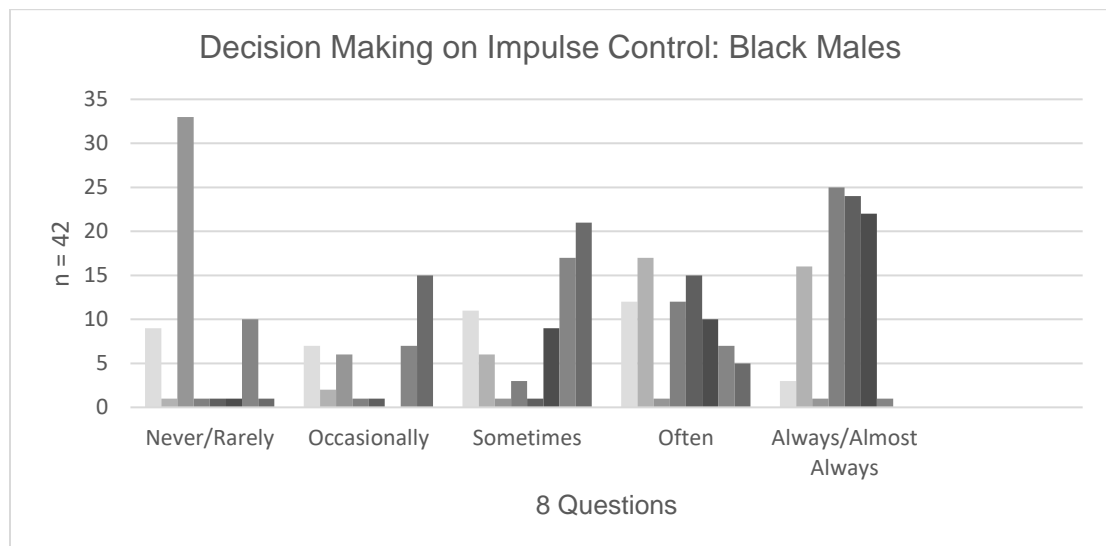


Figure 96. Decision Making on impulse control: Black Males

Decision making on impulse control emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 97.

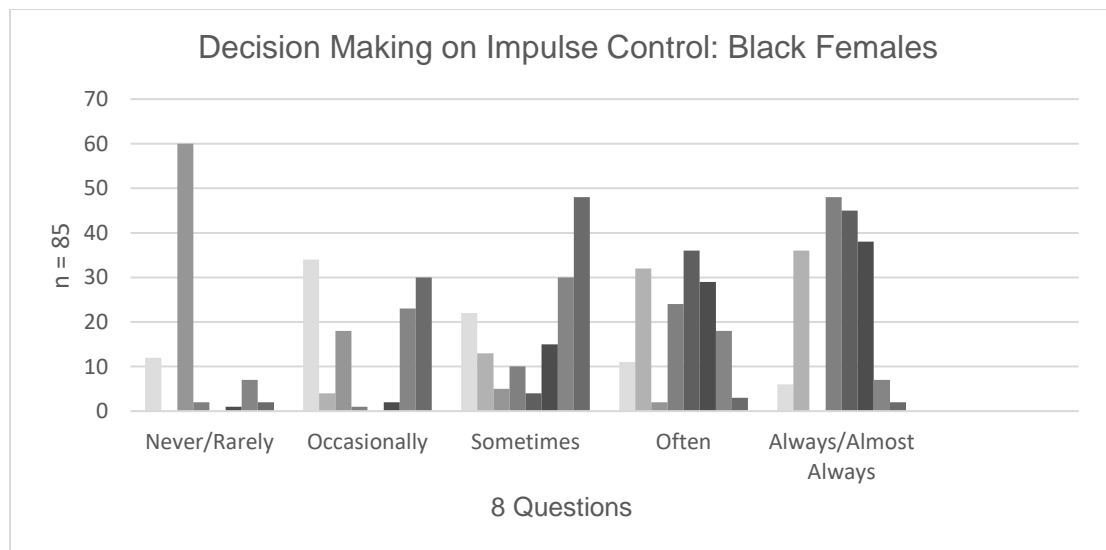


Figure 97. Decision Making on impulse control: Black Females

### Stress Management on Flexibility

The subscale of flexibility involves familiarizing thoughts, emotions, behaviors, and emotions to dynamic situations or ideas (Bar-On, 1997). Figures 98 to 105 represent

the participants' responses for flexibility. Low scores indicate the respondents' uneasiness to change and rigidity in thought and behavior; high scores reflect participants' openness to change (MHS, 2011). Participants' responses from Whites (males and females), Asian males favored often. Hispanic males peaked at sometimes while females peaked at often and always/almost always. Blacks (males and females) registered at always/almost always confirming positive views of change as refreshing and obligatory (MHS, 2011). Participants' responses to negative impressions showed a consistent response across all respondents at never/rarely for questions pertaining to the respondents' need for others, which sanctions self-sufficiency, resilience, and independence through difficult situations. In the context of leadership, flexibility countersigns a leader's problem solving, stress tolerance, and impulse control. Leaders who possess flexibility balance the tensions in the workplace through mindful practice of self-awareness, non-reactivity, non-judging, and re-counting (Baron, Rouleau, Grégoire, & Baron, 2018).

Stress management on flexibility emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 98.

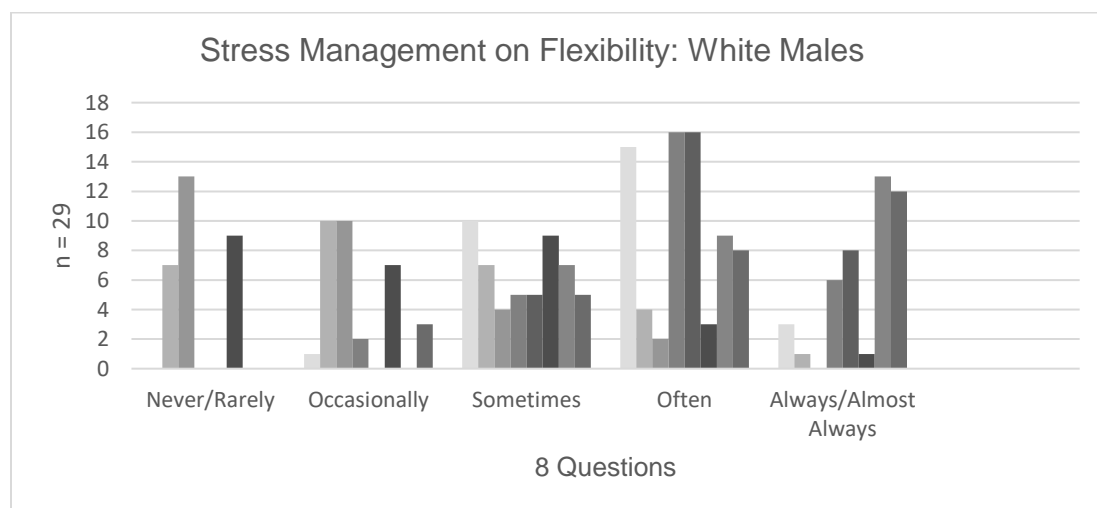


Figure 98. Stress Management on flexibility: White Males

Stress management on flexibility emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 99.

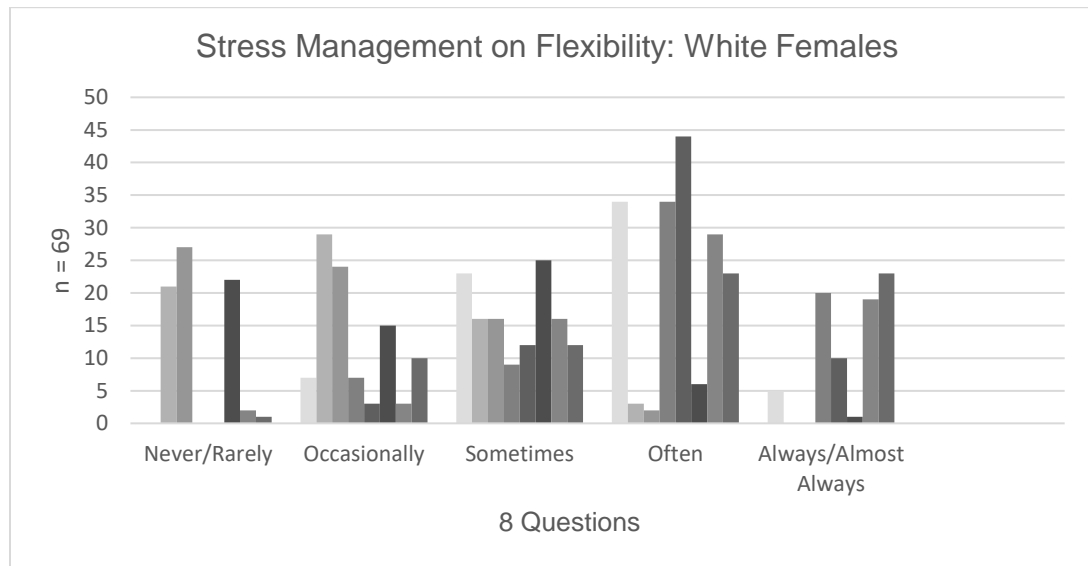


Figure 99. Stress Management on flexibility: White Females

Stress management on flexibility emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 100.

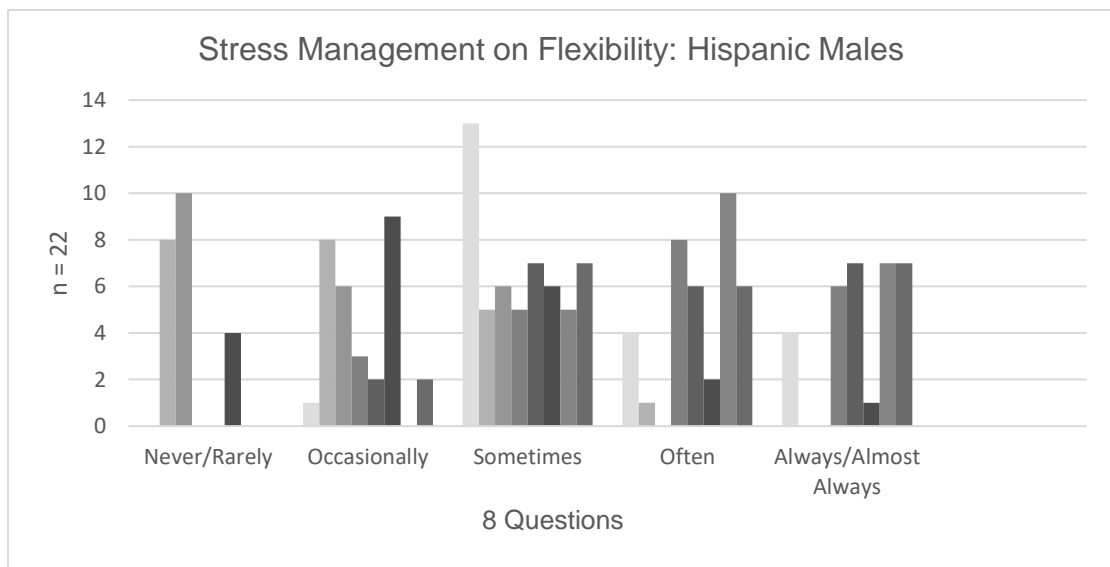
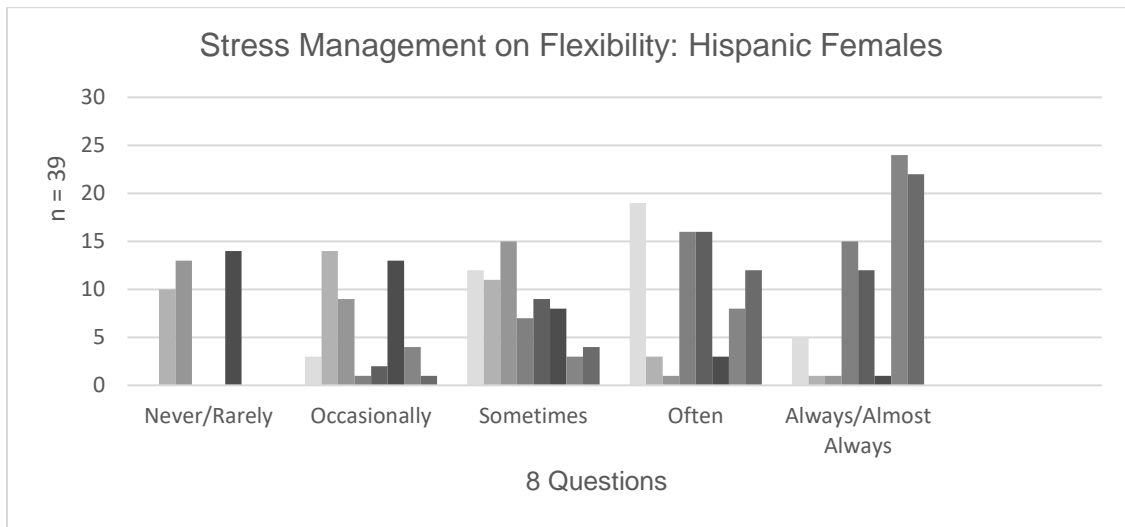


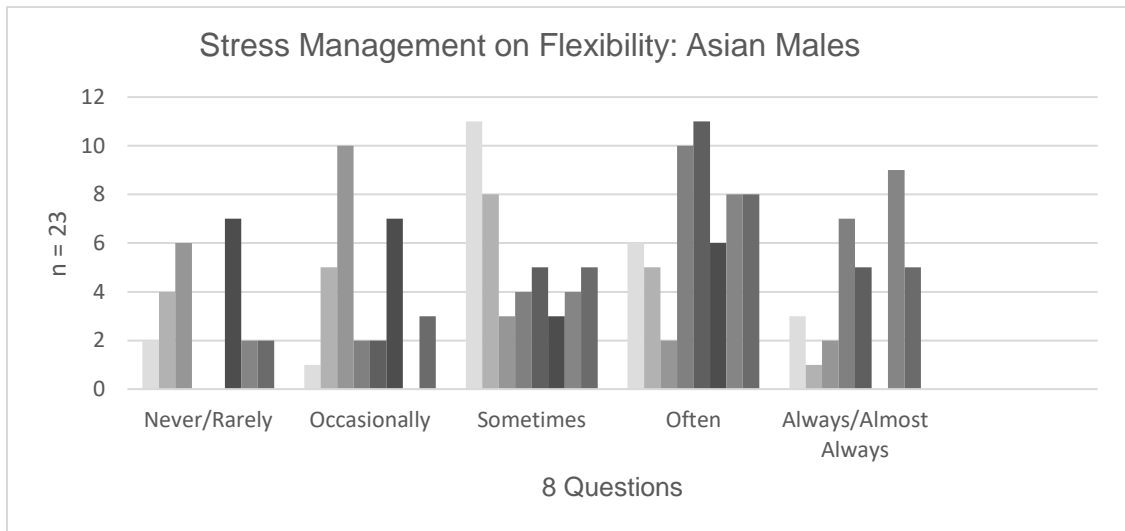
Figure 100. Stress Management on flexibility: Hispanic Males

Stress management on flexibility emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 101.



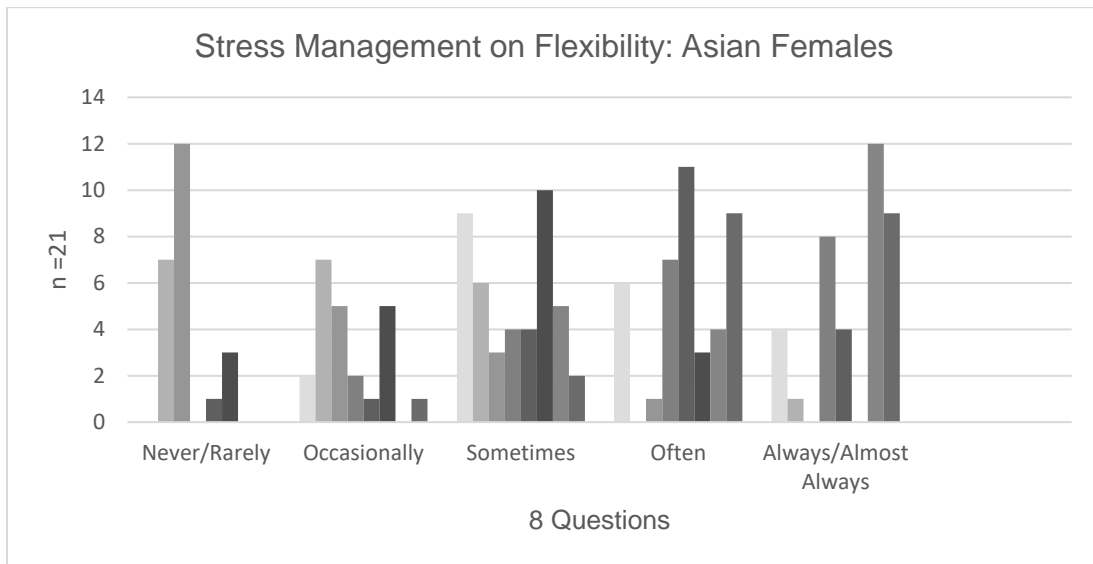
*Figure 101.* Stress Management on flexibility: Hispanic Females

Stress management on flexibility emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 102.



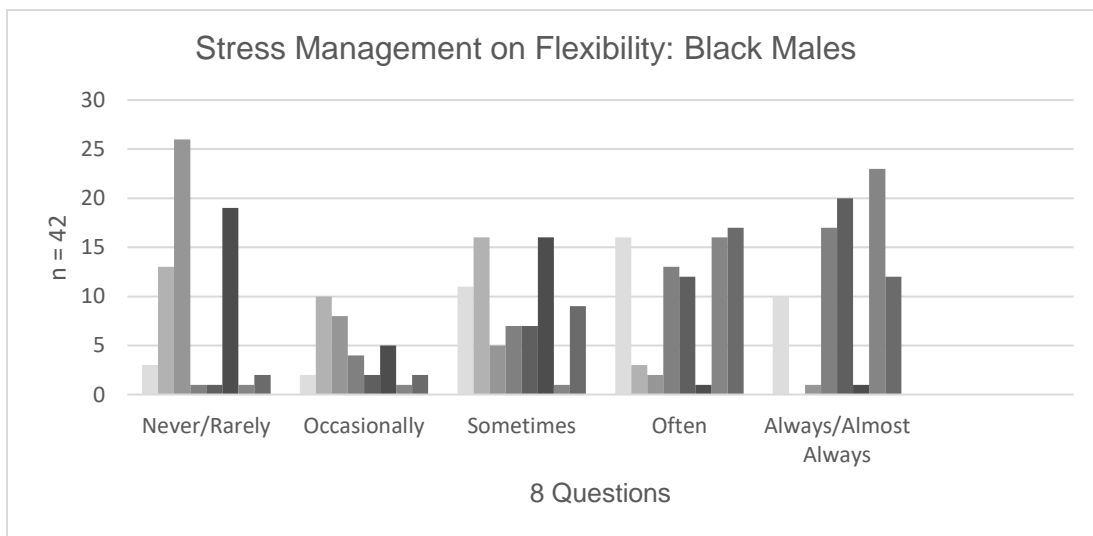
*Figure 102.* Stress Management on flexibility: Asian Males

Stress management on flexibility emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 103.



*Figure 103.* Stress Management on flexibility: Asian Females

Stress management on flexibility emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 104.



*Figure 104.* Stress Management on flexibility: Black Males

Stress management on flexibility emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 105.

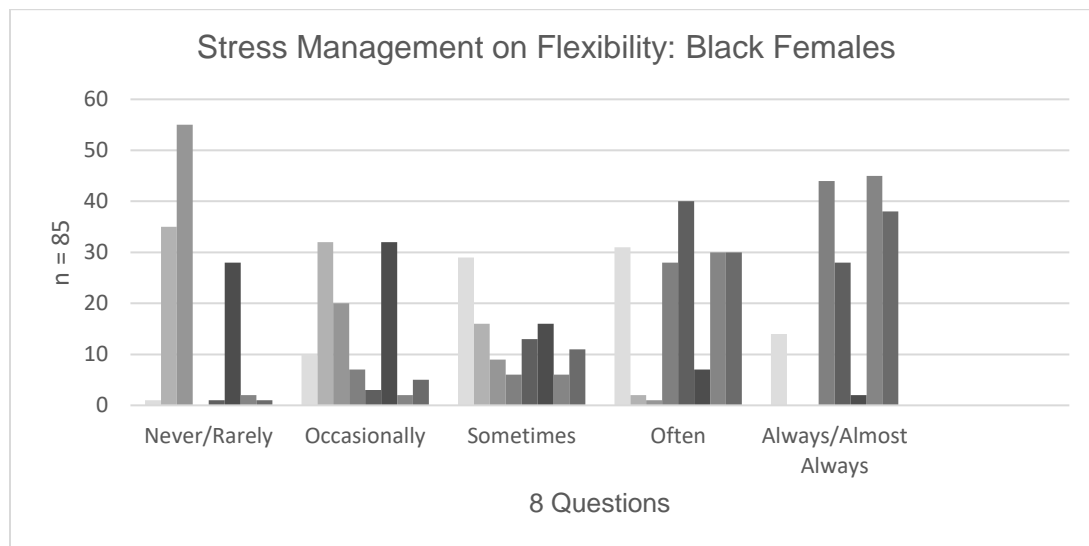


Figure 105. Stress Management on flexibility: Black Females

### Stress Management on Stress Tolerance

The subscale of stress tolerance comprises of coping in stressful situations (Bar-On, 1997). Figures 106 to 113 represent the participants' responses for stress tolerance. Low scores indicate the respondents' tension or poor concentration when dealing with stressful matters; high scores reflect participants' abilities to remain calm under pressure (MHS, 2011). Participants' responses from White males favored often while White females favored Hispanic and Asian males favored often and always/almost always. Hispanic and Asian females, and Black (males and females) peaked at always/almost always confirming multidimensional coping strategies are mobilized to deal with stress (MHS, 2011). Participants' responses to negative impressions showed an unswerving response from all respondents at never/rarely for questions relating to respondents' self-improvement. In the context of leadership, stress tolerance indorses a leader's emotional self-awareness, impulse control, and flexibility. Leaders who possess

stress tolerance are adept at reducing negative workplace behaviors such as absenteeism, interpersonal conflict, turnover or retaliation (Shi, Liu, & Liu, 2009), which have a significant effect on organizational effectiveness.

