CHAPTER 1: INTRODUCTION

Practitioners of Business as Mission (BAM) and Business for Transformation (B4T) needed tools to measure the social impact of the endeavors to glorify God through holistically reaching others with the gospel of Jesus Christ. The goal of holistic impact required instruments that took into account the impact that Business practitioners were having on advancement of God’s kingdom. The measurements must account for spiritual, economic, social, and ecological impact for the benefit of practitioners, sending agencies, investors, lenders, shareholders and other stakeholders. This research investigated a small piece of the puzzle related to the social impact of Business as Mission. Chapter 1 provided the reader with the Problem, the Background to the Problem, the Setting of the Research, the Thesis Statement, and a list of the Research Hypotheses and Corollaries. The chapter included the Scope of the Research, Research Assumptions, and Significance of the Research.

Problem Statement

Did the cultural intelligence of Business as Mission and Business for Transformation practitioners affect their social impact, defined as conflict level, relationship building, and effective business exchange, among employees, customers, and suppliers.

Problem Background

Business as Mission was a subset of the larger movement known as Social Entrepreneurship that grew from 1980s to 2022 as a result of several concurrent phenomena known as: globalization, technological advancements, worldwide financial expansion, and worldwide financial mismanagement. Opportunities and challenges arose from rapid economic, social, religious, technological, ecological, and political changes experienced by people from many nations. The seismic changes led to benefits and challenges to which populations had to react. Many welcomed the openness of borders and the benefits from which they were able to take advantage, while they ignored or downplayed the challenges that began to accrue in the background. At the beginning, few voices warned of the dangers; concerns were sidelined as misinformed, speculative, provincially, or ideologically driven. When the challenges of population migrations, employment instability, unrestrained spending, largescale financial debt, and cultural conflict became overwhelmingly evident, many began to question the wisdom of the global system. Movements espousing nationalism, religious, cultural, or ethnic identity came forward as alternatives to the international economic and political system, which led to reactionary policy from nation-states to greater restrictions about those who could enter their borders, how they could enter, and for how long. The restrictions challenged the work of missionaries, students, and non-profit and migrant workers. Visitors had to prove the value of their presence to the host countries they sought to inhabit. In this context, Business as Mission has developed as a way to do missions that holistically benefitted people: spiritually, socially, economically, and ecologically.

The phenomena coupled with a paradigm shift in business practices from a single bottom-line perspective, where business practitioners only responsibility was to increase value to their shareholders to a more holistic view, birthed social entrepreneurship and Business as Mission. A multiple bottom-line perspective was a catalyst for business practitioners to realize that their normal profit-making activities including providing employment, job training, product innovation, and investment in research and development were more than merely profit-making activities. Normal profit-making activities were a way to (a) benefit many people both locally and abroad, (b) provide social stability, and (c) develop solutions to ecological problems, which business practitioners had contributed to in the past. Capitalism coupled with responsible business practices was shown historically to be a better way to distribute resources than an economy run by central government control. Due to neo-liberal economic ideology, many investors and theorists questioned the wisdom of the new paradigm and so a quest was begun to develop assessments to prove the value of Business as Mission and meet the diverse needs of a variety of businesses and information users.

The research was conducted in collaboration with the OPEN/Business for Transformation network, whose practitioners were part of the larger Business as Mission movement. The networks and practitioners were growing in number every year. Practitioners were people motivated by the Christian faith to interact cross-culturally with nationals within the borders of countries in the 10/40 window, either through for-profit businesses or non-profit agencies. The practitioner’s goals were to effect spiritual, economic, social, and ecological transformation in the lives of those with whom they interacted. Many practitioners worked under the oversight and guidance from either a board, a mission agency, consultants, or networks of practitioners. The practitioners in the Business as Mission and Business for Transformation networks were mostly from Western countries in North America and Europe. Most received education and training from universities and educational institutions in the West. Their missiological methods, economic and social philosophies, and views of individuality and community were derived from western traditions.

The OPEN/Business for Transformation network was the group of practitioners studied. It was founded and until recently continued under the guidance of its founder, Patrick Lai. This network functions under a modified philosophy of Business as Mission. Lai’s tentmaker philosophy also incorporated non-profit groups acting in developing nations in the 10/40 window. The tentmaker conceptualization of success entailed three constructs: evangelization, discipleship, and church planting. If these did not take place, then the practitioner’s efforts could not be said to be successful. Conversely, if these were achieved, but the business side of the practitioner’s efforts failed, it would still be considered a success. The definition of success for Business as Mission was broader and included business, spiritual, social, ecological outcomes. The constructs would be included in a Business as Mission concept of success, but it would also entail success in business as well as in social and ecological outcomes. For Business as Mission constructs: spiritual, economic, social, and ecological, all must be achieved to declare a practitioner’s efforts successful.

Thesis Statement

This research was designed to investigate how Business as Mission practitioner’s cultural intelligence affects social impact defined as conflict management, building relationships, and effective business exchange with employees, customers and suppliers.

Research Hypothesis

**Hypothesis 1**

H01: There was a statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

**Corollaries.**

Corollary A (Co1a): There was a statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co1b): There was a statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary C (Co1c): There was a statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co1d): There was a statistically significant difference in Cultural Intelligence Cognitive values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary E (Co1e): There was a statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co1f): There was a statistically significant difference in Cultural Intelligence Motivational subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary G (Co1g): There was a statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co1h): There was a statistically significant difference in Cultural Intelligence Behavioral subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

**Hypothesis 2**

H02: There was a statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

**Corollaries**.

Corollary A (Co2a): There was a statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co2b): There was a statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary C (Co2c): There was a statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co2d): There was a statistically significant difference in Cultural Intelligence Cognitive subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary E (Co2e): There was a statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co2f): There was a statistically significant difference in Cultural Intelligence Motivational subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary G (Co2g): There was a statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co2h): There was a statistically significant difference in Cultural Intelligence Behavioral subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

**Hypothesis 3**

H03: There was a statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the on Effective Business Exchange subscale.

**Corollaries.**

Corollary A (Co3a): There was a statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co3b): There was a statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary C (Co3c): There was a statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co3d): There was a statistically significant difference in Cultural Intelligence Cognitive subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary E (Co3e): There was a statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co3f): There was a statistically significant difference in Cultural Intelligence Motivational subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary G (Co3g): There was no statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co3h): There was no statistically significant difference in Cultural Intelligence Behavioral subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange.

CHAPTER 2: REVIEW OF LITERATURE

Business as Mission (BAM) was an interdisciplinary model for Christian mission activity driven by theological, business, contextual, and pragmatic concerns. The development of these concerns led to research that tested the social impact of BAM practitioners. This review looked not only at the development of BAM research, but also multiple bottom-line business paradigms to gain insight into the development of measurements used to improve practice and prove value to donors and effectiveness of those paradigms. It also explored the use of the cultural intelligence scale to improve expatriate performance and particularly how cultural intelligence affects the social impact of practitioners in cross-cultural settings.

Sources Consulted

The information for this research project came from multiple libraries, conferences on faith-based social entrepreneurship, and online databases. The libraries at Omega Graduate School, the U. S. Library of Congress, Oakland University, and The University of Texas at Dallas provided access to many of the sources used. Certain book resources were acquired from online book sellers or conferences on faith-based social entrepreneurship. Sources consulted from journals, articles and other publications came through internet access and multiple databases and publishers (*i.e.*, ProQuest, Google Scholar, Wiley Online Library, JSTOR, Emerald Insight, SAGE Publications, Springer, and Elsevier).

Business as Mission (BAM)

The emergence of BAM and its practitioners were the synthesis of: (a) a commitment to the commission that Jesus leveled to his disciples that states “Go therefore and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, teaching them to observe all that I have commanded you” (Matthew 28:19-20); (b) emphasis on the biblical doctrines of vocation and the priesthood of all believers (1 Peter 2:9); (c) innovative missional strategies as a response to changing geopolitical realities; and (d) transformative business theory.

As BAM expanded and grew by the number of practitioners, types of businesses, size of businesses, policies and procedures, and engagement with new cultures, questions about its efficacy arose. BAM was first and foremost a missiological response to Jesus injunction to make disciples. Secondarily, it was a theological response that sought to reemphasize Christian doctrines of the priesthood of all believers and vocation. Thirdly, it was a highly contextualized response to contemporary business practices and environments. Naturally, questions arose regarding its missiological, theological, and contextual foci. Agreement on definitions is important when discussing any topic. Proponents of BAM have struggled to define it and the literature shows that proponents do not agree on a common definition. Therefore, much of the literature concerns itself with responding to these three areas of concern. There has been a great deal less research which tests whether it actually works.

**Missiological Focus**

Christian evangelism and missions concerns itself with sharing the Person and work of Jesus Christ with unbelievers. Christians are enjoined to this task by command (Mt. 28:19-20; Mk. 16:15; Lk. 24:46-48; Acts 1:8) and evidence of this permeates records of the first century church (Acts 10:34-43; 11:18; 17:22-34; Rom. 11:13-24; Eph. 2:11-22). Furthermore, there is a great deal of literature, artifacts, and architecture that demonstrated that the mission to spread Christian dogma and practice throughout the world was carried on by believers in the preceding centuries. It is the privilege and joy of every believer to tell others about Jesus Christ whether in their native land and language or a foreign land and language. How believers achieve this task has been and continues to be debated among Christians.

An example of an early debate over how to faithfully communicate Jesus Christ to others occurred between the apostles, Peter and Paul. Peter and Barnabus had been eating with Gentile believers in Antioch, but when other Jewish believers arrived both Peter and Barnabus separated themselves from the Gentiles brethren and quit eating with them for fear of offending the Jewish believers (Gal. 2:11-14). Paul caught them doing it and argued that it was hypocritical to go back to living under Jewish kosher laws when Christians were not bound by them. The manner by which Peter and Barnabus conducted themselves in this instance reflected both a theological error in that all believers, both Jew and Gentile, are one in Christ and all are saved by faith in him, not by their adherence to the law (Rom. 3:9, 21-26; Gal. 2:15) and a missiological error because the gospel of God’s kingdom extends throughout the world to all people without exclusion (Rom. 3:29-30; Gal. 3:28). Following this event, the leaders of the Christian movement met in Jerusalem to resolve the debate and they sent instructions to all the churches which at this time were mainly composed of Jewish Christians, on how to understand and relate to Gentile believers (Acts 15:12).

Another early example of the debate over how to communicate the gospel of Jesus Christ was Paul’s method of support for his evangelism and missionary efforts. In his defense of his right to be considered an apostle by the Corinthians, he related that he did not take any money from them though he had a right to do it and they had an obligation to pay him (1 Cor. 9:1-14). Instead, he was supported by other believers from Macedonia (2 Cor. 11:7-9). Elsewhere, the Bible records that Paul also repaired tents to provide financial support for his missional efforts instead of receiving support from those he ministered to (Acts 18:1-4). The books of the New Testament record that there was monetary support for the preaching of the gospel. Jesus and the disciples had monetary support (Mk. 6:37; Lk. 8:1-3; Jn. 12:4-6), and after Jesus ascended, the other apostles had monetary support (Acts 2:44-46; 4:32-36). The disciples had all been called from different vocations to become full-time ministers and left their previous vocations. Yet, Paul took a modified approach. He both received donations and he worked another job while sharing the gospel of Christ with others. In missiological circles, this activity of Paul to self-support evangelism and missions is referred to as tentmaking.

**Theological Focus**

The doctrine of the priesthood of all believers played a role in the development of BAM (Johnson, 2009). 1 Peter 2:9, states, “But you are a chosen race, a royal priesthood, a holy nation, a people for his own possession, that you may proclaim the excellencies of him who called you out of darkness into his marvelous light.” The recovery of this doctrine was an important theological contribution of both magisterial Reformers, Martin Luther and John Calvin, to Christian doctrine and practice in the fifteenth and sixteenth centuries. The medieval view of vocation divided life into a sacred-secular dichotomy. God glorifying work was reserved exclusively to priests, pastors, and those in religious orders (Veith, 2002) and created an intermediary between God and the people. Contrary to the medieval view, the Reformers asserted the doctrine of the priesthood of all believers, whereby the work accomplished by all believers was a gift from God, done with God’s help, and performed with respect to God’s glory (Don, 2021), and believers had the ability to go directly to God in prayer and present their needs and confess their sins to Jesus Christ without any other mediator. Missiologically, it meant that sharing the Christian faith was the privilege and duty of all believers.

Recovery of the Christian doctrine of vocation is another important theological foundation to BAM and related to the priesthood of all believers. The doctrine of vocation, also known as the doctrine of calling, was one that was rooted in the teaching of the early church. Christians are called upon to do everything to the glory of God (1 Cor. 10:31; Col. 3:17, 23-24). These efforts are done first to glorify God and second to serve as evangelistic examples to others (Mt. 5:16; Eph. 2:10). Vocation is not merely a job for which a task is rewarded with financial remuneration, rather it has a greater meaning with spiritual significance (Veith, 2002). Understood spiritually, one does not choose a vocation, but one is called to it by God through a process of discovery over a lifetime often with help from mature mentors. Vocation includes marital status (*e.g.*, single or married), having children, workplace relationships, citizenship, and membership and responsibilities in the church. Beals (2014) qualitative research revealed that modern Christians lack training in the doctrine of vocation. Many believers essentially hold a medieval view questioning the value of their daily work as glorifying to God.

**The Christian Case for Business**

The Christian case for business involves the concepts of vocation, work, service, wholeness, and profit. Keller and Alsdorf (2012) explained how the work of every believer is to be done to God’s glory and the benefit of others. As Christians learn how God calls them to expand his kingdom in the world, this understanding changes their perspective of their labor. Work is imbued with design and dignity when seen as an extension of God’s creative power. This mindset counters the view that work is fruitless, pointless, or selfish. The business world offers ample opportunity to Christians to model and share Christ to unbelievers. According to Shearer (2015), believers in business can positively affect individuals, industries, community, church, and the public perception of believers. They make the glory of God known through discipling the nations and this includes the business marketplace (p. 40). Conversely, Christians must reject the compartmentalization of life into separate distinct categories that are unrelated to each other. In business, Christians are free and empowered to serve the needs of others and in doing so expand the influence of the kingdom of God on earth.

Miller (2007) gave a historical account of the development of the relationship between faith and work in the 19th and 20th centuries. After recounting the influence of the Social Gospel movement in the late 19th and early 20th centuries, he related how Christian laity navigated the theological reaction to the Social Gospel by orthodox believers. Orthodox believers felt advocates of the Social Gospel were abandoning the command to evangelize and disciple souls for eternity and instead turning to a religion that focused upon satisfying the imminent needs of people. Following World War II, the laity took up the challenge to maintain a faithful presence of Christ in the world outside of both ecclesial supervision and missionary structures. Motivated by eschatological positions, ecumenicism, and a reaction to highly specialized theological writings that alienated regular believers, laity-led groups created their own structures. These taught the doctrine of vocation in plain language, thereby reaffirming the unique calling of God on every believer to share in the mission of communicating the gospel to all people. Johnson (2009) corroborates this analysis stating that both the marketplace ministry and BAM movements have grown from grass root efforts led almost entirely by the laity without much support from churches or denominations (pp. 100-101). Miller’s account characterized the situation that existed as a tension between faithfulness to Scripture and orthodoxy on one hand and societal transformation on the other. He rejected the notion of secular versus sacred as a false dichotomy. The literature regarding BAM and marketplace ministry testified that believers, churches, and mission organizations continued to struggle with this dichotomy into the 21st century (Tunehag, 2018).

The Christian case for business also faced opposition because of divergent views of capital, capitalism, usury and profit. Suspicion of profit seen as ill-gotten gains and that notion that wealth is evil is mentioned throughout BAM literature as a challenge faced by proponents (Eldred, 2010; Russell, 2010). Scriptural interpretation of passages about usury, the charging of interest on a loan, have led some to negative views about capital and profit. Selective anti-capitalist interpretations of what was taught in the New Testament about money and how the early church operated financially (Acts 2:45) were a misreading of the text. The text shows that the believers moved by love for Christ sold their “possessions and belongings” to share with those in need, but it was charity, not mandated. Peter’s confrontation with Ananias and Saphira makes clear that they were under no command to sell property that they owned, it was theirs to do with as they pleased (Acts 5:4). Luke described what happened there among the first group of believers in Jerusalem following Jesus’s ascension. Years later, Paul instructed Timothy that the desire to be rich is a temptation that leads people away from God. He stated that the “love of money is a root of all kinds of evil” (1 Tim. 6:10). Yet, Paul did not state that money or capital itself was evil. Capital can and should be used wisely for God’s glory and the good of others as attested to in Jesus’s parable of the talents (Mt. 25:14-30). However, the anti-capitalist interpretation of the Bible’s teachings about wealth continued to affect how Christians saw their work, vocation, and the material gain they incurred as a result of them. Richards (2009) summarized Max Weber’s theory that the Protestant work ethic was part of an attempt by Calvinists to seek evidence that they were one of the elect. If they were truly elect, then naturally, there would be a variety of evidence to corroborate it. Financial prosperity would be one such proof of a rightly ordered and disciplined life. Weber misunderstood the Christian doctrine of vocation, according to Veith (2002), the Christian work ethic actually came from understanding the true meaning of work which affirmed the dignity of human beings and provided both satisfaction and fulfillment. It is not just human labor but “many aspects of business activity are morally good in themselves, and that they in themselves bring glory to God–though they also have great potential for misuse and wrongdoing” (Grudem, 2007, p. 12).

Free market capitalism coupled with huge advances in technology improved profitability, transportation, volume of trade and access to global markets. Globalization was an ideology and practice that challenged Christian missions (Steffen & Rundle, 2003; Johnson, 2009). For BAM practitioners, access to countries that had once been impossible to penetrate were opened through the door of trade which helped them to circumvent cultural, political, and national barriers. There was recognition of and disagreement over the possibilities and difficulties presented by globalization among Christian business advocates and BAM proponents (Rundle, 2009). BAM practitioners pressed forward taking advantage of the world created by globalization, just like the early Christians took advantage of Roman roads to take the gospel to those who had not heard.

**The Social Impact of Business**

Business and trade have had a real quantifiable effect on the lives of people worldwide both positive and negative. On the positive side is the availability of life saving technology and medicine (Anderson, 2014), food, energy, communications, and education. Global trade offered a greater volume and variety of choices. The speed of trade between hemispheres meant that certain food choices that were once seasonal, were available year round. Technology and communication provided near immediate knowledge of catastrophes and disasters to help hasten relief efforts. Business and trade also affected the lives of individuals. On the negative side, whole nations collapse into bottomless debt and face the loss of national sovereignty and determination This occurs due to predatory practices whereby individuals, companies, and even other nations take control of their resources by trade agreements, treaties, and lending by unscrupulous parties that ignore or abuse laws to take the resources and wealth of others.

The social impact of business is not like an alien invasion of the planet, where one day they suddenly appear and overwhelm the planet’s defenses and life is radically changed forever. Instead, it is many small interventions that eventually add up to major change (Praszkier & Nowak, 2012). Social Entrepreneurship was a response to globalization and neo-liberal economic theory. It was an attempt to correct the perceived negative effects of globalization and neo-liberal economics on people in both developed and developing countries (Dacin, Dacin, & Tracey, 2011).

**Poverty Alleviation**

The Bible speaks about poverty and concern for the poor. On the one hand it states, ‘Thus says the Lord of hosts, “Render true judgments, show kindness and mercy to one another, do not oppress the widow, the fatherless, the sojourner, or the poor, and let none of you devise evil against another in your heart”’ (Zechariah 7:9-10). On the other hand, Jesus stated, “For you always have the poor with you, and whenever you want, you can do good for them. But you will not always have me” (Mark 14:7). Christian teaching has upheld that believers are to treat others well, even one’s enemies (Luke 6:27-36), but is realistic about the presence of sin and suffering in this world (2 Timothy 3:1-5). Christians have interpreted this data in diverse ways and believers find themselves on a continuum between two positions. On one side, some interpret these teachings to mean that demonstrating the love of God means helping people with problems in this life. Great efforts are made to alleviate human suffering by providing care for physical, emotional, economic, social, and mental needs in this life. So great is this emphasis by some, that they neglect the spiritual message about the Person and work of Christ. On the other side, are those who feel that gospel proclamation and spiritual care is the primary concern of the church to prepare people for the life to come. All too often, the church’s efforts in non-spiritual areas detracts from the main task of the church and actually subvert its reason for existence. “Biblical teaching that a true experience of the grace of Jesus Christ,” opined Keller, “inevitably motivates a man or woman to seek justice in the world” (2010, p. ix). As Christians wrestle with where they fall on the continuum of how the church is to glorify God here on earth and love their neighbor, they also debate over which means are the best to achieve these ends.

BAM is a method of achieving care for people using business to support people financially, emotionally, and spiritually. Businesses provide jobs which help people become self-sustaining. It also provides training and confidence to help people emotionally. Business provide a way to model the Christian life daily before others. Poverty alleviation is not central to BAM, but then again, poverty alleviation is not central to Christianity either. Johnson (2009) wrote, “BAM is designed to empower indigenous people to help themselves out of poverty their own way” (p. 56). Rundle and Steffen (2003) explained the logic behind leveraging the assets and networks of Christian businesses for the benefit of the poor. Helping the poor is a by-product of living a Christian life. The way Christians help others with respect to poverty comes either through charity or business. BAM can best be described by the old adage, “Give a man a fish and he will eat for a day, teach him to fish and he will eat for life.”

Furthermore, the impact of business on people in the developing world can be illustrated with respect to poverty. The complexity of poverty makes it hard to determine solutions (Olapido, 2009). There were several definitions of poverty that affected the responses to it (Corbett & Fikkert, 2012). Poverty was often referred to as scarcity or the lack of resources of people to meet their own needs. It was also defined as the accompanying societal implications and psychological states which accompany not having enough resources, like alienation, humiliation, depression, shame, and despair. The assessment of poverty differs from the point of view of the poor to the view of those offering aid. Others viewed poverty as the failure of people in developing countries to reach an estimated standard of living, usually imagined in terms of those living in developed nations (Banerjee & Duflo, 2011), such as the level of adaptation of modern technology and different cultural values prioritizing different outcomes. Others theorized that the corruption and oppression by a narrow elite in power and lack of educational opportunities led to economic devastation and the suppression of the formation of rights and the practice of self-determination (Acemoglu & Robinson, 2012). The causes of poverty were usually explained in material or economic terms, though some recognized other causes like the impact of politics, culture, religion, disease, and ecology.

Some observed that the proposed solutions to poverty treated symptoms rather than causes and offered temporary aid rather than transformation. Risk aversion by large firms and multi-national corporations left the poor in economic deserts (Aspiras, 2016). Often efforts by non-profit organizations to improve the lives of people proved unsustainable and often contributed to greater poverty rather than less of it. Charity led to the destruction of local indigenous businesses who could not compete against donated goods and services (Corbett and Fikkert, 2012). The acceptance of foreign aid by developing nations came with restrictions on the use of that aid which often flowed back to companies or agencies based in the developed nations the offering aid (Barrett, 2009). Corruption accompanied aid efforts in funding and distribution, as well as the implementation of programs by local officials such that institutions that should have been supportive of economic and political freedoms became extractive by syphoning off capital, resources, liberty, and hope (Acemoglu & Robinson, 2012). Lasting change only came through for-profit business and access to global markets leading to business formation and employment. The ethical practice of business by BAM practitioners in developing countries exposed and addressed the conditions that create and allow the proliferation of poverty (Russell, 2010). Ultimately, local indigenous people had to take responsibility and ownership of the changes proposed. As these untapped markets become more politically stable, large corporations are beginning to seek to sell their products (Haber, 2016). However, Aspiras (2016) proposed that buying products from the poor instead of selling to them would lead to better economic outcomes. Yunus and Weber (2010) proposed that entrepreneurial ventures in the developing world that really want to help and empower the poor should do so by giving them better access to markets, good jobs, and income through business ownership. The dignity of work, the rule of law, entrepreneurship, innovation, promotion of indigenous business, access to global markets, and personal property rights were necessary conditions for transforming developing nations.

**Definitions**

Social Entrepreneurship was an innovative model for business practice, profit or non-profit, to affect social, economic, and ecological change in the world (Thompson & Scott, 2014). Praszkier and Nowak (2012) noted that several definitions of social entrepreneurship have been offered. They summarized the most important components of these various definitions as: (1) creating and sustaining social value rather than just private value; (2) pursuing opportunities; (3) responding to challenges with innovation, adaptation and learning; (4) acting with limited resources; acting with a greater ethical responsibility; (5) targeting neglected and highly disadvantaged populations; and (6) aiming for large-scale transformational benefits (pp. 9-12). Haber (2016) added that social entrepreneurs were looking to address the underlying conditions that led to problems by implementing “scalable wholesale change” rather than addressing immediate problems (p. 25). However, others do not believe that these efforts necessarily require scalability to make a difference (Anderson, 2014).

