

4-11-2020

## Understanding the Impact of Psychological Empowerment, Workplace Motivation, and Social Capital on the Job Performance of Farmers in Honduras: A Mixed Methods Study

Susan Lale Karimiha

Follow this and additional works at: [https://digitalcommons.lsu.edu/gradschool\\_dissertations](https://digitalcommons.lsu.edu/gradschool_dissertations)



Part of the [Development Studies Commons](#), [Economic Policy Commons](#), [Food Security Commons](#), [Human Factors Psychology Commons](#), [Labor Economics Commons](#), [Latin American Studies Commons](#), [Leadership Studies Commons](#), [Other Social and Behavioral Sciences Commons](#), [Peace and Conflict Studies Commons](#), [Rural Sociology Commons](#), [Social Policy Commons](#), and the [Social Psychology Commons](#)

---

### Recommended Citation

Karimiha, Susan Lale, "Understanding the Impact of Psychological Empowerment, Workplace Motivation, and Social Capital on the Job Performance of Farmers in Honduras: A Mixed Methods Study" (2020). *LSU Doctoral Dissertations*. 5227.

[https://digitalcommons.lsu.edu/gradschool\\_dissertations/5227](https://digitalcommons.lsu.edu/gradschool_dissertations/5227)

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact [gradetd@lsu.edu](mailto:gradetd@lsu.edu).

# **UNDERSTANDING THE IMPACT OF PSYCHOLOGICAL EMPOWERMENT, WORKPLACE MOTIVATION, AND SOCIAL CAPITAL ON THE JOB PERFORMANCE OF FARMERS IN HONDURAS: A MIXED METHODS STUDY**

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The School of Leadership and Human Resource Development

by

Susan Lale Karimiha

B.A, University of Colorado, Boulder, 2008

B.A, University of Colorado, Boulder, 2008

M.S., Louisiana State University, 2012

May 2020

©Copyright 2020  
Susan Lale Karimiha  
All Rights Reserved

To farmers, this work is affectionally dedicated to you. Despite the challenging nature of your work, you feed and provide fuel and fiber for the people of the world.

## **ACKNOWLEDGMENTS**

First, this accomplishment would not be possible without the support of my committee chair, Dr. Sunyoung Park. Your patience, mentoring, continued trust, and guidance throughout my doctoral program taught me how to be a better scholar. Your never-ending support allowed me to reach this great academic finish line. I was also fortunate to have as my committee members, Dr. Petra A. Robinson, Dr. Sonja Wiley, and Dr. Tao Jin. Your patience and guidance were critical to the successful completion of my dissertation. Thank you also to Jeffrey Shane Portier, for your great administrative work in supporting my efforts to finish my dissertation.

Additionally, I would like to wholeheartedly thank the faculty, staff, and students of the National Agriculture University of Honduras for your assistance and support with my data collection. I also have a great deal of appreciation for all the farmers in Olancho, Honduras who shared their experiences with me and enabled me to conduct research with them. I would also like to thank my colleagues and friends, especially Dr. David Picha, Dr. Cristina Cossich, Dr. Rose Baker, and Dr. Jeantyl Norze.

Finally, I would like to thank my family, especially my mom and dad, Afsar Aslanha and Hamid Karimiha, for providing the unwavering support and empowerment I needed to flourish academically and personally. And to my grandmother, Marziyeh Aslan-Ghazvini, thank you for always encouraging me to pursue the highest education possible and for believing in me. I also appreciate the support of my brother, my aunts, uncles, and my cousins. I would also like to thank my lovely husband, Richard Russo for his unwavering support, love, and patience and for being a constant source of encouragement. Without my family's love, trust and support, I could not have reached this far in my academic journey.

# TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	IV
LIST OF TABLES .....	VII
LIST OF FIGURES .....	VIII
ABSTRACT.....	IX
CHAPTER 1. INTRODUCTION .....	1
Problem Statement .....	2
Context of Rural Farmers in Honduras .....	4
Why Study Farmers and Farmers in Honduras? .....	8
Purpose of the Study and Research Questions .....	11
Significance and Contribution of the Study .....	12
Definition of Terms .....	14
Summary .....	16
CHAPTER 2. REVIEW OF LITERATURE .....	18
Theoretical Framework .....	18
Job Performance .....	21
Factors Influencing Job Performance.....	36
Summary .....	57
CHAPTER 3. METHODOLOGY .....	59
Research Design.....	59
Population and Sample.....	60
Instrumentation.....	69
Data Collection.....	76
Data Analysis .....	77
Summary .....	83
CHAPTER 4. RESULTS .....	84
Quantitative Results .....	84
Qualitative Findings .....	94
Combined Findings .....	106
Summary .....	113
CHAPTER 5. SUMMARY, DISCUSSION, RECOMMENDATIONS .....	114
Summary of the Study .....	114
Discussion .....	119
Implications .....	131
Delimitations and Limitations of the Study .....	136
Recommendations for Future Research .....	138