Stress management on stress tolerance emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 106.

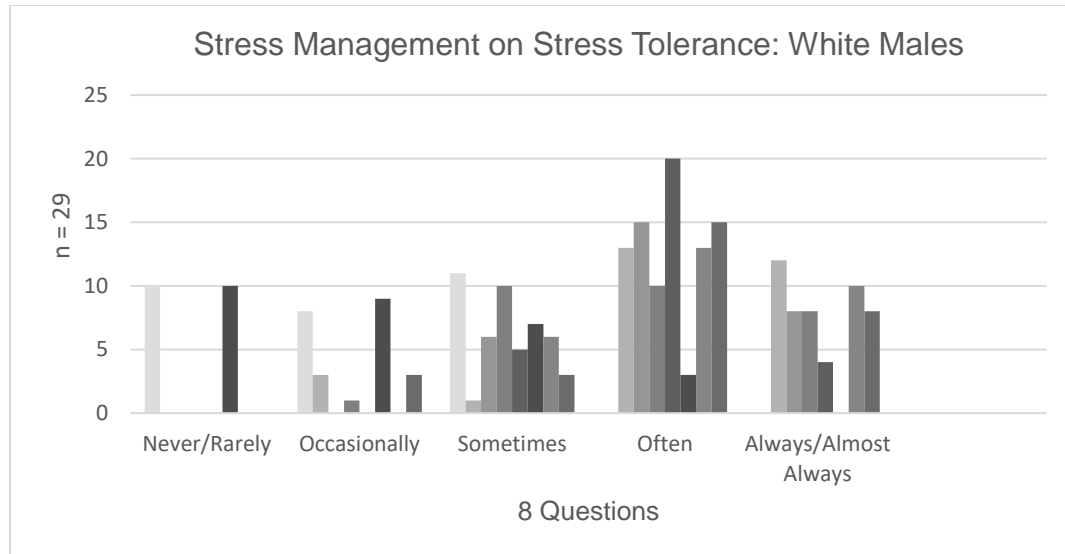


Figure 106. Stress Management on stress tolerance: White Males

Stress management on stress tolerance emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 107.

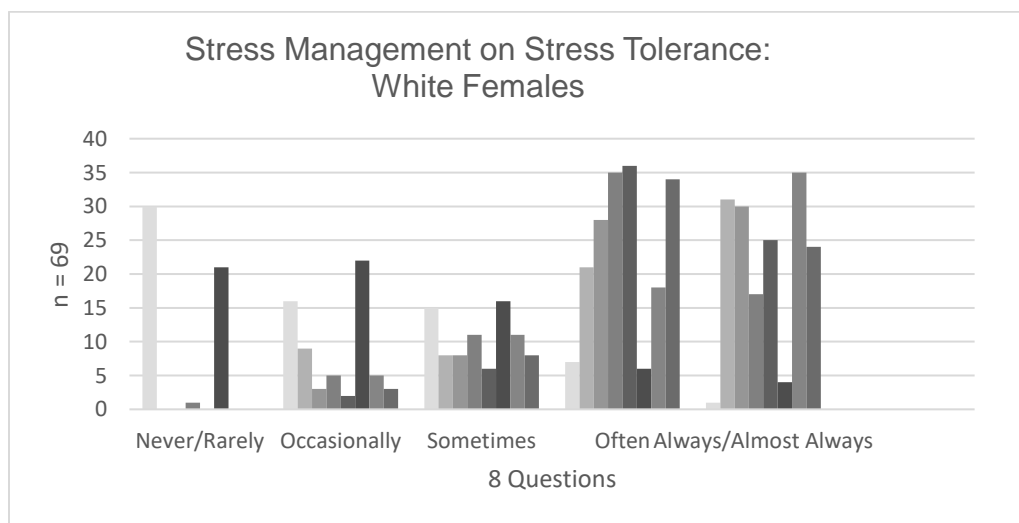


Figure 107. Stress Management on stress tolerance: White Females



Stress management on stress tolerance emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 108.

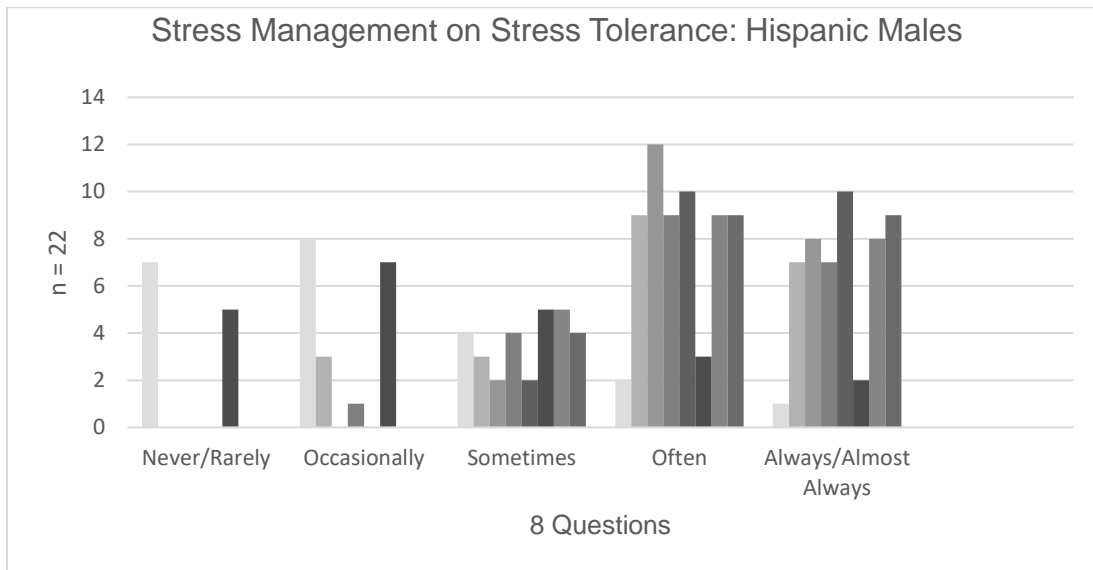


Figure 108. Stress Management on stress tolerance: Hispanic Males

Stress management on stress tolerance emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 109.

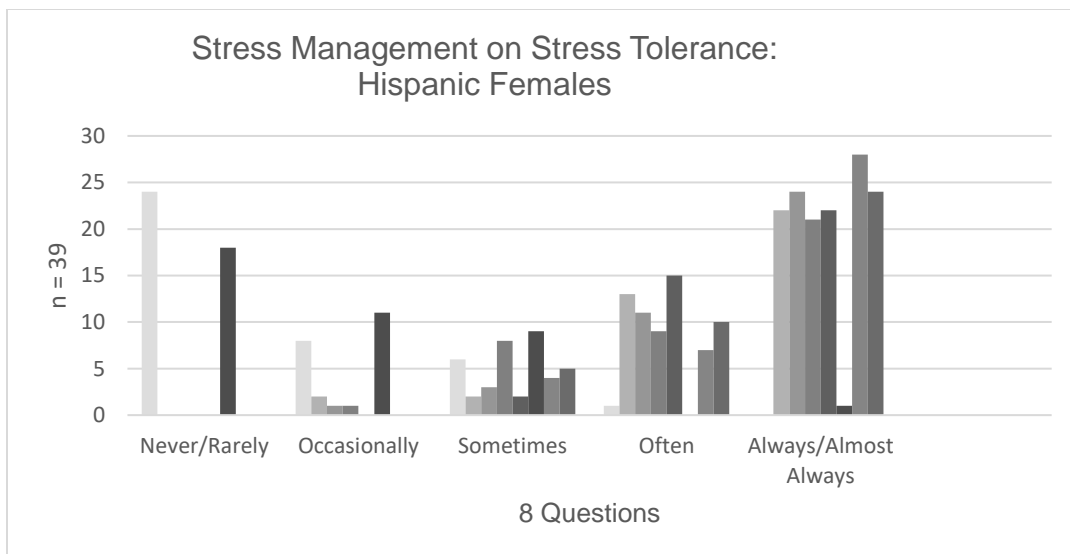


Figure 109. Stress Management on stress tolerance: Hispanic Females

Stress management on stress tolerance emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 110.

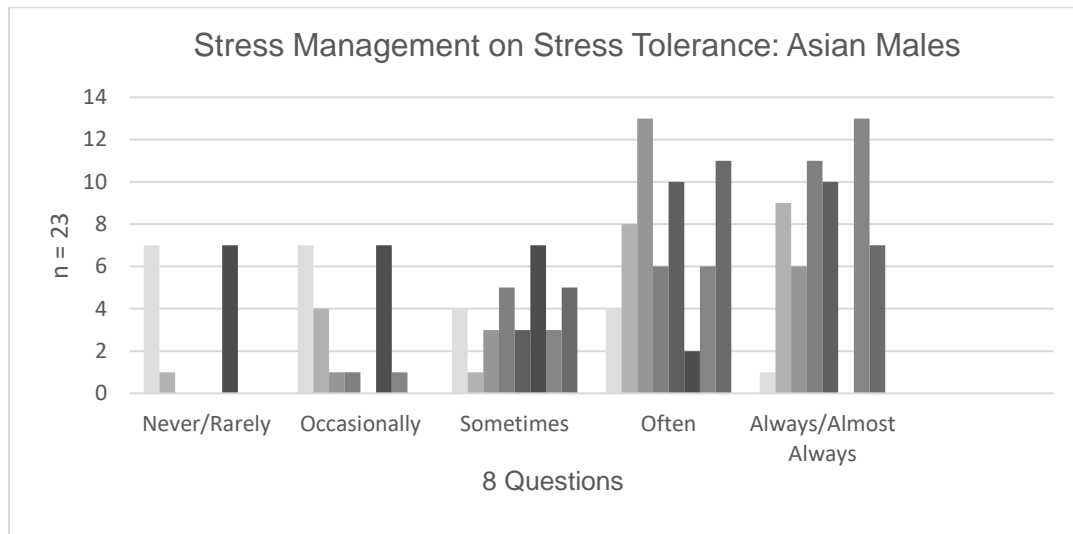


Figure 110. Stress Management on stress tolerance: Asian Males

Stress management on stress tolerance emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 111.

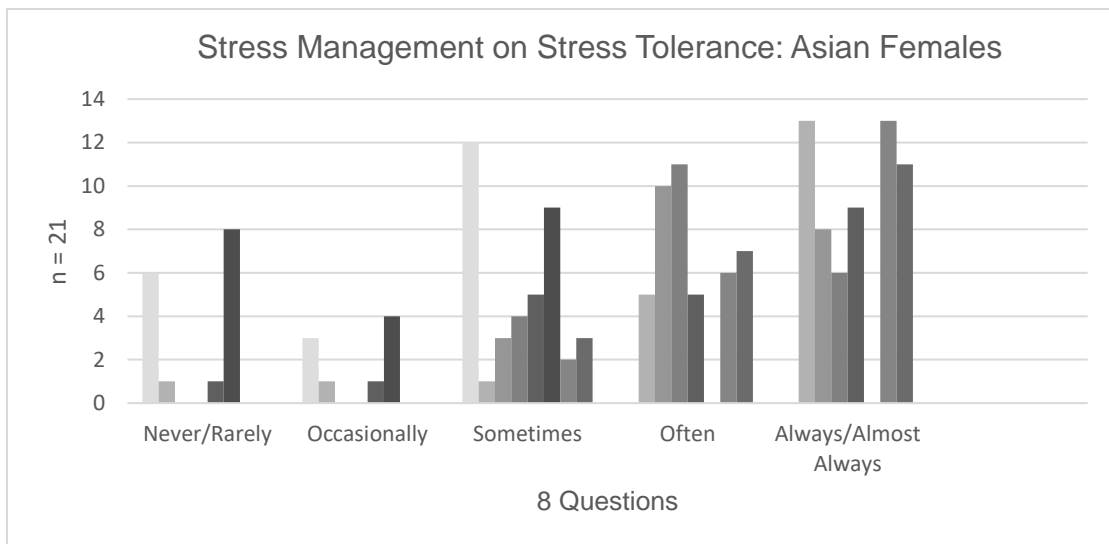
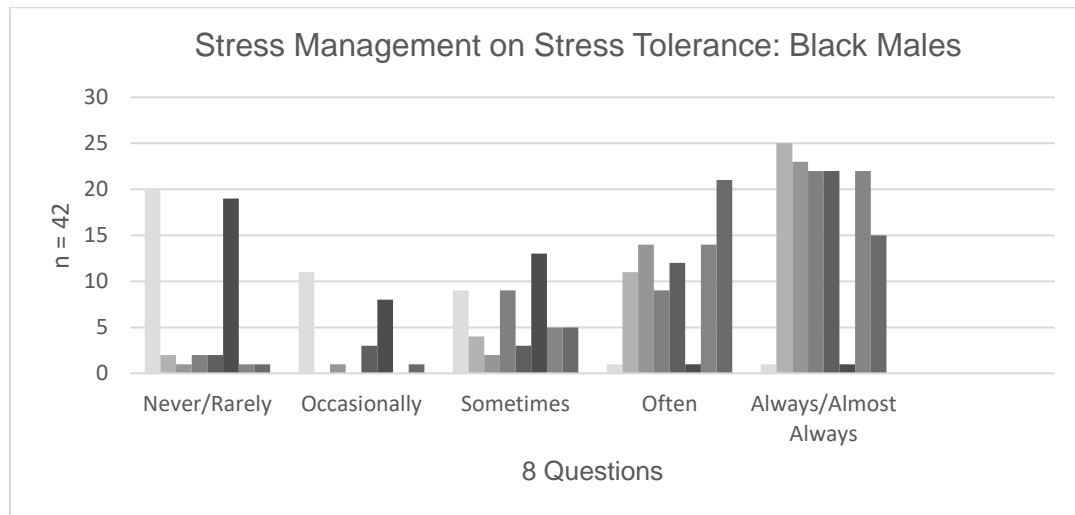


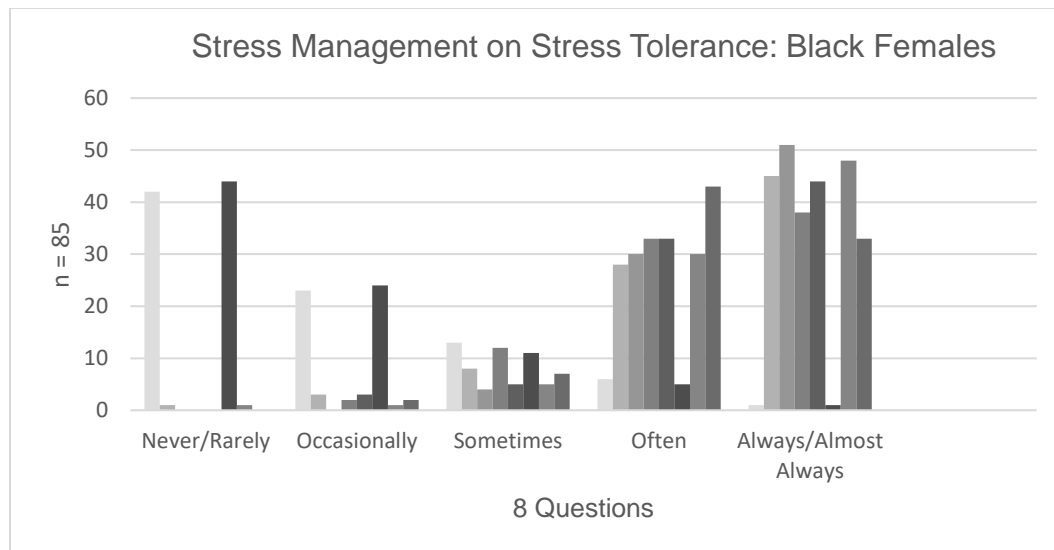
Figure 111. Stress Management on stress tolerance: Asian Females

Stress management on stress tolerance emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 112.



*Figure 112.* Stress Management on stress tolerance: Black Males

Stress management on stress tolerance emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 113.



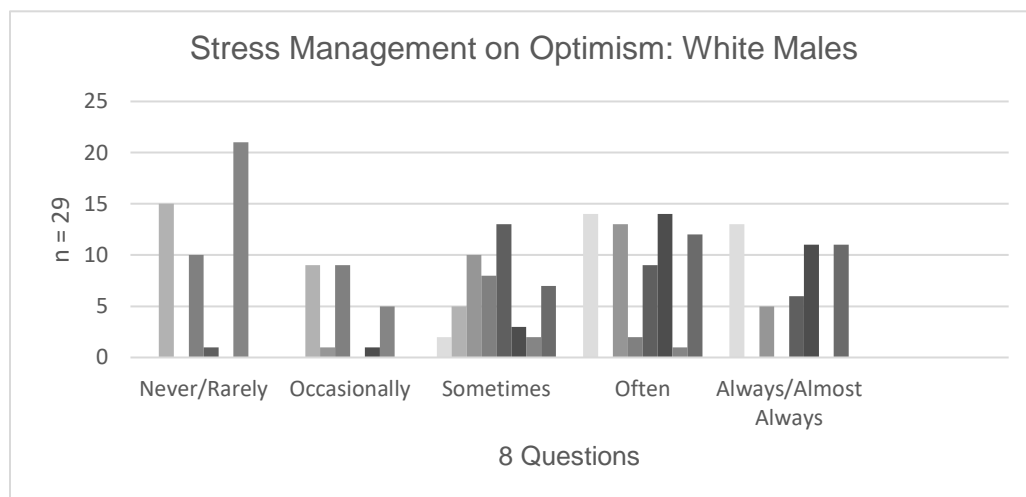
*Figure 113.* Stress Management on stress tolerance: Black Females

### Stress Management on Optimism

The optimism subscale encompasses an individual's positive attitude and viewpoint on life and how he or she remains resilient through sporadic setbacks

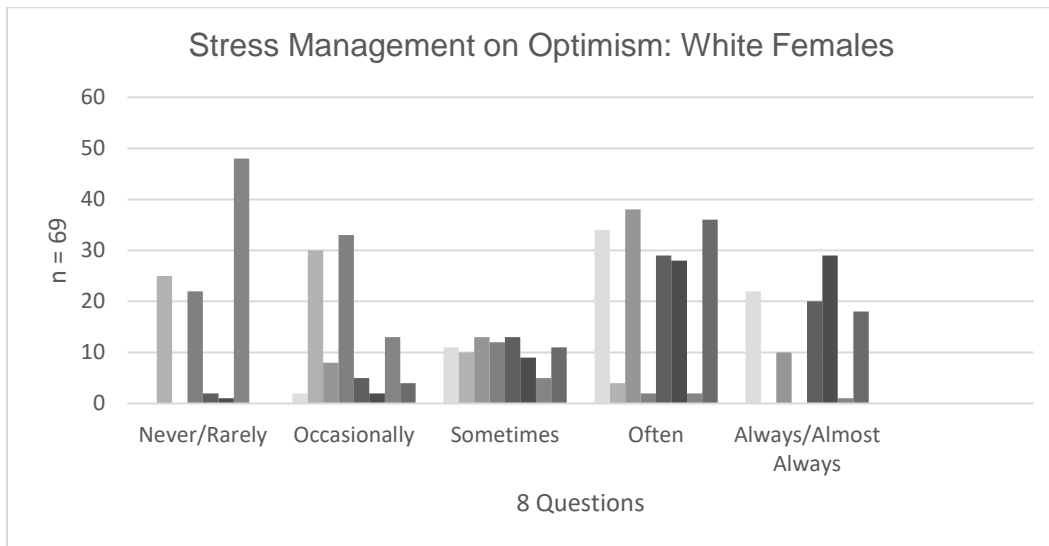
(Bar-On, 1997). Figures 114 to 121 represent the participants' responses for optimism. Low scores indicate the respondents' cynical worldview; high scores reflect participants' views of the world in a positive light (MHS, 2011). Participants' responses from White, Hispanic and Asian males favored often and always/almost always. Responses from White females peaked at often while Hispanic, Asian and Black females favored often and always/almost always. Black males peaked at always/almost. Participants' feedback portrayed an inspiring outlook of the world (MHS, 2011). Participants' responses to negative impressions showed self-control over one's emotions and levels of self-awareness and self-regard. In the context of leadership, optimism aligns with the self-actualization subscale, which confirms the leaders' perseverance and self-commitment through changing times. Leaders who possess optimism positively stimulate organizational performance and effectiveness (Alvim & Pires, 2017).

Stress management on optimism emotional intelligence scores for White males ( $n = 29$ ) were illustrated in Figure 114.



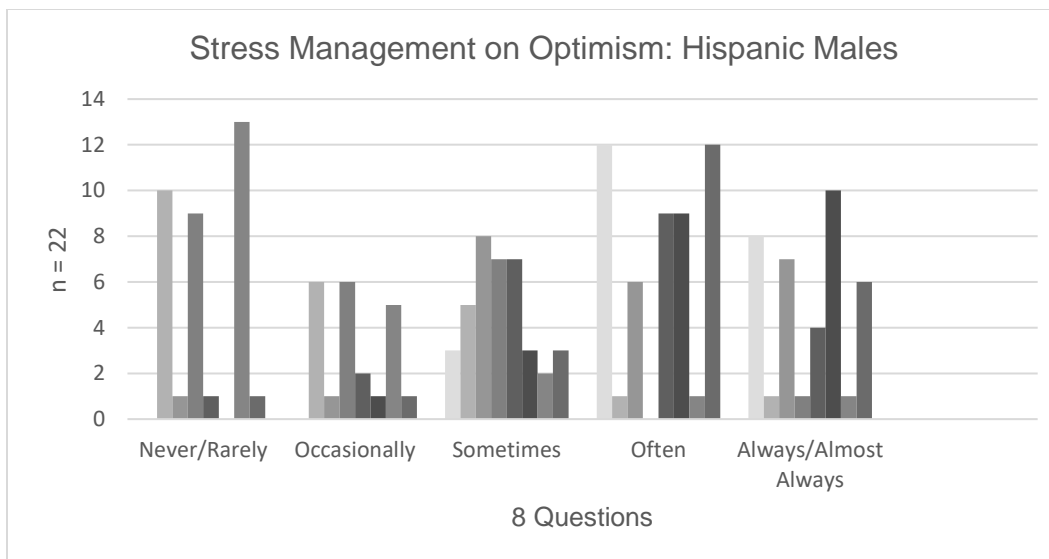
*Figure 114. Stress Management on optimism: White Males*

Stress management on optimism emotional intelligence scores for White females ( $n = 69$ ) were illustrated in Figure 115.