Business as Mission (BAM) was a for-profit, cross-cultural intentionally missional business venture led by lay people whose actions to bring hope and healing to people worldwide were motivated by and centered upon the knowledge and love of God in the gospel of Jesus Christ (Johnson, 2009; Ward, 2021). There are four essential dimensions that qualify a business to be called BAM business. These dimensions must be taken into account in the planning and execution of business operations. First, BAM businesses intend to share the gospel of Jesus Christ with people in order to see people evangelized, converted and trained, with a goal to see churches planted (Purpose). Second, BAM businesses must be functional businesses, operating with integrity and legitimately such that they obtain proper licenses, pay taxes, comply with national laws and codes for business practice, hire employees and provide them whatever benefits are congruent with current laws and their business model, with a goal to achieve growth and become financially solvent (Profit). Third, BAM businesses desire to have a positive impact on the people that the owners interact with, most notably, employees, customers, and suppliers (People). Fourth, BAM businesses are mindful of the ecological impact of their business operations and seek responsible and innovative practices leading to better ecological outcomes (Planet).

Business for Transformation (B4T) described a business that intentionally located in an area with a population unreached by the Christian gospel to create jobs and help the community to transform by evangelism, discipleship, and church planting in the name and power of Jesus Christ (Lai, 2015). B4T is “a strategy of the people of God using their gifts from God for the glory of God among the unreached” rather than a financial strategy (p. 12). The transformation begins with believers and is shared with others in practical ways. The focus of B4T is relationship with God and others. The workplace is a platform to demonstrate how the kingdom of Christ is integrated into life holistically and with transparency (*e.g.*, economically, socially and spiritually).

A Tent-maker is a Christian whose full financial support comes from working a job, either one’s own business or as an employee for a company, in a different culture with the intention to witness cross-culturally (Lai, 2015).

**Multiple Bottom-Line Theory**

The multiple bottom-line business paradigm was a reactionary movement to globalism, neo-liberal economic policies, the Marxist critique of capitalism, and large scale social problems. As more people worldwide looked toward government not only for the protection of rights, but also for a basic safety net (Anderson, 2014), governments looked for alternative financing for social services (Denny & Seddon, 2014). The paradigm asserted that commerce was a force for sustained economic growth and development for the maximum amount of people worldwide. It was argued that businesses were concerned about more than profit. The corporate social responsibility movement held that business was a vehicle of social innovation and change (Johnson, 2009). Not only did businesses provide jobs, income, training, self-esteem for employees, and access to new and existing products and services at fair prices, it was posited that businesses could affect change to “intractable social challenges” like “climate change, environmental destruction, youth unemployment and social exclusion” (Howaldt, Kopp, & Schwarz, 2015, p. 29). These outcomes could be achieved by rethinking ways for government, business, non-profits, philanthropic donors, religious groups, and local communities to interact with each other to address social challenges (Unger, 2015). To account for these various aspects to be addressed, a triple bottom-lined paradigm (*i.e.*, economic, social, and ecological) was conceived.

The multiple bottom-line paradigm sets the goals to be achieved and assessed. Yet, sometimes these goals conflict with each other and social entrepreneurs “walk a fine line between achieving their social mission and responding to market requirements” (Cipriani, et al., 2020, p. 549). Organizations may be mission-driven or profit-driven, public or private, government or non-government, charitable or faith-based, and these can affect its structure, metrics, culture, and its ability to have social impact. This means adjusting traditional business models for issues that pertaining to governance, competencies, managing surplus and calculating how to handle risk and benefits to generate social benefits. Social enterprises are different from traditional businesses. For example, traditional business models engage in cost-cutting measures and efficiency implementation to improve performance. Social enterprises must deal with limited resources differently. The multiple bottom-line paradigm is fueled by innovation, whereas the goal of hyper-efficiency in traditional business models can stifle innovation.

Large scale social problems require much more complex impact measurements. The same can be said for measurements for initiatives under the banner of corporate social responsibility (Anderson, 2014). For example, consider the ecological impact of businesses. They are difficult to respond to because it is often difficult to determine the extent to which a particular business has impacted the environment. Models of environmental impact are built upon assumptions that may or may not be true depending on industry, geography, and other factors. Responses to problems are dependent upon support from customers and the broader community (Anderson, 2014). Support must be generated and sustained by a propaganda campaign. Furthermore, it is uncertain whether proposed political and business solutions (*e.g.*, carbon credits, electric vehicles, etc.) would actually solve the problems named. To what degree will those solutions resolve the perceived ecological problem? It might be the case that resources could be better spent solving other problems that face humanity (Lomborg, 2004).

Social enterprise, social entrepreneurship, and BAM placed great emphasis on innovation and creative strategies as the proper response to economic challenges. The story of Muhammad Yunus and Grameen Bank (2010) highlighted the vision of someone who addressed the needs of people in an economically and developmentally challenged area. He saw an opportunity that proved to be financially rewarding where many financial, governmental, charitable and non-governmental institutions demonstrated an inability or unwillingness to step up and take a risk. Economic opportunities for micro-, small-, medium-, and even large-sized businesses had to be created from nothing more than the ideas and courage of entrepreneurs. The enticement to this new frontier of commerce in the developing world was freedom from much of the regulations and laws that government and established business institutions entailed in the developed world. The challenge to life in a new frontier, as with all new business ventures, was securing capital.

Measuring Social Entrepreneurship

The rise of Social Entrepreneurship was a response to the aforementioned circumstances. There was a need for advocates to both define and defend the new field of study and practice. First, Social Entrepreneurs had to distinguish themselves them from other philanthropic endeavors. Governments often offered aid to other nations with certain diplomatic and financial outcomes and loyalties expected which necessitated measurements to determine success or failure. Aid was offered with little regard for the success of national or local businesses. Philanthropic agencies, non-governmental organizations, and religious charities also offered aid to people in various nations with donated funds. Donors, non-governmental organizations, and charities sought to develop measurements that would provide the ability to track, predict, compare, and control the use of resources in a manner that brought about the outcomes they determined were needed (Nicholls, Nicholls, & Paton, 2015). These changes included hunger relief, access to clean water, medical care, ecological concerns, and education, but often did not include national or local business success which would fund a path to sustainable change.

The second phase of research was to define the dimensions of the multiple bottom-line paradigm and provide clear definitions that were testable. Thompson and Scott (2014) stated, “Without clear agreement on meaning and purpose, it is difficult to evaluate performance, value and success” (p. 13). Commercial businesses are driven by efficiency in the delivery of products and services with goals usually measured with metrics like quantities of time and money. Values driven organizations are more complex in that their goals often involve addressing human needs whose timeframes and delivery efficiencies are longer and whose success may not be quantifiable through financial metrics.

The third phase of the scholarship was to define and produce instruments that would provide clarification, flexibility, adaptability, and evidence to lend further support to the multiple bottom-line paradigm. Social Entrepreneurship literature was replete with calls for better measurements that would adapt to business characteristics such as: size, structure, life stage, industry, regulatory environment, reporting needs, cross-cultural needs, etc. (Nicholls, Nicholls & Paton, 2015). The purpose of assessment was to be a common language for understanding business impact and to provide effective communication (Graham & Anderson, 2015; Buck & Reinhardt, 2016). Measurements had to meet the various needs of practitioners, shareholders, and stakeholders, like financial investors, non-governmental organizations, and charities, who helped to evaluate past actions and provided the data for analysis, which brought both immediate relief from suffering and some sense of lasting change. Practitioners and others tracked, predicted, and compared the work being done (Nicholls, Nicholls, & Paton, 2015) and also helped to manage risk (Nicholls & Tomkinson, 2015). Measurements were needed to provide standardization so that contrasts and comparisons of different agencies addressing different problems in different places were possible. Cross-cultural business provided unique challenges in assessment. Cross-cultural contexts were potentially local, regional, or global, incorporating different industries, regulatory situations, organizational structures, and sized businesses. A variety of contexts presented challenges for measurement formation to provide tools which could provide meaningful information for decision-makers and yet were portable between various contexts (Van Wyk & Adonisi, 2011).

The formation of measurements required a statement of the goals to be reached. Yet, among the various actors involved like governments, donors, philanthropic organizations, practitioners, local indigenous businesses and local indigenous populations, there were competing goals. Religious organizations and charities sought to provide spiritual training and transformation as well as social impact. The measurements for non-profit and philanthropic agencies varied and given the non-monetary nature of many of organizations goals along with preferences for short-term relief or long-term change, various measurements were offered to record practitioner effectiveness. The challenge was to provide measurements that helped practitioners become more effective, as well as assessment that proved value to shareholders, investors, and donors (Graham & Anderson, 2015).

Measurements and reporting were shaped to the needs of the users. Not only did different users of measurements have different informational needs, but different circumstances affected the information requirements. Measurements had to show how much of a change occurred and whether the difference was as much as could be expected (Nicholls, Nicholls, & Paton, 2015). Evaluation required strong internal monitoring which demanded discipline from practitioners (Kessler & Tanburn, 2014). Tracking multiple outcomes was time consuming and more of an art than a science in order to balance the tension that occurred between different reporting requirements. Various accounting methods were used, such as Social Return on Investment (SROI) and outcome stars and randomized controlled trials (Hall & Arvidson, 2014), blended value accounting (Emerson, 2003), and the balanced scorecard (Trelstad, 2014). As research on social impact has shown, it was more complicated and required new tools to measure a variety of outcomes.

**Approaches to Social Entrepreneurship Measurement**

There were many measurements that looked at Social Entrepreneurship projects from the eyes of those looking to invest responsibly. The Global Impact Investing Network (GIIN) worked with a variety of non-profit and governmental agencies to develop a set of proprietary standards called the Impact Reporting and Investment Standards (IRIS). The Global Impact Investing Network promoted these standards to help with data collection, to gain credibility with investors and lenders, to provide uniformity of data for comparison and contrast, and to provide a singular vocabulary for impact investment (Bouri, et al., 2011). They formed the Global Impact Investing Rating System (GIIRS) (Haber, 2016) to help monitor and track social entrepreneurial investments. A variety of groups used similar standards, such as Toniic (Morgan, et al., 2012), and the impact measurement guidelines from the Social Impact Investment Taskforce, a G-8 working group (Barby, et al., 2014).

Other alternative standards developed were the Business Innovation Facility and The William Davidson Institute’s BOP Impact Assessment Framework (Chapple, 2012), the Donor Committee for Enterprise Development (DCED) Standard sponsored by the UK Department for International Development (Kessler & Tanburn, 2014), and the management information system called Ongoing Assessment of Social Investment (OASIS) developed by the Roberts Enterprise Development Fund (REDF) (Trelstad, 2015). The standards were encompassing of both developed and developing countries. They were broad enough to be used both cross-culturally and in a single culture. Some governments developed special legal and economic categories recognizing social entrepreneurial ventures like Community Interest Companies (CIC) in Britain (Nicholls, 2010a) and the Certified B Corporations and Benefit Corporations in the United States (Haber, 2016). Social Entrepreneurs have also created investment vehicles to assist business ventures like the Social Impact Bonds (SIB) in Australia (Graham & Anderson, 2015).

**BAM Business Model**

BAM had unique challenges outside of those experienced by Social Entrepreneurship advocates. Established theological positions, ecclesiastical culture, and missiological practice demanded further explanations from practitioners to justify their use of BAM. The BAM research network was unique because it insisted on a holistic matrix for transformation realized in a four-fold bottom-line: spiritual; economic; social; and ecological. Success was defined and measured by advancement in all four dimensions. The network was formed by practitioners, consultants, researchers, missiologists, business professors, and staff from mission sending agencies. As the businesses involved grew in number and maturity, tools for evaluation and for reporting continued to be a pressing need.

The modern discussion of the Christian doctrine of vocation, especially as it related to Christians engaged in business coupled with technological advances and the phenomena of globalization with its affirming effect upon those engaged in cross-cultural activities, like missionaries, business people, and diplomats, played an important role the formation of BAM. BAM practice and research developed in tandem with the multiple bottom-lined business theory called Social Entrepreneurship (Aspiras, 2016). Multiple-bottom line business was a way to account for a variety of goals and outcomes that were part of business life and took these into account when planning, strategizing, marketing, operating, financing and reporting. From a business theory perspective, BAM has been said to be a subset of Social Entrepreneurship (Bosch, 2017). While it is helpful to contrast and compare how BAM and B4T practitioners have adapted theories from social entrepreneurship, many of their motivations and goals are distinct from it.

Distinctions within BAM

BAM was a big tent movement composed of smaller more distinct groups. The smaller groups were defined in terms of the degree of their adherence to the BAM business model, church denomination affiliation, business industry, and roles in the business process. Practitioners played different roles in the business, from CEO to board member to manager to employee. Impact on other people could still be meaningful regardless of position (Baer, 2018). BAM, B4T, and tentmaking were all closely related but identifiably distinct groups.

**Tentmaking**

Tentmaking was a missionary strategy patterned upon the Apostle Paul’s endeavors to work as a tent maker to self-support his missionary efforts in the first century as he travelled around the Mediterranean Sea. His work meant that his time was divided between repairing tents and evangelism. The two major descriptions of the modern tentmaking strategy were: (1) financial self-support, and (2) access to countries that were closed to normal missionary activity (Lewis, 1996; Siemens, 1997; Hamilton, 2002). This missionary strategy underwent a transformation with the publication of the book *Tentmaking: The life and work of business as missions* (Lai, 2005). Tentmaking became both a missiological strategy and a multiple bottom-line business model, whether profit or non-profit, that stressed the idea of Christian vocation, intentionality in work to be a faithful witness to Christ, accountability to a local church, and bi-vocational work in the 10/40 window which describes “countries (other than North America) lying roughly between 10 and 40 degrees north or the equator; they typically are facing high levels of poverty and have relatively little access to Christian resources” (Rundle, 2014, p . 26, note 11). Its goal was to reach unreached people in the world with the message of Jesus Christ. The main outcomes sought were: evangelism, discipleship, and church planting. Evaluation for the success of this model were not predicated on the success of the business, rather on the people affected by the gospel and churches planted.

Lai’s tentmaking model made distinctions between different levels of practitioner commitment. The five types of tentmaking missionaries (T1-T5) took into account previous cross-cultural experience, business experience, personality types, time commitment to an assignment, language skills, support structures, ministry philosophy, and structure of overseas business. The five types were: long-term, independent, and self-sufficient (T-1); long-term residency working for a secular company (T-2); long-term access with partial or full church support and a part-time job that allowed for language learning and relationship building (T-3); flexible access through work for an NGO, usually medical, educational, agricultural or engineering (T-4); and medium or short-term access traditional missionary with full financial support from local churches (T-5). All of these types of tentmakers had legal residency in the countries they lived and through hard work and upright conduct earned the respect of others.

Tentmaking was a multiple bottom-line model, however the spiritual outcomes were considered primary. The tentmaking model was defined by three concepts: evangelism, discipleship, and church planting. The measurements used to track and monitor these outcomes were straightforward. The number of people evangelized, the number of people discipled, and the number of churches planted. If these outcomes were achieved, but the business failed, the tentmaking endeavor was still considered a success. To be sure economic Business was important for both in country presence and integrity of Christian witness before the people being reached but not penultimate. Tentmakers were bi-vocational missionaries by calling (Lai, 2005), who were sent by and accountable to churches or denominational agencies. Tentmaking was a missionary strategy.

There were certain pragmatic concerns that tentmaking addressed. It sought to understand particular markets. It focused on tangible, quantifiable best practices that would improve practitioners’ effectiveness to accomplish maximum impact for advancement of God’s kingdom. It showed concern for practitioners in that it wanted to match skills to the task and focused on business relationships as well as on tools that would assist practitioners. Tentmaking insisted that practitioners develop a business plan as a necessary step in formulating, evaluating, and running the business (Lai, 2015; Johnson, 2009). Finally, it showed concern for the family life of practitioners.

**Business for Transformation (B4T)**

The OPEN/B4T Network had been a pioneer into the use a multiple bottom-line model for mission work with over 200 practitioners worldwide functioning in a variety of businesses. It was a facilitator of the tentmaking mission model and represented the development and expansion of thought about the economic impact of practitioners. It subscribed to a multiple bottom-line approach, but prioritized the spiritual and economic over social and ecological (Lai, 2015). It was a movement toward a more holistic approach to missions to gain access to unreached peoples. As a corrective strategy for using God-given gifts to promote God’s glory among the unreached, it defined spiritual impact in the same manner as tentmaking. The spiritual objectives were: evangelism; discipleship; and church planting. Yet, tentmaking was exclusively self-support, while B4T included both self-support and those whose income was supplemented with donations.

**Business as Mission**

As already stated, BAM’s paradigm involved four dimensions: spiritual, economic, social, and ecological. It was for-profit, cross-cultural, intentional commerce meant to bring transformation in the name of Christ.

Business as Mission Critique

Following the multiple bottom-line paradigm, BAM assumed all the challenges faced by Social Entrepreneurship. As previously stated, practitioners had to defend the model against established theological positions, ecclesiastical culture, and missiological practice. Several theological concerns were raised. First, Quatro (2012a) objected that BAM as hybridization of business with evangelization and discipleship violated the principle of sphere sovereignty seen through a Reformed theological perspective thereby confused God’s purposes for business and the church. Second, instead of resolving the secular-sacred dichotomy, it reinforced it. The secular-sacred dichotomy held that religious work and vocation are of a higher order than work and vocation in the non-religious sphere of life (Johnson, 2009). Third, the BAM paradigm projected a false spiritual superiority of practitioners over other Christians engaged in normal business (Childs, 2012). Fourth, BAM obscured the roles and responsibilities of missionaries, the appropriate levels of accountability, and appropriate levels of training (Bosch, 2017). Fifth, a vague definition of the term kingdom of God could lead to mission drift away from a holistic understanding of BAM (Ward, 2021). According to Ward, a stronger definition of the kingdom of God clarified theological misunderstandings thereby satisfying criticisms about the secular-sacred dichotomy, addressed the roles and responsibilities of practitioners, and gave support to what is to be measured for the sake of progress in the mission.

Criticisms of a more pragmatic nature were leveled at BAM. First, neither practitioners, nor the literature, nor researchers had yet demonstrated the social impact of BAM (Bronkema & Brown, 2009). Rundle (2012a) agreed and called for more research to be done to establish confidence in the BAM model and to create tools to help practitioners succeed. Second, the multiple bottom-line paradigm oversold the ability of business ventures to solve social problems (Quatro, 2012; Fleming & Jones, 2013). Third, Quatro, channeling critiques of multiple bottom-line businesses offered by Milton Friedman (1970), claimed that businesses are about stewarding resources for profit. Fourth, as with any grassroots movement, there were political implications to BAM that were not addressed (Bronkema & Brown, 2009). Many of these concerns required time to gather evidence and evaluate if desired outcomes were achieved.

**Business as Mission versus Social Entrepreneurship**

BAM also uniquely addressed itself to cross-cultural settings in developing countries in the 10/40 window seeking to reach people living in poor or unstable regions of the world that most Social Entrepreneurs would avoid because of risk, market size, and poverty. Many BAM ventures, whether categorized as micro, small, medium, or large businesses, lacked access to both traditional funding sources and established Social Entrepreneurship funding. The extraordinary story of Muhammad Yunus, the founder of Grameen Bank in India, was much more an exception to the rule than normative for Social Entrepreneurs (Yunus & Weber, 2010). Social Entrepreneurship ventures, on the other hand, tended to be medium- or large-sized and backed by a variety of groups, like the G-8 nations, the U. S. Federal Reserve Bank and other central banks, the U. S. Small Business Administration, and large foundations like the Rockefeller Foundation (Graham & Anderson, 2015; Haber, 2016). Social Entrepreneur finance had access to a wider field of financing sources, *i.e.*, governmental and private sources, investors and charities (Salmon, 2014). Many projects undertaken by social entrepreneurs took place in the developed world, *e.g.*, blighted or undeveloped downtown areas of major cities. Social Entrepreneurship involved advanced market and environmental research that required a high level of expertise, long times for planning and research, highly developed relationships with governmental leaders and agencies, as well as a good deal of capital to cover expenses.

When it came to measurements, all multiple bottom-line businesses faced the question of how many and which indicators, other than monetary, were appropriate to account for spiritual, social, and ecological impact. Since many held that multi-national corporations thrived with globalization characterized by cheap labor, lax environmental standards, and corruption, the issue about the ability of BAM practitioners to maintain ethical business practices remained prominent (Ewert, 2006). The phenomena of globalization coupled with financial deregulation, expanding markets in developing countries, fiat currencies, regional trade agreements, and increased people flows across borders provided the context in which the multiple bottom-line paradigm grew. Multiple bottom-line business proponents were not immune to an overly optimistic view of globalization and its powers to address these issues.

The research by Rundle and Lee (2022) proposed a typology for BAM practitioners that would reconcile their identities as they managed the tensions inherent in running a multiple bottom-line business. 119 BAM practitioners responded to a 59 question survey that explored their backgrounds, motivations, and business practices. Rundle and Lee adapted a typology of entrepreneurial identities taken from social entrepreneurship scholarship by Fauchart and Gruber (Siemens, Gruber, Fauchart, and Zellweger, 2016) to create a new typology for BAM practitioners. Missional identity salience explained spiritual and missional goals and business identity salience identified levels of comfort with the processes and objectives of commerce. These two dimensions of identity salience led to four types: Explorer, Evangelist, Faith Driven Entrepreneur, and BAM. The purpose was to demonstrate the ways respondents rationalized the four bottom lines of the BAM model. The prioritization of spiritual versus economic goals showed differences between three out of four groups whereby the Faith Driven Entrepreneur prioritized economics over spiritual, the Evangelist prioritized spiritual over economics and both Explorer and the BAM only slightly prioritized spiritual over economics. The item regarding how many had over five years of nonprofit experience demonstrated that Explorer ranked highest, followed by the Evangelist, the BAM, and the Faith Driven Entrepreneur. Risk propensity showed that the Evangelist type had the greatest tolerance for risk while the type with the most risk aversion was the Faith Driven Entrepreneur. Personal start-up capital showed the Faith Driven Entrepreneur with the highest rank followed by the BAM, then the Evangelist, then the Explorer. Finally, the prioritization of economic and social impact showed interesting findings. All types prioritized economic over social impact.

Often ecological concerns that were part of the multiple bottom-line business paradigm were relegated to a place of secondary consideration for some BAM practitioners (Lai, 2015). Russell (2010) summarized three typical ways businesses dealt with ecological impacts: (1) attempts to reduce impact; (2) offset impact by doing other things that positively affect the ecology; and (3) innovate to change impact. BAM practitioners, like all other businesses, had to weigh the costs and productivity of changes, the size and industry of their businesses against the predicted change that those factors would yield. Questions lingered when larger corporations advertised the changes they made in their company towards more ecologically friendly practices and procedures. It seems that their claims seem to be more about a way to market themselves than about solving ecological problems. Others critiqued that worldwide problems should be prioritized to match resources for greatest impact leaving ecological issues low on issues to be addressed (Bhagwati, *et al.*, 2004; Lomborg, 2004). BAM and B4T practitioners had to use their best judgment to incorporate ecologically friendly practices into their businesses while balancing financial, spiritual, and social concerns.

Business as Mission Measurements

The Business as Mission Global Think Tank (2014) called for tools to measure businesses using their model. There were philosophical differences within the movement as to the goals and measurements required to describe success. All BAM advocates agreed on the use of spiritual and economic dimensions (Johnson, 2009). Yet, there were persistent theological, ideological, and practical questions about the definitions, scope, and use of the social and ecological dimensions that required clarification. Rundle (2014) wrote, “In practice, the first three bottom lines – economic, social, and spiritual – are prominent concerns among BAM practitioners, but there is far from any consensus about the importance of having explicitly environmental goals” (p. 24).

The mission of both Social Entrepreneurship and BAM was to affect change in the lives of people and address problems in the world. Both approaches attempted to educate and redefine the goals of donors and investors from short-term relief to long-term change. This was one of the reasons that drove them to develop the multiple bottom-line. To prove a multiple bottom-line, they explained how many things that businesses were already doing could be used to prove their philosophy. Employment, training, and impact based upon tax revenues and economic benefits to the communities in which the businesses were located required explanation. Descriptions of the tangible social impact of business in communities showed that they were not accidentally related outcomes. The psychological factors that employment had upon people needed to be accounted for. The ability of people to make a living that enabled them to bear and raise children which was the most fundamental of all societal activities, provided challenging yet real psychological and sociological factors that required measurements. There were many more measurements that were complex and could not be monetized, yet they demonstrated that businesses had a social impact. In the eyes of traditional business operational considerations, these impacts were subordinate to profit-making. Multiple bottom-line business proponents argued that social, ecological, and spiritual impact were also important and needed to be considered in planning, budgeting, and operational concerns. This was the center of the debate to a multiple bottom-line business philosophy. How could a multiple bottom-line business be led and managed? Occam’s razor when applied to business goals implied that it should be as simple and straightforward as possible (Morgan, et al., 2012). Businesses generated more than one outcome. Multiple outcomes required consideration to plan for and track them.