APPENDIX A. SURVEY INSTRUMENT .....	141
APPENDIX B. INTERVIEW AND FOCUS GROUP QUESTIONS.....	151
APPENDIX C. HONDURAS NATIONAL FELLOWSHIP AWARD LETTER .....	155
APPENDIX D. LOUISIANA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL LETTERS .....	156
APPENDIX E. PARTICIPANT CONSENT FORMS .....	158
REFERENCES .....	163
VITA.....	186

## LIST OF TABLES

Table 1. Definitions of Job Performance and Related Constructs .....	23
Table 2. Types of Technical Management Practices .....	33
Table 3. Definitions of Workplace Motivation and Related Constructs.....	43
Table 4. Demographic Survey Results.....	64
Table 5. Interview Participants .....	67
Table 6. Focus Group Participants.....	68
Table 7. Questionnaire Research Components .....	73
Table 8. Instrument Reliability .....	74
Table 9. Interview Question Examples.....	75
Table 10. Fit Indices and Acceptable Thresholds.....	78
Table 11. Descriptive Statistics, Correlations, and Reliabilities.....	85
Table 12. Measurement Model Results .....	91
Table 13. Hypothesis Testing: Effects of Path Estimates .....	93
Table 14. From Codes to Global Themes .....	94
Table 15. The Emerged Themes for the Nature of Psychological Empowerment, Workplace Motivation, Social Capital Impact on Job Performance .....	99
Table 16. Joint Display of Quantitative, Qualitative and Mixed Methods Meta-Inferences of Functional Constructs related to Job Performance .....	107



## LIST OF FIGURES

Figure 1. Hypothesized model .....	58
Figure 2. Municipalities of Olancho, Honduras and surveyed areas .....	63
Figure 3. Job performance measurement model .....	86
Figure 4. Psychological empowerment measurement model .....	87
Figure 5. Respecified measurement model of workplace motivation.....	88
Figure 6. Respecified measurement model of social capital.....	89
Figure 7. Overall respecified measurement model .....	90
Figure 8. Hypothesized structural model .....	92

## **ABSTRACT**

A farmer's job performance is critical to the production of raw materials such as food, fiber, and fuel and is therefore an important concern for individuals, businesses, and economies across the world. The literature on improving farmers' job performance has focused more on introducing new technologies, and less on the psychosocial factors that improve job performance. The primary purpose of this study was to examine the impact of psychological empowerment, workplace motivation, and social capital on farmers' job performance in Honduras.

A mixed methods approach was used to collect and analyze both quantitative and qualitative data. For quantitative data, a paper-and-pencil-based questionnaire with 53 items (excluding nine demographic questions) was distributed. Structural equation modeling (SEM) was adopted to analyze data from 396 responses. For qualitative data, semi-structured individual interviews (six farmers) and a dyadic focus group (three farmers) were conducted. By using the constant comparison method, the qualitative data were coded and analyzed for emergent themes. The combined findings were compared for confirmation, discordance, and for expansion of the data.

The relationship between psychological empowerment and job performance was found to be statistically significant. For the qualitative findings, the farmers described that their experience of control and impact on others influenced their job performance. Machismo was an expansion to quantitative data, where female farmers described that gender relations may influence their job performance. The relationship between workplace motivation and job performance was not found to be statistically significant. The qualitative data displayed discordance, where farmers revealed that money, work conditions, and heritage played a role in

their job performance. The relationship between social capital and job performance was found to be statistically significant. For the qualitative findings, the farmers revealed that the power of unity played a role in their job performance. The combined findings also suggest that workplace motivation may mediate the relationship between psychological empowerment and job performance, and social capital and job performance.

The findings are discussed considering the current research on job performance in human resource development. The implications of the study are presented for theory, practice, and policy. Finally, recommendations are made for future studies.

## CHAPTER 1. INTRODUCTION

At some point in your life, at least once, you may need a lawyer, a doctor or an architect, but every day of your life you need a farmer.... I feel that this is a purpose and motivates me every day.... Yes, I perform. When someone says, “thank you for what you produce.” This is the best pay. You can see the impact you have producing food for people.

*Farmer Juan, Corn, Beans and Coffee Farmer, Olancho, Honduras*

A farmer’s job performance is a critical pillar in societies ability to function and sustain life through the raw and value-added materials produced. Farmers develop, cultivate and produce raw materials that feed, clothe, and provide fuel for the world. Their job performance has implications beyond the production of goods and services and is relevant to social justice and impacts both environmental and societal outcomes in nations and the world (Godfray et al., 2010). Beyond these outcomes, a farmer’s job performance affects their own livelihoods, families, and communities.

Rivera (1995) emphasized that the capacity of the workforce to produce sustainable agricultural products is a concern for the field of human resource development (HRD). Developing human resources in the agricultural sector is important due to the following pressures: “1) expanding international trade and the penetration of competitive global pressures on local markets; 2) problematic food security, or access to food; 3) population growth, migration and urbanization; 4) science and technology development; 5) increasing pressures on land use; 6) sustainable agriculture and natural resources management; 7) growing expectations for participation and control of institutional decision-making; 8) imbalances in the supply of and demand for trained workers; and 9) persistence of poverty, illiteracy and poor quality of life in certain developing countries” (Rivera, 1995, p. 71). With attention to these changes and

demands, more research is needed to better understand the HRD context of farmers and to explore how their job performance can be improved.