*Figure 115.* Stress Management on optimism: White Females

Stress management on optimism emotional intelligence scores for Hispanic males ( $n = 22$ ) were illustrated in Figure 116.



*Figure 116.* Stress Management on optimism: Hispanic Males

Stress management on optimism emotional intelligence scores for Hispanic females ( $n = 39$ ) were illustrated in Figure 117.

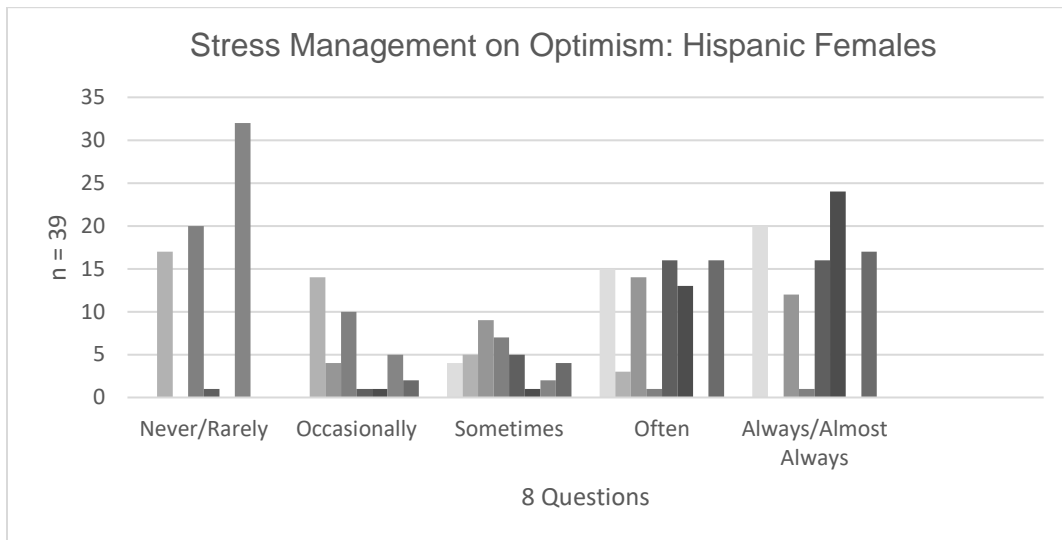


Figure 117. Stress Management on optimism: Hispanic Females

Stress management on optimism emotional intelligence scores for Asian males ( $n = 23$ ) were illustrated in Figure 118.

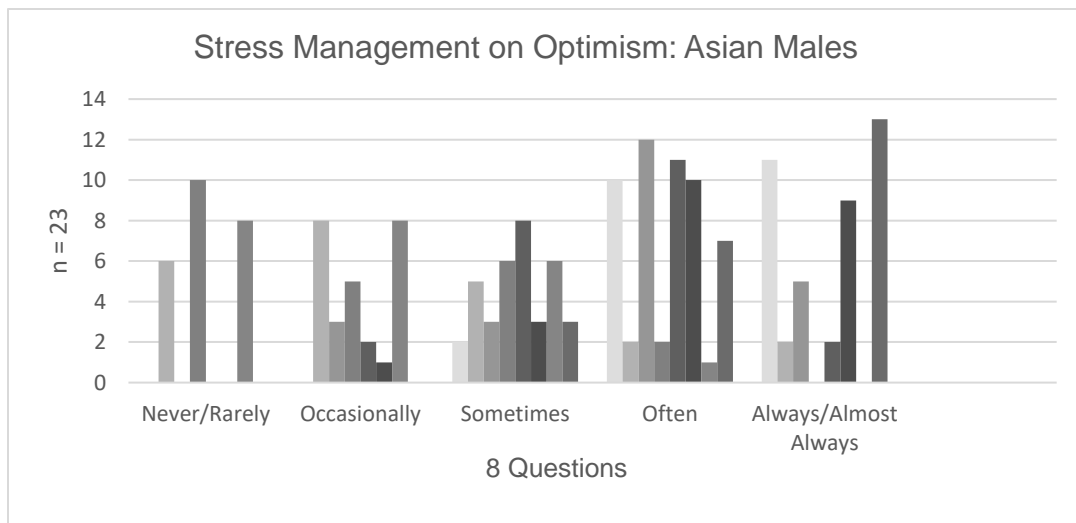
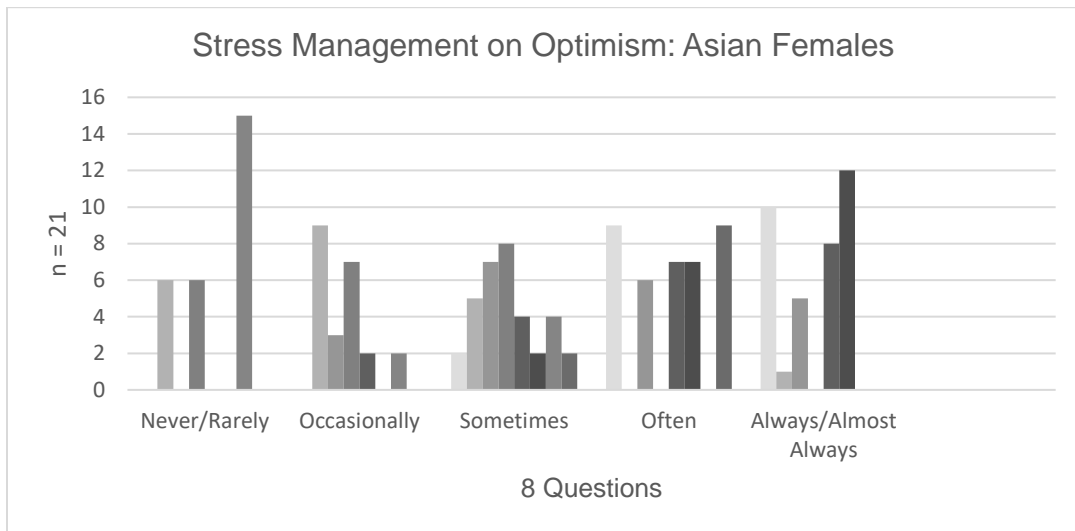


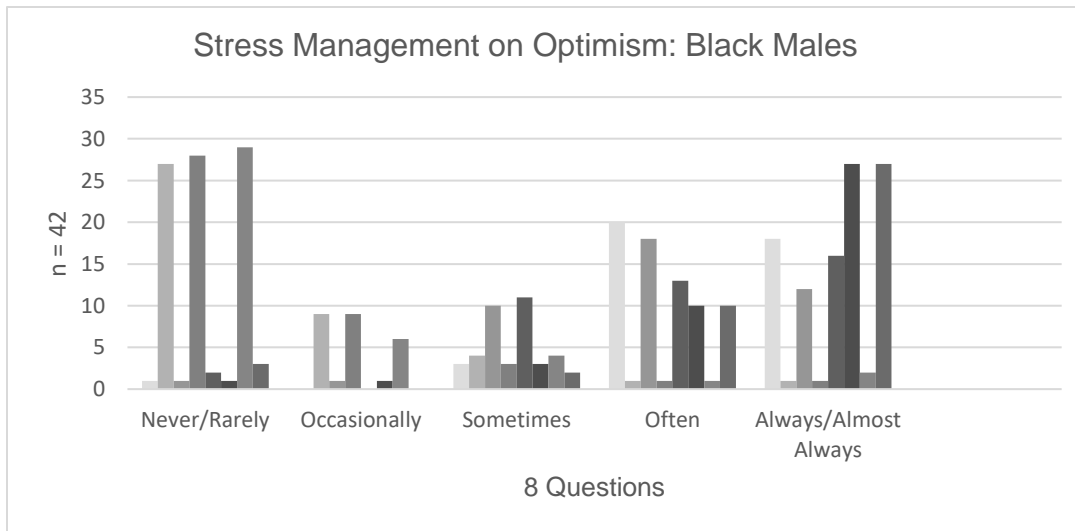
Figure 118. Stress Management on optimism: Asian Males

Stress management on optimism emotional intelligence scores for Asian females ( $n = 21$ ) were illustrated in Figure 119.



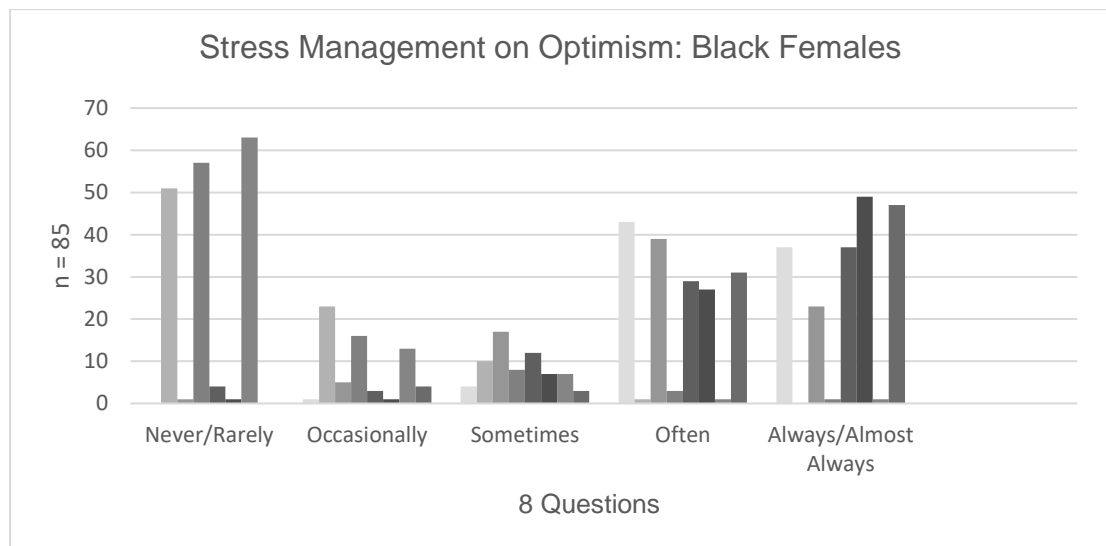
*Figure 119.* Stress Management on optimism: Asian Females

Stress management on optimism emotional intelligence scores for Black males ( $n = 42$ ) were illustrated in Figure 120.



*Figure 120.* Stress Management on optimism: Black Males

Stress management on optimism emotional intelligence scores for Black females ( $n = 85$ ) were illustrated in Figure 121.



*Figure 121.* Stress Management on optimism: Black Females

### **Research Questions and Hypotheses Descriptive Analyses by Group**

The research questions and hypotheses were investigated to determine if a statistical difference existed in the relationship between emotional intelligence and workplace diversity in women and minorities. MANOVA is still robust even with the presence of outlier or extreme values. Outlier scores can be caused by sampling errors (Field 2013). Black (1999) instructed that close examinations of the sample and data recording are performed. When the sample is random and is representative of the population, outlier scores are indicative of the variation and can be retained as valid. Minimal outlier scores were calculated for each subscale; no data were dropped. The results explained in the following paragraphs describe the findings in this present study. Table 8 shows a summary of the results for each corresponding research question and linked hypotheses:



Table 8

*Decision Tree for Research Questions and Hypotheses*

Research Question	Decision for Hypothesis	Classification
RQ1. What statistical differences, if any, exist in the emotional intelligence (EI) scores by group, at top, publicly-held technology solutions-based firms in the U.S?	Fail to reject	Group: White, Hispanic, Asian, and Black
RQ2. What relationship, if any, exists between EI and workplace diversity by gender (i.e., women versus men) classification at top, publicly-held technology solutions-based firms in the U.S?	Fail to accept	Gender: women versus men
RQ3. What relationship, if any, exists between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) and race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S?	Fail to reject	Ethnicity: Hispanic versus Asian
	Fail to reject	Race: White versus Black
RQ4. What relationship, if any, exists between EI and workplace diversity by work title (i.e., manager or higher) classification at top, publicly-held technology solutions-based firms in the U.S?	Fail to accept	Manager or higher
	Fail to accept	State: CA, TX, NY, FL, and PA
RQ5. What relationship, if any, exists between EI and workplace diversity by demographic region (i.e., CA, TX, NY, FL, PA) classification at top, publicly-held technology solutions-based firms in the U.S?		

The first research question sets the foundation by shaping the understanding of the correlation of emotional intelligence on women and minorities in the technology arena.

RQ1. What statistical differences, if any, exist in the emotional intelligence (EI) scores by group, at top, publicly-held technology solutions-based firms in the U.S?

H1<sub>0</sub>: There is no statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

H1<sub>1</sub>: There is a statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

To examine research question 1, a multivariate analysis of variance (MANOVA) was performed to evaluate the relationship between each group (White, Hispanic, Asian, and Black) and five chief scales subscales of emotional intelligence. MANOVA is an appropriate statistical procedure when there is one or more independent variable (i.e., gender, ethnicity, race, work title, and work region) and the emotional intelligent scores and five emotional intelligence factors as the dependent variables, which enabled differences in the directions of the means to be tested (Carey,1998). The variables were set in the SPSS® software dataset simultaneously. Predictor variables were labelled as categorical then coded as 1 = White, 2 = Black, 3 = Hispanic and 4 = Asian. Dependent variables were coded as numeric then regressed.

Prior to evaluation, the assumptions of normality, homogeneity, and residuals were measured. Box's Test of equality of covariance matrices is useful in testing the null hypotheses. Results showed Box's  $M = 321.037$ ,  $F = 1.306$  and a  $p = .003$ . Multivariate normality (see Table 9) reports as significant in larger samples that produce greater variances and co-variances (Tabachnick & Fidell, 2012).

Table 9

*Box's Test of Equality of Covariance Matrices*

Test of Equality of Covariance	Results
Box's M	321.037
F	1.306
df1	195
df2	7823.326
Sig.	.003

Field (2013) clarified that the Levene's test for homogeneity of variances can be used for larger samples, however, the homogeneity of variance as a significant assumption of normality decreases in importance. Field (2013) reminded that multivariate tests have greater breadth and power in detecting correlation between dependent variables, and thus report a significant outcome. Homogeneity of variances can be assumed for all scores as the significance is greater than 0.05 (Field, 2013; Pallant, 2007). The variances across groups are roughly equal and the homogeneity of variance can be assumed (see Table 10).

Table 10

*Results of Levene's test of homogeneity of variance*

Unequal variances for emotional intelligence subscales	Levene's Test Results
Perception	$F(67, 262) = 1.245, p = .12$
Expression	$F(67, 262) = 1.233, p = .13$
Interpersonal	$F(67, 262) = 1.124, p = .26$
Decision Making	$F(67, 262) = .965, p = .06$
Stress Management	$F(67, 262) = .783, p = .88$

Cross-products are indispensable to MANOVA studies and represent the overall error and the relationship between the dependent variables (Field, 2013). The scores of all five emotional intelligence factors illustrate a pattern that the correlation across variables is stronger than the individual variables alone (see Table 11). The total cross-product is a meter of the overall relationship between the variables.

Table 11

*Results of Tests by Dependent Variables*

<b>Residual SSCP Matrix</b>						
		Perception	Expression	Interpersonal	Decision Making	Stress Mgt
Sum-of-	Perception	11719.37	3447.99	6592.28	6805.16	6278.40
Squares and	Expression	3447.99	9886.74	5020.62	3962.23	3330.70
Cross-	Interpersonal	6592.28	5020.62	12789.75	9126.8	8662.80
Products	DecisionMaking	6805.16	3962.23	9126.88	13210.37	10747.33
	StressMgt	6278.40	3330.70	8662.84	10747.33	14018.26
Covariance	Perception	44.73	13.16	25.16	25.97	23.96
	Expression	13.16	37.74	19.16	15.12	12.71
	Interpersonal	25.16	19.16	48.82	34.84	33.06
	DecisionMaking	25.97	15.12	34.84	50.42	41.02
	StressMgt	23.96	12.71	33.06	41.02	53.51
Correlation	Perception	1.00	.32	.54	.55	.49
	Expression	.32	1.00	.45	.35	.28
	Interpersonal	.54	.45	1.00	.70	.65
	DecisionMaking	.55	.35	.70	1.00	.79
	StressMgt	.49	.28	.65	.79	1.00

Multivariate analysis followed by discriminant function analysis (DDA) were used to illustrate how the dependent variables discriminate for each group (Field, 2013). Discriminant analysis further breaks down the linear combination of outcome variables to determine predictability of grouping the dependent variables. Analysis of the case summary show significance for the employee groups in Table 12.

Table 12

*Results of Multivariate Tests by Group*

	Value	F	Hypothesis df	Error df	Sig.	$\beta$
Pillai's trace	.112	2.521	15.000	972.000	.001	.991
Wilks' lambda	.891	2.539	15.000	889.302	.001	.985
Hotelling's trace	.119	2.551	15.000	962.000	.001	.992
Roy's largest root	.074	4.790 <sup>a</sup>	5.000	324.000	.000	.979

The values of the structure matrix are essential to interpreting the canonical variate correlation coefficients (Field, 2013). Furthermore, as Bargman (1970) argued, dependent variables with high canonical variate correlations have the highest contribution to the group. In examining the results in Table 13, the dependent variables contribute differently to each function.

Table 13

*Results of Structure Matrix*

<b>Structure Matrix</b>			
	Function		
	1	2	3
Expression	.937*	.144	-.067
DecisionMaking	.398	.583*	.509
Perception	.085	.529*	.168
StressMgt	.213	.629	.734*
Interpersonal	.459	.001	.725*

The results for the structure matrix (see Table 14) accentuate the canonical variate correlation coefficients by providing insight into the positive and negative directional relationships of the variates by function (Bargman, 1970). The strength of the positive relationships were recorded for expression in function 1, stress management for function 2, and interpersonal and stress management for function 3. Negative relationship are low

in stress management and perception for function 1, significantly strong in function 2, and low to moderate in function 3.

Table 14

*Results of Standardized Canonical Discriminant Function Coefficients*

	Function		
	1	2	3
Perception	-.420	.497	-.387
Expression	.948	.130	-.466
Interpersonal	.121	-1.129	.931
DecisionMaking	.312	.556	-.250
StressMgt	-.154	.627	.663

With 100% or ( $n = 330$ ) valid cases for DDA, the eigenvalues show the converted variances for each group. The effect sizes were computed and displayed as  $R^2$ . Three underlying dimensions explain the group differences as shown in Table 15.

Table 15

*Results of Eigenvalues and Wilks Lambda*

Eigenvalues				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.074 <sup>a</sup>	61.9	61.9	.262
2	.044 <sup>a</sup>	37.3	99.2	.206
3	.001 <sup>a</sup>	.8	100.0	.031
Wilks' Lambda				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 3	.891	37.567	15	.001
2 through 3	.957	14.426	8	.071
3	.999	.303	3	.960

Group centroids display the mean variate scores for each group both positive and negative. Table 16 and Figure 122 illustrate a generally close horizontal distance of all

four groups White, Hispanics, Asians, and Blacks among the emotional intelligence scores ( $n = 330$ ). The results show centroid scores with positive and negative differences.

Table 16

*Results of Functions of Group Centroids*

Group	Function		
	1	2	3
White	-.045	-.317	.007
Black	-.190	.126	-.026
Hispanic	-.009	.203	.057
Asian	.662	.061	-.019

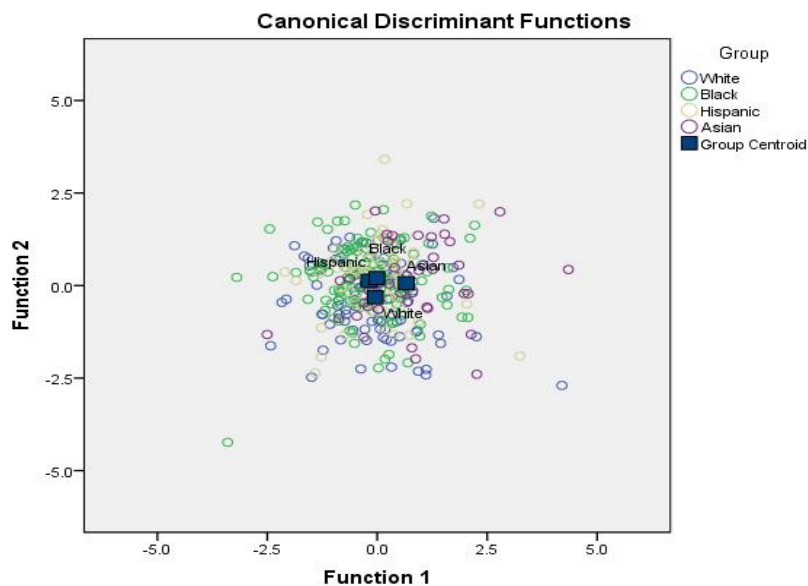


Figure 122. Group Centroids for all employees by group

**Discriminant Results and Response to Hypothesis by Group**

- ✓ The MANOVA was followed up with discriminant analysis, which revealed three discriminant functions. The first explained 61.9% of the variance, canonical  $R^2 = .07$ , whereas the second explained only 37.3%, canonical  $R^2 = .04$ , and the third explained .8%, canonical  $R^2 = .001$ . In

combination, these discriminant functions significantly differentiated among employee groups,  $\hat{\lambda} = 0.89$ ,  $X^2(15) = 37.57$ ,  $p = .001$ , but removing the first function showed that the second function did not significantly differentiate among employee groups,  $\hat{\lambda} = 0.96$ ,  $X^2(8) = 14.43$ ,  $p = .07$ . There is enough evidence to fail to reject the alternate hypothesis:  $H1_1$ : There is a statistical difference between EI scores by group at top, publicly-held technology solutions-based firms in the U.S.

### **Research Questions and Hypotheses Descriptive Analyses by Gender**

The second group of research questions and hypotheses were examined to determine if a statistical difference existed in the relationship between emotional intelligence scores and workplace diversity among the four employee groups ( $n = 330$ ).