For both BAM and B4T ventures the audience or end user of the assessment can be practitioners, shareholders, or stakeholders. Practitioners were the ones actually doing the work, running the business, building relationships, and seeing that transformational and spiritual goals were achieved. Shareholders were owners of the business venture and could have included family and friends, mission organizations/sending agencies, churches and church denominations, or just Christian investors who hoped their wealth would be used to make a difference. Stakeholders were many and varied. Governments, non-governmental organizations, employees, lenders, suppliers, retailers, transportation companies, consultants, customers and educators all played vital roles in helping practitioners succeed in their business.

The determination of goals and informational needs helped to select which measurements were needed. Choosing a measurement was similar to the dilemma faced by Goldilocks as she went through the house of the three bears trying out and appropriating their goods, food, and furniture to suit her needs. In such instances, the assessment depended upon the needs of the user (Johnson, 2009). This required researchers and practitioners to record sufficient and appropriate data so that informational needs could be met. Informational needs were broader than mere business financial data because multiple bottom-line businesses were tracking multiple outcomes. Multiple bottom-line businesses had to prove that needs were met, lives of people were transformed by the work of the practitioner, and demonstrate how effectively and efficiently that work was accomplished. Researchers in collaboration with practitioners assisted by helping determine which data to record to help achieve operational success. Information that was of value to the practitioner or maybe a consultant, was not necessarily of value to shareholders. The challenge to meeting informational needs are many. Individual practitioners had to weigh which data they needed to assess and operate the business as well as what data their investors require. Researchers had to gain access to a population, protect the identities of respondents, and determine what approach to data collection such as quantitative, qualitative, or mixed method was appropriate with regards to audience, circumstances, and informational needs. These measurements were used to demonstrate that God was at work in business to bring spiritual, economic, social, and ecological impact.

**Social Impact Self-Report (SISR)**

Practitioners experienced a variety of relationships that developed in cross-cultural situations. The greatest social impact a practitioner had was likely those with whom they spent the greatest amount of time. For most business practitioners whether cross-cultural or not, this meant employees, customers, and suppliers. For BAM and B4T practitioners, this entailed relationships with stakeholders like employees, suppliers, customers, and fellow BAM or B4T team members. Baer (2006) wrote, “Each relationship in business is a fundamental part of our lives and represents a special opportunity for kingdom impact” (p. 75). Major indicators of those relationships included levels of conflict, relationship building skills, and the ability to effectively engage in business. These three relationship indicators were subscales for the Social Impact Self-Report instrument.

The ability to relate to others was a great concern to all those who engaged in cross-cultural labors. Corporations, governments, and missionary agencies have suffered from placing people who were unable to adjust to living in different cultural contexts. The emphasis on globalization and the pressure of companies to select, train, and evaluate their employees for effective cross-cultural business required tools to measure existing intercultural competence or intelligence in its employees. The development of tools to test people for cultural intelligence and competence was driven by business needs and grounded in the theory of multiple intelligence. Too many businesses had experienced expensive and time-consuming expatriate failures. There was also a desire to provide leadership across cultures and for multicultural teams (Alon, et al*.*, 2015).

This research project sought to understand the impact of cultural intelligence and expatriate success on BAM. More specifically, how it related to the impact of the BAM paradigm’s social dimension. Social impact was chosen because it applied to both BAM and B4T practitioners. The specific social outcomes tested were: Conflict Management, Relationship Building, and Effective Business Exchange. The importance of these subscales were derived from literature that discussed issues pertaining to entrepreneurial success in cross-cultural environments with regard to social impact. These outcomes were best realized in the relationships that were most central to BAM and B4T practitioners, those with employees, customers, suppliers, and fellow BAM or B4T team members. The literature defined cultural intelligence as “another form of intelligence that explains adaptability to diversity and cross-cultural interactions” (Van Dyne, Ang, & Koh, 2008, p. 16). The cultural intelligence instrument (CQS) had four subscales that rendered data about individual practitioners’ ability to adapt to cross-cultural situations: metacognitive, cognitive, motivational, and behavioral. Collectively, these seven subscales: metacognitive, cognitive, motivational, behavioral, conflict management, relationship building, and effective business exchange, were the core of the research and provided the basis for the interpretation of the data.

Cross-cultural business literature illuminated several areas of concern to relationships, which were central to business. In a positive sense, relationship building was central to business through building trust and confidence with others. Conversely, conflict management in relationships was a central challenge to business handled by navigating differing goals, personalities, and cultural differences. Effective business exchange was also a relational term that included entrepreneurship, sustainability, and social responsibility. Conflict management skills were often the subject of study for hostile cross-cultural environments (Praszkier & Nowak, 2012; Lai, 2015) and were specifically named as an area of future study by the authors of CQS (Ang, et al., 2007). Strategy formation in cross-cultural environments was also deemed relevant. Other literature looked at sustainability (Spence, Gherib & Biwolé, 2011; Bansal & DesJardine, 2014; Khan & Quaddus, 2015) and longevity (Bruce, Deskins, & Gurley-Calvez, 2012; Tàpies & Moya, 2012; Daepp, Hamilton, West, & Bettencourt, 2015) of both people and businesses in cross-cultural settings. Other authors focused upon social responsibility in cross-cultural business (Azmat & Samaratunge, 2009) as well as business with the intent of creating social impact (Luke & Chu, 2013; Thompson & Scott, 2014; Haber, 2016). Entrepreneurial intentions were also developed by many authors (Bolton, 2012; Valliere, 2015).

**Conflict Management**

An Australian study on conflict by Van Gramberg, Teicher, Bamber and Cooper (2020) investigated the relationship between employee voice, intentions to quit and conflict resolution. The survey included 773 union and non-union employees working in companies or organizations with over 500 employees. 298 respondents reported experiencing conflict in the past year. Findings showed that employee voice was associated with successful dispute resolution (*β* = 0.42, *p* < 0.01, model 2), which reduced employees’ intentions to quit (*β* = -0.21, *p* < 0.01, model 4). Employee voice had the additional benefit of directly reducing intentions to quit (*β* = -0.28, *p* < 0.01, model 4), besides the indirect effect of helping to resolve disputes. Results indicated that regardless of the level of voice at work, disputes related to employment conditions (*β* = 0.15, *p* < 0.05, model 4) and supervisory decisions (*β* = 0.112, *p* < 0.10, model 4) are associated with stronger intentions to quit. Part-time employees were more likely to report less favorable dispute resolution (*β* = -0.17, *p* < 0.05) but also less likely to quit (*β* = -0.16, *p* < 0.05). Also those who reported bullying claims were less likely to find resolution. The research provided recommendations for improving workplace dispute resolution that they believed offer mutual gains for stakeholders. The study found that excluding bullying and uncivil behavior, if employees’ voices are respected and a dispute resolution process is in place there is greater ability to resolve conflict at work and reduced turnover.

Research by Bhatt (2020) comparing engineers and managers working in the gas and oil industry from India and Kuwait illuminated cultural differences when handling conflict. 174 respondents revealed their preferred way of handling conflict in relation to their cultural intelligence, intercultural sensitivity and how that related to their own cultural backgrounds. The study found there was a significant difference in intercultural sensitivity, cultural intelligence, and preferred conflict handling styles between the employees from India and Kuwait. The Indian respondents (14.13, 14.18, 14.84, 14.70, 13.36) scored higher mean values in all five styles of handling conflict (Yielding, Compromise, Forcing, Problem Solving, Avoiding) than their Kuwait counterparts (12.00, 12.34, 12.62, 12.74, 12.28). Indian respondents scored highest on the forcing style and low on conflict avoidance and Kuwait respondents scored highest on the problem-solving style. Except for the behavioral CQ, Indian respondents scored higher in the other dimension of cultural intelligence than their Kuwait respondents. The study also found significant correlations between the styles of handling conflict and both intercultural sensitivity and cultural intelligence. Bhatt interpreted the data to imply that the interactions of Kuwait respondents centered on cognitive aspects whereas Indian respondents gravitate more towards affective aspects of cross-cultural interactions which he explained in terms of Hofstede’s uncertainty avoidance value (p. 30). This research shows that the interplay of intercultural sensitivity, cultural intelligence, conflict management style and cultural background leads to interesting outcomes for employees and managers in cross-cultural settings. If not handled well, mismanagement of conflict can cause stress and make task completion more difficult. Ignorance of cultural differences can cause negotiations or task achievement to be derailed.

**Relationship Building**

Kopenen, Julkunen Gabrielsson and Pullins (2021) did qualitative research on the salesperson–customer relationships of nine experienced salespeople. The salespeople worked for three different companies. All the salespeople were from Finland, a low context culture. Each salesperson had long-term relationships with a customer from a low context culture, where what is said is what is meant, and from a high context culture, where what is said, is not necessarily what is being conveyed. They interviewed three of the salespeople four times, six of the salespeople two times and two customers once for a total of 26 interviews. There were two research questions posed. First, how did intercultural, interpersonal salespeople-customer relationships evolve in culturally diverse settings? Second, how did a salesperson’s self-describe CQ contribute to the development of their intercultural, interpersonal salesperson-customer relationships?

The authors utilized identity management theory (IMT) that focused on cultural and relational identities where cultural acceptance comes from a shared system of symbols, meanings and norms for conduct and relational acceptance is private shared understandings that one is born into. They also understood that social disclosure plays a role in the development of relationships through the release of personal information that takes place as a result of the business transaction. Relationships go through phases: the trial phase; enmeshment; and renegotiation. In the trial phase people make small talk and simply make transactions. The study found salespeople with low CQ tended to stay in the trial phase. In the enmeshment phase, talk broadens to include information about family, values and personal history. Salespeople with medium or high CQ would move into this stage. Finally, in the renegotiation phase, talk deepens to include personal medical issues, moral issues and longings or disappointments. Salespeople with high CQ are better able to navigate relationships with customers at this level especially when cross-cultural interactions are occurring with customers from cultures with different contexts. Not all customers want a deeper relationship with salespeople, so salespeople must be sensitive to the needs of each customer. For managers, they need to hire salespeople who are culturally aware, maybe local people who are experienced with that culture, or maybe expatriates who have the cultural intelligence and flexibility to adapt.

Ng (2022) explored the relationships, behaviors, and perceptions between managers and clinicians toward value-based healthcare in the National Health Service in the United Kingdom. One of the main drivers for change towards delivering value-based healthcare in the United Kingdom was to improve clinical and managerial culture and engagement within organizations. The relationships between clinicians and managers in an organization were often considered to be either an enabler or disabler toward successful engagement to develop strategies towards better value healthcare. Successful engagement was dependent on effective and transformational leadership that could impact on organizational value in healthcare.

A qualitative research methodology of semi-structured in-depth interviewing on a sample consisting of hospital consultants, senior managers and board executives from a diverse group were conducted. A thematic analysis was used to analyze the data using a systematic approach. The study ﬁndings identiﬁed areas of potential barriers to engagement for clinicians and managers which were related to regulatory burden, ﬁnancial challenges and workforce shortages. Key recommendations on what was required to improve clinicians and managers engagement and the leadership approaches toward improving value-based healthcare were discussed. Structural and organizational problems can be barriers to forming relationships.

**Effective Business Exchange**

Cross-cultural salespeople must exhibit adaptive selling behaviors according to Charoensukmongkol (2020). This research inquired about the relationships between CQ, adaptive selling behavior and international sales performance. There were 365 Thai salespeople at trade shows in India, Japan and Vietnam with usable responses. They were tested on CQ, adaptive selling behavior, trait mindfulness and international sales performance. The first hypothesis about a positive relationship between CQ and adaptive selling behavior was supported (*β* = 0.221, *p* < 0.001). Adaptive selling behavior was defined as the salesperson altering, adjusting and adapting their behaviors, strategies and communications with customers. The second hypothesis that stated that adaptive selling behaviors mediated the positive relationship between CQ and international sales performance was supported (Sobel t = 3.04, *p*, < 0.002). However, there was no statistically significant direct relationship between CQ and international sales performance (*β* = 0.089, *p* > 0.05). The final hypothesis of a positive relationship between CQ and adaptive behavior moderated by the level of trait mindfulness was supported (*β* = 0.093, *p* < 0.013). Trait mindfulness was the salesperson’s awareness to miniscule observable changes happening in real time. The study also found positive correlations adaptive selling behavior and both product knowledge and sales performance.

Salespeople with high CQ showed adaptive selling behaviors when acting with foreign customers. High CQ salespeople who adjusted their sales efforts due to their vigilance in observing customers fared better than those who were not observant. The study opined that sales presentations made in cross-cultural situations be made by skilled salespersons with high CQ, adaptive selling behavior and trait mindfulness. It also suggested that training in all these areas should be overtaken to help existing sales staff to improve their understanding and abilities to deal with cross-cultural situations.

Studies of internationalization had largely overlooked developing countries with high levels of legitimate informal entrepreneurship. Boafo, Owusu, Guiderdoni-Jourdain (2022) analyzed the internationalization of Informal African Firms (IAFs) from a network perspective. The research undertook in-depth case studies of 14 informal smaller ﬁrms in two major enterprise clusters in Ghana. The ﬁndings showed that half transacted business in ﬁve to seven foreign markets, and more than half sold abroad within three years of inception. The research illustrated the different network ties that inﬂuenced passive and active internationalization strategies with evidence that these Informal African Firms developed buyer networks through customer referrals and foreign customer walk-ins to the firm. Overall, the research provided a comprehensive understanding of the triggers that initiated international business activities by IAFs so contributed to current theorizing noting implications for management practices and policymaking on this important but hitherto, under-explored issue.

Stakeholder engagement grew into a widely used yet often unclear construct in business and society research. The literature lacked a unified understanding of the essentials of stakeholder engagement, and the fragmented use of the stakeholder engagement challenged its development and legitimacy. The purpose of this article was to clarify the construct of stakeholder engagement in order to unfold the full potential of stakeholder engagement research. The research included a literature review on 90 articles in leading academic journals focusing on stakeholder engagement in the business and society, management and strategy, environmental management, and environmental policy literatures. The research presented a descriptive analysis of stakeholder engagement research for a 15-year period, and identified the moral, strategic, and pragmatic components of stakeholder engagement as well as its aims, activities, and impacts. The research offered an inclusive stakeholder engagement definition and provided a guide to organizing the research. The research complemented the current understanding with a largely overlooked dark side of stakeholder engagement. The research concluded with future research avenues for stakeholder engagement research.

According to Chapple (2012) all impact measurements accomplished several things. First, they demonstrated impact and clarified reporting. Second, they evaluated effectiveness. Third, they improved efficiencies for companies and all impact investments. Fourth, they assisted companies when they sought to borrow money from a lender by proving value. Finally, they gave a picture of how the business was situated in its industry and its context by allowing comparisons to other similar organizations. When it came to social benefits, Nicholls, et al. (2015) stated that assessment helped to track predict and compare social benefits.

As has been stated, impact measurement for social entrepreneurship and BAM were unique in that they were trying to account for a multiple bottom-line. The first challenge to advocates of multiple bottom-line business was a question of definitions (Nicholls, 2010b). That challenge remained problematic because there were several definitions competing for both social entrepreneurship and BAM. There were three major areas of assessment involving standards, reporting, and rating (Hall & Arvidson, 2014; Nicholls, 2009). Standards were necessary to frame reporting. They were guidelines for what information was essential to reporting to practitioners, shareholders, and other stakeholders.

Kimura (2020) observed that on top of the well-known dilemma of social enterprises as hybrid organizations, the form in which they struggle to balance business viability and the fulfillment of social missions, faith-based social enterprises had an added dimension: their spirituality manifested as organizational culture and practices based on their spiritual values and mission to spread their faith. By employing critical realist institutional logics and an identity-based and biographical approach to social entrepreneurship, Kimura’s research identified a typology of different hybrid forms of Christian social enterprises in Cambodia and the tensions associated with them. The research explored how and why social entrepreneurs have created and sustained such forms. The research analyzed the qualitative data of 12 Christian social enterprises mainly from interviews with their entrepreneurs. Broadly speaking, the analysis revealed that the hybrid forms of the enterprises depended on the entrepreneurs’ agency, which was influenced by their biographies and contexts. Particularly, in addition to the entrepreneurs’ possession and enactment of multiple identities, boards of directors, as part of the context and their accountability pressures were crucial for Christian social enterprises to achieve the triple bottom line of business viability, social missions, and spiritual outcomes.

What was unique about many social entrepreneurial ventures was that they intentionally maintained a for-profit focus. For-profit focus distinguished them from government intervention or aid, which was often linked to diplomatic rationales of state actors. Fisher (2008) stated that research into the superiority of various aid efforts, found in favor of for-profit ventures, as the preferred solution to structural poverty and long-term economic vitality. The way to ensure that goals were being met was through carefully developed assessment and best practices.

**Multiple Intelligence Theory**

Intelligence assessment was not adequate to predict success in cross-cultural situations. The theory of multiple intelligences spearheaded by Gardner led to the formation and assessment of other types of intelligence. The theory of multiple intelligence was introduced in the book, *Frames of mind: The theory of multiple intelligences* by Howard Gardner (1983). He posited a variety of intelligences existed beyond the three areas suggested: logic, mathematics, and linguistics. These other intelligences included music, kinesthetic, spatial, interpersonal and naturalist, but advocates of multiple intelligence theory posited there could be more. Prior to this, Neisser (1979) had postulated that intelligence was a cultural construct. Added to this, intelligence testing, in and of itself, was not adequate to predict success in cross-cultural situations. The theory of multiple intelligence was also explored by others (Sternberg and Detterman, 1986; Carroll, 1993; Perkins, 1995), who laid out a multidimensional perspective of intelligence. Intelligence, as one of many evolutionary advantages, was seen as broader than a general assessment of intellect in terms of memory and analytic abilities. Instead, intelligence was seen as an assessment of an individual’s potential incorporating both their strengths and weaknesses, their adaptability to environment and decision-making regarding use of the whole range of their abilities (Sternberg, 2005). Thus, the intelligence quotient offered a limited view of human intellect that left an incomplete picture of an individual’s potential.

Measurements are constructed from careful research based upon clear definitions and hypotheses that allow for theory falsification when tested. This proved a problem for multiple intelligence theory. Indecision about the specific “intelligences” that were to be amended to the three used in general intelligence tests meant problems with hypotheses formation and nullification. In fact, Gardner’s own definition changed from the publication of *Frames of Mind* to his later published research (McGee & Hantla, 2012). The theory suffered from ambiguity about whether other “intelligences” were considered actual intelligence or skills. Also, the theory was unclear about whether what was measured was to be deemed either a trait or an ability (McGreal, 2013). These debates were not mere conflict over the definition of terms, but reflected larger questions as to what constituted evolutionary advantage and the teleology of evolutionary adaptation. Framed in these terms, certain advocates of multiple intelligence theory who held to a non-evolutionary worldview recognized their need to defend their definition of intelligence in another way (McGee & Hantla, 2012). There were also challenges about the incongruity and predictability of the measures used as well as the value of new tools over pre-existing ones (Conte, 2005). Another critique of the research was that its reporting was weak (McGreal, 2013). Reporting has been a common objection to social research, in that it often relies upon self-reporting. Researchers often supplement their findings through the use of outside observation and reporting by others, yet this is not always possible due to the type of data sought and the circumstances in which social researchers do their work. Finally, questions arose about the subjective nature of findings concerning the attitudes of people. Attitudes are by nature subjective, in contrast to objective facts, like mathematical truths, that are true no matter the feelings of people.

Further objections were raised that multiple intelligences was not a proven theory because those areas that shared cognitive abilities prove that there was in fact, general intelligence that applied over most of the so-called intelligences that Gardner had proposed and that talents or abilities were not to be equated with intelligence (McGreal, 2013, p. 3). Yet, as the research (Mayer & Salovey, 1997; Bar-On, 1997) was expanded to emotional intelligence, *i.e.*, the ability to perceive, interpret, manage and control one’s own emotions and the emotions of others, it was used to help screen candidates for leadership in organizations. The tools to test for emotional intelligence proliferated and were refined (Brackett, Salovey, 2006; Tapia & Marsh, 2006), but some doubts about their value remained. Emotional intelligence tests were challenged by critics for many of the same reasons as other multiple intelligence tools (Fernández-Berrocal & Extremera, 2006). It was said they lacked conceptual bases, they were ill defined, they were not predictive, they had reliability problems, or that they only described emotional states but did not assess actual intelligence (Conte, 2005). Cross-cultural work, however, was unique and required a unique set of personal attitudes, characteristics, and skills.

**Cultural Intelligence (CQ)**

There were various approaches to cross-cultural comparative studies and evaluation. The knowledge-based model was built around understanding the similarities and differences of one culture from another. These differences between cultures were referred to as psychic distance (Egwuonwu, Sarpong, & Mordi, 2020), that is to say “an agent’s perception of differences among the operating environment of a foreign…counterpart” (p. 618). Various cultures were compared and contrasted to each other on several central values or message systems (Jassawalla, Truglia & Garvey, 2004; Harrison & Shaffer, 2005). Hofstede’s cultural dimensions theory (2001) is one such framework for analyzing cross-cultural communication. The cultural dimensions theory proposes a way to compare countries on the basis of several measures: the power distance index (PDI); individualism versus collectivism (IDV); masculinity versus femininity (MAS); uncertainty avoidance index (UAI); long-term orientation versus short-term orientation (LTO); and indulgence versus restraint (IVR). Another example is Meyer’s (2014) typology that looked at countries in light of several different measures, such as communication, evaluation, persuasion, leadership, decision-making, trust, conflict, and time. These attempts are subject to refinement and modification in light of criticisms raised against them. For instance, even Hofstede noted that there are separate cultures within nations and businesses and organizations must be evaluated separately from nations. Evaluating individuals with respect to cultural engagement requires considering personal traits, dispositions and skills to adapt. Evaluation of cross-cultural knowledge is not the same as evaluating the personal disposition of a person towards cross-cultural engagement. Neither is cross-cultural knowledge, nor personal disposition towards cross-cultural engagement equivalent to a person’s actual ability to adapt (Lingenfelter & Mayers, 2003).

The cultural intelligence model was another approach to cross-cultural comparative studies and evaluation. Cultural intelligence (CQ) was defined by Earley and Ang in 2003. It is “the capability of an individual to function effectively in situations characterized by cultural diversity” (Ang & Van Dyne, 2008, p. 3). More specifically, it is a multi-dimensional construct consisting of: (1) metacognitive; (2) cognitive; (3) behavioral; and (4) motivational dimensions. Metacognitive CQ is described as “an individual’s level of conscious cultural awareness during cross-cultural interactions” (p. 5). It describes the individual ability to monitor and regulate thought processes to assist cultural learning during cultural interactions. Cognitive CQ “reflects knowledge of norms, practices, and conventions in different cultures that has been acquired from educational and personal experiences” (p. 5). Thus, it incorporates the knowledge-based approach to cross-cultural comparative studies. Motivational CQ is “the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences” (p. 6). Behavioral CQ is “the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from different cultures” (p. 6). Cultural intelligence incorporates knowledge about cultural similarities and differences as well as personal traits, dispositions and skills of the practitioner to provide a better assessment of an individual’s adaptability in a cross-cultural encounter.

Opinions on how to conceptualize the subscales of CQ varied. It was formulated an aggregate multidimensional construct, the four subscales treated as a single-factor. There was debate however, as to whether that formulation was appropriate. Some saw it having four correlated factors, still others use a combined/split factors model, finally some examined single CQ factors in isolation from each other (Rockstuhl & Van Dyne, 2018). This remodeling of the subscales of CQ was brought forward because further research of the differential validity of the four factors of CQ had not been replicated. Researchers asserted contending claims that pairs of subscales, like metacognitive behavioral, or cognitive and motivational were predictors of task performance. These contentions demonstrated that there was not a “shared understanding of the theoretical unity of the four CQ factors” (p. 124). Rockstahl and Van Dyne proposed a bi-factor model, it adds a fifth subscale, latent CQ, which accounts for shared variance between the four subscales and treats them all as an aggregate multidimensional construct. They performed meta-analysis on 199 samples (*N* = 44,155). The contributions of CQ seen as intercultural judgment, decision-making, adaptation, and task performance were taken into account in the meta-analysis structural modeling. Therefore, metacognitive CQ (*β* = 0.26, *p* < 0.01), cognitive CQ (*β* = 0.14, *p* < 0.01) contributed to judgment and decision-making beyond the effect of latent CQ (*β* = 0.20, *p* < 0.01). Motivational CQ (*β* = 0.33, p < 0.01) had significant effects upon sociocultural adjustment beyond the effects of latent CQ (*β* = 0.47, *p <* 0.01), whereas behavioral CQ (*β* = 0.01, *ns*) had no significant effect. This shows that the bi-factor model mediates the effects of CQ in that sociological adjustment mediates the effects of motivational CQ on intercultural task performance. Work adjustment mediates the effects of motivational CQ on expatriate job performance. It also explains how metacognitive CQ has a moderating effect on the relationships between the other three CQ factors and intercultural effectiveness. The authors suggest further research to clarify each subscale individually for outcomes. Even given these clarifications, the research concerning CQ led to a development of a scale that had a “strong conceptual foundation as well as strong psychometric measures” (Van Dyne, Ang, & Koh, 2008, pp. 17-18). The outcomes of higher cultural intelligence for individuals would be improved cultural judgment, decision-making, and cultural adaptation.