RQ2. What relationship, if any, exists between EI and workplace diversity by gender (i.e., women versus men) classification at top, publicly-held technology solutions-based firms in the U.S?

H2<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

H2<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

To examine research question 2, a multivariate analysis of variance (MANOVA) was performed to evaluate the relationship by gender: women versus men for each group (i.e., White, Hispanic, Asian, and Black) and the emotional intelligence factors.



Predictor variables were unchanged, dependent variables for gender was set at 1 = Female and 2 = Male. Descriptive statistics were calculated in Table 17.

Table 17

*Descriptive Statistics by Gender*

Group Statistics					
Gender	Variable				
	Perception	Expression	Interpersonal	Decision Making	Stress Management
Female	M = 81.90	M = 66.68	M = 72.92	M = 82.11	M = 81.26
	SD = 6.41	SD = 5.95	SD = 6.05	SD = 6.02	SD = 6.67
Male	M = 80.53	M = 66.91	M = 72.79	M = 81.21	M = 80.90
	SD = 7.57	SD = 7.72	SD = 8.61	SD = 9.05	SD = 8.56
Total	M = 81.42	M = 66.76	M = 72.87	M = 81.79	M = 81.13
	SD = 6.86	SD = 6.62	SD = 7.05	SD = 7.23	SD = 7.38

**Response to Hypothesis for Gender**

Altogether, the results from the four multivariate tests (Table 18) showed no statistical difference between the emotional intelligence scores by gender classification. Results are provided for one of the four tests (Field, 2013). No additional post-hoc was performed as gender only has two coded labels (female and male), and additional statistical analysis requires a minimum of three groups.

Table 18

*Multivariate Tests by Gender*

Multivariate Tests								
	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	$\beta$
Pillai's trace	.003	.154 <sup>a</sup>	5.000	258.000	.979	.003	.771	.086
Wilks' lambda	.997	.154 <sup>a</sup>	5.000	258.000	.979	.003	.771	.086
Hotelling's trace	.003	.154 <sup>a</sup>	5.000	258.000	.979	.003	.771	.086
Roy's largest root	.003	.154 <sup>a</sup>	5.000	258.000	.979	.003	.771	.086

Using Wilk's Lambda, there was no significant correlation between emotional intelligence and workplace diversity by gender classification:  $\Lambda = 0.99$ ,  $F(5, 258) = .154$ ,  $p = .979$ . There is enough evidence to fail to reject the null hypothesis:  $H_{20}$ : There is no statistical difference in the relationship between leader EI and workplace diversity by gender classification (i.e., women versus men) at top, publicly-held technology solutions-based firms in the U.S.

### **Research Questions and Hypotheses Descriptive Analyses by Ethnicity and Race**

The third group of research questions and hypotheses were investigated to determine if a statistical difference existed in the relationship between emotional intelligence scores and workplace diversity in women and minorities by probing the scores against ethnicity and race classifications. The results described in the following paragraphs designate the findings.

To examine research question 3, a multivariate analysis of variance (MANOVA) was performed to evaluate the relationship between by ethnicity and race. For analysis by ethnicity (Hispanic versus Asian), dependent variables were identified as 3 = Hispanic ( $n = 61$ ) and 4 = Asian, ( $n = 44$ ). For analysis by race (White versus Black), predictor variables were identified as 1 = White, and 2 = Black. Dependent variables included the five components of emotional intelligence retained its prior coding as numeric. Descriptive statistics are reported in Table 19.

RQ3. What relationship, if any, exists between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) and race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S?

- H3<sub>0a</sub>: There is no statistical difference in the relationship between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) classification at top, publicly-held technology solutions-based firms in the U.S.
- H3<sub>1a</sub>: There is a statistical difference in the relationship between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) classification at top, publicly-held technology solutions-based firms in the U.S.
- H3<sub>0b</sub>: There is no statistical difference in the relationship between EI and workplace diversity by race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S.
- H3<sub>1b</sub>: There is a statistical difference in the relationship between EI and workplace diversity by race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S.

Table 19

*Descriptive Statistics by Ethnicity*

Group Statistics					
Ethnicity	Variable				
	Perception	Expression	Interpersonal	Decision Making	Stress Management
Hispanic	M = 82.21	M = 66.87	M = 73.13	M = 82.82	M = 82.36
	SD = 7.13	SD = 6.47	SD = 6.38	SD = 6.21	SD = 6.45
Asian	M = 82.00	M = 70.82	M = 74.91	M = 83.86	M = 82.34
	SD = 8.29	SD = 8.06	SD = 6.86	SD = 8.22	SD = 8.04
Total	M = 81.42	M = 66.76	M = 72.87	M = 81.79	M = 81.13
	SD = 6.86	SD = 6.62	SD = 7.05	SD = 7.23	SD = 7.38

**Response to Hypothesis for Ethnicity**

Altogether, the results from the four multivariate tests showed statistical differences between the emotional intelligence scores in the employee groups by

ethnicity (i.e., Hispanic versus Asian) as shown in Table 20. No additional post-hoc was performed as ethnicity only included two coded labels (i.e., Hispanic versus Asian); additional statistical analysis requires a minimum of three groups: Using Wilk's Lambda there was a significant correlation between emotional intelligence and workplace diversity by ethnicity classification:  $\Lambda = 0.91$ ,  $F(10, 516) = 2.37$ ,  $p = .01$

Table 20

*Multivariate Tests by Ethnicity*

<b>Multivariate Tests</b>								
	Value	F	Hypothesis		Sig.	Partial Eta Squared	Noncent. Parameter	$\beta$
			df	Error df				
Pillai's trace	.087	2.358	10.000	518.000	.010	.044	23.580	.937
Wilks' lambda	.914	2.372 <sup>a</sup>	10.000	516.000	.009	.044	23.719	.939
Hotelling's trace	.093	2.386	10.000	514.000	.009	.044	23.855	.940
Roy's largest root	.077	3.984 <sup>b</sup>	5.000	259.000	.002	.071	19.921	.947

There is enough evidence to fail to reject the alternative hypothesis: H3<sub>1a</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by ethnicity classification (i.e., Hispanic versus Asian) at top, publicly-held technology solutions-based firms in the U.S.

### **Response to Hypothesis for Race**

Descriptive statistics were reported in Table 21. Altogether, the results from the four multivariate tests showed a statistical difference between the emotional intelligence scores in employee groups by race classification. No additional post-hoc was performed as race only has two coded labels (White and Black), and further statistical analysis requires a minimum of three groups.

Table 21

*Descriptive Statistics by Race*

Group Statistics					
Race	Variable				
	Perception	Expression	Interpersonal	Decision Making	Stress Managem
White	M = 80.26 SD = 7.01	M = 66.19 SD = 6.25	M = 72.77 SD = 6.46	M = 80.37 SD = 6.06	M = 79.64 SD = 7.14
Black	M = 81.73 SD = 5.99	M = 65.74 SD = 5.92	M = 72.13 SD = 7.74	M = 81.68 SD = 7.95	M = 81.28 SD = 7.61
Total	M = 81.42 SD = 6.86	M = 66.76 SD = 6.62	M = 72.87 SD = 7.05	M = 81.79 SD = 7.23	M = 81.13 SD = 7.38

The results by race for the four multivariate tests are reported in Table 22. Using Wilk's Lambda, there was a significant correlation between emotional intelligence and workplace diversity by race classification:  $\Lambda = 0.90$ ,  $F(10, 516) = 2.86$ ,  $p = .00$

Table 22

*Multivariate Tests by Race*

Multivariate Tests								
	Value	Hypothesis			Sig.	Partial Eta Squared	Noncent. Parameter	$\beta$
		F	df	Error df				
Pillai's trace	.105	2.859	10.000	518.000	.002	.052	28.585	.976
Wilks' lambda	.898	2.857 <sup>a</sup>	10.000	516.000	.002	.052	28.570	.976
Hotelling's trace	.111	2.855	10.000	514.000	.002	.053	28.554	.975
Roy's largest root	.075	3.899 <sup>b</sup>	5.000	259.000	.002	.070	19.494	.942

There is enough evidence to fail to reject the alternative hypothesis:  $H_{31b}$ : There is a statistical difference in the relationship between EI and workplace diversity by race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S.

## Research Questions and Hypotheses Descriptive Analyses by Work Title

The fourth group of research questions and hypotheses were examined to determine if a statistical difference existed in the relationship between emotional intelligence scores from and workplace diversity by analyzing the scores of the employee groups by work title (i.e., manager or higher). The results described in the following paragraphs designate the findings. Table 23 showed the descriptive statistics, which were followed by multivariate tests in Table 24.

Table 23

### *Descriptive Statistics by Work Title*

Title	Group Statistics				
	Variable Perception	Expression	Interpersonal	Decision Making	Stress Management
Manager	M = 81.50 SD = 7.00	M = 67.24 SD = 7.10	M = 73.03 SD = 7.52	M = 82.09 SD = 7.71	M = 81.55 SD = 7.76
Director	M = 80.48 SD = 6.62	M = 65.16 SD = 4.81	M = 72.03 SD = 6.11	M = 80.63 SD = 5.93	M = 79.66 SD = 6.69
VP	M = 82.10 SD = 4.93	M = 67.25 SD = 4.98	M = 73.35 SD = 4.40	M = 82.75 SD = 5.13	M = 80.40 SD = 4.89
SVP	M = 85.17 SD = 3.66	M = 67.33 SD = 5.09	M = 75.00 SD = 4.65	M = 80.50 SD = 3.51	M = 82.17 SD = 5.04
EVP	M = 73.67 SD = 4.93	M = 58.33 SD = 2.08	M = 68.00 SD = 5.20	M = 74.33 SD = 4.04	M = 76.67 SD = 4.16
CEO	M = 94.00 SD = 5.66	M = 65.00 SD = 8.49	M = 76.50 SD = 2.12	M = 88.00 SD = 5.66	M = 88.50 SD = 2.12
Total	M = 81.42 SD = 6.86	M = 66.76 SD = 6.62	M = 72.87 SD = 7.05	M = 81.79 SD = 7.23	M = 81.42 SD = 6.86

The results by race are reported for the four multivariate tests in Table 24. Using Wilk's Lambda, there was a significant correlation between emotional intelligence and workplace diversity by work title classification:  $\Lambda = 0.84$ ,  $F(25, 959) = 1.81$ ,  $p = .01$

Table 24

*Multivariate Tests by Work Title*

<b>Multivariate Tests</b>								
	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	$\beta$
Pillai's trace	.166	1.800	25.000	1310.000	.009	.033	45.011	.992
Wilks' lambda	.842	1.813	25.000	959.929	.009	.034	33.483	.947
Hotelling's trace	.177	1.816	25.000	1282.000	.008	.034	45.392	.992
Roy's largest root	.088	4.595 <sup>a</sup>	5.000	262.000	.000	.081	22.973	.973

To avoid a Type 1 error, eigenvalues and Wilk's Lambda helped to explain the results. Five discriminant functions were applied. No further post hoc validations were necessary.

Table 25

*Eigenvalues and Wilk's Lambda for Work Title*

<b>Eigenvalues</b>				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.049 <sup>a</sup>	48.0	48.0	.215
2	.031 <sup>a</sup>	30.2	78.2	.172
3	.015 <sup>a</sup>	15.2	93.4	.123
4	.007 <sup>a</sup>	6.5	99.9	.081
5	.000 <sup>a</sup>	.1	100.0	.009

<b>Wilks' Lambda</b>				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 5	.905	32.245	25	.151
2 through 5	.949	16.866	16	.394
3 through 5	.978	7.121	9	.625
4 through 5	.993	2.157	4	.707
5	1.000	.026	1	.873

### **Discriminant Results and Response to Hypothesis by Work Title**

- ✓ The MANOVA was followed up with discriminant analysis, which revealed five discriminant functions. The first explained 48.0% of the variance, canonical  $R^2 = .05$ , whereas the second explained only 30.2%, canonical  $R^2 = .03$ ; the third explained 15.2%, canonical  $R^2 = .02$ ; the fourth dimension explained 6.5%, canonical  $R^2 = .01$ ; while the last dimension explained 0.1%, canonical  $R^2 = .00$ . In combination, these discriminant functions do not significantly show correlations between emotional intelligence scores and work title among employee groups,  $\chi^2(25) = 32.25, p = .15$ . There is enough evidence to fail to reject the null hypothesis:  $H_{40}$ : There is no statistical difference between EI scores and workplace diversity by work title classifications at top, publicly-held technology solutions-based firms in the U.S.

### **Research Questions and Hypotheses Descriptive Analyses by Work Region**

The final group of research questions and hypotheses were examined to determine if a statistical difference existed in the relationship between emotional intelligence scores from and workplace diversity by analyzing the scores of employee groups by work region. The results described in the following paragraphs designate the findings.

To examine research question 4, a multivariate analysis of variance (MANOVA) was performed to evaluate the relationship by demographic regions (i.e., CA, TX, NY, FL, PA). For analysis, all factors were established (i.e., group name, ethnicity, race, work title and designated states) to examine the interactions, if any. For analysis by region, coding was as follows: 1 = CA, 2 = TX, 3 = NY, 4 = FL, and 5 = PA.

Descriptive statistics were depicted in Table 26.



RQ5. What relationship, if any, exists between EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) classification at top, publicly-held technology solutions-based firms in the U.S?

H5<sub>0</sub>: There is no statistical difference in the relationship between leader EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top, publicly-held technology solutions-based firms in the U.S.

H5<sub>1</sub>: There is a statistical difference in the relationship between leader EI and workplace diversity by work region (i.e., CA, TX, NY, FL, PA) at top, publicly-held technology solutions-based firms in the U.S.

Table 26

*Descriptive Statistics by Work Region*

Work Region	Variable Perception	Expression	Interpersonal	Decision Making	Stress Management
CA	M = 79.36 SD = 7.420	M = 66.82 SD = 8.085	M = 74.45 SD = 7.394	M = 81.27 SD = 9.403	M = 84.27 SD = 9.870
TX	M = 82.40 SD = 10.262	M = 72.40 SD = 14.117	M = 76.20 SD = 9.257	M = 84.80 SD = 10.592	M = 80.20 SD = 7.918
NY	M = 81.13 SD = 6.625	M = 67.41 SD = 7.129	M = 72.68 SD = 7.242	M = 81.05 SD = 6.549	M = 80.18 SD = 7.590
FL	M = 81.44 SD = 6.861	M = 66.48 SD = 6.140	M = 72.75 SD = 6.975	M = 81.82 SD = 7.320	M = 81.15 SD = 7.290
PA	M = 82.29 SD = 6.794	M = 66.71 SD = 6.838	M = 73.03 SD = 6.996	M = 82.56 SD = 6.630	M = 81.74 SD = 6.707
Total	M = 81.42 SD = 6.861	M = 66.76 SD = 6.615	M = 72.87 SD = 7.045	M = 81.79 SD = 7.228	M = 81.13 SD = 7.377

Multivariate tests are shown in Table 27. Four discriminant functions were applied. Post hoc post hoc validations were necessary to avoid a type II error.

Table 27

*Multivariate Tests by Work Region*

<b>Multivariate Tests</b>							
	Value	F	Hypothesis df	Error df	Sig.	Noncent. Parameter	$\beta$
Pillai's trace	.105	1.412	20.000	1044.000	.107	28.232	.922
Wilks' lambda	.898	1.418	20.000	856.639	.105	23.451	.847
Hotelling's trace	.111	1.422	20.000	1026.000	.103	28.434	.924
Roy's largest root	.070	3.646 <sup>a</sup>	5.000	261.000	.003	18.229	.925

Eigenvalues and Wilk's Lambda helped to explain the results in Table 28. Four discriminant functions were applied. No further post hoc validations were necessary.

Table 28

*Eigenvalues and Wilk's Lambda for Work Region*

<b>Eigenvalues</b>				
Function	Eigenvalue	% of variance	Cumulative %	Canonical Correlation
1	.037 <sup>a</sup>	59.6	59.6	.188
2	.019 <sup>a</sup>	31.0	90.6	.137
3	.005 <sup>a</sup>	8.2	98.8	.071
4	.001 <sup>a</sup>	1.2	100.0	.027

<b>Wilks' Lambda</b>				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 4	.941	19.606	20	.483
2 through 4	.976	7.975	12	.787
3 through 4	.994	1.862	6	.932
4	.999	.244	2	.885

**Discriminant Results and Response to Hypothesis by Work Region**

- ✓ The MANOVA was followed up with discriminant analysis, which revealed four discriminant functions. The first explained 59.6% of the variance, canonical  $R^2 = .04$ ; the second explained only 31.0%, canonical

$R^2 = .02$ ; the third explained 8.2%, canonical  $R^2 = .01$ ; and the fourth dimension explained 1.2%, canonical  $R^2 = .00$ . In combination, these discriminant functions do not significantly show a correlation between EI scores and workplace diversity by work region,  $\chi^2 = .94$ ,  $X^2(20) = 16.61$ ,  $p = .48$ . There is enough evidence to fail to reject the null hypothesis:  $H_{50}$ . There is no statistical difference in the relationship between leader EI and workplace diversity by demographic region (i.e., CA, TX, NY, FL, PA) at top, publicly-held technology solutions-based firms in the U.S.

### **Summary**

The content in chapter four comprised of the results of the data collection and the analysis for a quantitative descriptive-comparative study on the relationship between emotional intelligence and workplace diversity in women and minorities. The response total of 330 ( $n = 330$ ) respondents were used in the data analysis. An overview of the EQ-i 2.0 instrument was stated; descriptive and comparative analyses were performed for five factors of the instrument among four employee groups (i.e., White, Hispanic, Asian and Black). The results showed emotional intelligence as a predictor by employee group (i.e., White, Hispanic, Asian, and Black: H11), by ethnicity (Hispanic versus Asian: H31a) and by race (White versus Black: H31b). Chapter five provides the description and details of the study in relation to the research questions and findings before exploring possible recommendations.

## Chapter 5

### Conclusions and Recommendations

The purpose of this quantitative descriptive-comparative is to examine the relationship of emotional intelligence and workplace diversity as it is unknown. Through examination of similarities and differences by gender, ethnicity, race, and demographic region, the emotional intelligence awareness scores were determined among women and minorities. Understanding this purpose underwrites how leaders acquire, place, and retain diverse leaders in senior roles to create and sustain optimum performance in the workplace. This study is primarily framed by the emotional intelligence theory (Goleman, 1995; Mayer et al., 2016) but also includes network theory (Simmel, 1955), organizational theory (Jones, 2013), contingency theory (Lawrence & Lorsch, 1967, 1969, 1970), cultural diversity (Ely & Thomas, 1996; Hofstede, 1980), and diversity and inclusion (Cox, 1993). The study's findings supports two original models for recognizing and advancing women and minorities with high emotional intelligence in the high-technology sector. Chapter five explores the implications to these theories, and includes three recommendations for future research.

### **Summary of Research Findings**

The findings for this quantitative descriptive-comparative study reflected the response and analysis to the listed hypotheses and associated research questions. Statistical measurements for emotional intelligence was determined using the Emotional Quotient Inventory 2.0 (EQ-i 2.0) and were found to be the predictor variable for three of the five research questions (RQ1, RQ3<sub>1a</sub>, and RQ3<sub>1b</sub>). Multivariate analysis of variance

(MANOVA), post-hoc tests, and discriminant function analysis served as the statistical procedures to validate the results.

**Findings related to RQ1:** What statistical differences, if any, exist in the emotional intelligence (EI) scores of White, Hispanic, Asian, and Black, at top, publicly-held technology solutions-based firms in the U.S? The findings showed that emotional intelligence was significantly positive to workplace diversity and highlighted a relationship existed between the variables in managers or higher, enlisted by a sample of four groups: (1) White males and females, (2) Hispanics (males and females), (3) Asians (males and females), (4) and Blacks (males and females). This is further explained in RQ3.

**Findings related to RQ2:** What relationship, if any, exists between emotional intelligence and workplace diversity for gender (i.e., women versus men) classification at top, publicly-held technology solutions-based firms in the U.S? The findings detected no relationship existed between emotional intelligence and workplace diversity by gender although a prior study by Whitman et al. (2009) found differences. Other researchers have reported higher emotional intelligence scores for women (Mayer & Salovey, 1999) while Goleman (1998) repudiate any gender differences exist. With nearly half the American workforce comprising of women, researchers do not have a clear indication that explains why women continue to be underrepresented in leadership roles in technology based organizations.

**Findings related to RQ3:** What relationship, if any, exists between EI and workplace diversity by ethnicity (i.e., Hispanic versus Asian) and race (i.e., White versus Black) classification at top, publicly-held technology solutions-based firms in the U.S?

The results of the hypotheses-testing uncovered that a positive relationship exists between emotional intelligence and workplace diversity for ethnicity and for race. This is confirmed by Ashraf and Khan's (2014) findings for ethnicity: Asians with higher emotional intelligence produced above average work performance. The findings that Hispanics and Blacks have higher emotional intelligence than Whites support the findings in prior studies by Robert et al. (2001) and Whitman (2009). Whitman (2009) attributed higher EI in racial and ethnic groups to familial settings, which endorse how minorities interpret, process information, and strive toward a common purpose. Given statistical evidence that Hispanics will represent 1 out of 5 workers in 2026 (BLS, 2017), and that racial and ethnic compositions for Asians and Hispanics will grow at a faster pace at 2.5% and 2.7% respectively (BLS, 2017) and the projection by Rolan and Toosi (2018) indicating that an increase in Blacks in the American workforce from 19.6 million in 2016 to 21.6 million in 2026, organizational leaders should not delay preparation into understanding how to interconnect with these groups to bring about optimal work performance.

**Findings related to RQ4:** What relationship, if any, exists between EI and workplace diversity by work title (i.e., manager or higher) at top, publicly-held technology and solutions-based firms in the U.S? The research results demonstrated no statistical differences existed in the relationship between emotional intelligence awareness scores and workplace diversity by work title. No prior studies have examined the relationship between emotional intelligence and workplace diversity by work title for diverse American populations in technology and solutions-based firms.

**Findings related to RQ5:** What relationship, if any, exists between EI and workplace diversity by demographic region (i.e., states: CA, TX, NY, FL, PA) classification at top, publicly-held technology and solutions-based firms in the U.S? The research results demonstrated no statistical differences existed in the relationship between emotional intelligence awareness scores and workplace diversity by work region. No prior studies have examined the relationship between emotional intelligence and workplace diversity by work region for American populations in technology and solutions-based firms.

### **Discussion on Study Findings**

The research questions and associated hypotheses assisted in examining the relationship between emotional intelligence and workplace diversity. As indicated in Chapter Two, controversies in the workplace diversity highlighted challenges for women and minorities in general and then specifically within the high-technology sector. This study confirms that women and minorities in technology based firms possess higher emotional intelligence, as a group, by ethnicity; specifically, Asians, and by race; specifically Blacks.

Instrumentally, women and minorities have played an integral role in shaping the global workplace. Leaders with increased emotional intelligence inspire teams to rally around the common goal (Chan & Mallett, 2012), which is verified by this study that women and minorities in technology based firms with high emotional intelligence have the characteristics to achieve positive outcomes, cultivate a competitive advantage for organizations, accelerate innovative ideas, and embed a rich culture of goal congruence, flexibility, and goal attainment.

The findings in this study promulgate a sense of urgency for organizational leaders to address the steady incline for high-technology employment by 2024 and the advancement of the U.S. mainstream workforce by age, gender, ethnic, and racial compositions (BLS, 2015; BLS, 2016; BLS, 2017; Vilorio, 2014; Wolf & Terrell, 2016). These findings, however, cast doubt on the status quo as women and minorities in the high technology sector continue to be underutilized and underrepresented at top, senior roles in technology while noticeably, White men - have occupied senior roles in this industry adding to the paucity of women and minorities in executive functions (BLS, 2015; EEOC, 2016). Glass ceiling, sex and race-biased assessments, student preparedness for the STEM field, gendered assumptions, even personal and cultural views of STEM roles as akin to masculine have contributed to the pipeline concerns encircling the underrepresentation of women and minorities in this field. Furthermore, the findings in this study declare that homosocial reproduction, sticky-flooring, and discrimination are associated factors that persist (Baert et al., 2016; Bond & Haynes, 2014; BLS, 2015; Hudson et al., 2017; Kanter 1977).

While this study's findings establish a relationship between emotional intelligence and workplace diversity, further studies may need to investigate the relation of additional variables such as: education and training. Education offers insights to an individuals' credentials from High School Diploma to Ph.D but also underwrites one's soft skills (i.e., empathy, effective communication, independent thinking, and creativity) (Gwynne, 2016). The top four soft skills are identified as: organization, communication, promptness, and teamwork, which are insightful in identifying how individuals will interact with team members and other stakeholders (Massey, 2016). Conversely, Clarke



(2016) noted that the lack of soft skills endangers productivity, organizational growth and success. On the job-training is also vital and enables one's ability to autonomously follow policies, procedures, or curriculums while others may grow from peer shadowing (BLS, 2017). In part or combined, these variables as shown in Figure 123 may provide further understanding into the underrepresentation of women and minorities in senior roles at top, publicly-held technology and solutions-based firms in the U.S.



*Figure 123.* Emotional Intelligence -Workplace diversity soft-skill model. Model developed is original from research study findings.

### **Implications for Leadership**

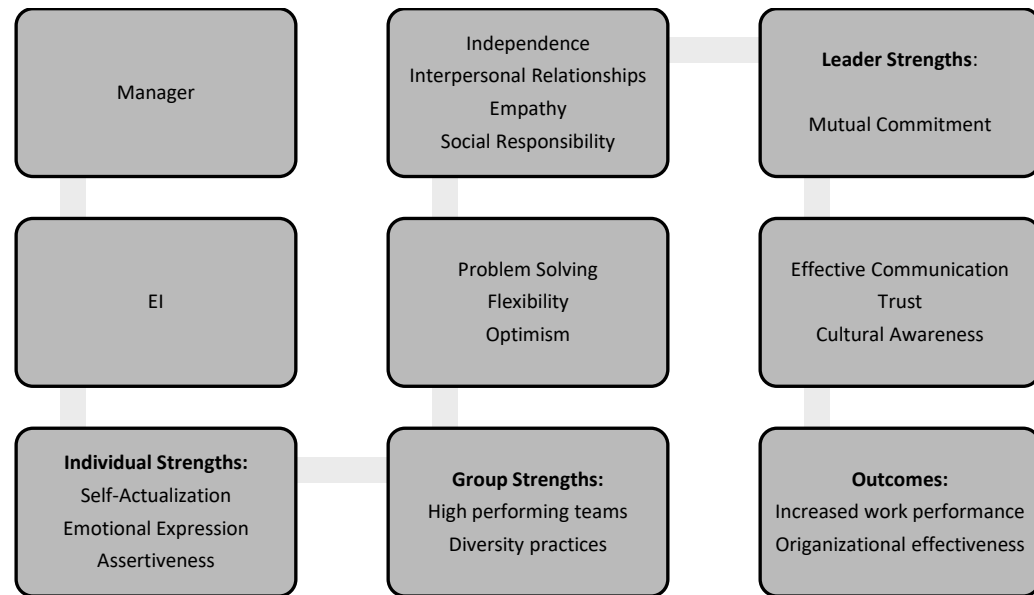
Leadership is an evolutionary and multi-dimensional process heartened by individuals who enthuse and motivate dynamic teams (Marques, 2007). There is no singular path or particular group of techniques for identifying leaders (Bass 2000, 2008). Leaders with high emotional intelligence however, focus on how to improve performance, attain maintainable results, innovate, and are stocked with an indispensable toolkit enabling interaction and unification with members of diverse backgrounds.

Altogether, leaders with emotional intelligence uphold cultural fitness and social norms to make sensible decisions by surveilling the emotional and non-emotional aspects of a situation before forming a conclusion (Bar-On, 1997).

High technology firms tend to be fast moving and operate in high-velocity environments. Organizational leaders who lack the flexibility and speed in decision-making fail to grow or even survive (Campos, Solé Parellada, Aguilar Valenzuela, & Rubio, 2015). Change is inevitable and may erupt in the wake of a growing diverse American workforce. Members of high-performing teams create coordination and emotional stability to develop, disperse ideas, and resonate mission-possible behaviors. Leaders inspire followers with effective communication, trust, and cultural awareness to revitalize mutual commitment toward organizational effectiveness and top performance.

The results from this study subsidizes focus on ten of the 15 emotional intelligence subscales. Doing this, afforded the microcosmic view into the five chief components, which underwrite emotional functioning (MHS, 2011). Furthermore, these variables are closely related to key characteristics for a leader's success in the high-tech sector: (a) self-actualization, (b) emotional expression, (c) assertiveness, (d) independence, (e) interpersonal relationships, (f) empathy, (g) social responsibility, (h) problem solving, (i) flexibility, (j) optimism. These characteristics have countersigned the opportunity to develop an original model (see Figure 124) based on this study's findings. Lower emotional intelligence scores in any of the ten subscales produce challenges in the high-tech sector, generates low creativity in developing meaningful products and services, lessens decisiveness, expands unclear focus, and endorses inflexibility in radically changing environments, which notarize sluggish outputs and

organizational decline. The compilation of the results indicated that management who incorporate increased emotional intelligence awareness can utilize individual strengths from the ten identified subscales to thrive (Bond & Haynes, 2014; Sabharwal, 2014; Shin-yih Chen et al., 2015; Wang, 2015).



*Figure 124.* Emotional Intelligence -Workplace diversity leadership attributes model. Model developed is original from research study findings.

### Implications for Emotional Intelligence

Organizational leaders are faced with understanding and employing skills to champion top performance while sustaining a competitive advantage. The role of organizational leaders is to embed a culture of harmony among workers while steering the mission of a common purpose. Emotional intelligence has been identified as the crucial component in uniting the workforce to increased performance (Bradberry & Greaves, 2009). The research findings for this present study were critical to examining the emotional intelligence awareness and gender, ethnicity, race, work title, and work region for women and minorities in managerial roles at top, publicly-held technology and

solutions-based firms in the U.S. Prior studies on emotional intelligence have not widely assessed the relationship between emotional intelligence and workplace diversity for this field.

A manager who possesses high emotional intelligence harbors coping mechanisms to remain calm and laser focused on the mission. Such an individual remains self-motivated while, inspiring others to set and achieve goals during organizational transformation, environmental uncertainty, or change. Moreover, leaders with emotional intelligence can quickly ignite innovative ideas, establish and sustain interpersonal relationships among employees to maximize team performance. Adapting one's emotions, thought processes, and actions combined with the ability to recognize and re-steer the emotions of others underwrite effective interpersonal relationships, reality testing, empathy, optimism, and problem solving (MHS, 2011).

Conversely, managers with low emotional intelligence as evidenced through the results in this study may compromise the firm's bottom line, weaken organizational performance, and reduce personnel's alignment to the organizations' goals. Thus, leaders with low emotional intelligence lack the ability to synchronize ideas when conflict arises which can contribute to organizational failure. In such instances, leaders with low emotional intelligence skills lack the composure to self-manage and self-regulate during taxing situations analogous to the uncertain and sometimes unstable environment in which technology based firms compete (Campos et al., 2015).

### **Implications for Workplace Diversity**

The U.S. mainstream workforce is becoming more racially and ethnically diverse

(BLS, 2015; 2017). The high-tech sector is fueled by high performing teams that rely on diverse leaders to establish interpersonal relationships, self-manage, listen, develop others, problem solve, energize followers, sustain engagement, understand and share information. In the end, leaders with increased emotional intelligence inspire teams toward goal attainment. The results for this study implies that leaders need to rethink talent management strategies and diversity practices to be prepared for the workforce of the near future. From this, leaders can devise newer approaches to acquire, place, and retain diverse workers.

To achieve this, employers will need to look beyond current skills and skill requirements and seek to understand how a candidate will contribute to the organizational cultural fitness demonstrable through aligned core values and personal goals. One solution may reside in employers converging to diversity practices based on trust, meaningful relationships, authenticity, adaptability, and collaboration. Hiring leaders who demonstrate high emotional intelligence awareness through empathy, problem solving, flexibility and independence will eliminate burdens of high turnover rates in the high-technology industry. Pertaining to placement, the findings in this study suggest that leaders must increase deployment of women and minorities in senior roles when their emotional intelligence skills are high and their work performance consistently align with a trajectory of successful outcomes.

Diversity practices have to undergo paradigm shifts. In doing so, organizational leaders need to sharpen communicative strategies to ensure that all members of the organization connect with the mission given the challenges with cultural and language barriers. Effective communication endorses increased employee morale, clarity on

organizational objectives, and promotes organizational success. Next, organizational leaders must develop diversity strategies that focus on embedding a rich culture of what diversity means to the organization. Beyond the confines of policies, leaders instill ethos at indiscriminate levels of the firm cross-functionally and intra-organizationally. Figure 123 illustrated a new model developed from results from this present study and integrates diversity practices and communication as critical components for women and minorities in the high-tech sector (Sabharwal, 2014).

### **Recommendations**

The current study supplied insight into relationship between emotional intelligence and workplace diversity among women and minorities at top publicly-held technology and solutions-based firms in the U.S. Research findings enlighten the research problem warranting the necessity of the study and underwrite the advancement of knowledge in social research. Recommendations for future research and conclusion are founded in the study's results.

### **Recommendations for Future Research**

The present quantitative descriptive-comparative study examined the relationship between emotional intelligence and workplace diversity in women and minorities in top, publicly-held technology and solutions-based firms in the U.S. Emotional intelligence was measured with the EQi-2.0 instrument. The extant literature was necessary to explore the role of emotional intelligence in high-tech sector and in the selected populations, which further endorsed the value for organizational performance and effectiveness. The data results showed that leaders who lack emotional intelligence may exude lower self-confidence, set lower goals, appear emotionally detached, demonstrate

discomfort with self-expression, rely on direction to fulfill tasks, lack ability to develop and maintain meaningful relationships, can be easily biased by emotions among other challenges (MHS, 2011).

Previous studies confirmed emotional intelligence has a positive effect on creating positive attitudes, coping with conflict, furthering collaboration (Clark & Polesello, 2017; Cole & Salimath, 2013; Jorfi et al., 2012; Whitman, et al., 2009; Yadav, 2014). Very few studies have examined the relationship between emotional intelligence and workplace diversity although, sufficient evidence shows that women and minorities possess higher emotional intelligence awareness. Far too few studies have investigated the relationship of emotional intelligence (EI) and workforce diversity using diverse populations in the technology arena (Chiva & Alegre, 2008; Clark & Polesello, 2017; Jada et al., 2014; Fisher et al., 2005). Thus, this study fills a gap in the existing literature on emotional intelligence and workplace diversity.

**Recommendation 1:** Future studies can examine the relationship through broader lenses and varied research methods. For instance, a mixed-method research study with a developmental research approach and a longitudinal design could examine the relationship between emotional intelligence and workplace diversity by conducting and analyzing perceptions of diverse leaders in high-tech. Complimentarily, quantitative analysis could be used to measure emotional intelligence scores of the diverse leaders at episodic levels: such as an initial assessment then retesting at six months or at one year to determine if any changes occurred. The incorporation of leadership training may serve as an intervening variable, which may allow organizational leaders to test Jain's (2016) theory that emotional intelligence is learned, trained, and self-regulated. The inclusion of

broader demographic factors such as age, education, professional memberships, military status, and disability can be included as variables for a future study, which will help to underpin other potential factors that are in motion when leaders acquire, place, or retain women and minorities in senior roles in high-tech. Combining the EQi-2.0 with other emotional intelligence instruments such as the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) may provide supplementary sources and greater comprehension for organizational leaders to understand employee groups (MHS, 2011).

**Recommendation 2:** No prior studies have examined the relationship of emotional intelligence and workplace diversity through the composition of the work region for the high-tech sector in the U.S using underrepresented workers in senior roles. This present study may have been too narrow in its approach to answer the research question by examining populations within the 5 technological epicenters of mainstream American workforce as CA, TX, NY, FL, and PA (Census Data Program, 2014; EEOC, 2016). A study with expanded demographics will access a larger population of diverse workers and capture greater insights on how women and minorities are represented in this field. Such a future study may solicit data collection from multiple high-tech firms in the U.S., or can employ the random sampling method from social media outlets as used in this present study.

**Recommendation 3:** A qualitative research method can be applied to explore the perceptions of women and minorities in managerial roles in high-tech. Interviews can be conducted and patterns formed from themes. Themes such as bamboo curtain, glass ceiling, and discrimination or sticky-flooring can be enlisted and explored. A qualitative approach may be helpful in ascertaining which theme has greater influence in



understanding why women and minorities who possess high emotional intelligence continue to be underrepresented in senior roles.

### **Summary**

Chapter five consisted of conclusions, implications and recommendations for future research to examine the relationship between emotional intelligence and workplace diversity among women and minorities at top, publicly-held, technology and solutions-based firms in the U.S. The study's findings highlighted the necessity for leaders to understand how to utilize diverse leaders for organizations' growth and performance. An appraisal of the analysis of the research questions and justification for the results were presented. The listed hypotheses were tested to determine if statistical significance existed between emotional intelligence and workplace diversity. There was relationship between emotional intelligence and workplace diversity by group, ethnicity, and by race; no relationship was found between emotional intelligence and workplace diversity by work title and work region. Leaders in the high-tech sector can apply the new model that includes the ten distinct characteristics from the emotional intelligence subscales or develop a new method that affords continuous process refinement that endorses elevating women and minorities into senior roles in technology based firms. Implications to leadership, emotional intelligence and workplace diversity were explored. Opportunities for future research on this topic were closely addressed enlisting three recommendations.

### **Conclusions**

Chapter five comprised of summarized information for the present research study, the problem statement, purpose, literature review, methodology and design, population frame and sample, data collection process and analysis, research findings, and

recommendations. The research findings were discussed, observations noted and recommendations for future research documented. The problem steering the need for this research is that despite increasing evidence that emotional intelligence promotes positive attitudes, cultivates collaboration, and managing conflict, far too few studies have been conducted to examine the relationship between emotional intelligence and workplace diversity in the U.S. high-tech sector. The purpose of this research study aimed at examining the relationship between emotional intelligence and workplace diversity to determine if statistical differences among managerial women and minorities or at higher roles at top, publicly-held technology and solutions-based firms in the U.S. Workplace diversity was reviewed by gender, ethnicity, race, work title, and select work regions that were identified by the Census Data Program (2014) to be epi-centers for technology.

The literature review was conducted using germinal and current body of knowledge including constructs from emotional intelligence, diversity and inclusion, workplace diversity, cultural intelligence. Prior studies were conducted to measure emotional intelligence by gender, race, and ethnicity; and far too few studies have been conducted to examine the relationship between emotional intelligence in women and minorities in technology. Previously, no studies have been conducted to examine the emotional intelligence scores of women and minorities by examining the population from highly concentrated tech regions in the U.S. This quantitative descriptive-comparative study examined the relationship between emotional intelligence and workplace diversity vis a vis the sample that included women and minorities who comprised a current and growing substantial segment of the shifting American mainstream workplace by 2024 (Wolf & Terrell, 2016).

Completed assessments from 330 participants were included from a random population who worked primarily in CA, TX, NY, FL, and PA. Participants were required to be 18 years or older, employed full or part-time, in a managerial role or higher, at a top, publicly-held technology or solutions-based firm in the U.S. Participants retained anonymity throughout data collection and data analysis. Participants' gender, ethnicity, race, work title, and work region were gathered for this study.

Data results were evaluated using multivariate analysis of variance (MANOVA), normality, cross-products, outlier data, post-hoc tests, and discriminant function analysis. MANOVA tests have substantial power in two ways: (a) examining multiple correlated dependent variables; a single statistical test on the set of variables is performed as opposed to conducting individual tests, and (b) the detective nature of exploring how the independent variables correlated to the dependent variables (Carey, 1998). The data results were discussed in Chapter four and were accompanied by tables, figures, and charts to explain the findings.

## References

- Abraham, R. (2004). Emotional competence as antecedent to performance: A contingency framework. *Genetic, Social and General Psychology Monographs*, 130(2), 117-143. Available at <https://www.researchgate.net/>
- Abrams, D. A., (2013). *Diversity & Inclusion: The big six formula for success*. Lexington, KY: Createspace Independent Publishing Platform
- Acha, V., Hargiss, K. M., & Howard, C. (2013). The relationship between emotional intelligence of a leader and employee motivation to job performance. *International Journal of Strategic Information Technology and Applications (IJSITA)*, 4(4), 80-103. doi:10.4018/ijcita.2013100105
- Alavi, B. S., & Gill, C. (2016). Leading change authentically: How authentic leaders influence follower responses to complex change. *Journal of Leadership & Organizational Studies*, 1–15. doi: 10.1177/1548051816664681
- Alvim, N., & Pires, T. (2017). Optimism and timing of market entry: How beliefs and information distortion create market leadership: Optimism and timing of market entry. *International Journal of Economic Theory*, 13(3), 289-311. doi:10.1111/ijet.12130
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, 57(12), 1060-73. Retrieved from <http://www.apa.org>
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington, DC: Author.
- Antonakis, J. (2004). On why "emotional intelligence" will not predict leadership

- effectiveness beyond IQ or the "big five": An extension and rejoinder. *Organizational Analysis*, 12(2), 171-182. doi: 10.1108/eb028991
- Asnawi, N. H., Yunus, N. H., & Razak, N. A. (2014). Assessing emotional intelligence factors and commitment towards organizational change. *International Journal of Social Science and Humanity*, 4(1), 5-n/a. doi:10.7763/IJSSH.2014.V4.309
- Ashraf, F., & Khan, M. A. (2014). Does emotional intelligence moderate the relationship between workplace bullying and job performance? *Asian Business & Management*, 13(2), 171-190. doi:10.1057/abm.2013.5
- Atwater, L. E. and Yammarino, F. J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? *Personnel Psychology*, 45(1), 141-64. Available at <https://onlinelibrary.wiley.com>
- Awino, Z. B. (2013). Top management team diversity, quality decisions and organizational performance in the service industry. *Journal of Management and Strategy*, 4(1), 113-123. doi:10.5430/jms.V4n1p113
- Baert, S., De Pauw, A., & Deschacht, N. (2016). Do employer preferences contribute to sticky floors? *ILR Review*, 69(3), 714-736. doi:10.1177/0019793915625213
- Bakker, A.B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. Retrieved from <http://www.emeraldinsight.com>
- Bakker, A.B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65(10), 1359–1378. Retrieved from <http://www.journals.sagepub.com>

- Bansal, S. (2009). *Technology scorecards: Aligning IT investments with business performance*. Hoboken, NJ: John Wiley & Sons
- Barak, M. E. M., Findler, L., & Wind, L. H. (2016). Diversity, inclusion, and commitment in organizations: International empirical explorations. *Journal of Behavioral and Applied Management*, 2(2), 813. Retrieved from [www.researchgate.net](http://www.researchgate.net)
- Bargman, R. E. (1970). Interpretation and use of generalized discriminant function. In R. C. Bose et al. (Eds.). *Essays in probability and statistics*. Chapel Hill: University of North Carolina Press.
- Bar-On, R. (1997). *Bar-On emotional quotient inventory (EQ-I): Technical manual*. Toronto, Canada: Multi-Health Systems.
- Baron, L., Rouleau, V., Grégoire, S., & Baron, C. (2018). Mindfulness and leadership flexibility. *Journal of Management Development*, 37(2), 165-177.  
doi:10.1108/JMD-06-2017-0213
- Bartow, A. (2016). Patent law, copyright law, and the girl germs effect. *St. John's Law Review*, 90(3), 579. Retrieved from <https://scholarship.law.stjohns.edu/lawreview>
- Bass, B. (1998). *Transformational Leadership: Industrial, Military, and Educational Impact*. London: Lawrence Erlbaum.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8, 9–32.  
Retrieved from <https://www.journals.elsevier.com/>
- Bass, B. M. (2000). The future of leadership in learning organizations. *Journal of*

*Leadership & Organizational Studies*, 7(3), 18-40.

doi:10.1177/107179190000700302

Bass, B. M. (2008). *The Bass handbook of leadership: Theory, research, & managerial applications* (4th ed.). New York, NY: Free Press.