**Cultural Intelligence Scale (CQS)**

The cultural intelligence scale (CQS) was developed by Ang, Van Dyne, Koh, et al. (2007). It was a 20 item instrument that treated the four dimensions of CQ as subscales measured by a 7-point Lickert-scale (1=strongly disagree; 7=strongly agree). Four items for Metacognitive CQ, six items for Cognitive CQ, five items for Motivational CQ, and five items for Behavioral CQ (Van Dyne, Ang, & Koh, 2008).

Several efforts have been made to test the efficacy of CQS in various countries. Greischel, Zimmermann, Mazziotta, and Rohmann (2021) observed that intercultural competence played a crucial role in increasingly multicultural societies. The Cultural Intelligence Scale had proven to be a promising approach to measure intercultural competence in a variety of contexts. Despite its use as a reliable and valid instrument across the globe, however, the Scale had not been systematically validated for German-speaking countries. The research examined the psychometric properties, factor structure, and convergent, and discriminant validity of a German translation of the Cultural Intelligence Scale in two distinct samples (N = 392; N = 414). Across both studies a bi-factorial model with three speciﬁc factors, cognitive, behavioral, and motivational, and a general cultural intelligence factor best reﬂected the data. The findings demonstrated good psychometric properties and promising results regarding the convergent and discriminant validity of the general factor whereas the incremental validity of the speciﬁc factors required further consideration.

**Other Cultural Intelligence Scales**

Other efforts were made to create other cultural intelligence instruments. Earley and Mosakowski (2004) developed a multidimensional construct with three dimensions treated as subscales: cognitive CQ; physical CQ; and emotional/motivational CQ measured by a 5-point Lickert scale (1=strongly disagree; 5=strongly agree). This was accompanied by a taxonomy for interpreting scores of the manager-participants: provincial, analyst, natural, ambassador, mimic, and chameleon. The authors admitted that many managers are hybrids of two or more types (p. 142). They believed that cultural intelligence can be developed in people and is not understood to be an inherent trait. Thus, CQ assists by demonstrating strengths and weaknesses to be improved upon with time, effort, and maturity.

Thomas, Liao, Aycan, et. al. (2015), developed a short form measure for cultural intelligence (SFCQ) that was 10 items and used a 5-point Lickert scale (1=strongly disagree; 5=strongly disagree). The 3-fold conceptual foundation for this scale incorporated (1) knowledge, (2) skills, and (3) metacognitive CQ. Neto, Neto, and Neto (2021) defined cultural intelligence as a core social ability to interact successfully in cross-cultural environments. The short form measure of CQ had been validated in several countries, although not for Portuguese-speaking countries. This research described the ﬁndings of three studies conceived to validate the cultural intelligence scale in the Portuguese language. The ﬁrst study supported the scale as unidimensional with three intermediate facets and possessing adequate internal consistency in a sample of college students (N = 217). In construct validity, the instrument was weakly associated with but dissimilar to ethnocentrism and personality and was positively related to various markers of multicultural experience. Regarding criterion-validity, the Cultural Intelligence Scale was related to sociocultural adaptation and had a close relationship from another culture.

The second study supported the construct validity and the concurrent validity of the Portuguese Cultural Intelligence Scale using a diﬀerent sample of national college students (*N* = 195). The ﬁnal study (*N* = 181) supported the construct, the convergent, and the criterion-related validities of the Portuguese Cultural Intelligence scale in a sample of international students. In the three studies cultural intelligence emerged as a second-order single factor with three ﬁrst-order factors, in particular, cultural knowledge, cultural skills, and cultural metacognition. The findings substantiated the validity of the Portuguese Scale and demonstrated the Portuguese version as a tool with substantial evidence for easily assessing cultural intelligence.

Alon, Boulanger, Meyers, and Taras (2016) developed the Business Cultural Intelligence Quotient (BCIQ) that sought to refit CQ research specifically to global business environments. Its purpose was to be a diagnostic tool to “identify potential high-CQ employees to improve their intercultural skills” (Alon, Boulanger, Elston, et. al., 2016, p. 8). The authors assert that BCIQ differs from CQS because it “offers (1) a refined factor structure; (2) the use of objective cultural knowledge measures; (3) applicability in the business and workplace context…, and (4) improved reliability and validity compared to other CQ measures” (p. 4). The instrument has 40 questions that incorporate true/false questions on global knowledge, demographics, and business experience questions. The self-report section uses a 5-point Lickert scale. The 4 subscales of the BCIQ are: motivation; listening and communication adaptation; cognitive preparation and learning; and global knowledge.

These efforts to create instruments that are better suited or more refined to business and promote their use have limitations. CQS was one of the first such instruments testing cultural intelligence. The permission to use it for academic research by its authors helped to further promote its use leading to greater understanding of its strengths and weaknesses as a tool of assessment. Morin & Talbot’s review (2021) of cultural intelligence research shows that 70% of studies use CQS (p. 421). Newer instruments may be more focused or superior in conceptualization, but are not as well-known, or are proprietary, or are still attempting to achieve testing across populations, cultures, and languages (Alon, Boulanger, Meyers and Taras, 2016). Many studies done to establish reliability, validity, and other hypotheses related to CQ have relied heavily upon university students and not actual practitioners (Charoensukmongkol, 2020).

**Cultural Intelligence and Management**

Nosratabadil, Bahrami, Palouzian, and Mosavi (2020) suggested that the challenge for international companies was to manage multicultural environments effectively. Cultural intelligence was a soft skill required of the leaders of organizations working in cross-cultural contexts to be able to communicate effectively in such environments. On the other hand, organizational structure played an active role in developing and promoting such organizational skills. The research aimed to investigate the effect of leader cultural intelligence on organizational performance mediated by organizational structure. A quantitative empirical research design using a questionnaire for data collection, and structural equation modeling for data analysis, was employed among executives of knowledge-based companies in the Science and Technology Park in Bushehr, Iran. The findings disclosed that leader cultural intelligence directly and indirectly had a positive and significant effect on organizational performance. In organizations that operated in a multicultural environment, the higher the level of leader cultural intelligence, the higher the performance of that organization. Accordingly, such companies were encouraged to invest in improving the cultural intelligence of their leaders to improve their performance in cross-cultural environments, and to design appropriate organizational structures for the development of intellectual capital.

In a similar manner, Egwuonwu, Sarpong, and Mordi (2020), investigated how managerial cultural intelligence affected relational performance. The cultural intelligence of the manager helps to lessen the psychic distance (*i.e.*, perceived distance between cultural environments of the countries or parties involved) which leads to improved relations and better performance. Their study only tested Metacognitive CQ and Motivational CQ with regards to psychic distance and relational performance. Data was collected from 228 importers from Nigeria. The hypothesis that Metacognitive CQ of an import manager was negatively related to psychic distance was supported (*β* = -0.21, *t* = -3.10, p = 0.002). However, the hypothesis regarding Motivational CQ being negatively related to psychic distance was not supported (*β* = -0.46, *t* = 0.46, p = 0.508). It was also found that psychic distance was negatively associated with relational performance (*β* = -0.26, *t* = -0.39, p = 0.000). Their findings suggested that the metacognitive CQ of import managers should be strengthened and higher CQ scores should be taken into account when hiring managers.

Another study (Berraies, 2019) regarding the effect of the cultural intelligence of middle managers on the innovation performance of companies points out that mere acquisition of knowledge of other cultures is not enough. The study investigated whether or not the cultural intelligence of middle managers had a positive effect upon innovation performance and whether knowledge sharing had a mediating effect upon that relationship. Only metacognitive CQ was found to have a positive effect upon innovation performance (*β* = 0.208, *p* < 0.01). Cognitive CQ, motivational CQ, and behavioral CQ had were not significant (*p* > 0.05). Again, when testing the mediating effect of knowledge sharing on the relationship between cultural intelligence and innovation performance, only metacognitive CQ was found to have significance (*β* = 0.734 , *p* < 0.001). The hypothesis that knowledge sharing has a positive effect on a firm’s innovation was found to be significant (*β* = 0.569, *p* < 0.001). The results demonstrated “that other factors intervene to mediate or reinforce the effect of motivational and behavioral CQ on KS and innovative performance” thus “different aspects of the work and social context can affect the innovative behavior of employees” (p. 1031).

The perception of organizational support can play a role in expatriate adjustment, assignment completion and job satisfaction according to Sokro, Pillay and Bednall (2021). The research was conducted in four cities in Ghana and included 229 expatriate working in different sectors of the economy (*i.e.*, mining, construction, energy, oil, gas and telecommunications). The first set of hypotheses looked at how expatriates’ perception of organizational support (POS) related to adjustment, assignment completion, and job satisfaction. The second set of hypotheses focused upon how expatriate adjustment mediated the relationship between POS and either assignment completion or job satisfaction. The final hypothesis examined how assignment completion mediated the relationship between POS and job satisfaction. It was found that expatriate’s POS related positively to adjustment (0.361, *t* = 5.576, *p* < 0.01), assignment completion (0.234, *t* = 3.494, *p* < 0.01) and job satisfaction (0.322, *t* = 5.916, *p* < 0.01). Expatriate adjustment was mediated through the relationship between POS and assignment completion (0.512, *t* = 3.940, *p* < 0.01) and between POS and job satisfaction (0.175, *t* = 2.230, *p* < 0.01). Assignment completion mediated the relationship between POS and job satisfaction (0.263, *t* = 2.446, *p* < 0.01). The implications for management is to provide signs of support to expatriate employees with reward and compensation systems that entice and motivate employees to accept relocations and provide assistance to employees to help them adjust and integrate into a new culture.

**Cultural Intelligence and Employees**

A study by Paparpoidamis, Tran, and Leonidou (2019) examined how frontline employees’ cultural intelligence influenced customer service quality perceptions. The research suggested that the three components of cultural intelligence: cognitive, emotional/motivational, and physical have differential moderating effects on perceived service quality that varied across two national markets. Data collected with a multi-respondent cross-cultural research design indicated that cognitive cultural intelligence negatively mitigated the impact of perceived customer service quality in an emerging-market context, while emotional/motivational cultural intelligence had a positive moderating effect in a mature-market setting. When service employees had high physical cultural intelligence, the positive role of perceived customer service in creating and maintaining customer loyalty was strengthened.

Fan, Song, Nepal, and Lee (2020) studied the cultural intelligence and its relationship to innovation performance of Chinese migrant workers in South Korea. There were 386 employee-supervisor dyads responses that examined the relationship between cultural intelligence, innovative behavior, and a climate of inclusion. It was found that cultural intelligence was positively related to employees’ innovative behavior (*β* = 0.34, *p* < 0.001). Knowledge sharing as mediator of the relationship of cultural intelligence and employees’ innovative behavior showed a weakening effect on that relationship (*β* = 0.23, p < 0.001). Yet, knowledge sharing was positively related to innovative behavior (*β* = 0.40, p < 0.001). It also found that a climate of inclusion moderated the relationship between cultural intelligence and knowledge sharing (*β* = 0.17, p < 0.01). This study suggested that employees with high cultural intelligence in a climate of inclusion can help foster innovative behavior.

Min, Kim, and Agrusa (2021) examined the impact of cultural intelligence on three key work-related attitudinal outcomes including burnout, engagement, and job satisfaction in a structural equation model. Data were collected from 288 restaurant employees in Hawaii, a tourist destination, where employees had a great degree of face-to-face interaction with culturally diverse restaurant patrons. Among the four dimensions of cultural intelligence—metacognitive, cognitive, motivational, and behavioral—cognitive and motivational cultural intelligence played a primary role in the proposed model. Motivational cultural intelligence predicted employee burnout (*r* = -0.36, *p* < 0.01), engagement (*r* = 0.47, *p* < 0.01), and job satisfaction (*r* = 0.44, *p* < 0.01); Cognitive cultural intelligence predicted job satisfaction via engagement. Both Motivational and Cognitive cultural intelligence had an indirect influence on job satisfaction through engagement (COG - *ꞵ* = 0.23, *p* < 0.05; MOT - *ꞵ* = 0.17, *p* < 0.05) or burnout (MOT - *ꞵ* = 0.14, *p* < 0.05). Unlike previous research of people who were studying or working abroad, this research indicated that cultural intelligence can be a salient personal resource for hospitality employees in their home countries, when they have diverse customers.

Another study concerned with enhancing expatriate success by Setti, Sommovigo and Argentero (2020) investigated cultural intelligence, cross-cultural adaptation and performance. There were 151 viable responses from Latin American expatriates working in the Middle East. The authors used a six factor model where each of the dimensions of CQ were treated separately alongside with work cross-cultural adaptation and assignment-specific performance. Work cross-cultural adaptation is “the extent to which expatriates become psychologically comfortable handling assignment duties and meeting performance expectations” (p. 4292). The first set of hypotheses examined how the four dimensions of CQ related to assignment performance. It was found that metacognitive CQ (*ꞵ* = 0.10, *t* = 4.13, *p* < 0.001), cognitive CQ (*ꞵ* = 0.12, *t* = 3.58, *p* < 0.001), motivational CQ (*ꞵ* = 0.15, *t* = 4.12, *p* < 0.001) and behavioral CQ (*ꞵ* = 0.12, *t* = 3.68, *p* < 0.001) positively related to assignment-specific performance. The second set of hypotheses held that the four dimensions of CQ positively related to work cross-cultural adaptation. Metacognitive CQ (*ꞵ* = 0.11, *t* = 3.39, *p* < 0.001), cognitive CQ (*ꞵ* = 0.13, *t* = 4.79, *p* < 0.001), motivational CQ (*ꞵ* = 0.17, *t* = 4.30, *p* < 0.001) and behavioral CQ (*ꞵ* = 0.13, *t* = 4.18, *p* < 0.001) positively related to work cross-cultural adaptation. The third hypothesis was statistically significant showing work cross-cultural adaptation was positively related to assignment-specific performance (*ꞵ* = 0.19, *t* = 1.96, *p* < 0.05). The fourth set of hypothesis examined how work cross-cultural adaptation partially mediated the associations between metacognitive CQ (*ꞵ* = 0.02, *t* = 1.65, *p* < 0.05), cognitive CQ (*ꞵ* = 0.03, *t* = 1.83, *p* < 0.05), motivational CQ (*ꞵ* = 0.03, *t* = 1.84, *p* < 0.05) and behavioral CQ (*ꞵ* = 0.02, *t* = 1.85, *p* < 0.05) and assignment-specific performance in a statistically significant way. These findings suggest that hiring employees for cross-cultural work should test for cultural intelligence, companies should provide CQ training before they departed for another country and provide intervention focused upon deficiencies to insure successful expatriate employees.

The research by Lorenz, Ramsey, Andzullis, and Franke (2020) explored the dark side of CQ and how it impacted employees with regards to opportunism, ethical relativism and customer relationship performance. The authors conducted four separate tests of which only the first will be examined here. The first test was done with a sample was 230 expatriates from 62 countries working in the United States whose assignments ranged from three months up to 5 years. Opportunism was defined as self-interest tainted by dishonest or unethical behavior evidenced by incomplete or misleading information, concealing or disguising truth to defraud or confuse (p. 557). Ethical relativism is the belief that morality depends on the situation and is subjective. Customer relationship performance was defined as actions that resulted in increased market penetration, revenue, and other metrics that build relationships with local customers by meeting expectations and servicing needs. These become relevant when considering the agency, principal, and confluence of an expatriate with respect to the company who employs them. Often expatriates have a high degree of autonomy, there is information asymmetry between them and their employer, and difficulty monitoring them due to distance. The expatriate is there to develop relationships, cultivate local networks and to increase marketability and bargaining power (p. 559). This means the employer is placing a large degree of trust in the expatriate with little ability to know, understand or monitor the activities of their employee. The employer is then concerned with control mechanisms over the expatriate before, during and after assignments.

The authors of the study tested the relationship of two dimensions of CQ, metacognitive CQ and cognitive CQ, with opportunism and ethical relativism. The first set of hypotheses proposed that metacognitive CQ and cognitive CQ had positive relationships with opportunism. Only cognitive CQ was statistically significant (*b* = 0.15, *p* < 0.05). Similarly, the second set of hypotheses proposed that metacognitive CQ and cognitive CQ had positive relationships with customer relationship performance. In this case both the metacognitive CQ (*b* = 0.39, *p* < 0.001) and cognitive CQ (*b* = 0.25, *p* < 0.01) were statistically significant, thus these hypotheses were supported. The third set of hypotheses proposed the moderating effect of ethical relativism on both metacognitive CQ and cognitive CQ with regards to both opportunism and customer relationship performance. Ethical relativism significantly strengthened the relationship between cognitive CQ and opportunism (*b* = 0.14, *p* < 0.01), but not metacognitive CQ (*b* = 0.06, *p* > 0.05). Ethical relativism weakened the relationship between both metacognitive CQ (*b* = -0.12, *p* < 0.05) and cognitive CQ (*b* = -0.10, *p* < 0.05) and customer relationship performance. When the level of CQ was adjusted: low, medium, or high, it affected these relationships.

**Cultural Intelligence and Teams**

Iskhakova and Otto (2020) investigated how working in culturally diverse teams influences team-level cultural intelligence development and how team-level cultural intelligence influenced performance. The use of culturally diverse work teams within organizations increased, their relationships with team-level cultural intelligence was not well understood. At the individual-level, cultural intelligence had been demonstrated to positively impact multicultural teams, but team-level cultural intelligence had rarely been examined to understand how it was developed and whether it impacted team performance. The research used a quantitative methodology and a longitudinal research design to test two sets of hypotheses. The first set of hypotheses tested the development of team-level cultural intelligence after working in culturally diverse teams, and the second set of hypotheses tested the influence of team-level cultural intelligence on team performance.

Data from 23 teams (86 individual student participants) supported the hypothesis that working in culturally diverse teams developed team-level cultural intelligence, where overall CQ (*t* = 4.90), and every subscale showed improvement, however, cognitive (*t* = 4.03) and behavioral (*t* = 4.90) showed the greatest increases. The second hypothesis did not show statistically significant changes in academic team performance overall, but motivational (*t* = 1.98) and behavioral (*t* = -2.10) were statistically significant. The research contributed to the cultural intelligence literature by lifting the level of analysis from the individual to a team-level to consider team-level effects. Iskhakova and Otto concluded that working in culturally diverse teams developed team-level cultural intelligence overtime. Once team-level cultural intelligence had been developed, the research demonstrated a positive relationship between the motivational facet and team academic performance. When considering the influence of team-level cultural intelligence on performance, it was important to consider the relationship with each of the cultural intelligence facets.

The research finding had important practical implications with respect to the development of team-level cultural intelligence. The research supported the use of highly culturally diverse teams in business schools for the development of skills because they provide the opportunity for team members to learn from each other. As an important practical social implication, an opportunity to work in cross-cultural teams during international business studies could be considered as an equalizer for students who cannot afford to study abroad given the time consuming and costs aspects. Additionally, cross-cultural teamwork exposed students to intense interactions with different races and cultures during their study period and made graduates significantly more work-ready.

Price (2021) in his dissertation stated that many domestic and international companies employed multicultural teams, which required a commitment to integrate new employees regardless of culture or country of origin. Challenges existed, when companies employed multicultural teams to meet objectives. In the global business environment, the multicultural team was an essential part of an organization. The global business environment not only created opportunities for increased profitability but has generated questions regarding the effectiveness of multicultural working teams. The research analyzed four factors to determine the complex relationships between variables, their interrelationships, and how they influence team effectiveness. A model-based approach was employed to examine the variables influence on team effectiveness. The examination focus consisted of investigative efforts to determine how cultural intelligence mitigated the challenges of cultural diversity on team activities and outcomes thereby highlighting the significance of cultural intelligence for multicultural teams. The research included 292 adult volunteer participants who has participated in a multicultural group in the last year. The findings indicated strong relationships between motivational CQ and team effectiveness (*F*(1,171,99.9) = 22.640, *p* < 0.01) and metacognitive CQ and team effectiveness (*F*(1,171,99.9) = 15.820, *p* < 0.001), whereas cognitive CQ and behavioral CQ were not statistically significant (*p* > 0.05). This research contributed to existing literature in relation to team-based outcomes by highlighting the focus of multicultural team member perspectives, interactions, and assessments, when engaged in team-level activities, as opposed to using team-level outcomes as the basis for determining what makes a multicultural team effective.

Alexandra, Ehrhart, and Randel (2021) stated that the positive effects of cultural intelligence and perceived inclusion in culturally diverse contexts were well-documented, but the relationship between the constructs had not been explored, despite them sharing common themes. The research examined the relationships between individual-level cultural intelligence, perceived inclusion, and perceived cultural diversity in a sample of 925 individual students working in culturally diverse groups completing online surveys at two distinct times during a semester of class. Results showed that individuals' cultural intelligence predicted their perceived inclusion in workgroups (direct effect = 0.40, *p* < 0.001). Individuals' perceived inclusion in workgroups was positively related to further cultural intelligence development in the individuals (direct effect = 0.26, *p* < 0.001). The respondents were split into three levels and the results of path analysis and multi-group SEM led to the rejection of the hypothesis that the relationship between an individual’s CQ and perceived inclusion was stronger when individuals perceived greater cultural diversity in their workgroups (direct effect = 0.39, *p* < 0.0001). Yet, the corresponding hypothesis that the relationship between an individual’s perceived inclusion and CQ development was stronger for individuals who perceived higher levels of cultural diversity in their workgroup was shown to be statistically significant at all three levels. It was significantly stronger at the high level of perceived cultural diversity (direct effect = 0.45, *p* < 0.0001) compared with low and moderate levels (direct effect = 0.21, *p* < 0.0001). The findings extend research on factors contributing to individual differences in cultural intelligence and perceived inclusion in workgroups demonstrating that CQ growth can happen within culturally diverse circumstances even if in one’s own country.

Fitzsimmons, Liao, and Thomas (2017) provided insight into how employee cultural identity affects their ability to deal with multicultural encounters. The measures were identified as: identity plurality; identity integration; identity uncertainty; feelings of being overwhelmed by cultural translation; cultural metacognition; adaptability; and language interpretation. Three studies were taken: (1) employed multicultural students; (2) hotel employees; and (3) health care workers. For brevity’s sake, only the findings about hotel employees and health care workers will be summarized here. The study of 77 hotel workers in a hotel chain in western Canada from five hotels showed no significant correlation between identity integration and identity plurality (*r* = 0.16, *p* = *ns*; multicultural participants only). Identity plurality was significantly and positively related to in-group cultural composition (*r* = 0.43, *p <* 0.01) and cultural metacognition (*r* = 0.25, *p < 0.05*). Post-hoc Scheffé comparisons showed groups (mono-cultural, bi-cultural and multicultural) had significantly different levels of identity plurality (*F* (2, 77) = 90.23, *p* < 0.01), thus, the following differences, mono-cultural (*M* = 2.91, SD = 1.08), bi-cultural (*M* = 5.46, SD = 1.20), and multicultural (*M* = 7.47, SD = 1.52). Multicultural employees scored higher on job performance (*t* (29) = 2.30, *p* < 0.05) and on felling overburdened with cultural translation (*t* (76) = 2.09, *p* < 0.05) than mono-cultural employees. When controlling for English language fluency and hotel location, identity plurality was significantly related to in-group cultural composition (*β* = 0.42, *p* < 0.05) and cultural metacognition (*β* = 0.28, *p* < 0.05). However, there was no correlation between feeling overburdened and cultural translation (*β* = 0.15, *p* = *ns*). There was also a significant variance with respect to feeling overburdened with cultural translation work (*β* = -0.45, *p* < 0.01). Also, it was found that identity integration was significantly related to job performance (*β* = 0.63, *p* < 0.05), however it was not significantly related to cultural metacognition (*β* = 0.02, *p* = *ns*).

The study of health care employees used the same measures to test a large sample of 819 employees. Identity integration and identity plurality were significantly correlated with a small effect size (*r* = 0.27, *p* < 0.01). Post-hoc Scheffé comparisons revealed significant differences between mono-culturals (*M* = 3.11, SD = 0.88), bi-culturals (*M* = 5.72, SD = 1.43), and multiculturals (*M3cultures* = 7.73, SD = 1.92; *M4cultures* = 9.92, SD = 2.42). Multiculturals spoke more languages (*t* (817) = -5.96, *p* < 0.01), interpreted more frequently (*t* (760) = -5.53, *p* < 0.01), were more adaptable (*t* (772) = -3.76, *p* < 0.01), and had a higher cultural metacognition (*t* (772) = -5.17, *p* < 0.01). Multiculturals also reported feeling significantly more burdened with cultural translation work (*t* (772) = - 5.09, *p* < 0.01). Those who internalized more cultural identities felt more overburdened with cultural translation work (*β* = 0.16, *p* < 0.01), spoke more languages (*β* = 0.19, *p* < 0.01), were asked more often to interpret (*β* = 0.16, *p* < 0.01), had higher levels of cultural metacognition (*β* = 0.24, *p* < 0.01), and higher adaptability (*β* = 0.13, *p* < 0.01).