Bateman, T.S., & Snell, S. A. (2007). Management-Leading and Collaborating in a Competitive World [ DX Reader version]. Retrieved from <https://ecampus.phoenix.edu/content/eBookLibrary2>

Becker, T. E., Atinc, G., Breauagh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in descriptive-comparative studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, 37(2), 157-167. doi:10.1002/job.2053

Bedeian, A. G. (2015). More than meets the eye: A guide to interpreting the descriptive statistics and correlation matrices reported in management research. *Revista Ibero – Americana De Estratégia*, 14(2), 8-22. doi: 10.5585/ijsm.v14i2.2244

Bell, B. S., & Kozlowski, S. W. J. (2002). A typology of virtual teams: Implications for effective leadership. *Group & Organization Management*, 27(1), 14-49. Retrieved from <http://www.journals.sagepub.com/home>

Benjamin, B., Gulliyya, T., & Crispo, A. W. (2012). Emotional intelligence and organizational culture. *Insights To A Changing World Journal*, (1), 52-64. Retrieved from <http://www.worldcat.org>

- Birken, S. A., Bunker, A. C., Powell, B. J., Turner, K., Clary, A. S., Klamann, S. L., . . . Weiner, B. J. (2017). *Organizational theory for dissemination and implementation research. Implementation Science, 12*. doi:10.1186/s13012-017-0592-x
- Black, T. R. (1999). *Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics*. London, England: Sage.
- Black, T. R. (2011). *Understanding Social Science Research*. London, England: Sage.
- Blake, R. (1989). Integrating quantitative and qualitative methods in family research. *Families Systems and Health 7*, 411–427. Retrieved from <http://www.apa.org>
- Bleijenbergh, I., Peters, P., & Poutsma, E. (2010). Diversity management beyond the business case. *Equality, diversity and inclusion: An international journal, 29*(5), 413-421. doi:10.1108/02610151011052744
- Bielikova, A., & Misankova, M. (2014). Corporate culture as a factor of quality increase at a transport company. *Actual Problems in Economics, 159*, 163-170. Retrieved from <http://eco-science.net/>
- Boland, M. J., & Ross, W. H. (2010). Emotional intelligence and dispute mediation in escalating and de-escalating situations. *Journal of Applied Social Psychology, 40*(12), 3059-3105. doi:10.1111/j.1559-1816.2010.00692.x
- Bond, M. A., & Haynes, M. C. (2014). Workplace diversity: A social-ecological framework and policy implications: *Workplace diversity. Social Issues and Policy Review, 8*(1), 167-201. doi:10.1111/sipr.12005
- Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social*



- Psychology Bulletin*, 29, 1147-1158. Retrieved from journals.sagepub.com/home
- Bradberry, T., & Greaves, J. (2009). *Emotional Intelligence 2.0*. San Diego, CA: TalentSmart.
- Bratton, V. K., Dodd, N. G., & Brown, F. W. (2011). The impact of emotional intelligence on accuracy of self-awareness and leadership performance. *Leadership & Organization Development*, 32(2), 127-149. Retrieved from www.emeraldinsight.com
- Breland, A. (2017). Government study shows lack of diversity in tech. Retrieved from <http://thehill.com/policy/technology/362650-government-study-shows-lack-of-diversity-in-tech>
- Brenton, B., & Levin, D. (2012). The softer side of: The people. *Journal of Product Management*, 29(3), 364-366. doi:10.1111/j.1540-5885.2012.00910.x
- Brown, D. R. (2011). *An experiential approach to organization development* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Brown, M. M., & Brudney, J. L. (2003). Learning organizations in the public sector? A study of police agencies employing information and technology to advance knowledge. *Public Administration Review*, 63(1), 30-43. Retrieved from <http://www.wiley.com>
- Brutus, S., & Duniewicz, K. (2012). The many heels of Achilles: An analysis of self-reported limitations in leadership research. *Leadership Quarterly*, 23(1), 202-212. doi: 10.1016/j.leaqua.2011.11.015
- Bureau of Labor Statistics, U.S. Department of Labor. (2008). Older workers. Retrieved from [https://www.bls.gov/spotlight/2008/older\\_workers/](https://www.bls.gov/spotlight/2008/older_workers/)

(visited *December 03, 2017*).

Bureau of Labor Statistics, U.S. Department of Labor. (2011). Women at Work. Spotlight on Statistics. Retrieved from <https://www.bls.gov/spotlight/2011/women/> (visited *December 03, 2017*).

Bureau of Labor Statistics. (2015). Labor Force Characteristics by Race and Ethnicity, 2014. Retrieved from <https://www.bls.gov/opub/reports/race-and-ethnicity/archive/labor-force-characteristics-by-race-and-ethnicity-2014.pdf> (visited *December 3, 2017*).

Bureau of Labor Statistics, U.S. Department of Labor (2016). *The Economics Daily*, 39 percent of managers in 2015 were women on the Internet at <https://www.bls.gov/opub/ted/2016/39-percent-of-managers-in-2015-were-women.htm> (visited *December 03, 2017*).

Bureau of Labor Statistics, U.S. Department of Labor. (2016). *Black women in the labor force*. Available at [Black\\_Women\\_in\\_the\\_Labor\\_Force%20for%20diss%20112517.pdf](#) (visited *December 03, 2017*).

Bureau of Labor Statistics, U.S. Department of Labor. (2017). Employment change for STEM occupations by state, May 2009 to May 2015. Available at <https://www.bls.gov/spotlight/2017/science-technology-engineering-and-mathematics-stem-occupations-past-present-and-future/home.htm> (visited *February 03, 2019*).

Burke, M. M. (2004). Exploring differences in intrinsic motivation Based on Keirseyan temperament type. Unpublished doctoral dissertation, California

School of Organizational Studies, Alliant International University, San Francisco  
Bay

Burks, B. (1926). On the inadequacy of the partial and multiple correlation technique.

*Journal of Educational Psychology*, 17, 625–630. Retrieved from [www.apa.org](http://www.apa.org)

Bushra, F., Usman, A., & Naveed, A. (2011). Effect of transformational leadership on  
employees' and organizational commitment in banking sector of Labore

(Pakistan). *International Journal of Business & Science*, 2(18), 261-267.

Retrieved from <http://www.ijbssnet.com/>

Busso, L. (2003). *The Relationship between Emotional Intelligence and Contextual*

*Performance as influenced by Job Satisfaction and Locus of Control Orientation.*

San Diego, CA: Alliant International University.

Cabello, R., Sorrel, M. A., Fernández-Pinto, I., Extremera, N., & Fernández-Berrocal, P.

(2016). Age and gender differences in ability emotional intelligence in adults: A  
cross-sectional study. *Developmental Psychology*, 52(9), 1486-1492. Retrieved

from [www.apa.org](http://www.apa.org)

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental*

*designs for research*. Chicago, IL: Rand McNally.

Campos, H., Solé Parellada, F., Aguilar Valenzuela, F. A., & Rubio, A. M. (2015).

Strategic Decision-making speed in new technology based firms. *Rai*, 12(2), 13-

152. Retrieved from [onlinelibrary.wiley.com](http://onlinelibrary.wiley.com)

Cantrell, M. A. (2011). Demystifying the research process: Understanding a descriptive

comparative research design. *Pediatric Nursing*, 37(4), 188-9. Retrieved from

<http://www.pediatricnursing.org>

- Carey, G. (1998). Multivariate Analysis of Variance (MANOVA): I. Theory. Retrieved from <https://www.coursehero.com/file/8479863/Carey1998-MANOVA/>
- Caruso, D., & Salovey, P. (2004). *The emotionally intelligent manager: How to develop and use the four key emotional skills of leadership*. San Francisco, CA: Jossey-Bass.
- Catalyst. (2016). Women in Science, Technology, Engineering, and Mathematics (STEM). Retrieved from <http://www.catalyst.org/knowledge/women-science-technology-engineering-and-mathematics-stem>. Site accessed on December 10, 2017
- Catalyst. (2017). What's Keeping Latinas From the Top? Retrieved from <http://www.catalyst.org/blog/catalyzing/whats-keeping-latinas-top>
- Catalyst. (2017). Despite Modest Gains, Women and Minorities See Little Change in Representation on Fortune 500 Boards. Available at <http://www.catalyst.org/media/despite-modest-gains-women-and-minorities-see-little-change-representation-fortune-500-boards>
- Census Data Program. (2014). Exploring the high-tech industry taxonomy using LED. Available at <https://lehd.ces.census.gov/doc/workshop/2014/Presentations/High-TechPresentationLED.pdf>
- Census Data Program. (2017). Retrieved from [www.census.gov](http://www.census.gov)
- Census Data Program. (2018). America counts: Stories behind the numbers. Retrieved from [www.census.gov](http://www.census.gov)

- Chan, T., J., & Mallett, J. C. (2012). The value of emotional intelligence for high performance coaching. *International Journal of Sports Science and Coaching*, 6(3), 315-328. Retrieved from journals.Sagepub.com
- Chang, J. W., Sy, T., & Choi, J. N. (2012). Team Emotional Intelligence and Performance Interactive Dynamics between Leaders and Members. *Small Group Research*, 43(1), 75–104. doi: 10.1177/1046496411415692
- Chen, H. (2012). *Approaches to quantitative research: A guide for dissertation students*. Cork, Ireland: Oak Tree Press.
- Cherniss, C., & Adler, M. (2000). *Promoting emotional intelligence in organizations*. Alexandria, VA: American Society for Training and Development.
- Cherniss, C. (2010a). Emotional intelligence: New insights and further clarifications. *Industrial & Organizational Psychology*, 3(2), 183-191. Retrieved from <http://www.apa.org>
- Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional intelligence: What does the research really indicate? *Educational Psychologist*, 41(4), 239-245. doi:10.1207/s15326985ep4104\_4
- Cherniss, C. (2010b). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, 3(2), 110-126. Retrieved from <http://www.apa.org>
- Chiva, R., & Alegre, J. (2008). Emotional intelligence and: The role of organizational learning capability. *Personnel Review*, 37(6), 680-701. doi:10.1108/00483480810906900
- Choy, W. K. W. (2007). Globalisation and workforce diversity: HRM implications for

- multinational corporations in singapore. *Singapore Management Review*, 29(2), 1.  
Retrieved from <http://www.worldcat.org>
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2014). *Research methods, design, and analysis* (12th ed.). Boston, MA: Allyn & Bacon.
- Christie, A. M. H., Jordan, P. J., & Troth, A. C. (2015). Leader and member trust antecedents: Emotional intelligence and perceptions of others. *International Journal of Organizational Analysis*, 23(1), 89 – 101. Retrieved from <http://www.emeraldinsight.com>
- Chrobot-Mason, D., & Aramovich, N. P. (2013). The psychological benefits of creating an affirming climate for workplace diversity. *Group & Organization Management*, 38(6), 659-689. doi:10.1177/1059601113509835
- Chun, H., Kim, J-W., & Lee, J. (2014). How does information technology improve aggregate productivity? A new channel of productivity dispersion and reallocation. *Research Policy*, 44(5), 999-1016. doi: 10.1016/j.respol.2014.11.007
- Clark, M. J., Polesello, D. (2017). Emotional and cultural intelligence in diverse workplaces: getting out of the box, *Industrial and Commercial Training*, 49(7/8), 337-349. doi: 10.1108/ICT-06-2017-0040
- Clarke, M. (2016). Addressing the soft skills crisis. *Strategic HR Review*, 15(3), 137-139. doi:10.1108/SHR-03-2016-0026
- Clifton, J. (2017, June 13). The world's broken workplace. The chairman's blog. Message posted to <http://www.gallup.com>
- Coetzer, G. H. (2015). Emotional versus cognitive intelligence: Which is the better

- predictor of efficacy for working in teams? *Journal of Behavioral and Applied Management*, 16(2), 116. Retrieved from <http://www.us.sagepub.com/>
- Cohen, J. (1988). *Statistical power analysis for behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23 (1997), 239–290. doi:10.1108/IJOA-07-2013-0695
- Cole, D. A., Maxwell, S. E., Arvey, R., & Salas, E. (1994). How the power of MANOVA can both increase and decrease as a function of the intercorrelations among the dependent variables. *Psychological Bulletin*, 115(3), 465-474. doi:10.1037/0033-2909.115.3.465
- Cole, B. M., & Salimath, M. S. (2013). Diversity identity management: An organizational perspective. *Journal of Business Ethics*, 116(1), 151-161. doi:10.1007/s10551-012-1466-4
- Collins, J. (2001). *Good to great - Why some companies make the leap . . . and others don't*. New York, NY: Harper Business.
- Colnerud, G. (2013). Brief report: Ethical problems in research practice. *Journal of Empirical Research on Human Research Ethics*, 8(4), 37 - 41. doi:10.1525/jer.2013.8.4.37
- Cone, J. D., & Foster, S. F. (2006). *Dissertations and theses from start to finish (2nd ed.)*. American Psychological Association: Washington, DC: APA.
- Cooper, R. K., & Sawaf, A. (1997). *Executive EI: emotional intelligence in leadership and organizations*. New York: Berkley Publishing Group.

- Corder, G. W., & Foreman, D. I. (2014). *Nonparametric statistics: A step-by-step approach*. New York, NY: John Wiley & Sons.
- Cox, T. (1993). *Cultural diversity in organizations: Theory, research and practice*. San Francisco, CA: BerrettKoehler.
- Creswell, J. (2014). *Research design, qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The leader and member leader and member trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, 21(5) 563–576.  
Retrieved from [www.jstor.org/journal/stramanaj](http://www.jstor.org/journal/stramanaj)
- Dearborn, K. (2002). Studies in emotional intelligence redefine our approach to leadership development. *Public Personnel Management*, 31(4), 523-530.  
doi:10.1177/009102600203100408
- de Goeij, Moniek C. M., van Diepen, M., Jager, K. J., Tripepi, G., Zoccali, C., & Dekker, F. W. (2013). Multiple imputation: Dealing with missing data. *Nephrology, Dialysis, Transplantation*, 28(10), 2415-2420. doi:10.1093/ndt/gft221
- De Clercq, D., Bouckennooghe, D., Raja, U., & Matsyborska, G. (2014). Unpacking the goal congruence-organizational deviance relationship: The roles of work engagement and emotional intelligence. *Journal of Business Ethics*, 124(4), 695-711. doi:10.1007/s10551-013-1902-0
- de Mooij, M., & Hofstede, G. (2010). The Hofstede model. *International Journal of Advertising*, 29(1), 85-110. doi: 10.2501/S026504870920104X



- Donnelly, R. A. (2007). *Statistics: Simple solutions to the biggest statistical problems getting through the class* (2nd ed.). New York: Penguin Group.
- Dowling, G. (2017). The glass ceiling: Fact or a misguided metaphor? *Annals in Social Responsibility*, 3(1), 23-41. doi:10.1108/ASR-05-2017-0002
- Drucker, P. F. (1986). *Managing for Results*. New York, NY: Harper Business
- Einwohner, R. L. (2011). Ethical considerations on the use of archived testimonies in holocaust research: Beyond the IRB exemption. *Qualitative Sociology*, 34(3), 415-430. doi:10.1007/s11133-011-9196-y
- Elliott, C., Leck, J., Rockwell, B., & Luthy, M. (2013). What my guidance councillor should have told me: The importance of universal access and exposure to executive-level advice. *Electronic Journal of E-Learning*, 11(3), 239-252.  
Retrieved from [www.ejel.org](http://www.ejel.org)
- Ellis, T. J., & Levy, Y. (2009). Towards a guide for novice researchers on research methodology: Review and proposed methods. *Issues in Informing Science & Information Technology*, 6, 323-337. Retrieved from <http://www.iisit.org>
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229-273. doi: 10.2307/2667087
- Emotional intelligence “wow” factor: Benefits of taking feelings into account. (2012). *Development and learning in organizations: An international journal*, 27(1), 25-27. doi:10.1108/14777281311291268
- Evans, C. (2014). Diversity management and organizational change. *Equality, diversity and inclusion: an international journal*, 33(6), 482-493. doi:10.1108/edi-09-2013-

- Evans, U. F., Mkpandiok, A., & Okonna, K. O. (2017). An evaluation of the level of awareness of the STCW-78 as amended in manila 2010, using maritime education and training institutions as collective compliance mechanism. *Australian Journal of Maritime and Ocean Affairs*, 9(3), 168-181.  
doi:10.1080/18366503.2017.1306915
- Fernandez, P. J. (2013). *Leading in a diverse and conflicted world: Crucial lessons for the 21<sup>st</sup> century*. Philadelphia, PA: Global Tree.
- Ferris, G. R., Treadway, D. C., Perrewé, P. L., Brouer, R. L., Douglas, C., & Lux, S. (2007). Political skill in organizations. *Journal of Management*, 33(3), 290-320.  
doi:10.1177/0149206307300813
- Fidan, D., Boztoprak, H., Usta, T., Sari, B., & Guzey, Y. (2016). The effects of discrimination against women in places of business: A report on the tourism industry. *Review of Business*, 37(1), 56. Retrieved from <https://www.journals.elsevier.com>
- Field, A. P. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Los Angeles, CA: Sage.
- Finch, H. (2005). Comparison of the performance of nonparametric and parametric MANOVA test statistics when assumptions are violated. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 1(1), 27-38. doi:10.1027/1614-1881.1.1.27
- Fisher, D. K., Russell, K., Nottingham, L., & Field, J. B (2005). Characteristics of effective leaders in economic development: An exploratory study. *Southern*

- Business Review*, 31(1). Retrieved from <http://www.questia.com>
- Ford, R. T. (2015). Civil rights 2.0: Encouraging innovation to tackle silicon valley's diversity deficit. *Stanford Journal of Civil Rights & Civil Liberties*, 11(2), 155. Retrieved from <https://law.stanford.edu/event/journal-of-civil-rights-and-civil>
- Francis, D., Bessant, J., & Hobday, M. (2003). Managing radical organisational transformation. *Management Decision*, 41(1), 18-31. Retrieved from <http://www.emeraldinsight.com/loi/md>
- Fraser, G., Osborne, D., & Sibley, C. G. (2015). We want you in the workplace, but only in a skirt! Social dominance orientation, gender-based affirmative action and the moderating role of benevolent sexism. *Sex Roles*, 73(5), 231-244. doi:10.1007/s11199-015-0515-8
- Frazier, E. M. (2005). Glass ceiling: Factor myth. NAAAS Conference Proceedings. Scarborough: 2005, 1929 -1948. Retrieved March 17, 2010, from the ProQuest Database.
- Fryer, Roland G., Jr., and Glenn C. Loury. (2013). Valuing Diversity. *Journal of political Economy* 121 (4): 747–74. Retrieved from <http://www.jstor.org/>
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The dark triad of personality: A 10 year review. *Social and Personality Psychology Compass*, 7, 199–216. Retrieved from <http://www.onlinelibrary.wiley.com>
- Gay, L. R. (1996). *Educational research: Competencies for analysis and application* (4th ed.). Beverly Hills, CA: Sage.
- George, D. & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference, 18.0 update* (11<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.

- Gibbs, G. R. (2014). Dealing with Missing Data and Data Cleansing. Part 3 of 3 on Quantitative Coding and Data Entry. Available at <https://www.youtube.com/watch?v=2enOenYOo8I>
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Goleman, D. (1998a). *Working with emotional intelligence*. New York, NY: Bantam.
- Goleman, D. (2001). Emotional Intelligence: Issues in Paradigm Building. In C. Cherniss And D Goleman (Eds.). *The Emotionally Intelligent Workplace*, 13-26, San Francisco, CA: Jossey-Bass.
- Goleman, D. (2013). *FOCUS: The inner driver of excellence*. New York, NY: Harper.
- Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal Leadership: Unleashing the power of emotional intelligence*. Boston, MA: Harvard Business Review.
- Gondal, U. H., & Husain, T. (2013). A comparative study of intelligence quotient and emotional intelligence: effect on employees' performance. *Asian Journal of Business Management*, 5(1), 153-162. Retrieved from <http://www.ajbms.org>
- Gonzalez, M. D. (2014). Organizational commitment through diversity and inclusion. *International Journal of Diversity*, 2014(4), 91-122. Retrieved from <http://www.ijd.cgpublisher.com>
- Gonzalez-Barrera, A., & Lopez, H. M. (2015). Is being Hispanic a matter of race, ethnicity or both? Available at <http://www.pewresearch.org/fact-tank/2015/06/15/is-being-hispanic-a-matter-of-race-ethnicity-or-both/>
- Gonzalez, H. B., & Kuenzi, J. J. (2012). Science, technology, engineering, and

- mathematics (STEM) education: A primer. Congressional Research Service, Library of Congress.
- Retrieved from <http://fas.org/sgp/crs/misc/R42642.pdf>
- Gonzalez, R., Martins, M. (2016). Capability for continuous improvement. *The TQM Journal*, 28(2), 250 – 274. doi: 10.1108/TQM-07-2014-0059
- Greene, J., V. Caracelli, and W. Graham 1989 Toward a Conceptual Framework for Mixed-Methods Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11, 255-274. Retrieved from <http://www.journals.sagepub.com>
- Greenwald, H. P. (2008). *Organizations: Management without control*. Thousand Oaks, CA: Sage.
- Greener, I. (2011). *Designing social research: A guide for the bewildered*. Thousand Oaks, CA: Sage.
- Gressgard, L. J., Amundsen, O., Aasen, T. M. & Hansen, K. (2014). Use of information and communication technology to support employee-driven innovation in organizations. *Journal of Knowledge Management*, 18(4), 633-650. doi:10.1108/JKM-01-2014-0013
- Griffith, E. (2015). The top technology companies of the *Fortune* 500. Available at <http://fortune.com/2015/06/13/fortune-500-tech/>
- Grisham, P. (2015). United States Tech Industry Employs 6.5 Million in 2014. Available at <https://www.comptia.org/about-us/newsroom/press-releases/2015/02/10/united-states-tech-industry-employs-6.5-million-in-2014>
- Gwynne, P. (2016). Does high tech need humanities graduates? *Research Technology Management*, 59(5), 6-7. Available at [www.iriweb.org/rtm](http://www.iriweb.org/rtm)

- Hackler, D., & Saxton, G. D. (2007). The strategic use of information technology by nonprofit organizations: Increasing capacity and untapped potential. *Public Administration Review*, 67(3), 474-487. doi: 10.1111/j.1540-6210.2007.00730.x
- HACR. (2016). Corporate Inclusion Index. Available at [http://www.hacr.org/research\\_institute/cii/](http://www.hacr.org/research_institute/cii/)
- Halvorson, C. (2018, May 30). 7 great employee retention strategies. Message posted to <https://wheniwork.com>.
- Harris, P. R., & Moran, R. T. (1999). *Managing cultural differences: Leadership strategies for A new world of business*. Woburn, MA: Butterworth-Heinemann.
- Harris, R. (2017). Embracing DIVERSITY for a healthy workplace. *Journal of the Australian – Traditional Medicine Society*, 23(1), 28. Retrieved from <https://www.researchgate.net/journal/>
- Harter, K. J., Schmidt, L. F., Agrawal, K. S., Plowman, K. S., & Blue, A. (2016). The Relationship Between Engagement at Work and Organizational Outcomes: Meta-Analysis: Ninth Edition. Available at [www.gallup.com](http://www.gallup.com)
- Heger, B. K. (2007). Linking the employment value proposition (EVP) to employee engagement and business outcomes: Preliminary findings from a linkage research pilot study. *Organization Development Journal*, 25(2), 121–133. Retrieved from <https://www.Questia.com/Journals>
- Hickman, G. R. (2016). *Leading organizations: Perspectives for a new era* (3rd ed.). Thousand Oaks, CA: SAGE.
- Hill, Charles, W. L. (2009). *International Business- Competing in the Global Market Place*. New York, NY: McGraw-Hill Irwin

- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Intercultural corporation and its importance for survival*. New York, NY: McGraw Hill.
- Hofstede, G. (2001). Culture's recent consequences: Using dimension scores in theory and research. *International Journal of Cross Cultural Management*, 1(1), 11-17. Retrieved from <http://www.journals.sagepub>.
- Hollis, L. P. (2016). *The Coercive Community College: Bullying and its Costly Impact on the Mission to Serve Underrepresented Populations*. Bingley, United Kingdom: Emerald Group Publishing.
- Hollis, L. P. (2017). *Qualitative Phenomenological Study: Considerations in Engaging International Students*. SAGE Publications Ltd. Thousand Oaks, CA.
- Holme, R. (2000). Effects of globalization. *American Water Works Association Journal*, 92(1), 46. Retrieved from <http://www.awwa.org>
- Homberg, F., & Bui, H. T. M. (2013). Top management team diversity: A systematic review. *Group & Organization Management*, 38(4), 455-479. doi:10.1177/1059601113493925
- Hong, Y., Catano, Y. M., & Liao, H. (2011). Leader emergence: The role of emotional intelligence and motivation to lead. *Leadership & Organization Development Journal*, 32 (4), 320-343. doi:10.1108/01437731111134625
- Howell, D. C. (2004). *Fundamental statistics for the behavioral sciences*. Belmont, CA: Brooks/Cole-Thomson Learning.