These studies shows that cultural identity patterns correlate to “the potential of individuals to contribute to their organizations” (p. 83). The relationship between the measures tested in these studies are complex and require further explanation. Identity plurality is useful for predictive outcomes for mono-cultural and multicultural employees. Yet, the researches assert that other internal motivations must be looked for to determine employee personal task and outcomes. In an increasing globalized workforce, multicultural employees may informally help other mono-cultural employees navigate difficulties between each other, however they must do so with caution, lest they lose track of their own responsibilities and fall behind (p. 85).

**Cultural Intelligence and Entrepreneurship**

Entrepreneurship plays an important role in new ventures and revitalizing established businesses. Kromidha, Altinay, Madanoglu, Nurmagambetova and Madanoglu (2022) investigated how cultural intelligence and entrepreneurial intentions were affected by institutional environments. Institutional environment included regulatory, cognitive, and normative forces (p. 1582) which influence potential business owners. The authors tested 224 young potential entrepreneurs in Kazakhstan in various stages of business development from ideation stage to resource and funding stage. They found that cultural intelligence was positively related to entrepreneurial intentions (0.048, *p* < 0.001). The second hypothesis was also supported in that favorable perceptions of the institutional environment led to a higher probability of starting a business (0.046, *p* < 0.01). They also found that institutional environment positively moderated the relationship between CQ and entrepreneurial intentions (0.042, *p* < 0.01). Internal and external factors determine entrepreneurial intent. Thus, business start-ups are affected by the perceptions of the institutional environment.

Another study by Şahin and Gürbüz (2020) investigated how entrepreneurial orientation and international performance were moderated by cultural intelligence. They used a six factor model treating each of the four dimensions of CQ as separate moderating factors along with entrepreneurial orientation and international performance. The research included 206 completed surveys from top managers of small and medium-sized enterprises in Turkey. These were companies with up to 250 employees engaged in international business activities. The CQ of the manager was considered an internal factor moderating the effects of entrepreneurial orientation which may facilitate or impede international performance. In other words, company leadership themselves must possess high levels of cultural intelligence to facilitate a spirit of entrepreneurship leading to better international performance. Strong support was found for the relationship between entrepreneurial orientation and international performance moderated by metacognitive CQ, cognitive CQ, and motivational CQ, but not for motivational CQ (Model 6: b = 0.04, SEb = 0.05, *β* = 0.04, *t* (196) = 0.862, *p* = 0.410). The addition of entrepreneurial orientation to the ‘ideal’ configuration of CQ of top managers, *e.g.*, a high level of all four dimensions of CQ, to moderate the positive relationship between entrepreneurial orientation and international performance was positive and significant. When similarity to the ideal configuration was high, the relationship between entrepreneurial orientation and international performance was positive, but when the similarity was low, it was not statistically significant (sb = 0.08, SEb = 0.08, *β* = 0.07, *t* = 1.045, *p* = .297). The effect of entrepreneurial orientation on international performance greatly depends upon the top manager’s CQ and that coupled with an ideal configuration of CQ moderates the relationship between entrepreneurial orientation and international performance of the company. All dimensions of CQ strengthen the relationship between entrepreneurial orientation and international performance except behavioral CQ.

**Cultural Intelligence and Missions**

Vaughan (2022) examined the perspective of Costa Rican pastors and church leaders who regularly serve with American missionaries on their opinions of American missionaries through multiple semi-structured interviews. This qualitative phenomenological study found that the American missionaries were viewed as lacking in understanding of culture, attitudes, and even language. Attitude was the primary issue that Costa Rican Christians found puzzling about American missionaries. The missionaries were perceived as lacking humility, exhibiting a superiority complex, unwilling to listen, and inflexible. They lacked proper communication with local believers about planning and organization of events and projects. Many of the missionaries failed to understand how the Costa Rican people understand time, appropriate attire, physical touch, food, the handling of conflict, and the importance of developing relationships with local church leadership. This lack of cultural awareness about Costa Ricans and the lack of sensitivity and observation about differences led the research to conclude that many if not most of the missionaries needed training in cultural intelligence and cross-cultural dynamics. Yet, the study found that a good attitude was the most important issue for missionaries to exhibit.

CHAPTER 3: RESEARCH DESIGN

The following chapter entails research on the social impact of cross-cultural business practitioners, who were engaged in Business on Mission in developing countries. The Business for Transformation network (B4T) included practitioners engaged in both for-profit and non-profit business activities. B4T practitioners worked alone or in teams in developing countries in the geographic region known as the 10/40 window. The Cultural Intelligence Scale (CQS) developed by Ang, Van Dyne, Koh, et al. (2007) was applied to assess the cultural intelligence (CQ) of practitioners (see Appendix D) in conjunction with the Social Impact Self-Report (SISR) instrument (see Appendix D) to determine how cultural intelligence affected the social impact of practitioners’ relationships and business exchange with employees, customers, and suppliers.

Problem Statement

It was unknown how an individual BAM or B4T practitioner’s cultural intelligence affected social impact, as defined by conflict level, building relationships, and effective business exchange with employees, customers, and suppliers.

Thesis Statement

This study was designed to investigate how an individual BAM practitioner’s cultural intelligence affects social impact defined as conflict management, building relationships, and effective business exchange with employees, customers and suppliers.

Null Hypotheses

**Hypothesis 1**

H01: There was no statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollaries.

Corollary A (Co1a): There was no statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co1b): There was no statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary C (Co1c): There was no statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co1d): There was no statistically significant difference in Cultural Intelligence Cognitive values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary E (Co1e): There was no statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co1f): There was no statistically significant difference in Cultural Intelligence Motivational subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

Corollary G (Co1g): There was no statistically significant difference in Social Impact Conflict Management subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co1h): There was no statistically significant difference in Cultural Intelligence Behavioral subscale values between respondents with high values and respondents with low values on the Social Impact Conflict Management subscale.

**Hypothesis 2**

H02: There was no statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollaries.

Corollary A (Co2a): There was no statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co2b): There was no statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary C (Co2c): There was no statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co2d): There was no statistically significant difference in Cultural Intelligence Cognitive subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary E (Co2e): There was no statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co2f): There was no statistically significant difference in Cultural Intelligence Motivational subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

Corollary G (Co2g): There was no statistically significant difference in Social Impact Relationship Building subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co2h): There was no statistically significant difference in Cultural Intelligence Behavioral subscale values between respondents with high values and respondents with low values on the Social Impact Relationship Building subscale.

**Hypothesis 3**

H03: There was no statistically significant difference in Cultural Intelligence values between respondents with high values and respondents with low values on the on Effective Business Exchange subscale.

Corollaries.

Corollary A (Co3a): There was no statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Metacognitive subscale.

Corollary B (Co3b): There was no statistically significant difference in Cultural Intelligence Metacognitive subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary C (Co3c): There was no statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Cognitive subscale.

Corollary D (Co3d): There was no statistically significant difference in Cultural Intelligence Cognitive subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary E (Co3e): There was no statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Motivational subscale.

Corollary F (Co3f): There was no statistically significant difference in Cultural Intelligence Motivational CQ subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange subscale.

Corollary G (Co3g): There was no statistically significant difference in Social Impact Effective Business Exchange subscale values between respondents with high values and respondents with low values on the Cultural Intelligence Behavioral subscale.

Corollary H (Co3h): There was no statistically significant difference in Cultural Intelligence Behavioral CQ subscale values between respondents with high values and respondents with low values on the Social Impact Effective Business Exchange.

Operational Definitions

Cultural Intelligence Behavioral subscale. Subscale of the Cultural Intelligence Scale that included Items 42, 43, 44, 45, and 45 administered to practitioners engaged in Business as Mission through the Business for Transformation Network in developing countries in the 10/40 window.

Cultural Intelligence Behavioral subscale values. Values were the sum of respondent ratings of one to seven (strongly disagree to strongly agree) of items 27, 28, 29, and 30 of the Cultural Intelligence Scale.

Cultural Intelligence Cognitive subscale. Subscale of the Cultural Intelligence Scale that include 31, 32, 33, 34, 35, and 36.

Cultural Intelligence Cognitive subscale values. Values were the sum of respondent ratings of items 31, 32, 33, 34, 35, and 36 of the Cultural Intelligence Scale.

Cultural Intelligence Metacognitive subscale. Subscale of the Cultural Intelligence Scale that included items 27, 28, 29, and 30.

Cultural Intelligence Metacognitive subscale values. Values were the sum of respondent ratings of items 27, 28, 29, and 30 of the Cultural Intelligence Scale.

Cultural Intelligence Motivational subscale. Subscale of the Cultural Intelligence Scale that included items 37, 38, 39, 40, and 41.

Cultural Intelligence Motivational subscale values. Values were the sum of respondent ratings of items 37, 38, 39, 40, and 41 of the Cultural Intelligence Scale.

Cultural Intelligence values. Values generated by respondent ratings of items in the Cultural Intelligence Scale.

Respondents with high values. The sum of item ratings from the Cultural Intelligence subscales and the Social Impact subscales were averaged; all values greater than the mean were high values.

Respondents with low values. The sum of item ratings from the Cultural Intelligence subscales and the Social Impact subscales were averaged; all values less than the mean were low values.

Social Impact Conflict Management subscale. Subscale of the Social Impact Self-Report that included items 49, 54, 57, 59, 62, 65, 66, and 68.

Social Impact Conflict Management subscale values. Values were the sum of respondent ratings of items 49, 54, 57, 59, 62, 65, 66, and 68 of the Social Impact Self-Report.

Social Impact Effective Business Exchange subscale. Subscale of the Social Impact Self-Report that included items 51, 52, 53, 55, 58, and 60.

Social Impact Effective Business Exchange subscale values. Values were the sum of respondent ratings of items 51, 52, 53, 55, 58, and 60 of the Social Impact Self-Report.

Social Impact Relationship Building subscale. Subscale of the Social Impact Self-Report that included items 48, 50, 56, 61, 63, 64, 67, 69.

Social Impact Relationship Building subscale values. Values were the sum of respondent ratings of items 48, 50, 56, 61, 63, 64, 67, 69 of the Social Impact Self-Report.

Methodology Assumptions

There were assumptions about methodology that affected this research, including the following:

1. The Cultural Intelligence Scale assumed there were multiple types of intelligence.
2. Cultural intelligence was the capability to operate effectively in varied cultural settings.
3. Respondent responses were assumed to be honest.
4. Respondents were assumed to be proficient in the English language.
5. The Metacognitive, Cognitive, Motivational, and Behavior subscales effectively assessed cultural intelligence.
6. The Conflict Management, Relationship Building, and Effective Business Exchange subscales effectively assessed practitioner Social Impact.

Research Limitations

Research limitations included the following:

1. The instruments applied in this research were self-reported and were not confirmed by observer reports.
2. Several items in the Demographic Survey called for response to a range of values rather than a single value, which caused the data to be Nominal. Had the survey asked for a single number the data would have been at least Interval.
3. The Cultural Intelligence Scale was potentially affected by context.
4. Due to the legal status of practitioners in closed access countries, it was unadvisable and often not possible to gain feedback from observers.
5. Only Cultural Intelligence Metacognitive and Behavioral subscales were found to predict task performance.
6. Responses taken from the Business for Transformation network, whose critical goals were evangelism, discipleship, and church planting, did not always comport with Business as Mission’s four-fold bottom-line—they did not always represent fully committed practitioners to the Business as Mission paradigm.
7. The Business for Transformation practitioners were from developed Western countries and did not represent a broader cross-section from both developed and developing countries in Asia, South America, or Africa.
8. This research did not directly address language skills or learning--cultural intelligence assumed but did not directly include linguistic aptitude. Cultural intelligence focused on the motivations, aptitude, behaviors, and intelligence of the practitioner to adapt to different cultures.

Ethical Compliance

This research conformed to the NIH Code of Ethics which hold to stringent ethical standards for social research (http://www.apa.org/ethics/code/index.aspx?item-+11#). The researcher was certified in both NIH and HIPAA practices. Permission was granted by the leader of the Business for Transformation network of cross-cultural missionary and business practitioners to gain access to the network (see Appendix A). Instruments included a disclosure whereby participants by completing the instruments granted permission for the use of the information they gave for research and reporting purposes (see Appendix D). Distribution and collection of the instrument was handled by b the leader of the network due to the sensitivity of the information revealed and the political settings in which the practitioners operated their businesses. It was important for some practitioners that their Christian identity be protected due to the governmental restrictions and regulations concerning foreign peoples residing and conducting business within their borders. The nature of their work, residency, and welfare would have been jeopardized if governmental agencies had known about their full purpose in being there. The network leader used proven secure confidential means of communicating and distributing surveys to respondents. Names and specific information about geographic locations of respondents was protected. Reminders about survey participation were sent to the network leader and relayed to respondents.

Research Strategy

**Population**

The population was (a) Business for Transformation network (OPEN/B4T) practitioners from Western developed countries, who used the Business as Mission model to open for-profit businesses, and (b) Business for Transformation network practitioners who ran non-profit organizations in developing countries in the 10/40 window.

**Sample**

The self-selected sample was from Business for Transformation practitioners in the Business for Transformation network (OPEN/B4T), who worked in developing countries in the 10/40 window.

**Instruments**

Three instruments were applied in the research, the 20-item Cultural Intelligence Scale, the 22-item Social Impact Self-Report, and the 26-item Demographic survey. The three instruments were combined into one instrument and made available to the OPEN/Business for Transformation participants, as a paper survey or an electronic gathering program.

**Cultural Intelligence Scale.**

The Cultural Intelligence Scale was developed by Ang, Van Dyne, Koh, Ng, Templer, Tay, and Chandrasekar (2007). The 20-item instrument was developed from Cultural Intelligence research (See Appendix D). The instrument included four subscales: Metacognitive, Cognitive, Motivational, and Behavioral. The Metacognitive subscale assessed individual cultural consciousness and awareness during interactions with those from different cultural backgrounds (Van Dyne, Ang & Koh, 2008). The Cognitive subscale measured individual cultural knowledge of norms, practices, and conventions in different cultural settings. The Motivational subscale assessed individual capability to direct attention and energy toward cultural differences. The Behavioral subscale evaluated individual capability to exhibit appropriate verbal and nonverbal actions, when interacting with people from different cultural backgrounds. The scale was tested cross-culturally multiple times with both self-report and observer-report during scale development for generalizability across samples, times, countries, and methods, and for discriminant, incremental, and predictive validity. Permission was granted to use the instrument and make it available in a paper and electronic form (see Appendix A).

**Social Impact Self-Report.**

The Social Impact Self-Report was developed to assess social impact that focused conflict management, relationship building, and effective business exchange among employees, customers, and suppliers of Business as Mission and Business for Transformation practitioners. A five-point Likert-type scale was developed (1-strongly agree to 5-strongly disagree) to rate social impact items in the Social Impact Self-Report. Lawshe’s Content Validity Ratio table (Ayre & Scally, 2014) was consulted to determine the number of experts needed to assess items of relevance in the survey. A five-step process was applied in the development of the Social Impact Self-Report.

First, from a literature search, items for three subscales were developed. For the assessment of Conflict Management 21-items were developed; for Relationship Building 25-items were developed; and for Effective Business Exchange 20-items were developed.

Second, the three sets of items were submitted to a panel of experts to be rated as essential or nonessential. The panel of experts included nineteen, mostly college professors; of the nineteen, nine responded by rating the three sets of items, as essential or non-essential. Non-essential was rated 0 and essential was rated 1. In the Conflict Management subscale there were seven 9s, three 8s, a mean of 6.9 and a standard deviation of .042 essential ratings; in the Relationship Building subscale there was one 9, ten 8s, a mean of 6.84, and a standard deviation of .043; and in the Effective Business Exchange subscale there was two 9s, four 8s, a mean rating of 6.64, and a standard deviation of .047.

Third, based upon the rating of the Expert Panel eight Conflict Management items were selected and randomized, eight Relationship Building items were selected and randomized; and six Effective Business Exchange items were selected and randomized.

Fourth, the 22 selected/randomized items were submitted to practitioners, who attended two Open/Business for Transformation Network Conferences, one during October 2018 in Kansas City, MO and one during March 2019 in Houston, TX. Twenty-two conference practitioner participants responded in the pilot study. The sum of the item variance was 13.22083, the average of the sums of the responses was 34.9375, and the Cronbach alpha was .651186. (Appendix)

Fifth, the instrument was evaluated for reliability by a split-half analysis. The odd items were compared to the even items in the Social Impact Self-Report. A Pearson Product Moment Correlation was applied to assess the reliability. A total of 16 cases were compared. The mean for the odd items was 17.0625; the mean for the even items was 17.8750. The Pearson’s Correlation Coefficient was .6467; the t-value was 3.171989 with 14 degrees of freedom; and the p-value was .007. A low p-value implied that the slope did not equal zero.

The assessment of essential and non-essential items by the expert panel established the validity of the Social Impact Self-Report. The pilot studies and the split-half analysis established the reliability of the instrument.

**Demographic Data.**

An instrument with 26-items was developed to gain a profile of the 46 respondents who completed either a paper survey or the electronic survey. The paper survey was made available to OPEN/Business for Transformation Network participants by an administrator of the network.

**Data Collection**

**Data Gathering**

There were two methods applied in disseminating and gathering research instruments, electronic and paper. Both methods were available to record the responses of Business for Transformation practitioners, depending on convenience and the need for discretion. The electronic version was administered by Survio (www.survio.com), an online service accessed by respondents through the Internet. Information about access was provided through an email link or through directions by a network leader. Survio recorded and compiled response data and forwarded it to the researcher for analysis.

Respondents, whose well-being was not at risk, were directed by the Business for Transformation network leaders through electronic communications to access the website and complete the survey. For practitioners, whose residency circumstances were at risk, the communication, distribution, notifications, and collection of data were left to the discretion of the Business for Transformation network leader. The completed paper surveys, distributed by the Business for Transformation network leader, were compiled on an Excel spreadsheet, along with the electronically collected responses.

**Data Organization**

Six spreadsheets were prepared to receive the data gathered in the development of the Social Impact Self-Report and the data generated by the unified three-part paper survey and/or the electronic gathering device, including:

* Expert Opinion Data
* Pilot Study Data
* Split Half Analysis Data
* Demographic Data
* Cultural Intelligence Data
* Social Impact Self-Report Data

**Data Analysis**

Four procedures were applied in the data analysis, including: Frequencies Analysis, Mann-Whitney Two-Sample Test, Cronbach’s alpha, and a Correlation Analysis. The descriptive data was organized and analyzed with the aid of the Frequencies Analysis procedure. The hypotheses were analyzed through the application of the Mann-Whitney Two-Sample Test. A Correlation Analysis was applied to analyze or establish the reliability of the Split Half Data. The Cronbach alpha was applied to establish reliability of the Social Impact Self-Test in the Pilot Study.

The Frequencies Analysis counted the occurrence of data values for a variable and displays that data in a table. Things were counted and data consisted of totals or frequencies for a category, which was sometimes referenced as categorical data.

The Mann-Whitney Two-Sample Test was an independent group analysis in that observations were taken from groups in which respondents in one group did not appear in another group. The observations within as well as between groups were independent of one another. In the Mann-Whitney test there was no assumption about normality or equality of variances. The data analysis involved the calculation of a p-value that was applied to determine statically significant differences. A p-value of .05 or less was evidence of a statistically significant difference and a p-value above .05 was evidence of no statistically significant difference.

Correlation Analysis was a measure of the strength of the linear relationship between two variables. A scatterplot would show a pattern that falls along a straight line. Correlation assumed that both variables were independent—neither was dependent on, caused or influenced the other. Values close to -1 or 1 indicated a strong relationship between two variables. Values close to zero indicated a weak or non-existent relationship. Negative value indicated an inverse relationship—as one variable increases, the other decreases. A positive value showed a direct relationship—as one variable increased, the other increased.

Cronbach’s alpha was a coefficient of reliability or a measure of internal consistency. The procedure assessed how closely related a set of items were as a group; it was considered a measure of scale reliability.

**Hypotheses Testing**

The three hypotheses were assessed based on the finding of each of the three sets of corollaries. If there was significant difference in one or more of the eight corollaries for each of the three hypotheses, the null hypothesis was rejected (see Table 1).

**Table 1. Statistical Analysis Summary**

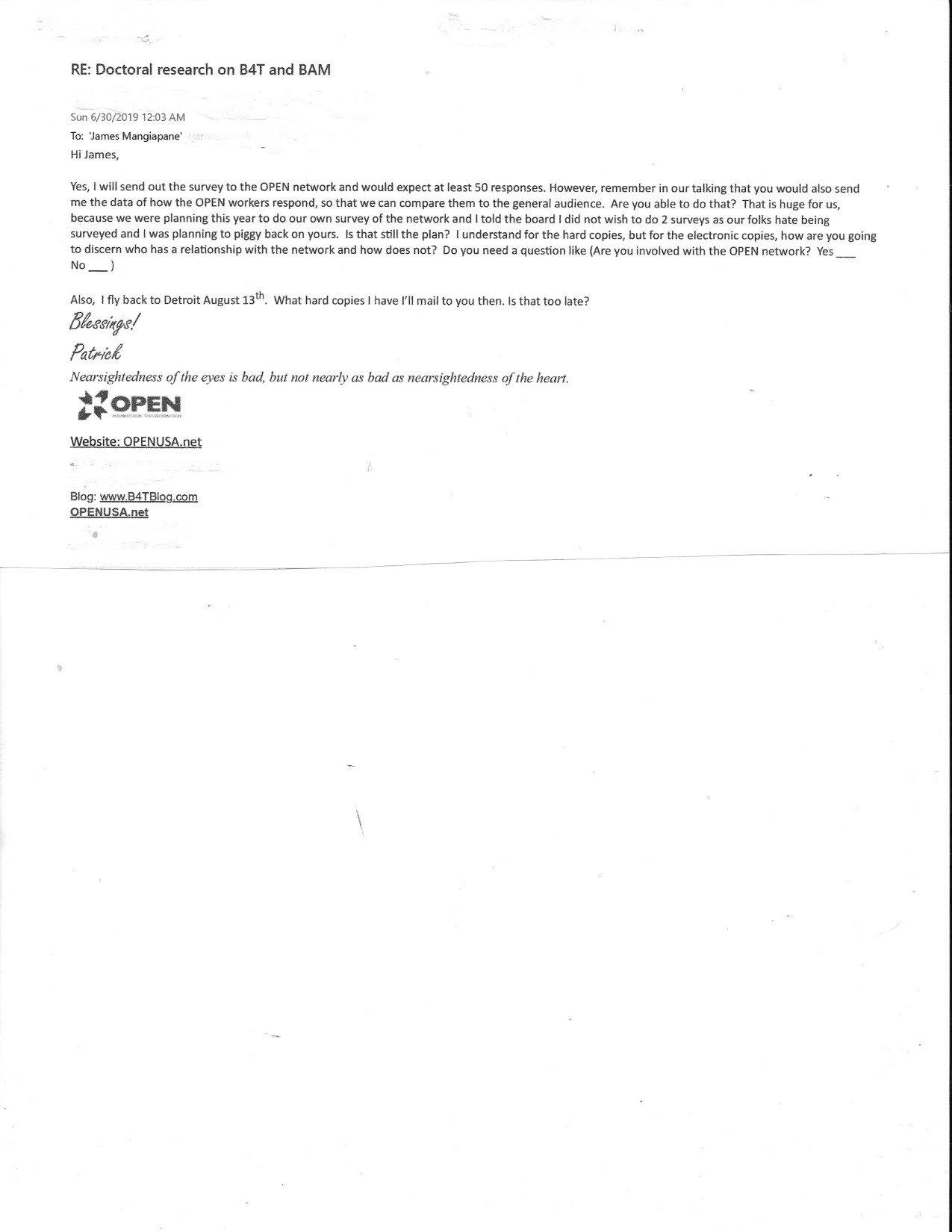
|  |  |
| --- | --- |
|  |  |
| Hypothesis/Corollary # | Procedure |
| Hypothesis 1 | Corollary Analysis |
| Corollary 1a | Mann-Whitney U |
| Corollary 1b | Mann-Whitney U |
| Corollary 1c | Mann-Whitney U |
| Corollary 1d | Mann-Whitney U |
| Corollary 1e | Mann-Whitney U |
| Corollary 1f | Mann-Whitney U |
| Corollary 1g | Mann-Whitney U |
| Corollary 1h | Mann-Whitney U |
| Hypothesis 2 | Corollary Analysis |
| Corollary 2a | Mann-Whitney U |
| Corollary 2b | Mann-Whitney U |
| Corollary 2c | Mann-Whitney U |
| Corollary 2d | Mann-Whitney U |
| Corollary 2e | Mann-Whitney U |
| Corollary 2f | Mann-Whitney U |
| Corollary 2g | Mann-Whitney U |
| Corollary 2h | Mann-Whitney U |
| Hypothesis 3 | Corollary Analysis |
| Corollary 3a | Mann-Whitney U |
| Corollary 3b | Mann-Whitney U |
| Corollary 3c | Mann-Whitney U |
| Corollary 3d | Mann-Whitney U |
| Corollary 3e | Mann-Whitney U |
| Corollary 3f | Mann-Whitney U |
| Corollary 3g | Mann-Whitney U |
| Corollary 3h | Mann-Whitney U |
|  |  |