- Hsu, Y. H. & Fang, W. (2009) Intellectual capital and new product development performance: The mediating role of organizational learning capability. *Technological Forecasting and Social Change*, 76(5), 664-677. doi: 10.1016/j.techfore.2008.03.012
- Huberty, C. J., & Morris, J. D. (1989). Multivariate analysis versus multiple univariate analyses. *Psychological Bulletin*, 105, 302-308. Retrieved from [www.apa.org](http://www.apa.org)
- Hudson, M., Netto, G., Noon, M., Sosenko, F., de Lima, P., & Kamenou-Aigbekaen, N. (2017). Ethnicity and low wage traps: Favouritism, homosocial reproduction and economic marginalization. *Work, Employment and Society*, 31(6), 992-1009. doi:10.1177/0950017016674898
- Ilevbare, F. M., Ojeleye, B., & Ilevbare, O. E. (2012). Influence of industrial conflict on perceived employee work performance in selected local government area in osun state. *Journal of Emerging Trends in Economics and Management Sciences*, 3(5), 439-446. Retrieved from [jetems.scholarlinkresearch.com](http://jetems.scholarlinkresearch.com)
- Imenda, S. (2014). Is There a Conceptual Difference between Theoretical and Conceptual Frameworks? *Journal of Social Science*, 38(2): 185-195. Retrieved from <https://www.journals.elsevier.com/>
- Ionescu, V. (2014). Leadership, culture and organizational change. *Manager*, (20), 65-71. Retrieved from <https://www.journals.sagepub.com>
- Jacobs, G., van Witteloostuijn, A., & Christe-Zeyse, J. (2013). A theoretical framework of organizational change. *Journal of Organizational Change Management*, 26(5), 772-792. doi:10.1108/JOCM-09-2012-0137
- Jada, U. Jena, L. K., & Pattnaik, R. (2014). Emotional Intelligence, Diversity, and



- Organizational Performance: Linkages and Theoretical Approaches for an Emerging Field. *Jindal Journal of Business Research*, 3(1-2), 46 - 57.  
doi:10.1177/2278682115627240
- Jain, A. (2016). Emotional intelligence: An introduction. *Deliberative Research*, 30(1), 26. Retrieved from <https://journals.sagepub.com>
- Jauk, E., Freudenthaler, H. H., & Neubauer, A. C. (2016). The dark triad and trait versus ability emotional intelligence: Emotional darkness differs between women and men. *Journal of Individual Differences*, 37(2), 112-118. doi:10.1027/1614-0001/a000195
- Johnston, W. B., & Packer, A. E. (1987). Workforce 2000: Work and workers for the 21st century. Indianapolis, IN: Hudson Institute.
- Jones, G. R. (2013). *Organizational theory, design, and change* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Jorfi, H., Yaccob, H. F. B., Shah, I. M., & Rezaian, A. (2012). Role of gender in emotional intelligence: Relationship among EI, communication effectiveness and (Case study in Universities of Iran). *International Journal of Management*, 29(3), 199-206. Retrieved from <http://www.theijm.com/>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724.  
doi:10.2307/256287
- Kanter, R. M. 1977. *Men and Women of the Corporation*. New York, NY: Basic Books.
- Katila, R., Chen, E., & Piezunka, H. 2012. All the right moves: How entrepreneurial firms compete effectively. *Strategic Entrepreneurship Journal*, 6, 116– 132.

Retrieved from <https://www.onlinelibrary.wiley.com>

Kaplan, R. M., Saccuzzo, D. P. (2005). *Psychological Testing: Principles, Applications and Issues*. Belmont, CA: Wadsworth Thomson Learning

Kaye, B., & Jordan-Lewis, S. (2008). *Love 'em or lose 'em: Getting good people to stay*. San Francisco, CA: Berrett-Koehler.

Katz, S. (2017). Generation X: A critical sociological perspective. *Generations*, 41(3), 12-19. Retrieved from <https://www.Questia.com/>

Killgore, W. D. S., Weber, M., Schwab, Z. J., DelDonno, S. R., Kipman, M., Weiner, M. R., & Rauch, S. L. (2012). Gray matter correlates of trait and ability models of emotional intelligence. *Neuroreport*, 23(9), 551-555. doi: 10.1097/WNR.0b013e32835446f7

Kourteli, L. (2000). Scanning the business environment: Some conceptual issues. *Benchmarking*, 7(5), 406-413. Retrieved from <https://www.emeraldinsight.com>

Kurtulus, F. A. (2012). Affirmative action and the occupational advancement of minorities and women during 1973-2003: Affirmative action and occupational advancement. *Industrial Relations: A Journal of Economy and Society*, 51(2), 213-246. doi:10.1111/j.1468-232X.2012.00675.x

Laerd Dissertations. (2012). How to structure the research limitations section of your dissertation. Retrieved from <http://dissertation.laerd.com/how-to-structure-the-research-limitations-section-of-your-dissertation.php>

Lang, Morya. (2009). LIBRARY RHETORIC: The Canadian Library Association Statement of Diversity and Inclusion & LGBTQ Advocacy. *Progressive Librarian*, 32(36), 54-88. Retrieved from <https://www.worldcat.org/title>

- Lawton, A., & Páez, I. (2015). Developing a framework for ethical leadership. *Journal Of Business Ethics*, 130(3), 639-649. doi:10.1007/S10551-014-2244-2
- Lawrence, P. R. and Lorsch, J. W. (1967). *Organization and Environment, Division of research graduate school of business administration*. Harvard University, Boston, MA. Lawrence, P. R. and Lorsch, J. W. (1969). *Developing Organization: Diagnosis & action*. Addison Wesley, Reading, MA.
- Lawrence, P. R. and Lorsch, J. W. (1970). *Studies in Organization Design*. Irwin, Homewood, IL.
- Lee, M. S., & Lim, C. S. 2014. *Brand Marketing Strategies of International Smartphone Market*. In R. Salerno-Kochan (Ed.), *Commodity Science in Research and Practice: Non-Food Products' Quality and Innovations*: 97-102. Cracow, Poland: Polish Society of Commodity Science.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statistics: Use and interpretation* (3rd ed.). Mahwah, NJ: Erlbaum
- Leedy, P. D., & Ormond, J. E. (2013). *Practical research: planning and design* (10th ed.). Boston, MA: Pearson
- Lehmann, C. (2010). top 3 leadership skills. *Tech & Learning*, 31(2), 14. Retrieved from <https://www.questia.com>
- Li, Q., Maggitti, P. G., Smith, K. G., Tesluk, P. E., & Katila, R. (2013). Top management attention to innovation: The role of search selection and intensity in new product introductions. *Academy of Management Journal*, 56(3), 893-916. doi:10.5465/amj.2010.0844
- Lin, C. P., (2015). Predicating team performance in technology industry: Theoretical

- aspects of social identity and self-regulation. *Technological Forecasting and Social Change*, 98, September 2015, 13-23.  
doi.org/10.1016/j.techfore.2015.05.017
- Lin, T., Chuang, L., Chang, M., & Yeh, C. (2012). A study of the relationship between team innovation and organizational innovation in the high-tech industry: Confirmation of the organizational culture moderation effect. *Advances in Management and Applied Economics*, 2(2), 19. Retrieved from <https://www.worldcat.org/title>
- Liu, J., Fu, P., & Liu, S. (2009). Conflicts in top management teams and team/firm outcomes: The moderating effects of conflict-handling approaches. *International Journal of Conflict Management*, 20(3), 228-250.  
doi:10.1108/10444060910974867
- Locke, E. A. (2005). Why emotional intelligence is an invalid concept. *Journal of Organizational Behavior*, 26(4), 425. Retrieved from <http://www.onlinelibrary.wiley.com>
- Lockwood, N. (2004). The glass ceiling: Domestic and international perspectives. HR Magazine. Retrieved March 8, 2010, from [http://findarticles.com/p/articles/mi\\_m3495/is\\_6\\_49/ai\\_n6099202/?tag=rbxcra.2.a.5](http://findarticles.com/p/articles/mi_m3495/is_6_49/ai_n6099202/?tag=rbxcra.2.a.5)
- Lombard, E. (2010). Perspectives on primary and secondary sources. *The Journal of Academic Librarianship*, 36(3), 250-253. doi: 10.1016/j.acalib.2010.03.008
- Lopez-Zafra, E., & Gartzia, L. (2014). Perceptions of gender differences in self-report measures of emotional intelligence. *Sex Roles*, 70(11), 479-495.  
doi:10.1007/s11199-014-0368-6

- Lusthaus, C., & Adrien, M. H. (1998). Organizational Assessment: A Review of Experience, Universalial Occasional Paper, No. 31, October 1998.  
<http://www.universalia.com/files/occas31.pdf>
- Maidique, M. A., Atamanik, C., & Perez, R. B. (2014). The six competencies of a CEO. *Leader to Leader*, 2014(71), 31-37. doi:10.1002/ltl.20111
- Marques, J. F. (2007). Leadership: emotional intelligence, passion and...what else? *Journal of Management Development*, 26(7), 644-651. Retrieved from <https://www.emeraldinsight.com>
- Mayer, J. D., DiPaolo, M. T., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment*, 54, 772-781. Available at Retrieved from <https://www.personality.org>
- Mayer, J. D., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298. Available at <https://www.journals.elsevier.com/intelligence>
- Mayer, J. D., & Salovey, P. (1997). *What is emotional intelligence?* In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). New York, NY: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist*, 63(6), 503. Retrieved from [www.apa.org/](http://www.apa.org/)
- Maxwell, J. C. (2000). *Failing forward: Turning mistakes into stepping stones for success*. Nashville, TN: Thomas Nelson.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional

- intelligence: *Principles and updates. Emotion Review*, 8(4), 290-300.  
doi:10.1177/1754073916639667
- Manning, S. (2013). New silicon valleys or a new species? commoditization of knowledge work and the rise of knowledge services clusters. *Research Policy*, 42(2), 379-390. doi: 10.1016/j.respol.2012.06.011
- Massey, K. (2016). Some skills can aid success in any job. *Arkansas Business*, 33(43), 14-15. Retrieved from [www.worldcat.org](http://www.worldcat.org)
- McCleskey, J. (2013). The dark side of leadership: Measurement, assessment, and intervention. *Business Renaissance Quarterly*, 8(2/3), 35. Available at <https://www.questia.com>
- McCleskey, J. (2014). Emotional intelligence and leadership: A review of the progress, controversy, and criticism. *International Journal of Organizational Analysis*, 22(1), 76-93. doi:10.1108/IJOA-03-2012-0568
- McMillan, J. H. (2000). Examining categories of rival hypotheses for educational research. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Meehl, P. E. (1970). Nuisance variables and the ex post facto design. In M. Radner, & S. Winokur (Eds.), *Minnesota studies in the philosophy of science*, 4 (pp. 372–402). Minneapolis, MN: University of Minnesota Press.
- Miller, K. D., & Tsang, E. K. (2010). Testing management theories: Critical realist philosophy and research methods. *Strategic Management Journal*, 32(2), 139-158. Retrieved from <https://www.onlinelibrary.wiley.com>
- Montano, B. R., & Dillon, R. (2005, April). The impact of technology on relationships

- within organizations. *Information Technology & Management*, 6(2-3), 227-251.
- Retrieved from <http://link.springer.com/journal/10799>
- Multi-Health Systems (1997, 2011). Emotional intelligence technical manual. Retrieved from <http://www.mhs.com>
- Murensky, C. (2000). The relationships between emotional intelligence, personality, critical thinking ability and organizational leadership performance at upper levels of management, Dissertation Abstracts International: Section B: *The Sciences and Engineering*, 61 (2-B), 1121 (US University Microfilms International ISSN/ISBN: 0419-4217)
- Mutlu, M. D. (2015). Driver factors of knowledge worker team innovation. Paper presented at the International Proceedings of Economics Development and Research, 85, 131-137. Retrieved from <https://www.ipedr.com>
- Naqshbandi, M. M., Kaur, S., Sehgal, R., & Subramaniam, I. D. (2015). Organizational culture profile of malaysian high-tech industries. *Asia-Pacific Journal of Business Administration*, 7(1), 2-19. doi:10.1108/APJBA-08-2013-0088
- Neuman, W. L. (2011). *Social research methods: Qualitative and quantitative Approaches* (7<sup>th</sup> ed.). Boston, MA: Allyn & Bacon.
- Nikfarjam, A., Shokoohi, M., Shahesmaeili, A., Haghdost, A. A., Baneshi, M. R., Haji-Maghsoudi, S., . . . Tarjoman, T. (2016). National population size estimation of illicit drug users through the network scale-up method in 2013 in Iran. *International Journal of Drug Policy*, 31, 147-152. doi:10.1016/j.drugpo.2016.01.013
- Nonaka, I., & Nishiguchi, T. (2001). *Knowledge emergence: Social, technical, and evolutionary dimensions of knowledge creation*. Cary, NC, USA: Oxford.

- D'Donnell, R. (2019). Why recruiters are 'screening in,' not out. Retrieved from [www.HRdive.com](http://www.HRdive.com)
- O'Dwyer, L. M., & Bernauer, J. A. (2014). *Quantitative research for the qualitative researcher*. Thousand Oaks, CA: Sage.
- Olivares, J. O. (2013). Diversity and Inclusion Standards: A laudable but premature goal. *Industrial and Organization Psychology: Perspectives on Science and Practice*, 209-212. Retrieved from <https://www.siop.org/journal/siopjournal.aspx>
- Olsen, W. (2012). Data Collection: Key debates and methods in social research. Los Angeles, CA: Sage.
- O'Reilly, C. A., Doerr, B., Caldwell, D. F., & Chatman, J. A. (2014). Narcissistic CEOs and executive compensation. *The Leadership Quarterly*, 25(2), 218.  
doi:10.1016/j.leaqua.2013.08.002
- Ozkan, M., & Solmaz, B. (2015). The Changing Face of the Employees – Generation Z and Their Perceptions of Work (A Study Applied to University Students). *Procedia Economics and Finance*, 26(2015), 476-483. doi: 10.1016/S2212-5671(15)00876-X
- Oyler, J. D., & Golden Pryor, M. (2009). Workplace diversity in the united states: The perspective of peter drucker. *Journal of Management History*, 15(4), 420-451.  
doi:10.1108/17511340910987338
- Pallant, J. (2007). *SPSS survival manual*. New York, NY: Open University.
- Patel, S., Padh, H., & Bhavsar, C. (2013). MANOVA over ANOVA- A better objective in bioequivalence study. *International Journal of Pharmaceutical Sciences and Research*, 4(5), 1874-1884. Retrieved from <https://www.ijpsr.com>



- Patrick, A. H., Kumar, R. V. (2017). Managing Workplace Diversity: Issues and Challenges *Sage Open*, (April- June, 2012). 1-15. doi: 10.1177/2158244012444615
- Payne, J., McDonald, S., & Hamm, L. (2013). Production teams and producing racial adversity in workplace relationships. *Sociological Forum*, 28(2), 326-349. doi:10.1111/socf.12021
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric Investigation with reference to established trait taxonomies. *European Journal of Personality*, 15, 425-448. Retrieved from <https://www.researchgate.net>
- Petrides, K. V. (2010). Trait emotional intelligence theory. *Industrial and Organizational Psychology*, 3(2), 136-139. doi: 10.1111/j.1754.9434.2010.01213.x
- Phakeng, M. (2015). Leadership: The invisibility of african women and the masculinity of power. *South African Journal of Science*, 111(11/12), 10-2. doi:10.17159/sajs.2015/a0126
- Pfeffer, J. (2017). Creating a high-performance culture (Video): Human resources and organizational behavior. Retrieved from <https://portal.phoenix.edu/medialibrary/videodetails.01-vid-6273157e7455eba76a159306d5a3814a.html>
- Population Reference Bureau. (2002). Racial and Ethnic Differences in U.S. Mortality. Available at <https://www.prb.org/racialandethnicdifferencesinusmortality/>
- Porter, M. (1998). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York, NY: The Free Press.
- Prati, L. M., Ceasar, D., Ferris, G. R., Ammeter, A. P., & Buckley, M. R. (2003).

Emotional intelligence, leadership effectiveness, and team outcomes.

[doi.org/10.1108/eb028961](https://doi.org/10.1108/eb028961)

Prematunga, R. K. (2012). Correlational analysis. *Australian Critical Care: Official Journal of the Confederation of Australian Critical Care Nurses*, 25(3), 195.

<https://www.journals.elsevier.com/australian-critical-care/>

Qirko, H. N. (2012). Applied anthropology and business diversity management.

*International Journal of Business Anthropology*, 3(2), 107-129. Available at [businessanthropology.blogspot.com/](http://businessanthropology.blogspot.com/)

Rafferty, E. A., Jimmieson, L. N., & Armenakis, A. A. (2013). Change Readiness: A Multilevel Review. *Journal of Management*, 39(1), 110-135.

doi: 10.1177/0149206312457417

Riaz, M., Ahmad, N., Riaz, M., Murtaza, G., Khan, T., & Firdous, H. (2016). Impact of job stress on employee. *International Review of Management and Business Research*, 5(4), 1370-1382. Retrieved from <https://www.irmbrjournal.com>

Rice, M. F. (2015). *Diversity and public administration*. ME Sharpe. London: England.