**APPENDIX A**

**PERMISSION LETTERS**

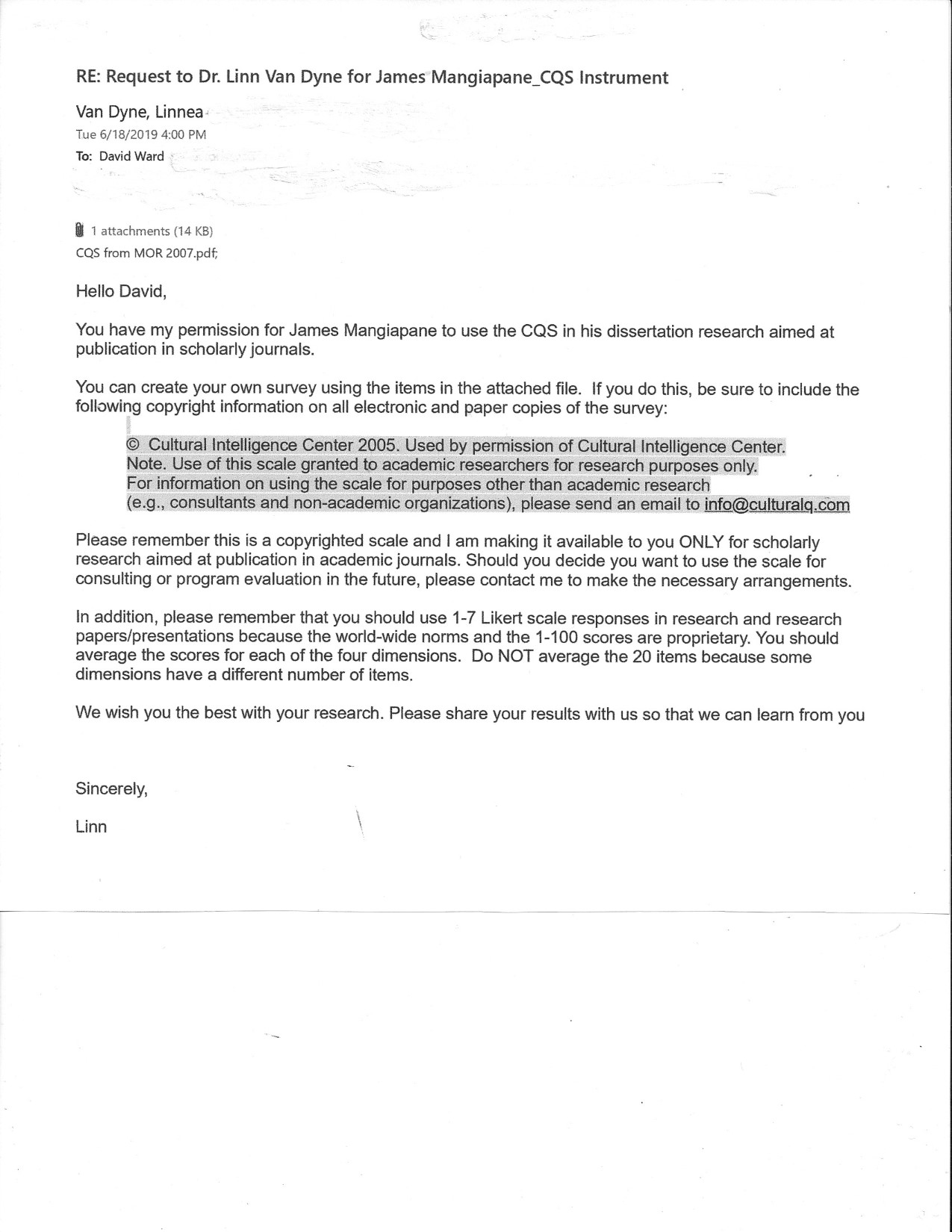
**Lai Permission Letter**

**Business for Transformation Network**



**Van Dyne Permission Letter**

**Cultural Intelligence Scale**



**APPENDIX B**

**NATIONAL INSTITUTE OF HEALTH**

**Certificate of Completion**



**APPENDIX C**

**MULTIPLE BOTTOM-LINE BUSINESS MODEL COMPARISON CHARTS**

|  |  |  |
| --- | --- | --- |
| **MULTIPLE BOTTOM-LINE BUSINESS MODEL COMPARISON CHART** | | |
|  | **BUSINESS AS MISSION** | **SOCIAL ENTREPRENEURSHIP** |
| **MODEL CONSTRUCTS & PARADIGMS (MEASUREMENT GOALS)** | Spiritual, Economic, Social, Ecological | Economic, Social, Ecological |
| **VOCATION** | Marketplace Ministry; Rejects Sacred/Secular Distinction; Kingdom Business/Perspective | Self-Discovery; Self-Fulfillment; Work to Live; Live to Work |
| **PROFIT/NON-PROFIT** | Profit | Profit & Non-Profit |
| **BUSINESS STRUCTURE** | Sole Proprietorship; Partnerships; Limited Liability Company; Low-Profit Limited Liability Company (L3C); Corporation (C or S) | Sole Proprietorship; Partnerships; Limited Liability Company; Low-Profit Limited Liability Company (L3C); Corporation (C or S) |
| **MODELS OF BUSINESS** | Tentmaking; Marketplace Ministries; Entrerprise Development; Business As Mission; Micro-Lending | Enterprise Development; Micro-Lending; Corporate Social Responsibility (CSR); Social Investment |
| **BUSINESS AS CHANGE AGENT** | Rethink Business For Cross-Cultural Christian Engagement | Rethink Business For Universal Application Rather Than Cross-Cultural; If Culture Considered Then International Organizations For Socio-Economic Growth; Consensus Building For International Development To Remake Economies; Marxist Influence; Wealth Redistribution |
| **CULTURAL COMPONENT** | Cross-Cultural Intent; 10/40 Window; Language Studies; Religion & Culture; Business & Culture; Majority Culture & Sub-Cultures; Etic & Emic | Socio-Economic & Socio-Political Intent |
| **ETHICS** | Contextualization of Biblical Ethics in Social, Economic & Political Spheres; Critical Engagement w/Business Ethics & Cross-Cultural Ethics; Critical Critiques of Capitalism | Corporate Social Responsibility (CSR); Governmental Ethics; Corporate Ethics; Marxist & Other Critiques Of Capitalism |
| **INTERNATIONAL ENGAGEMENT** | Required | Choice |
| **SHAREHOLDERS** | Private Business; Churches & Denominations; Investors | Governments; Non-Profits; Private Business; Publicly Traded Business; International Organizations |
| **MAJOR MOTIVATION** | Theological, Economic & Social | Economic & Political |
| **INCOME GOALS** | Self-support; Investments | Self-support; Donations; Investments |

|  |  |  |
| --- | --- | --- |
| **MULTIPLE BOTTOM-LINE BUSINESS MODEL COMPARISON CHART** | | |
|  | **BUSINESS FOR TRANSFORMATION** | **TENTMAKING** |
| **MODEL CONSTRUCTS & PARADIGMS (MEASUREMENT GOALS)** | Spiritual, Economic, [Social] | Spiritual defined as Evangelism; Discipleship; Church Planting; [Economic] |
| **VOCATION** | Marketplace Ministry; Rejects Sacred/Secular Distinction; Kingdom Business/Perspective | Marketplace Ministry; Rejects Sacred/Secular Distinction; Kingdom Business/Perspective |
| **PROFIT/NON-PROFIT** | Profit & Non-Profit | Profit & Non-Profit |
| **BUSINESS STRUCTURE** | Sole Proprietorship; Partnerships; Limited Liability Company; Low-Profit Limited Liability Company (L3C); Corporation (C or S) | Employee of Business, School, or NGO; Sole Proprietorship; Partnerships; Limited Liability Company; Low-Profit Limited Liability Company (L3C); Corporation (C or S) |
| **MODELS OF BUSINESS** | Tentmaking; Marketplace Ministries; Enterprise Development; Business As Mission; Micro-Lending | Tentmaking |
| **BUSINESS AS CHANGE AGENT** | Rethink Business For Cross-Cultural Christian Engagement | Rethink Business For Cross-Cultural Christian Engagement |
| **CULTURAL COMPONENT** | Cross-Cultural Intent; 10/40 Window; Language Studies; Religion & Culture; Business & Culture; Majority Culture & Sub-Cultures; Etic & Emic | Cross-Cultural Intent; 10/40 Window; Language Studies; Religion & Culture; Business & Culture; Majority Culture & Sub-Cultures; Etic & Emic |
| **ETHICS** | Contextualization of Biblical Ethics in Social, Economic & Political Spheres; Critical Engagement w/Business Ethics & Cross-Cultural Ethics; Critical Critques of Capitalism | Contextualization of Biblical Ethics in Social, Economic & Political Spheres; Critical Engagement w/Business Ethics & Cross-Cultural Ethics; Critical Critques of Capitalism |
| **INTERNATIONAL ENGAGEMENT** | Required | Required |
| **SHAREHOLDERS** | Private Businesses; Churches & Denominations; Investors; Non-Profits | Churches & Denominations |
| **MAJOR MOTIVATION** | Theological | Theological |
| **INCOME GOALS** | Self-support; Donations; Investments | Self-support |

**APPENDIX D**

**THREE-PART INSTRUMENT**

**PART 1: DEMOGRAPHIC SURVEY**

**1. Sex?**

**A. Male**

**B. Female**

**2. Highest education level attained?**

**A. Associate’s degree**

**B. Bachelor’s degree**

**C. Master’s degree**

**D. Doctorate degree**

**E. No formal degree**

**3. Current marital status?**

**A. Single**

**B. Married**

**C. Married w/Children**

**4. When you started your business, what was your level of language mastery for the language of the country in which you operated your business?**

**A. Beginner/Novice**

**B. Intermediate**

**C. Advanced**

**D. Expert**

**E. Native speaker of language**

**5. Number of years your business has been in operation?**

**A. 0-2**

**B. 3-5**

**C. 6-10**

**D. 11 or more**

**6. What is your current level of language mastery for the language of the country in which you operate your business?**

**A. Beginner/Novice**

**B. Intermediate**

**C. Advanced**

**D. Expert**

**E. Native speaker of language.**

**7. What is your position/title in the business?**

**A. President**

**B. Chief Executive Officer**

**C. Chief Financial Officer**

**D. Executive Director**

**E. Vice-President**

**F. Manager**

**G. Other**

**8. Do you have a satellite/branch office/franchise location different from your main office/headquarters?**

**A. Yes**

**B. No**

**9. Does your company have a corporate or advisory board?**

**A. Yes**

**B. No**

**10. How many hours per year do you spend communicating with a business consultant/advisor/mentor?**

**A. 0**

**B. 1-20**

**C. 20-40**

**D. 41 or more**

**11. Does your business have an office/site/location in a different country than the country in which you have citizenship?**

**A. Yes**

**B. No**

**12. What type of industry is your business (you may choose more than 1)?**

**A. Computer Software Development, Information Technology & Data Security**

**B. Food Service Industry (e.g., restaurants, supermarkets, grocery stores, bakeries, etc.)**

**C.** **Agricultural Production and Farming**

**D. Transportation, Distribution & Warehousing of Goods (e.g., shipping, trucking, airfreight, railroad, etc.)**

**E. Manufacturing (excluding Clothing & Wearables)**

**F. Sales and marketing (e.g., online, print, radio, other media,**

**etc.)**

**G. Education and Training (excluding medical and health**

**prevention training)**

**H. Financial & Banking Services**

**I. Retail (includes online and/or physical stores)**

**J. Health and Medical Services (e.g., hospitals, medical clinics, pharmacies, dietitian, medical and health prevention training, etc.)**

**K. Clothing and wearables (includes manufacturing and/or retail).**

**L. Other**

**13. Profit or non-profit business?**

**A. Profit**

**B. Non-Profit**

**C. Hybrid (some combination of for profit and non-profit)**

**14. What type of business entity?**

**A. C Corporation**

**B. S Corporation**

**C. Limited Liability Company**

**D. Low-Profit Limited Liability Company (L3C)**

**E. Partnership**

**F. Sole Proprietorship**

**G. Other**

**15. Indicate ALL ways you are compensated?**

**A. Payroll**

**B. Fringe Benefits (*e.g.*, health insurance, pension plan, etc.)**

**C. Distributions**

**D. Guaranteed Payments**

**E. Dividends**

**F. Capital Gains**

**G. Charitable Donations**

**16. My percentage of ownership of the business?**

**A. 0-10%**

**B. 11-25%**

**C. 26-40%**

**D. 41-60%**

**E. 61-99%**

**F. 100%**

**17. If you do not own 100% of the business, what are the number of local partners/owner/shareholders?**

**A. 1**

**B. 2**

**C. 3**

**D. 4 or more**

**E. Not Applicable**

**18. 2018 gross sales (estimate in US dollars)?**

**A. Less than $10,000**

**B. $10,001-$100,000**

**C. $100,001-$500,000**

**D. $500,001-$1,000,000**

**E. More than $1,000,000**

**19. How many LOCAL employees does your business employ?**

**A. 0-5**

**B. 6-10**

**C. 11-20**

**D. 21-40**

**E. 41 or more**

**20. How many EXPAT employees does your business employ?**

**A. 0-5**

**B. 6-10**

**C. 11-20**

**D. 21-40**

**E. 41 or more**

**21. How many hours per WEEK (average) do you spend communicating with EMPLOYEES (including face-to-face, telephone and email)?**

**A. 0-9**

**B. 10-19**

**C. 20-39**

**D. 40-49**

**E. 50 or more**

**22. What percentage of your CUSTOMERS are from North America and Europe?**

**A. 0-25%**

**B. 25-50%**

**C. 50-75%**

**D. 75-100%**

**23. How many hours per MONTH (average) do you currently spend communicating with your CUSTOMERS (including face-to-face, telephone and email)?**

**A. 0-20**

**B. 21-100**

**C. 101-200**

**D. 201 or more**

**24. What percentage of your SUPPLIERS are located in the country in which your business is located?**

**A. 0-25%**

**B. 25-50%**

**C. 50-75%**

**D. 75-100%**

**25. How many hours per MONTH (average) do you spend communicating with SUPPLIERS (including face-to-face, telephone and email)?**

**A. 0-10**

**B. 11-20**

**C. 21-40**

**D. 41 or more**

**26. Which business network are you associated with? (Check all that apply)**

**OPEN/B4T Network**

**Denominational network**

**Mission agency network**

**Other network**

**No network**

**PART 2: CULTURAL INTELLIGENCE SCALE**

**PART 2: INSTRUCTIONS:**

Read each statement and select the response that best describes your capabilities.

Select the answer that BEST describes you AS YOU REALLY ARE (1=strongly disagree; 7=strongly agree) As a BAM/B4T practitioner, please choose **ONE** of the following responses for each of the numbered items (statements) that best describes your position:

1. **I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I am conscious of the cultural knowledge I apply to cross-cultural interactions.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I check the accuracy of my cultural knowledge as I interact with people from different cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the legal and economic systems of other cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the rules (*e.g.*, vocabulary, grammar) of other languages.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the cultural values and religious beliefs of other cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the marriage systems of other cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the arts and crafts of other cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I know the rules for expressing non-verbal behaviors in other cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I enjoy interacting with people from different cultures.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I am confident that I can socialize with locals in a culture that is unfamiliar to me.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

**I am sure I can deal with the stresses of adjusting to a culture that is new to me.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I enjoy living in cultures that are unfamiliar to me.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I am confident that I can get accustomed to the shopping conditions in a different culture.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I change my verbal behavior (*e.g.*, accent, tone) when a cross-cultural interaction requires it.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I use pause and silence differently to suit different cross-cultural situations.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I vary the rate of my speaking when a cross-cultural situation requires it.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I change my non-verbal behavior when a cross-cultural situation requires it.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

1. **I alter my facial expressions when a cross-cultural interaction requires it.**

**Strongly Disagree Strongly Agree**

**1 2 3 4 5 6 7**

**PART 3: SOCIAL IMPACT**

**PART 3: INSTRUCTIONS**

As a BAM/B4T practitioner, please choose **ONE** of the following responses for each of the numbered items (statements) that best describes your position:

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

Please respond to **EVERY** item (statement) on the survey.

For PAPER VERSION OF SURVEY, in this section mark your answer with an “X”.  
Your answers will be recorded and used to determine the relationship between cultural intelligence and the social impact for BAM and B4T practitioners.

1. **I have a respectful relationship with my suppliers.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I have not compromised my values to resolve problems at work.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **Employee retention is high.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **My customers give me feedback that leads to better business practice.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I do not require a translator to communicate with my employees.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **My employees give me feedback that leads to better business practice.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **Company values are consistently upheld by employees.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **My company’s mission statement is well defined.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **My language skills are adequate to transact business.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I recognize employees’ contributions regularly.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **People have told me that they have heard good reports about my company in the broader community.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I have a strong support network to rely upon when challenges arise in the business.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I consult with at least one business expert to evaluate business performance.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I use employee training to better my relationships with employees.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I recognize my customers’ patronage regularly.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I have healthy relationships with employees.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I interact with nationals outside of work hours.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

1. **I respect the cultural values of employees.**

**Strongly Agree**

**Agree**

**Neutral**

**Disagree**

**Strongly Disagree**

**Not Applicable**

**APPENDIX E**

**RAW DATA**

**Demographic Data**

Table A15. Demographic Items 1-11

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | 1 | 2 | 3 | 3 | 5 | 4 | 7 | 1 | 1 | 4 | 1 |
| 2 | 2 | 6 | 3 | 3 | 4 | 4 | 6 | 1 | 1 | 3 | 1 |
| 3 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 |
| 4 | 1 | 3 | 3 | 2 | 4 | 4 | 1 | 1 | 1 | 4 | 2 |
| 5 | 1 | 3 | 3 | 5 | 2 | 5 | 7 | 2 | 2 | 4 | 2 |
| 6 | 1 | 3 | 2 | 1 | 4 | 3 | 5 | 1 | 2 | 2 | 1 |
| 7 | 1 | 3 | 3 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| 8 | 1 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 3 | 1 |
| 9 | 1 | 2 | 3 | 5 | 5 | 5 | 2 | 2 | 2 | 3 | 1 |
| 10 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 3 | 2 |
| 11 | 1 | 3 | 3 | 3 | 4 | 4 | 1 | 2 | 2 | 1 | 2 |
| 12 | 1 | 3 | 3 | 2 | 1 | 2 | 6 | 1 | 1 | 4 | 1 |
| 13 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 |
| 14 | 1 | 3 | 3 | 3 | 4 | 4 | 2 | 1 | 1 | 4 | 2 |
| 15 | 1 | 2 | 3 | 3 | 2 | 3 | 1 | 2 | 1 | 4 | 1 |
| 16 | 1 | 3 | 3 | 2 | 4 | 2 | 2 | 1 | 1 | 3 | 1 |
| 17 | 1 | 4 | 2 | 1 | 4 | 3 | 6 | 2 | 2 | 4 | 1 |
| 18 | 1 | 3 | 2 | 1 | 4 | 3 | 7 | 2 | 2 | 3 | 2 |
| 19 | 1 | 2 | 3 | 2 | 5 | 2 | 4 | 2 | 1 | 4 | 1 |
| 20 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 4 | 1 |
| 21 | 2 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 1 |
| 22 | 2 | 2 | 1 | 3 | 4 | 4 | 7 | 2 | 2 | 1 | 1 |
| 23 | 1 | 6 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 1 |
| 24 | 1 | 6 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 25 | 1 | 2 | 3 | 2 | 1 | 2 | 6 | 2 | 1 | 3 | 1 |
| 26 | 1 | 2 | 2 | 1 | 2 | 1 | 7 | 2 | 2 | 2 | 1 |
| 27 | 1 | 3 | 3 | 3 | 2 | 3 | 7 | 2 | 2 | 4 | 2 |
| 28 | 1 | 3 | 3 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 1 |
| 29 | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 4 | 2 |
| 30 | 1 | 2 | 2 | 1 | 4 | 1 | 4 | 1 | 1 | 3 | 2 |
| 31 | 1 | 3 | 3 | 3 | 4 | 4 | 4 | 1 | 2 | 2 | 1 |
| 32 | 1 | 2 | 3 | 1 | 5 | 5 | 2 | 1 | 2 | 4 | 2 |
| 33 | 1 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 |
| 34 | 1 | 3 | 2 | 1 | 5 | 1 | 4 | 1 | 1 | 2 | 1 |
| 35 | 1 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 |
| 36 | 1 | 3 | 2 | 1 | 4 | 3 | 2 | 2 | 2 | 2 | 1 |
| 37 | 1 | 4 | 2 | 4 | 4 | 5 | 2 | 1 | 2 | 2 | 1 |
| 38 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 2 |
| 39 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 4 | 1 |
| 40 | 1 | 3 | 2 | 1 | 4 | 2 | 4 | 1 | 1 | 3 | 1 |
| 41 | 1 | 3 | 3 | 2 | 4 | 3 | 1 | 1 | 1 | 2 | 2 |
| 42 | 1 | 3 | 3 | 3 | 5 | 4 | 7 | 1 | 2 | 2 | 1 |
| 43 | 1 | 3 | 3 | 3 | 4 | 2 | 2 | 1 | 2 | 3 | 1 |
| 44 | 1 | 2 | 2 | 1 | 4 | 3 | 7 | 2 | 2 | 3 | 2 |
| 45 | 2 | 3 | 3 | 3 | 4 | 3 | 5 | 2 | 1 | 3 | 1 |
| 46 | 2 | 2 | 1 | 4 | 4 | 4 | 7 | 2 | 2 | 1 | 1 |

Table A16. Demographic Items 12-14

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 12a | 12b | 12c | 12d | 12e | 12f | 12g | 12h | 12i | 12j | 12k | 13 | 14 |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 6 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 7 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 8 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 9 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 3 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 |
| 12 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 13 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 17 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 5 |
| 18 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 23 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| 26 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| 27 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 28 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 3 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 6 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 |
| 32 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 33 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 3 |
| 34 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 35 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 36 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 37 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 |
| 38 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 39 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 3 |
| 40 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 7 |
| 42 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 43 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 |
| 44 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 |
| 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 46 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 5 |

Table A17. Demographic Item 16-22

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 15a | 15b | 15c | 15d | 15e | 15f | 15g | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 5 | 5 | 5 | 5 | 1 | 3 | 1 |
| 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 5 | 5 | 1 | 3 | 1 |
| 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 1 | 1 | 1 | 3 |
| 4 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 5 | 5 | 2 | 3 | 3 |
| 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 1 | 1 | 2 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 2 | 1 | 1 | 2 | 4 |
| 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 1 | 1 | 1 | 1 | 1 |
| 8 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 6 | 5 | 5 | 5 | 3 | 2 | 3 |
| 9 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 6 | 5 | 5 | 5 | 1 | 5 | 1 |
| 10 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 1 | 1 | 1 | 2 | 1 |
| 11 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 6 | 5 | 2 | 1 | 1 | 1 | 4 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 5 | 1 | 3 | 1 | 2 | 4 |
| 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 2 | 1 | 2 | 1 |
| 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 4 | 5 | 1 | 3 | 1 |
| 15 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 5 | 3 | 1 | 3 | 1 |
| 16 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 5 | 5 | 2 | 4 | 4 |
| 17 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 6 | 5 | 3 | 3 | 1 | 3 | 1 |
| 18 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 6 | 5 | 2 | 2 | 1 | 2 | 1 |
| 19 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 1 | 3 | 1 |
| 20 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 5 | 3 | 4 | 1 | 2 | 3 |
| 21 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 5 | 2 | 1 | 1 | 3 | 1 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 2 | 3 | 1 | 1 | 1 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 5 | 1 | 1 | 1 | 2 | 1 |
| 24 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 5 | 4 | 4 | 1 | 3 | 3 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 2 | 1 | 1 | 2 | 1 |
| 26 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 4 | 4 | 1 | 4 | 4 |
| 27 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 5 | 2 | 2 | 1 | 2 | 4 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 4 | 1 | 3 | 3 |
| 29 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 5 | 3 | 2 | 1 | 2 | 2 |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 4 | 3 | 3 | 2 | 1 |
| 31 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 3 | 5 | 2 | 1 | 1 | 3 | 4 |
| 32 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 3 | 3 | 2 | 1 | 4 | 2 |
| 33 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 1 | 1 | 1 | 3 |
| 34 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 5 | 5 | 1 | 3 | 4 |
| 35 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 1 | 1 | 1 | 2 | 1 |
| 36 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 5 | 2 | 3 | 2 | 1 | 2 | 4 |
| 37 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 2 | 1 | 1 | 1 |
| 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 3 | 3 | 1 | 2 | 1 |
| 39 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 1 | 3 | 3 | 1 | 3 | 2 |
| 40 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 5 | 5 | 2 | 3 | 1 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 5 | 5 | 1 | 2 | 4 |
| 42 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 5 | 4 | 5 | 1 | 1 | 4 |
| 43 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 5 | 3 | 1 | 2 | 4 | 1 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 5 | 2 | 2 | 1 | 2 | 1 |
| 45 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 4 | 2 | 1 | 3 | 4 |
| 46 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | 2 | 3 | 1 | 1 | 1 |