Resick, C. J., Whitman, D. S., Weingarden, S. M., & Hiller, N. J. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology*, 94(6), 1365-1381. doi:10.1037/a0016238

Reuben, E., Sapienza, P., & Zingales, L. (2014). How stereotypes impair women's careers in science. *Proceedings of the National Academy of Sciences of the United States of America*, 111(12), 4403-4408. doi:10.1073/pnas.1314788111

Rigoni, B., & Nelson, B. (2016). Few millennials are engaged at work. Retrieved on June

- 2, 2017. Available at [www.gallup.com](http://www.gallup.com)
- Roberts, R.D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an intelligence? Some new data and conclusions. *Emotion*, 1, 196-231. Retrieved from <https://www.apa.org>
- Rolen, E. & Toossi, M. (2018). "Blacks in the labor force," *Career Outlook*, U.S. Bureau of Labor Statistics. Retrieved from [www.bls.gov](http://www.bls.gov).
- Rossmann, G., and B. Wilson 1991 Numbers and Words Revisited: Being "Shamelessly Eclectic." *Evaluation Review* 9(5), 627–643. Retrieved from <https://www.journals.sagepub.com>
- Routley, M., Phaal, R., Athanassopoulou, N., & Probert, D. (2013). Mapping experience in organizations: A learning process for strategic technology planning. *Engineering Management Journal*, 25(1), 35-47. Retrieved from <http://www.journals.elsevier.com/journal-of-engineering-and-technology-management/>
- Sabharwal, M. (2014). Is diversity management sufficient? Organizational inclusion to further performance. *Public Personnel Management*, 43(2), 197-217. Retrieved from <http://www.ppm.sagepub.com/>
- Saji, S. B. (2004). Workplace diversity, temporal dimensions and job engagement, cross cultural management: *An International Journal*, 1(4), 40 – 59.  
doi:10.1108/13527600410797873
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence, Imagination, Cognition, and *Personality*, 9, 185-211. Retrieved from <https://www.onlinelibrary.wiley.com>

- Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science*, 14(6), 281-285. doi:10.1111/j.0963-7214.2005.00381.x
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211. Retrieved from <https://www.sagepub.com>
- Sarwar, A., Mimitaz, M., & Ikram, S. (2015). Improving organizational citizenship behavior through transformational leadership: Mediating role of leader and member leader and member trust in leader. *Asian Journal of Business Management* 7(2): 28-36, 2015. Retrieved from <https://www.ajbms.com>
- Savel, R. H., & Munro, C. L. (2016). Emotional intelligence: For the leader in us all. *American Journal of Critical Care*, 25(2), 104-106. doi:10.4037/ajcc2016969
- Sedgwick, P. (2012). Proportional quota sampling. *BMJ: British Medical Journal*, 345(sep26 3), e6336-e6336. doi:10.1136/bmj.e6336
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- Shehzad, S., & Mahmood, N. (2013). Gender differences in emotional intelligence of university teachers. *Pakistan Journal of Social and Clinical Psychology*, 11(1), 16. Retrieved from [www.questia.com](http://www.questia.com)
- Shi, Y., Liu, C. and Liu, X.Q. (2009). Overview of research on the work stress. *Research on Economics and Management*, 9(4), 101-107. doi.org/10.1108/CMS-04-2014-0089

- Shih, H., & Susanto, E. (2010). Conflict management styles, emotional intelligence, and job performance in public organizations. *International Journal of Conflict Management, 21*(2), 147-168. doi:10.1108/10444061011037387
- Shin-yih Chen, A., Bian, M. D., & Hou, Y. H. (2015). Impact of transformational leadership on subordinate's EQ and work performance. *Personnel Review, 44*(4), 438-453. doi:10.1108/PR-09-2012-0154
- Schommer-Aikins, M., & Hutter, R. (2002). Epistemological beliefs and thinking about everyday controversial issues. *Journal of Psychology, 136*(1), 5.  
Retrieved from <https://www.tandfonline.com/>
- Shuttleworth, M. (2008, October 20). Validity and reliability. Retrieved from <https://explorable.com/validity-and-reliability?gid=1579>
- Shuttleworth, M. (2009, July 5). Internal validity. Retrieved from <https://explorable.com/internal-validity?gid=1579>
- Simmel, G. (1955[1908]). *The web of group affiliations in conflict and the web of group affiliations*, trans. R. Bendix. New York, NY: Free Press.
- Simon, M. K. (2006). *Dissertation and scholarly research: A practical guide to start and complete your dissertation, thesis, or formal research project*. Dubuque, Iowa: Kendall/Hunt.
- Simon, M. K., Goes, J. (2014). Qualitative research: The "L" side in the paradigm war. (PowerPoint Presentation). Retrieved from <http://www.dissertationrecipes.com/wp-content/uploads/2011/04/qualitatively>

- Singhal, T. K., Garg, B., & Saxena, D. (2014). Organizational productivity through emotional intelligence. *Pranjana*, 17(1), 47-55. Retrieved from <https://www.Indianjournals.com>
- Sinha, C., & Kumar, H. (2016). Relationship between emotional intelligence, work attitude & outcomes: Examination of Indian middle-managerial level employees. *Journal of Organizational Psychology*, 16(1), 118-125. Retrieved from <https://www.journals.sagepub.com/>
- Smith, Jessi, Cech, Erin, Metz, Anneke Metz, Huntoon, Meghan. 2014. Giving Back or Giving Up: Native American Student Experiences in Science and Engineering. *Cultural Diversity & Ethnic Minority Psychology* 20(3), 413–29. Available at <https://www.apa.org>
- Spear, M. (2015). Leadership and emotional intelligence: Does it matter? *Plastic Surgical Nursing*, 35(2), 55-57. doi:10.1097/PSN.0000000000000088
- Spector, P. E., Zapf, D., Chen, P. Y., & Frese, M. (2000). Why negative affectivity should not be controlled in job stress research: Don't throw out the baby with the bath water. *Journal of Organizational Behavior*, 21, 79–95. Retrieved from <https://www.jstor.org>
- Stahl, G., Maznevski, M. L., Voigt, A., & Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41(4), 690-709. doi:10.1057/jibs.2009.85
- Statisticssolutions. (n.d.). Univariate and Multivariate Outliers. Retrieved from

- <http://www.statisticssolutions.com/univariate-and-multivariate-outliers/>
- Status of Women in the States. (2019). Retrieved from <https://statusofwomendata.org/>
- Stein, S. J., & Book, H. E. (2011). *The EQ edge: Emotional intelligence and your success* (3rd ed.). Mississauga, CA: John Wiley & Sons Canada, Ltd.
- Stein, S. S., Papadogiannis, P., Yip, Y. A., & Sitarenios, G. (2009). Emotional intelligence of leaders: A profile of top executives. *Leadership & Organization Development Journal*, 30(1), 87-101. doi:10.1108/01437730910927115
- Steele, R., & Derven, M. (2015). Diversity & inclusion and: A virtuous cycle. *Industrial and Commercial Training*, 47(1), 1-7. doi:10.1108/ICT-09-2014-0063
- Sternberg, R. J. (1996). *Cognitive Psychology*. New York, NY: Harcourt Brace.
- Stevens, J. P. (1980). Power of the multivariate analyses of variance tests. *Psychological Bulletin*, 88, 728-737. doi:10.1037//0033-2909.88.3.728
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Suan, S. C. T., Anantharaman, R. N., & Kin, D. T. Y. (2015). Emotional intelligence and organisational performance: A framework. *Global Business and Management Research*, 7(2), 37-43. Retrieved from <https://www.questia.com>
- Subramanian, I. D., & Yen, C. L. (2013). Emotional intelligence of leaders and organizational culture: Evidence from IT companies in Malaysia. *African Journal of Business Management*, 7(11), 882-890. doi: 10.5897/AJBM12.1177
- Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6<sup>th</sup> ed.). Boston, MA: Pearson.
- Tan, J. (2008). Breaking the “bamboo curtain” and the “glass ceiling”: The experience of

- women entrepreneurs in high-tech industries in an emerging market. *Journal of Business Ethics*, 80(3), 547-564. doi:10.1007/s10551-007-9454-9
- Tamta, V., & Rao, M. K. (2017). Linking Emotional Intelligence to Knowledge Sharing Behaviour: Organizational Justice and Work Engagement as Mediators. *Global Business Review*, 18(6), 1580-1596. doi:10.1177/0972150917713087
- Tarr-Whelan, L. (2009). *Women lead the way: Your guide to stepping up to leadership and changing the world*. San Francisco, CA: Berrett-Koehler Publishers.
- Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of culture's consequences: A three-decade, multilevel, meta-analytic review of hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405-439.  
Retrieved from <https://www.apa.org>
- Terrell, N. (2007). STEM occupations. Available from  
<https://www.bls.gov/careeroutlook/2007/spring/art04.pdf>
- The Global Gender Report. (2014). Retrieved from  
<http://www.weforum.org/reports/global-gender-gap-report-2014>.
- Thoumrungroje, A., & Tansuhaj, P. (2007). Globalization effects and firm performance. *Journal of International Business Research*, 6(2), 43-58. Retrieved from <http://www.ijbr-journal.org>
- Thory, K. (2013). A gendered analysis of emotional intelligence in the workplace: Issues and concerns for human resource development. *Human Resource Development Review*, 12(2), 221-244. doi:10.1177/1534484312469100
- Tidd, J. & Bessant, J. (2013). *Managing: Integrating technological, market, and organizational change* (5<sup>th</sup> ed.). West Sussex, UK: Wiley.



- Tödtling, F., & Grillitsch, M. (2015). Does Combinatorial Knowledge Lead to a Better Innovation Performance of Firms? *European Planning Studies*, 23(9), 1741-1758. doi:10.1080/09654313.2015.1056773
- Trejo, A. (2014). Emotional intelligence and project outcomes in technology. *International Management Review*, 10(1), 31-42,66. Retrieved from <http://www.onlinelibrary.wiley.com>
- U.S. Bureau of Labor Statistics. (2018). Labor Force Participation Rate: Hispanic or Latino [LNS11300009]. Retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/LNS11300009>, January 27, 2019.
- USC Libraries. (n.d). Organizing your social sciences research paper. Retrieved from <http://libguides.usc.edu/content.php?pid=83009&sid=616083>
- U.S. Department of Labor. (2017). Women of working age. Retrieved from <https://www.dol.gov/wb/stats/NEWSTATS/latest.htm>
- U.S. Department of Labor, Bureau of Labor Statistics. 2017. *Occupational Outlook Handbook*. Retrieved June 2017 from <https://www.bls.gov/ooh/management/>.
- U.S. Equal Employment Opportunity Commission. (2006). Diversity in the finance industry. Retrieved from <http://www.eeoc.gov/eeoc/statistics/reports/finance/finance.pdf>
- U.S. Equal Employment Opportunity Commission. (2013). Job Patterns for Minorities and Women in Private Industry (EEO-1). Retrieved from [http://www1.eeoc.gov/eeoc/statistics/employment/jobpat-eo1/2013/index.cfm#select\\_label](http://www1.eeoc.gov/eeoc/statistics/employment/jobpat-eo1/2013/index.cfm#select_label)
- U.S. Equal Employment Opportunity Commission. (2015). American experiences versus

- American expectations. Retrieved from  
[http://www.eeoc.gov/eeoc/statistics/reports/american\\_experiences/#exec](http://www.eeoc.gov/eeoc/statistics/reports/american_experiences/#exec)
- U.S. Equal Employment Opportunity Commission. (2016). Diversity in high tech.  
 Retrieved from  
<https://www.eeoc.gov/eeoc/statistics/reports/hightech/upload/diversity-in-high-tech-report.pdf>
- Vancouver, J. B., & Schmitt, N. W. (1991). An exploratory examination of person organization fit: Organizational goal congruence. *Personnel Psychology*, 44, 333–352. Retrieved from  
<https://www.onlinelibrary.wiley.com>
- Van Rooy, D. L., Alonso, A., & Viswesvaran, C. (2005). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality and Individual Differences*, 38(3), 689-700. doi:10.1016/j.paid.2004.05.023
- Verbos, A. K., & Humphries, M. T. (2012). Decoupling equality, diversity, and inclusion from liberal projects. *Equality, diversity and inclusion: an international journal*, 31(5/6), 506 – 525. doi:10.1108/02610151211235497
- Vilorio, D. (2014). STEM 101: Intro to tomorrow's job. *Occupational Outlook Quarterly*, Spring 2014. Retrieved from <https://www.bls.gov/ooq>
- Vogelstein, F. (2006). Mastering the art of disruption: *Move over, jack welch. from apple to pixar, steve jobs is showing why he's the model CEO for the 21st century.* by fred vogelstein Time, Inc
- Walter, F., Cole, M.S. & Humphrey, R. H. (2011). Emotional intelligence: Sine qua non of leadership or folderol? *Academy of Management Perspectives*, 25(1),

45-59. doi:10.5465/AMP.2011.59198449

- Wang, K. T., Castro, A. J., & Cunningham, Y. L. (2014). Are Perfectionism, Individualism, and Racial Color-Blindness Associated with Less Cultural Sensitivity? Exploring Diversity Awareness in White Prospective Teachers. *Journal of Diversity in Higher Education*, 7(3), 211–225. Retrieved from [www.researchgate.net/journal](http://www.researchgate.net/journal)
- Wang, S. (2015). Emotional intelligence, information elaboration, and performance: The moderating role of informational diversity. *Small Group Research*, 46(3), 324–351. doi: 10.1177/1046496415578010
- Warne, R. T. (2014). A primer on multivariate analysis of variance (MANOVA) for behavioral scientists. *Practical Assessment*, 19(17), 1-10. Available at [pareonline.net](http://pareonline.net)
- Wheelan, S. A. (2016). *Creating Effective Teams: A Guide for Members and Leaders* (5th ed.). London: England. Sage.
- Whitman, D. S., Van Rooy, D. L., Viswesvaran, C., & Kraus, E. (2009). Testing the second-order factor structure and measurement equivalence of the wong and law emotional intelligence scale across gender and ethnicity. *Educational and Psychological Measurement*, 69(6), 1059-1074. doi:10.1177/0013164409344498
- Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. Thousand Oaks, CA: Sage.
- Williams, C. J. (2015). The 5 Biases Pushing Women Out of STEM. *Harvard Business Review*, 93(6), 23-23. Retrieved from <https://www.hbr.org>

- Wilson, E. (2014). Diversity, culture and the glass ceiling. *Journal of Cultural Diversity*, 21(3), 83. Retrieved from <https://www.questia.com>
- Wolff, S. B., Pescosolido, A.T. and Druskat, V.U. (2000) Emotional Intelligence as the basis of leadership emergence in self- managing teams. *Leadership Quarterly*.13, 505-522. doi: 10.1016/S1048-9843(02)00141-8
- Wolf, M., & Terrell, D. (2016). The high-tech industry, what is it and why it matters to our economic future. *Beyond the Numbers: Employment and Unemployment*, 5(8). (U.S. Bureau of Labor Statistics, May 2016). Available at <https://www.bls.gov/opub/btn/volume-5/the-high-tech-industry-what-is-it-and-why-it-matters-to-our-economic-future.htm>
- Wong, C.S. and K.S. Law, (2002) The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadership Quarterly*, 13: 243274. doi:10.1016/S1048-9843(02)00099-1
- Workforce Information Council. (2003). Workforce Information Council Ends a Long LMI Journey. Retrieved from <http://www.workforceinfocouncil.org/#topofpage>
- Wright, S. C. (2013). Developing ethical leaders: Is there inconsistency between theory and practice? *Journal of Human Values* 19(1), 29-38. doi:10.11770971685812470329
- Yadav, S. (2014). The role of emotional intelligence in organization development. *IUP Journal of Knowledge Management*, 12(4), 49-59. doi: 10.1108/00251741111130805
- Yerkes, M. (2010). Diversity in work: The heterogeneity of women's employment

patterns. *Gender, work, and organization*, 17(6), 696-720. doi:10.1111/j.1468-0432.2009.00462.X

Zacher, H., & Rosing, K. (2015). Ambidextrous leadership and team innovation.

*Leadership & Organization Development Journal*, 36(1), 54 – 68. doi:

10.1108/LODJ-11-2012-0141

Zakrzewska-Bielawska. (2010). High Technology Company – Concept, Nature,

Characteristics. *Recent Advances in Management, Marketing, Finances*, 93-98.

Retrieved from <http://www.wseas.org>

Zare, M. N., Azar, S. A., Mardani, A.H., & Arien, M. A. (2015). From change to

organizational transformation: A survey of Tehran Medical Science University's

libraries. *Library Management*, 36(1//2), 157-167. doi:10.1108/LM-06-2014-0074

Zhang, W., Zou, H., Wang, M., & Finy, M. S. (2015). The role of the Dark Triad traits

and two constructs of emotional intelligence on loneliness in adolescents.

*Personality and Individual Differences*, 75, 74–79. Retrieved from

<https://www.journals.elsevier.com>

Ziek, P., & Simulowitz, S. (2014). The impact of emergent virtual leadership

competencies on team effectiveness. *Leadership & Organization Development*

*Journal*, 35(2), 106-120. doi:10.1108/LODJ-03-2012-0043



## Appendix A

June 20, 2018

Re: Permission for Simone D. Arnold

To Whom it May Concern,

This letter is to confirm that Simone D. Arnold has been granted permission by Multi-Health Systems Inc, (MHS) to purchase and use Emotional Quotient Inventory 2.0® (EQ-i 2.0) for her research at the University of Phoenix. Simone has been approved by MHS to purchase the EQ-i 2.0 Scored Data Set Reports for \$6.00 each.

Simone has also met our Qualifications, which are in accordance with the ethical and professional standards of the American Psychological Association and the Standards for Education and Psychological Testing, to administer this instrument.

Thank you,

Betty Mangos

Multi Health Systems, Inc. Permissions and Licensing Specialist

Permissions@mhs.com

## Appendix B

### EQ-i 2.0 SURVEY QUESTIONS

#### Instructions:

The EQ-i 2.0 provides you with an opportunity to describe yourself by indicating the frequency with which you feel, think, or act in the way described by each statement. There are five response options for each statement:

Never/Rarely, Occasionally, Sometimes, Often, and Always/Almost Always.

Read each statement and decide which one of the five response options best describes the frequency of your thoughts, feelings, or actions. Indicate your response choice by circling the appropriate number.

If a statement does not apply to you, respond in such a way that will give the best indication of how you would possibly feel, think, or act. Although some of these statements may seem unclear or vague to you, choose the response option that seems to describe you best. There are no “right” or “wrong” answers and no “good” or “bad” choices. Answer openly and honestly by indicating how you actually are, and not how you would like to be or how you would like to be seen. Although there is no time limit, work at a steady pace and make sure that you consider and try to respond to each statement. This assessment must be completed in a single session.

Never/Rarely | Occasionally | Sometimes | Often | Always/Almost Always  
1                      2                      3                      4                      5

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. I keep calm in difficult situations.          | 1 | 2 | 3 | 4 | 5 |
| 2. I make rash decisions when I'm emotional.     | 1 | 2 | 3 | 4 | 5 |
| 3. I back down even when I know I am right.      | 1 | 2 | 3 | 4 | 5 |
| 4. It's hard for me to make decisions on my own. | 1 | 2 | 3 | 4 | 5 |
| 5. I interrupt when others are speaking.         | 1 | 2 | 3 | 4 | 5 |
| 6. It's difficult for me to change my opinion.   | 1 | 2 | 3 | 4 | 5 |
| 7. I say “no” when I need to.                    | 1 | 2 | 3 | 4 | 5 |

Copyright© 2012 Multi-Health Systems Inc. All rights reserved.



## Appendix C

**Demographic Form:** A quantitative descriptive-comparative study: *The relationship between emotional intelligence and workplace diversity*

Please complete each row.

Your Six-Digit Participant ID:	
<b>Select <u>one</u> box on EACH row</b>	
<b>Title:</b>	<input type="checkbox"/> Manager <input type="checkbox"/> Director <input type="checkbox"/> VP <input type="checkbox"/> SVP <input type="checkbox"/> EVP
<b>Other:</b> ( <i>please specify</i> )	_____
<b>State:</b>	<input type="checkbox"/> CA <input type="checkbox"/> FL <input type="checkbox"/> NY <input type="checkbox"/> PA <input type="checkbox"/> TX
<b>Gender:</b>	<input type="checkbox"/> M <input type="checkbox"/> F
<b>Race:</b>	<input type="checkbox"/> Black <input type="checkbox"/> White/Caucasian
<b>Ethnicity:</b>	<input type="checkbox"/> Hispanic <input type="checkbox"/> Asian

## Appendix D

### Social Media Advertisement for Diverse Study Participants

#### ***Emotional Intelligence and Workplace Diversity Study***

*Be part of an important quantitative descriptive-comparative study  
The purpose of this research study is to compare the emotional intelligence in  
**women, Hispanics, Asians, and Blacks** to determine if statistical differences exist.*

*Are you at least 18 years of age?*

**Do you identify as a female who is Hispanic, White, Black or Asian?**

**Do you identify as male who is Hispanic, Black or Asian?**

**Do you live or work in CA, FL, TX, PA, or NY?**

*Are you a supervisor, manager, director or higher?*

*Are you employed at a publicly-held technology or solutions-based firm in the U.S.?*

*If you answered **YES** to these questions, you may be eligible to participate in a research study on the relationship between emotional intelligence and workplace diversity. Computer access will be required to complete a survey. The survey will take no longer than 20 minutes.*

***Please email Simone Arnold at XXXXXXXX@email.phoenix.edu for more information***

## Appendix E

### List of Organizations/Groups Used for Study Advertisement

Group Name	Social Media Platform
Motivational Box	Facebook
PhinishED/Future Drs	
Things We Do	
God's People	
South Florida Empowerment Group	
Minority Doctoral Network	
Dissertation Doctoral Cohort	
Linda Church's Princess House	
Asian Professional Network	
USA Technology & Science	
SD Doctoral Support Group	
Software QA in the USA	
Researcher's Professional Page	LinkedIn
National Black MBA	
University of Phoenix Alumni (unofficial)	
Asian Groups	University of Phoenix Connect Communities
Technology Groups	

## Author's Biography



Simone Arnold  
Vice President, Global Payment Relations  
Coral Springs, FL

Simone Arnold is a vice president of global payment relations for the Automated Clearing House (ACH) operations at First Data Corporation (FDC) based in Coral Springs, Florida. In this role, Simone has oversight for the National Automated Clearing House Association (NACHA)/ACH Process Compliance, business relationship establishment with NACHA, initiative development, implementation, monitoring, risk mitigation, and performance measurement for ACH processes, audit controls, and ACH governance firm-wide.

Prior to this role, Simone led a hybrid team with operational oversight for American Express and Discover Payment Network Acceptance relationships estimated at \$50 billion in gross sales in 2015. Additionally, Simone had project management control for bankcards and other network related changes integrating the payment schemes across authorizations, settlement, interchange, reporting, and noncompliance risk aversion.

With First Data since 1995, Simone has held positions as Retrieval Clerk, Boarding and Implementation Analyst, Payments Compliance Manager, and Payments Compliance Director. Throughout these roles, Simone has been instrumental in the implementation of key industry initiatives such as EMV (Chip Technology), Tokenization, integration of Discover suite of products across Processing Networks, Keystone/Durbin Amendment, American Express OptBlue and ApplePay where the latter two initiatives are most memorable and rewarding initiatives to date yielding over \$15 million in revenue for First Data.

Through her service as First Data's, Coral Springs Site Coordinator and Employees Activities Leader, she led fundraising events for Junior Achievement of Broward County with a record-breaking fundraising event. In 2012, Simone was honored as one of Broward County's top 100 volunteers for outstanding community service. Simone is an active member of First Data's Black Leadership Council, and co-leads the Florida's chapter for the Women Impact Network (WIN). Simone facilitates in-house speaking engagements, leads the talent management pillars, mentors and sponsors owner-associates at First Data.

Simone is a member of *Wnet*- empowering women in payments. Also, Simone is a member of Phi Theta Kappa and the Delta Mu Delta International Honors Societies. As a member of a national Women of Color Empowerment Institute, Simone has served as a panelist in 2016 educating women in business to harness the power of Payments.

Simone received a BA in Communication from Florida Atlantic University and an MBA from Nova Southeastern University. Simone completed the Doctorate in Management degree at the University of Phoenix in May 2019 with the topic: A quantitative descriptive-comparative study: The relationship between emotional intelligence and workplace diversity.