Table A18. Demographic Items 24-26

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 24 | 25 | | 26a | | 26b | | | 26c | | 26d | 26e | |
| 1 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 2 | 2 | | 2 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 3 | 4 | | 2 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 4 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 5 | 1 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 6 | 4 | | 2 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 7 | 1 | | 1 | | 1 | | 1 | 1 | | 0 | | | 0 |
| 8 | 3 | | 2 | | 1 | | 1 | 1 | | 1 | | | 0 |
| 9 | 2 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 10 | 2 | | 1 | | 1 | | 0 | 1 | | 1 | | | 0 |
| 11 | 1 | | 1 | | 1 | | 0 | 1 | | 1 | | | 0 |
| 12 | 4 | | 2 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 13 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 14 | 1 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 15 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 16 | 1 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 17 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 18 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 19 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 20 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 21 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 22 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 23 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 24 | 1 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 25 | 1 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 26 | 3 | | 1 | | 1 | | 0 | 0 | | 1 | | | 0 |
| 27 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 28 | 4 | | 2 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 29 | 4 | | 2 | | 1 | | 0 | 0 | | 1 | | | 0 |
| 30 | 4 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 31 | 4 | | 3 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 32 | 4 | | 3 | | 0 | | 0 | 1 | | 0 | | | 0 |
| 33 | 1 | | 1 | | 1 | | 0 | 0 | | 1 | | | 0 |
| 34 | 2 | | 1 | | 1 | | 0 | 0 | | 0 | | | 1 |
| 35 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 36 | 4 | | 1 | | 1 | | 1 | 0 | | 1 | | | 0 |
| 37 | 4 | | 1 | | 1 | | 0 | 0 | | 1 | | | 0 |
| 38 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 39 | 4 | | 3 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 40 | 3 | | 1 | | 1 | | 0 | 0 | | 0 | | | 0 |
| 41 | 4 | | 1 | | 1 | | 0 | 0 | | 1 | | | 0 |
| 42 | 1 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |
| 43 | 1 | | 1 | | 0 | | 0 | 0 | | 0 | | | 1 |
| 44 | 4 | | 2 | | 1 | | 0 | 1 | | 1 | | | 0 |
| 45 | 4 | | 2 | | 1 | | 0 | 1 | | 1 | | | 0 |
| 46 | 4 | | 1 | | 1 | | 0 | 1 | | 0 | | | 0 |

**Cultural Intelligence Scale**

Table A19. Cultural Intelligence Metacognitive & Cognitive Subscales

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 |
| 2 | 7 | 5 | 3 | 5 | 3 | 5 | 4 | 2 | 2 | 3 |
| 3 | 2 | 5 | 5 | 3 | 3 | 1 | 3 | 3 | 4 | 3 |
| 4 | 5 | 7 | 6 | 6 | 5 | 5 | 6 | 5 | 5 | 5 |
| 5 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 7 | 7 |
| 6 | 7 | 7 | 7 | 6 | 3 | 6 | 7 | 6 | 5 | 6 |
| 7 | 6 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 5 |
| 8 | 6 | 5 | 5 | 4 | 6 | 5 | 6 | 5 | 4 | 5 |
| 9 | 6 | 4 | 5 | 5 | 5 | 3 | 5 | 5 | 4 | 3 |
| 10 | 6 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 5 | 6 |
| 11 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| 12 | 7 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 |
| 13 | 7 | 6 | 6 | 7 | 5 | 6 | 6 | 6 | 4 | 6 |
| 14 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 2 | 6 |
| 15 | 6 | 6 | 6 | 4 | 5 | 6 | 5 | 5 | 4 | 5 |
| 16 | 1 | 6 | 6 | 6 | 5 | 6 | 7 | 6 | 5 | 5 |
| 17 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 |
| 18 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | 7 | 6 | 6 |
| 19 | 6 | 5 | 6 | 6 | 4 | 6 | 4 | 2 | 3 | 3 |
| 20 | 5 | 5 | 6 | 5 | 6 | 6 | 6 | 4 | 3 | 4 |
| 21 | 6 | 5 | 6 | 5 | 4 | 7 | 6 | 6 | 5 | 5 |
| 22 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 4 | 5 |
| 23 | 6 | 6 | 6 | 6 | 5 | 5 | 7 | 7 | 6 | 4 |
| 24 | 6 | 6 | 6 | 5 | 5 | 2 | 5 | 5 | 3 | 5 |
| 25 | 7 | 6 | 6 | 6 | 4 | 2 | 7 | 7 | 1 | 3 |
| 26 | 5 | 6 | 5 | 6 | 5 | 4 | 6 | 6 | 4 | 5 |
| 27 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 5 | 6 | 5 |
| 28 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 5 | 7 | 5 |
| 29 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 5 |
| 30 | 6 | 7 | 5 | 4 | 4 | 4 | 6 | 6 | 4 | 6 |
| 31 | 6 | 7 | 5 | 7 | 5 | 7 | 7 | 6 | 7 | 5 |
| 32 | 7 | 5 | 6 | 5 | 4 | 5 | 6 | 6 | 6 | 6 |
| 33 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 |
| 34 | 5 | 5 | 5 | 4 | 6 | 5 | 6 | 6 | 6 | 5 |
| 35 | 5 | 7 | 5 | 3 | 5 | 3 | 4 | 4 | 5 | 5 |
| 36 | 6 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 3 |
| 37 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 38 | 6 | 6 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 6 |
| 39 | 6 | 6 | 6 | 5 | 4 | 4 | 5 | 5 | 5 | 4 |
| 40 | 6 | 7 | 6 | 6 | 6 | 4 | 5 | 5 | 2 | 4 |
| 41 | 4 | 6 | 4 | 4 | 4 | 4 | 6 | 5 | 2 | 4 |
| 42 | 6 | 5 | 5 | 4 | 7 | 6 | 6 | 5 | 5 | 6 |
| 43 | 7 | 7 | 7 | 7 | 5 | 2 | 7 | 6 | 5 | 6 |
| 44 | 5 | 5 | 6 | 6 | 5 | 4 | 5 | 5 | 5 | 5 |
| 45 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
| 46 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 |
|  | 6.34 | 6.36 | 6.28 | 5.87 | 5.66 | 5.70 | 6.47 | 6.04 | 5.32 | 5.74 |
|  | 1.20 | 0.88 | 0.89 | 1.16 | 1.06 | 1.57 | 0.97 | 1.19 | 1.48 | 1.15 |

Table A20. Cultural Intelligence Motivational & Behavioral Subscales

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
| 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 2 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 6 | 7 | 7 |
| 3 | 6 | 3 | 4 | 5 | 4 | 3 | 2 | 5 | 5 | 3 |
| 4 | 7 | 6 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 5 |
| 5 | 6 | 5 | 5 | 6 | 7 | 7 | 6 | 6 | 6 | 6 |
| 6 | 7 | 6 | 4 | 5 | 5 | 7 | 6 | 7 | 7 | 5 |
| 7 | 7 | 6 | 6 | 5 | 6 | 7 | 6 | 5 | 5 | 5 |
| 8 | 5 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| 9 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 3 | 3 |
| 10 | 7 | 6 | 6 | 5 | 5 | 6 | 6 | 7 | 7 | 7 |
| 11 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 |
| 12 | 5 | 7 | 6 | 6 | 7 | 4 | 2 | 5 | 3 | 3 |
| 13 | 5 | 6 | 6 | 6 | 7 | 6 | 6 | 5 | 6 | 6 |
| 14 | 7 | 6 | 6 | 6 | 7 | 6 | 4 | 3 | 6 | 6 |
| 15 | 7 | 7 | 7 | 7 | 7 | 6 | 3 | 6 | 6 | 3 |
| 16 | 7 | 5 | 6 | 5 | 6 | 7 | 6 | 6 | 6 | 6 |
| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 18 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 6 |
| 19 | 7 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 2 |
| 20 | 5 | 5 | 7 | 3 | 5 | 5 | 3 | 5 | 4 | 4 |
| 21 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| 22 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 3 | 2 |
| 23 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 6 | 1 |
| 24 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 4 | 3 | 2 |
| 25 | 4 | 5 | 4 | 4 | 7 | 5 | 7 | 7 | 7 | 7 |
| 26 | 7 | 5 | 6 | 5 | 7 | 6 | 5 | 3 | 5 | 2 |
| 27 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 |
| 28 | 6 | 7 | 7 | 6 | 7 | 5 | 5 | 6 | 6 | 4 |
| 29 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 7 | 6 |
| 30 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 6 | 5 |
| 31 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 6 | 7 |
| 32 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 5 | 5 |
| 33 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 6 | 5 | 3 |
| 34 | 6 | 5 | 6 | 5 | 5 | 4 | 4 | 5 | 5 | 4 |
| 35 | 7 | 6 | 5 | 7 | 7 | 5 | 4 | 5 | 5 | 4 |
| 36 | 7 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 4 |
| 37 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 38 | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 6 | 5 | 7 |
| 39 | 7 | 6 | 5 | 5 | 5 | 6 | 4 | 6 | 4 | 4 |
| 40 | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 6 | 6 | 4 |
| 41 | 7 | 7 | 7 | 7 | 7 | 5 | 4 | 4 | 4 | 4 |
| 42 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 6 | 5 | 5 |
| 43 | 7 | 7 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 4 |
| 44 | 6 | 6 | 7 | 6 | 6 | 5 | 6 | 5 | 5 | 6 |
| 45 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 46 | 7 | 7 | 7 | 7 | 7 | 7 | 1 | 7 | 4 | 4 |
|  | 7.15 | 6.83 | 6.81 | 6.66 | 7.02 | 6.81 | 5.91 | 6.55 | 6.32 | 5.74 |
|  | 0.78 | 1.01 | 0.97 | 0.95 | 0.86 | 1.03 | 1.48 | 1.02 | 1.21 | 1.72 |

**Social Impact Self-Report**

Table A21. Social Impact Self-Report Conflict Management Subscale

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | 49 | 54 | 57 | 59 | 62 | 65 | 66 | 68 | Sum | High/Low |
| 1 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 53 | 2 |
| 2 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 54 | 2 |
| 3 | 6 | 0 | 0 | 6 | 6 | 6 | 0 | 6 | 30 | 1 |
| 4 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 7 | 47 | 2 |
| 5 | 6 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 51 | 2 |
| 6 | 6 | 4 | 6 | 6 | 4 | 7 | 6 | 7 | 46 | 2 |
| 7 | 6 | 4 | 6 | 2 | 4 | 6 | 6 | 6 | 40 | 1 |
| 8 | 7 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 47 | 2 |
| 9 | 7 | 6 | 6 | 7 | 6 | 6 | 6 | 4 | 48 | 2 |
| 10 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 51 | 2 |
| 11 | 7 | 0 | 0 | 7 | 6 | 7 | 0 | 0 | 27 | 1 |
| 12 | 4 | 4 | 7 | 6 | 0 | 7 | 6 | 6 | 40 | 1 |
| 13 | 7 | 6 | 6 | 4 | 6 | 6 | 6 | 6 | 47 | 2 |
| 14 | 6 | 6 | 6 | 7 | 4 | 7 | 6 | 7 | 49 | 2 |
| 15 | 7 | 6 | 7 | 7 | 2 | 7 | 7 | 7 | 50 | 2 |
| 16 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 7 | 47 | 2 |
| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 56 | 2 |
| 18 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 55 | 2 |
| 19 | 4 | 6 | 2 | 7 | 6 | 6 | 6 | 6 | 43 | 1 |
| 20 | 7 | 6 | 6 | 7 | 2 | 6 | 6 | 6 | 46 | 2 |
| 21 | 6 | 4 | 6 | 4 | 4 | 6 | 6 | 6 | 42 | 1 |
| 22 | 7 | 7 | 4 | 2 | 2 | 7 | 2 | 6 | 37 | 1 |
| 23 | 6 | 6 | 6 | 7 | 4 | 7 | 4 | 7 | 47 | 2 |
| 24 | 6 | 6 | 2 | 4 | 0 | 6 | 7 | 6 | 37 | 1 |
| 25 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 52 | 2 |
| 26 | 7 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 47 | 2 |
| 27 | 6 | 6 | 7 | 2 | 6 | 7 | 6 | 6 | 46 | 2 |
| 28 | 6 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 49 | 2 |
| 29 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 54 | 2 |
| 30 | 6 | 6 | 6 | 6 | 4 | 7 | 4 | 7 | 46 | 2 |
| 31 | 7 | 6 | 6 | 4 | 2 | 6 | 4 | 7 | 42 | 1 |
| 32 | 6 | 6 | 7 | 6 | 4 | 6 | 6 | 6 | 47 | 2 |
| 33 | 7 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 20 | 1 |
| 34 | 4 | 4 | 6 | 6 | 0 | 6 | 6 | 6 | 38 | 1 |
| 35 | 7 | 6 | 4 | 7 | 4 | 6 | 4 | 7 | 45 | 1 |
| 36 | 7 | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 45 | 1 |
| 37 | 7 | 6 | 6 | 7 | 6 | 6 | 6 | 6 | 50 | 2 |
| 38 | 6 | 4 | 6 | 6 | 6 | 7 | 6 | 7 | 48 | 2 |
| 39 | 6 | 4 | 7 | 6 | 4 | 7 | 7 | 7 | 48 | 2 |
| 40 | 2 | 2 | 4 | 6 | 4 | 7 | 4 | 6 | 35 | 1 |
| 41 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 52 | 2 |
| 42 | 4 | 4 | 7 | 6 | 6 | 6 | 6 | 7 | 46 | 2 |
| 43 | 7 | 7 | 7 | 4 | 6 | 7 | 7 | 7 | 52 | 2 |
| 44 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 53 | 2 |
| 45 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 53 | 2 |
| 46 | 7 | 6 | 4 | 4 | 2 | 7 | 4 | 6 | 40 | 1 |
|  | 6.22 | 5.28 | 5.50 | 5.76 | 4.54 | 6.52 | 5.57 | 6.22 | 45.61 |  |
|  | 1.07 | 1.78 | 1.89 | 1.40 | 2.04 | 0.62 | 1.85 | 1.47 | 12.93 |  |

Table A22. Social Impact Self-Report Relationship Building Subscale

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | 48 | 50 | 56 | 61 | 63 | 64 | 67 | 69 | Sum | Hi/Low |
| 1 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 55 | 2 |
| 2 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 55 | 2 |
| 3 | 6 | 0 | 6 | 0 | 0 | 6 | 6 | 6 | 30 | 1 |
| 4 | 7 | 6 | 7 | 4 | 6 | 7 | 6 | 6 | 49 | 2 |
| 5 | 0 | 4 | 7 | 4 | 7 | 7 | 7 | 7 | 43 | 1 |
| 6 | 7 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 51 | 2 |
| 7 | 7 | 0 | 6 | 6 | 6 | 6 | 7 | 7 | 45 | 1 |
| 8 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 50 | 2 |
| 9 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 55 | 2 |
| 10 | 7 | 6 | 6 | 6 | 7 | 4 | 7 | 6 | 49 | 2 |
| 11 | 6 | 0 | 7 | 0 | 0 | 7 | 7 | 7 | 34 | 1 |
| 12 | 6 | 6 | 4 | 4 | 6 | 6 | 6 | 6 | 44 | 1 |
| 13 | 6 | 6 | 6 | 6 | 4 | 4 | 6 | 6 | 44 | 1 |
| 14 | 1 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 46 | 1 |
| 15 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 6 | 51 | 2 |
| 16 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 50 | 2 |
| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 56 | 2 |
| 18 | 7 | 7 | 6 | 2 | 7 | 7 | 7 | 7 | 50 | 2 |
| 19 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 48 | 2 |
| 20 | 6 | 6 | 4 | 6 | 6 | 6 | 6 | 6 | 46 | 1 |
| 21 | 6 | 4 | 6 | 6 | 6 | 7 | 6 | 0 | 41 | 1 |
| 22 | 4 | 6 | 7 | 1 | 6 | 7 | 7 | 0 | 38 | 1 |
| 23 | 6 | 4 | 6 | 4 | 6 | 6 | 7 | 6 | 45 | 1 |
| 24 | 7 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 47 | 1 |
| 25 | 7 | 4 | 6 | 6 | 6 | 6 | 7 | 7 | 49 | 2 |
| 26 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 48 | 2 |
| 27 | 7 | 2 | 7 | 4 | 7 | 6 | 7 | 7 | 47 | 1 |
| 28 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 52 | 2 |
| 29 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 55 | 2 |
| 30 | 7 | 1 | 6 | 4 | 7 | 6 | 7 | 7 | 45 | 1 |
| 31 | 7 | 7 | 7 | 4 | 7 | 6 | 6 | 4 | 48 | 1 |
| 32 | 6 | 6 | 7 | 4 | 6 | 7 | 7 | 7 | 50 | 2 |
| 33 | 7 | 0 | 6 | 0 | 0 | 7 | 7 | 7 | 34 | 1 |
| 34 | 6 | 4 | 6 | 6 | 6 | 7 | 4 | 6 | 45 | 1 |
| 35 | 6 | 6 | 2 | 6 | 6 | 4 | 6 | 7 | 43 | 1 |
| 36 | 6 | 6 | 6 | 4 | 7 | 7 | 6 | 7 | 49 | 2 |
| 37 | 6 | 6 | 7 | 6 | 6 | 6 | 7 | 7 | 51 | 2 |
| 38 | 7 | 2 | 6 | 6 | 7 | 6 | 7 | 7 | 48 | 1 |
| 39 | 6 | 4 | 7 | 6 | 4 | 4 | 6 | 7 | 44 | 1 |
| 40 | 4 | 4 | 2 | 2 | 6 | 7 | 6 | 4 | 35 | 1 |
| 41 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 54 | 2 |
| 42 | 7 | 6 | 7 | 2 | 6 | 7 | 6 | 6 | 47 | 2 |
| 43 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 50 | 2 |
| 44 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 53 | 2 |
| 45 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 53 | 2 |
| 46 | 4 | 4 | 7 | 2 | 6 | 7 | 7 | 0 | 37 | 1 |
|  | 6.07 | 5.04 | 6.20 | 4.87 | 5.96 | 6.26 | 6.50 | 6.04 | 46.93 |  |
|  | 1.44 | 2.14 | 1.15 | 2.03 | 1.74 | 0.93 | 0.62 | 1.76 | 13.22 |  |

Table A23. Social Impact Self-Report Effective Business Exchange Subscale

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # |  | 52 | 53 | 55 | 58 | 60 | Sum | Hi/Low |
| 1 | 7 | 7 | 7 | 6 | 7 | 6 | 42 | 2 |
| 2 | 6 | 7 | 7 | 7 | 7 | 7 | 43 | 2 |
| 3 | 6 | 0 | 0 | 6 | 6 | 6 | 25 | 1 |
| 4 | 6 | 7 | 6 | 7 | 7 | 7 | 42 | 2 |
| 5 | 7 | 7 | 6 | 4 | 7 | 7 | 39 | 2 |
| 6 | 6 | 2 | 4 | 4 | 6 | 6 | 30 | 1 |
| 7 | 6 | 6 | 6 | 6 | 0 | 2 | 27 | 1 |
| 8 | 6 | 6 | 6 | 4 | 7 | 6 | 37 | 2 |
| 9 | 6 | 6 | 7 | 1 | 7 | 4 | 33 | 1 |
| 10 | 6 | 4 | 6 | 6 | 6 | 6 | 36 | 2 |
| 11 | 0 | 7 | 0 | 6 | 6 | 4 | 24 | 1 |
| 12 | 0 | 6 | 6 | 4 | 6 | 6 | 29 | 1 |
| 13 | 6 | 6 | 7 | 7 | 6 | 6 | 39 | 2 |
| 14 | 7 | 7 | 7 | 7 | 7 | 7 | 43 | 2 |
| 15 | 2 | 6 | 7 | 2 | 7 | 7 | 33 | 1 |
| 16 | 6 | 7 | 7 | 6 | 7 | 6 | 41 | 2 |
| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 44 | 2 |
| 18 | 6 | 7 | 7 | 6 | 7 | 7 | 42 | 2 |
| 19 | 4 | 2 | 6 | 4 | 6 | 7 | 31 | 1 |
| 20 | 6 | 6 | 6 | 6 | 7 | 7 | 39 | 2 |
| 21 | 6 | 7 | 6 | 1 | 6 | 7 | 34 | 1 |
| 22 | 4 | 7 | 6 | 4 | 6 | 1 | 29 | 1 |
| 23 | 6 | 6 | 2 | 6 | 0 | 4 | 25 | 1 |
| 24 | 4 | 0 | 6 | 7 | 6 | 1 | 25 | 1 |
| 25 | 6 | 4 | 6 | 6 | 6 | 6 | 36 | 2 |
| 26 | 6 | 6 | 6 | 6 | 7 | 6 | 39 | 2 |
| 27 | 7 | 7 | 7 | 6 | 6 | 7 | 41 | 2 |
| 28 | 6 | 4 | 6 | 7 | 6 | 2 | 33 | 1 |
| 29 | 6 | 7 | 7 | 6 | 7 | 7 | 42 | 2 |
| 30 | 6 | 6 | 6 | 6 | 7 | 7 | 39 | 2 |
| 31 | 6 | 7 | 6 | 7 | 7 | 7 | 41 | 2 |
| 32 | 7 | 7 | 7 | 6 | 7 | 6 | 42 | 2 |
| 33 | 6 | 0 | 0 | 2 | 6 | 6 | 21 | 1 |
| 34 | 2 | 4 | 6 | 6 | 6 | 6 | 31 | 1 |
| 35 | 6 | 6 | 4 | 6 | 4 | 4 | 31 | 1 |
| 36 | 6 | 6 | 6 | 4 | 6 | 6 | 36 | 2 |
| 37 | 6 | 7 | 6 | 6 | 6 | 7 | 40 | 2 |
| 38 | 7 | 6 | 6 | 6 | 7 | 7 | 40 | 2 |
| 39 | 6 | 7 | 4 | 7 | 7 | 6 | 38 | 2 |
| 40 | 6 | 4 | 6 | 6 | 6 | 6 | 35 | 1 |
| 41 | 6 | 7 | 7 | 7 | 7 | 6 | 42 | 2 |
| 42 | 6 | 7 | 4 | 7 | 6 | 4 | 36 | 2 |
| 43 | 6 | 7 | 7 | 6 | 7 | 6 | 41 | 2 |
| 44 | 6 | 7 | 7 | 6 | 7 | 6 | 41 | 2 |
| 45 | 7 | 7 | 7 | 6 | 7 | 7 | 43 | 2 |
| 46 | 2 | 7 | 6 | 4 | 6 | 1 | 27 | 1 |
|  | 5.52 | 5.72 | 5.70 | 5.50 | 6.20 | 5.65 | 35.80 |  |
|  | 1.70 | 2.00 | 1.84 | 1.59 | 1.47 | 1.75 | 10.64 |  |

**APPENDIX F**

**SOCIAL IMPACT DEVELOPMENT DOCUMENTS**

**Items Rated by Expert Panel**

Table A24. Conflict Management Items for Evaluation by Expert Panel

|  |  |  |
| --- | --- | --- |
| Item | Essential | Non-essential |
| 1. I recognize my employees’ contributions regularly. |  |  |
| 2. I recognize my suppliers’ value regularly. |  |  |
| 3. I recognize my customers’ patronage regularly. |  |  |
| 4. Company values are consistently upheld by employees. |  |  |
| 5. I understand the company’s goals clearly. |  |  |
| 6. My work-related decisions are respected by employees. |  |  |
| 7. My employees follow the company agenda. |  |  |
| 8. I respect the cultural values of employees. |  |  |
| 9. I am challenged by the legal practices of the country my business operates in. |  |  |
| 10. I avoid public confrontations with my employees. |  |  |
| 11. I have not compromised my values to resolve problems at work. |  |  |
| 12. I have a strong support network to rely upon when challenges arise in the  business. |  |  |
| 13. I trust my employees to run the business when I am not there. |  |  |
| 14. I am accomplishing my goals on schedule. |  |  |
| 15. I am frequently frustrated because of my lack of language mastery. |  |  |
| 16. I have experienced conflict in my business from a lack of trust in others to perform their tasks. |  |  |
| 17. I have experienced conflict in my business from differences over  timely performance of tasks. |  |  |
| 18. My employees can clearly state what they are expected to do at work. |  |  |
| 19. My employees can clearly state what behaviors are required of them at  work. |  |  |
| 20. Conflict at work is just an opportunity to solve a problem. |  |  |
| 21. I often see my employees smiling at work. |  |  |
| Lickert-Item Scale:  Strongly disagree Disagree Neutral Agree Strongly Agree  1 2 3 4 5 | | |

Table A25. Relationship Building Items for Evaluation by Expert Panel

|  |  |  |
| --- | --- | --- |
| Item | Essential | Non-essential |
| 1. Employee retention rate is high. |  |  |
| 2. I have healthy relationships with employees. |  |  |
| 3. I have healthy relationships with customers. |  |  |
| 4. I have a healthy relationship with my spouse. |  |  |
| 5. I have honest relationships with employees. |  |  |
| 6. I have honest relationships with customers. |  |  |
| 7. I have honest relationships with suppliers. |  |  |
| 8. I have an honest relationship with my spouse. |  |  |
| 9. I value annual performance reviews with employees. |  |  |
| 10. My language skills are adequate to transact business. |  |  |
| 11. My language skills are adequate to communicate with others about  ultimate life issues. |  |  |
| 12. I have respect for the cultural values of the country my business  operates in. |  |  |
| 13. I use employee training to better my relationships with employees. |  |  |
| 14. I am optimistic about reaching my future goals. |  |  |
| 15. My employees give me feedback. |  |  |
| 16. My customers give me feedback. |  |  |
| 17. My employees are competent in their work. |  |  |
| 18. I have a respectful relationship with my suppliers. |  |  |
| 19. My employees are reliable. |  |  |
| 20. I interact with nationals outside of work hours. |  |  |
| 21. I have attended a major life event for an employee (*i.e.*, birthday,  funeral, wedding, or holiday celebration). |  |  |
| 22. I have attended a major life event for a customer (*i.e.*, birthday,  funeral, wedding, or holiday celebration). |  |  |
| 23. People recommend my business to others. |  |  |
| 24. People ask me for information unrelated to my business. |  |  |
| 25. I socialize with the people I work with outside of work hours. |  |  |
| Lickert-Item Scale:  Strongly disagree Disagree Neutral Agree Strongly Agree  1 2 3 4 5 | | |

Table A26. Effective Business Exchange Items for Evaluation by Expert Panel

|  |  |  |
| --- | --- | --- |
| Item | Essential | Non-essential |
| 1. I receive suggestions from my employees about new products or  services my company should offer. |  |  |
| 2. I receive suggestions from my customers about new products or  services my company should offer. |  |  |
| 3. I do not require a translator to communicate with my employees. |  |  |
| 4. My employees give me feedback that leads to better business practice. |  |  |
| 5. My customers give me feedback that leads to better business practice. |  |  |
| 6. My suppliers give me feedback that leads to better business practice. |  |  |
| 7. People have told me that they have heard good reports about my  company in the broader community. |  |  |
| 8. My company is meeting its target sales. |  |  |
| 9. My company is meeting its production quotas. |  |  |
| 10. Including my salary, the company is generating revenue to cover all  costs. |  |  |
| 11. People ask for my opinion about their own personal business  decisions. |  |  |
| 12. People have told me that they know someone who works at my  company. |  |  |
| 13. Much of my business comes from repeat customers. |  |  |
| 14. I receive referrals from customers. |  |  |
| 15. Hiring new employees is a priority. |  |  |
| 16. I encourage employees to keep regular business hours. |  |  |
| 17. I visit other companies to see how they manage their operations. |  |  |
| 18. I consult with at least one business expert to evaluate business  performance. |  |  |
| 19. My company’s mission statement is well defined. |  |  |
| 20. I have a list of qualified candidates who wish to work for my  company. |  |  |
| Lickert-Item Scale:  Strongly disagree Disagree Neutral Agree Strongly Agree  1 2 3 4 5 | | |

**Expert Panel Essential/Nonessential Ratings**

Table A27. Expert Panel Essential/Non-Essential Ratings

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 4 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 5 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 6 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 8 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| Mea | 9 | 4 | 9 | 9 | 9 | 7 | 7 | 9 | 2 | 7 |
| s.d. | 0 | 0.53 | 0.00 | 0.00 | 0.00 | 0.44 | 0.44 | 0.00 | 0.44 | 0.44 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** |
| 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 5 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 6 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| 9 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| Mea | 9 | 9 | 8 | 4 | 7 | 6 | 5 | 8 | 8 | 5 | 4 |
| s.d. | 0.00 | 0.00 | 0.33 | 0.53 | 0.44 | 0.50 | 0.53 | 0.33 | 0.33 | 0.53 | 0.53 |

**Pilot Study Data**

Table A28: Pilot Study Data

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **1** | **2** | **4** | **5** | **6** | **7** | **9** | **10** | **11** | **12** |
| 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 2 |
| 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 |
| 3 | 3 | 1 | 1 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 1 |
| 4 | 4 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| 5 | 5 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 1 | 1 | 1 |
| 6 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 7 | 7 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 |
| 8 | 8 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 3 | 1 | 3 |
| 9 | 9 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 |
| 10 | 10 | 1 | 1 | 2 | 1 | 2 | 4 | 1 | 2 | 2 | 1 |
| 11 | 11 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 12 | 12 | 2 | 4 | 2 | 3 | 1 | 3 | 4 | 2 | 2 | 2 |
| 13 | 13 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 |
| 14 | 14 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 |
| 15 | 15 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| 16 | 16 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 1 | 2 |
| Variance |  | 0.1625 | 0.65 | 0.2625 | 0.333333 | 0.533333 | 0.595833 | 0.916667 | 0.395833 | 0.229167 | 0.333333 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Item #** | **13** | **15** | **16** | | **17** | | **18** | **19** | **20** | **21** |  |
| 1 | 1 | 1 | 1 | | 3 | | 2 | 2 | 3 | 2 | 34 |
| 2 | 2 | 2 | 1 | | 1 | | 1 | 1 | 1 | 2 | 26 |
| 3 | 1 | 2 | 1 | | 1 | | 1 | 1 | 1 | 1 | 25 |
| 4 | 2 | 2 | 1 | | 1 | | 2 | 2 | 3 | 2 | 29 |
| 5 | 1 | 2 | 1 | | 1 | | 1 | 2 | 1 | 1 | 25 |
| 6 | 3 | 1 | 2 | | 1 | | 1 | 1 | 1 | 1 | 23 |
| 7 | 2 | 2 | 1 | | 1 | | 2 | 1 | 2 | 1 | 27 |
| 8 | 1 | 3 | 2 | | 1 | | 2 | 3 | 2 | 1 | 32 |
| 9 | 2 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 22 |
| 10 | 1 | 3 | 1 | | 1 | | 1 | 1 | 1 | 2 | 28 |
| 11 | 2 | 2 | 2 | | 2 | | 2 | 2 | 1 | 1 | 31 |
| 12 | 2 | 2 | 2 | | 1 | | 2 | 3 | 2 | 2 | 41 |
| 13 | 2 | 3 | 2 | | 2 | | 1 | 2 | 1 | 2 | 29 |
| 14 | 1 | 1 | 1 | | 1 | | 1 | 2 | 1 | 1 | 25 |
| 15 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 19 |
| 16 | 4 | 3 | 2 | | 1 | | 1 | 1 | 1 | 1 | 29 |
| Variance | 0.733333 | 0.595833 | 0.25 | | 0.333333 | | 0.25 | 0.516667 | 0.529167 | 0.25 |  |
| Cronbach Calculation  n= | | | | 18 | |
| V= | | | | 7.870833 | |
| c= | | | | 27.8125 | |
| (n/(n-1))= | | | | 1.058824 | |
| (v/c)= | | | | 0.282996 | |
| (1-(v/c))= | | | | 0.717004 | |
| Alpha= | | | | 0.75918 | |
|  | | | |  | |
| SumVar= | | | | 7.870833 | |

**Odd/Even Correlation Data**

Table A29. Odd Correlation Data

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | Sum |
| 1 | 2 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 3 | 2 | 2 | 20 |
| 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 16 |
| 3 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 15 |
| 4 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 17 |
| 5 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 1 | 17 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 13 |
| 7 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 14 |
| 8 | 1 | 4 | 1 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 1 | 19 |
| 9 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 14 |
| 10 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 21 |
| 11 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 18 |
| 12 | 2 | 2 | 3 | 3 | 4 | 2 | 2 | 2 | 1 | 3 | 2 | 26 |
| 13 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 20 |
| 14 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 16 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 1 | 1 | 1 | 16 |

Table A30. Even Correlation Data

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | EVEN |
| 1 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 1 | 2 | 3 | 3 | 22 |
| 2 | 1 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 17 |
| 3 | 1 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 15 |
| 4 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 18 |
| 5 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 15 |
| 6 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 14 |
| 7 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 17 |
| 8 | 1 | 1 | 3 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 21 |
| 9 | 1 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 16 |
| 10 | 1 | 2 | 2 | 4 | 2 | 1 | 4 | 1 | 1 | 1 | 1 | 20 |
| 11 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 17 |
| 12 | 4 | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 25 |
| 13 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 16 |
| 14 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 14 |
| 15 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 16 | 1 | 2 | 3 | 5 | 2 | 2 | 2 | 2 | 1 | 1 | 6 | 27 |

**APPENDIX D**

**DATA ANALYSIS**

**Demographic Frequency Calculations**

Cumulative Cumulative

V1 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 38 82.61 38 82.61

2 8 17.39 46 100.0

Cumulative Cumulative

V2 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 1 2.17 1 2.17

2 16 34.78 17 36.96

3 24 52.17 41 89.13

4 2 4.35 43 93.48

6 3 6.52 46 100.0

Cumulative Cumulative

V3 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 4 8.7 4 8.7

2 14 30.43 18 39.13

3 28 60.87 46 100.0

Cumulative Cumulative

V4 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 16 34.78 16 34.78

2 11 23.91 27 58.7

3 15 32.61 42 91.3

4 2 4.35 44 95.65

5 2 4.35 46 100.0

Cumulative Cumulative

V5 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 9 19.57 9 19.57

2 11 23.91 20 43.48

4 20 43.48 40 86.96

5 6 13.04 46 100.0

Cumulative Cumulative

V6 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 6 13.04 6 13.04

2 14 30.43 20 43.48

3 13 28.26 33 71.74

4 9 19.57 42 91.3

5 4 8.7 46 100.0

Cumulative Cumulative

V7 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 7 15.22 7 15.22

2 18 39.13 25 54.35

4 6 13.04 31 67.39

5 2 4.35 33 71.74

6 4 8.7 37 80.43

7 9 19.57 46 100.0

Cumulative Cumulative

V8 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 20 43.48 20 43.48

2 26 56.52 46 100.0

Cumulative Cumulative

V9 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 20 43.48 20 43.48

2 26 56.52 46 100.0

Cumulative Cumulative

V10 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 3 6.52 3 6.52

2 16 34.78 19 41.3

3 14 30.43 33 71.74

4 13 28.26 46 100.0

Cumulative Cumulative

V11 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 31 67.39 31 67.39

2 15 32.61 46 100.0

Cumulative Cumulative

V12A Frequency Percent Frequency Percent

-----------------------------------------------------------

0 36 78.26 36 78.26

1 10 21.74 46 100.0

Cumulative Cumulative

V12B Frequency Percent Frequency Percent

-----------------------------------------------------------

0 39 84.78 39 84.78

1 7 15.22 46 100.0

Cumulative Cumulative

V12C Frequency Percent Frequency Percent

-----------------------------------------------------------

0 39 84.78 39 84.78

1 7 15.22 46 100.0

Cumulative Cumulative

V12D Frequency Percent Frequency Percent

-----------------------------------------------------------

0 45 97.83 45 97.83

1 1 2.17 46 100.0

Cumulative Cumulative

V12E Frequency Percent Frequency Percent

-----------------------------------------------------------

0 39 84.78 39 84.78

1 7 15.22 46 100.0

Cumulative Cumulative

V12F Frequency Percent Frequency Percent

-----------------------------------------------------------

0 43 93.48 43 93.48

1 3 6.52 46 100.0

Cumulative Cumulative

V12G Frequency Percent Frequency Percent

-----------------------------------------------------------

0 31 67.39 31 67.39

1 15 32.61 46 100.0

Cumulative Cumulative

V12H Frequency Percent Frequency Percent

-----------------------------------------------------------

0 43 93.48 43 93.48

1 3 6.52 46 100.0

Cumulative Cumulative

V12I Frequency Percent Frequency Percent

-----------------------------------------------------------

0 43 93.48 43 93.48

1 3 6.52 46 100.0

Cumulative Cumulative

V12J Frequency Percent Frequency Percent

-----------------------------------------------------------

0 43 93.48 43 93.48

1 3 6.52 46 100.0

Cumulative Cumulative

V12K Frequency Percent Frequency Percent

-----------------------------------------------------------

0 38 82.61 38 82.61

1 8 17.39 46 100.0

Cumulative Cumulative

V13 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 44 95.65 44 95.65

2 1 2.17 45 97.83

3 1 2.17 46 100.0

Cumulative Cumulative

V14 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 4 8.7 4 8.7

2 1 2.17 5 10.87

3 29 63.04 34 73.91

5 3 6.52 37 80.43

6 5 10.87 42 91.3

7 4 8.7 46 100.0

Cumulative Cumulative

V16 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 5 10.87 5 10.87

2 4 8.7 9 19.57

3 3 6.52 12 26.09

4 7 15.22 19 41.3

5 3 6.52 22 47.83

6 24 52.17 46 100.0

Cumulative Cumulative

V17 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 5 10.87 5 10.87

2 2 4.35 7 15.22

3 1 2.17 8 17.39

5 38 82.61 46 100.0

Cumulative Cumulative

V18 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 5 10.87 5 10.87

2 17 36.96 22 47.83

3 8 17.39 30 65.22

4 6 13.04 36 78.26

5 10 21.74 46 100.0

Cumulative Cumulative

V19 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 13 28.26 13 28.26

2 9 19.57 22 47.83

3 9 19.57 31 67.39

4 4 8.7 35 76.09

5 11 23.91 46 100.0

Cumulative Cumulative

V20 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 40 86.96 40 86.96

2 4 8.7 44 95.65

3 2 4.35 46 100.0

Cumulative Cumulative

V21 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 8 17.39 8 17.39

2 18 39.13 26 56.52

3 15 32.61 41 89.13

4 4 8.7 45 97.83

5 1 2.17 46 100.0

Cumulative Cumulative

V22 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 24 52.17 24 52.17

2 3 6.52 27 58.7

3 7 15.22 34 73.91

4 12 26.09 46 100.0

Cumulative Cumulative

V24 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 10 21.74 10 21.74

2 4 8.7 14 30.43

3 3 6.52 17 36.96

4 29 63.04 46 100.0

Cumulative Cumulative

V25 Frequency Percent Frequency Percent

-----------------------------------------------------------

1 34 73.91 34 73.91

2 9 19.57 43 93.48

3 3 6.52 46 100.0

**Corollary Analysis Findings**

Co1a

Results of Non-Parametric analysis:

Group variable = META Observation variable = CONFLICT

Mann-Whitney U' = 311. U = 214.

Rank sum group 2 = 636. N = 25 Mean Rank = 25.44

Rank sum group 1 = 445. N = 21 Mean Rank = 21.19

Significance estimated using the z statistic.

Z = 1.059 p = 0.29

Co1b

Results of Non-Parametric analysis:

Group variable = RELAT Observation variable = METACOGNITIVE

Mann-Whitney U' = 267.5 U = 260.5

Rank sum group 2 = 567.5 N = 24 Mean Rank = 23.65

Rank sum group 1 = 513.5 N = 22 Mean Rank = 23.34

Significance estimated using the z statistic.

Z = .066 p = 0.947

Co1c

Group variable = CONF Observation variable = CONFLICT

Mann-Whitney U' = 465. U = 0.

Rank sum group 2 = 961. N = 31 Mean Rank = 31.

Rank sum group 1 = 120. N = 15 Mean Rank = 8.

Significance estimated using the z statistic.

Z = 5.436 p < 0.001

Co1d

Results of Non-Parametric analysis:

Group variable = CONF Observation variable = COGNITIVE

Mann-Whitney U' = 292. U = 173.

Rank sum group 2 = 788. N = 31 Mean Rank = 25.42

Rank sum group 1 = 293. N = 15 Mean Rank = 19.53

Significance estimated using the z statistic.

Z = 1.383 p = 0.167

Co1e

Results of Non-Parametric analysis:

Group variable = MOTIVAT Observation variable = CONFLICT

Mann-Whitney U' = 269.5 U = 234.5

Rank sum group 2 = 675.5 N = 28 Mean Rank = 24.13

Rank sum group 1 = 405.5 N = 18 Mean Rank = 22.53

Significance estimated using the z statistic.

Z = .383 p = 0.702

Co1f

Results of Non-Parametric analysis:

Group variable = CONF Observation variable = MOTIVATIONAL

Mann-Whitney U' = 236. U = 229.

Rank sum group 2 = 725. N = 31 Mean Rank = 23.39

Rank sum group 1 = 356. N = 15 Mean Rank = 23.73

Significance estimated using the z statistic.

Z = .07 p = 0.944

Co1g

Results of Non-Parametric analysis:

Group variable = BEHAV Observation variable = CONFLICT

Mann-Whitney U' = 445. U = 59.

Rank sum group 2 = 851. N = 28 Mean Rank = 30.39

Rank sum group 1 = 230. N = 18 Mean Rank = 12.78

Significance estimated using the z statistic.

Z = 4.333 p < 0.001

Co1h

Results of Non-Parametric analysis:

Group variable = CONF Observation variable = BEHAVIORAL

Mann-Whitney U' = 334.5 U = 130.5

Rank sum group 2 = 830.5 N = 31 Mean Rank = 26.79

Rank sum group 1 = 250.5 N = 15 Mean Rank = 16.7

Significance estimated using the z statistic.

Z = 2.378 p = 0.017

Co2a

Results of Non-Parametric analysis:

Group variable = META Observation variable = RELATIONSHIP

Mann-Whitney U' = 288. U = 237.

Rank sum group 2 = 613. N = 25 Mean Rank = 24.52

Rank sum group 1 = 468. N = 21 Mean Rank = 22.29

Significance estimated using the z statistic.

Z = .551 p = 0.581

Co2b

Results of Non-Parametric analysis:

Group variable = RELAT Observation variable = METACOGNITIVE

Mann-Whitney U' = 267.5 U = 260.5

Rank sum group 2 = 567.5 N = 24 Mean Rank = 23.65

Rank sum group 1 = 513.5 N = 22 Mean Rank = 23.34

Significance estimated using the z statistic.

Z = .066 p = 0.947

Co2c

Results of Non-Parametric analysis:

Group variable = COG Observation variable = RELATIONSHIP

Mann-Whitney U' = 274. U = 230.

Rank sum group 2 = 636. N = 28 Mean Rank = 22.71

Rank sum group 1 = 445. N = 18 Mean Rank = 24.72

Significance estimated using the z statistic.

Z = .484 p = 0.628

Co2d

Results of Non-Parametric analysis:

Group variable = RELAT Observation variable = COGNITIVE

Mann-Whitney U' = 264.5 U = 263.5

Rank sum group 2 = 563.5 N = 24 Mean Rank = 23.48

Rank sum group 1 = 517.5 N = 22 Mean Rank = 23.52

Significance estimated using the z statistic.

Z = . p = 1.0

Co2e

Results of Non-Parametric analysis:

Group variable = MOTIVAT Observation variable = RELATIONSHIP

Mann-Whitney U' = 281.5 U = 222.5

Rank sum group 2 = 687.5 N = 28 Mean Rank = 24.55

Rank sum group 1 = 393.5 N = 18 Mean Rank = 21.86

Significance estimated using the z statistic.

Z = .653 p = 0.514

Co2f

Results of Non-Parametric analysis:

Group variable = RELAT Observation variable = MOTIVATIONAL

Mann-Whitney U' = 271.5 U = 256.5

Rank sum group 2 = 556.5 N = 24 Mean Rank = 23.19

Rank sum group 1 = 524.5 N = 22 Mean Rank = 23.84

Significance estimated using the z statistic.

Z = .154 p = 0.877

Co2g

Results of Non-Parametric analysis:

Group variable = BEHAV Observation variable = RELATIONSHIP

Mann-Whitney U' = 387. U = 117.

Rank sum group 2 = 793. N = 28 Mean Rank = 28.32

Rank sum group 1 = 288. N = 18 Mean Rank = 16.

Significance estimated using the z statistic.

Z = 3.027 p = 0.002

Co1h

Results of Non-Parametric analysis:

Group variable = RELAT Observation variable = BEHAVIORAL

Mann-Whitney U' = 348.5 U = 179.5

Rank sum group 2 = 648.5 N = 24 Mean Rank = 27.02

Rank sum group 1 = 432.5 N = 22 Mean Rank = 19.66

Significance estimated using the z statistic.

Z = 1.847 p = 0.065

Co3a

Results of Non-Parametric analysis:

Group variable = META Observation variable = EFF\_BUSSINESS\_EXCHANGE

Mann-Whitney U' = 324. U = 201.

Rank sum group 2 = 649. N = 25 Mean Rank = 25.96

Rank sum group 1 = 432. N = 21 Mean Rank = 20.57

Significance estimated using the z statistic.

Z = 1.345 p = 0.178

Co3b

Group variable = EFFEC\_BUSS\_EX Observation variable = METACOGNITIVE

Mann-Whitney U' = 302.5 U = 201.5

Rank sum group 2 = 708.5 N = 28 Mean Rank = 25.3

Rank sum group 1 = 372.5 N = 18 Mean Rank = 20.69

Significance estimated using the z statistic.

Z = 1.125 p = 0.26

Co3c

Results of Non-Parametric analysis:

Group variable = COG Observation variable = EFF\_BUSSINESS\_EXCHANGE

Mann-Whitney U' = 308. U = 196.

Rank sum group 2 = 714. N = 28 Mean Rank = 25.5

Rank sum group 1 = 367. N = 18 Mean Rank = 20.39

Significance estimated using the z statistic.

Z = 1.249 p = 0.211

Co3d

Results of Non-Parametric analysis:

Group variable = EFFEC\_BUSS\_EX Observation variable = COGNITIVE

Mann-Whitney U' = 302. U = 202.

Rank sum group 2 = 708. N = 28 Mean Rank = 25.29

Rank sum group 1 = 373. N = 18 Mean Rank = 20.72

Significance estimated using the z statistic.

Z = 1.114 p = 0.265

Co3e

Results of Non-Parametric analysis:

Group variable = MOTIVAT Observation variable =

Mann-Whitney U' = 281.5 U = 222.5

Rank sum group 2 = 687.5 N = 28 Mean Rank = 24.55

Rank sum group 1 = 393.5 N = 18 Mean Rank = 21.86

Significance estimated using the z statistic.

Z = .653 p = 0.514

Co3f

Results of Non-Parametric analysis:

Group variable = EFFEC\_BUSS\_EX Observation variable = MOTIVATIONAL

Mann-Whitney U' = 270. U = 234.

Rank sum group 2 = 640. N = 28 Mean Rank = 22.86

Rank sum group 1 = 441. N = 18 Mean Rank = 24.5

Significance estimated using the z statistic.

Z = .394 p = 0.693

Co3g

Results of Non-Parametric analysis:

Group variable = BEHAV Observation variable =

Mann-Whitney U' = 504. U = 0.

Rank sum group 2 = 910. N = 28 Mean Rank = 32.5

Rank sum group 1 = 171. N = 18 Mean Rank = 9.5

Significance estimated using the z statistic.

Z = 5.661 p < 0.001

Co3h

Results of Non-Parametric analysis:

Group variable = EFFEC\_BUSS\_EX Observation variable = BEHAVIORAL

Mann-Whitney U' = 373. U = 131.

Rank sum group 2 = 779. N = 28 Mean Rank = 27.82

Rank sum group 1 = 302. N = 18 Mean Rank = 16.78

Significance estimated using the z statistic.

Z = 2.712 p = 0.007

CURRICULUM VITAE

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*Oral Roberts University* - Tulsa, Oklahoma: 1993.

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**Board Experience:**

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*Detroit Collegiate High School* – Detroit, Michigan (09/2015-05/2020).

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Founding board member of public charter school in Detroit, MI.

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