### **Problem Statement**

As the world population and consumption patterns for food, fiber, and fuel increase, the research on farmer's job performance will require a "revolution in social and natural sciences" (Godfray et al., 2010, p. 817) that will allow challenges in the agriculture industry to be addressed. In many nations around the world, the agriculture sector is the main source of the economy's gross domestic product and farming employs a large percentage of the population. The performance of the agriculture sector in countries where the population is largely employed in farming is strongly connected to a reduction in poverty, hunger, and inequality of the population (Lowder, Scoet, & Raney, 2016). A healthy agriculture sector is closely related to poverty reduction, economic development, and peace, in countries where the economy is dominated by farming (De Soysa & Gleditsch, 1999). In addition to the importance of the agriculture sector to the nation's peace and security, farmers' job performance fulfills important human needs for survival, including the production of food, fiber, and fuel.

Employers have long recognized the importance of job performance to meet an organization's objectives, specific goals, and bottom line, and as a result, performance is a highly researched area in HRD studies (Joo, Jeung, & Yoon, 2010). Employers and employees today face more complex and globalized environments, with rapid changes in economics and technology along with diverse conditions and altered circumstances (Ohme & Zacher, 2015; Savickas et al., 2009). Therefore, there is a need for additional organizational research on factors that increase job performance (Fogaça, Rego, Melo, Armond, & Coelho, 2018). In particular,

socially conscious and rigorous research, grounded in theory, may improve farmer's performance outcomes.

Following this, self-determination, social capital, and social network theories provide theoretical underpinnings for understanding job performance through psychosocial measures. Self-determination theory emphasizes factors such as relatedness, competence, and autonomy to understand human behavior (Deci & Ryan, 2012). Social capital and network theories describe the benefit of relationships in human systems (Putnam, 1995; Lin, 1999). These theories reveal a basis for the study of the constructs of psychological empowerment, workplace motivation, and social capital as related to job performance research.

Literature shows that factors such as psychological empowerment, workplace motivation, and social capital have a positive influence on the job performance of employees (Chiang & Hsieh, 2012; Joo, Jeung, & Yoon, 2010; Carmeli, Ben-Hador, Waldman, & Rupp, 2009). Little is known about these factors for farmers, and specifically in the context of agriculture dominant economies. A great deal of research has been conducted on job performance in organizations, but few studies have been carried out to discover the impact of psychological, motivational, and social factors on farmer's job performance. The research on farmer's job performance emphasizes technological additions, extension, and adult education. Most studies on job performance have generally focused on non-farm settings, including business, government, and educational organizations (Joo, Jeung, & Yoon, 2010; Cho, Faerman, & Yoon, 2012; Park, Kang, & Kim, 2018). As a result, the influence of psychosocial factors for performance improvement in agriculture, needs further attention.

Several studies on psychological empowerment, workplace motivation, and social capital demonstrate a positive correlation with job performance (Carmeli et al., 2009; Hechanova et al.,

2006; Leisink & Steijn, 2009). Existing quantitative, qualitative, and mixed methods research on job performance emphasizes non-agriculture focused industries and most of the research does not take place in Latin America (Chang & Jacobs, 2012; Chiang & Hsieh, 2012; Jaiswal & Dhar, 2016; Karvardar, 2014; Schindler & Burkholder, 2016; Yeung, Lai, & Yee, 2007). The literature review revealed that there is no previous research that tested the relationships among the variables of psychological empowerment, workplace motivation, social capital, and job performance. Additionally, the literature lacked mixed methods research in which quantitative and qualitative data were used together and grounded in a farmer's point of view on how psychological empowerment, workplace motivation and social capital interplay with job performance.

Therefore, the present study attempted to address the research problem of: 1) unstudied psychological and social factors in farmers and their impact on job performance, 2) a lack of evidence of farmer's experiences from their point of view on psychological and social factors which influence their job performance, 3) limited HRD research on the workplace of farmers in a Latin American setting. Consequently, the study aims to provide empirically grounded evidence for informed decision-making to improve farmer's job performance, which may ultimately help their livelihoods. At the same time, improving farmer's livelihoods may have a broad range of outcomes on their economic stability, global food security, and social justice.

### **Context of Rural Farmers in Honduras**

Honduras is a multi-ethnic nation with deep cultural and historical roots in agricultural production. Located in Central America, the country is bordered by Nicaragua, El Salvador, Guatemala, the Caribbean Sea and the Gulf of Fonseca, opening to the Pacific Ocean. The nation has both tropical and subtropical climates for agricultural production. Honduran farmers play a

critical role in providing agricultural products for domestic and international markets. In addition to aquaculture production, fisheries, and cattle farming, the main crops grown by farmers in Honduras include coffee, bananas, cacao, melons, pineapple, sugarcane, African palm, plantain, citrus, wood products, cotton, tobacco, beans, maize, and rice (New Agriculturist, 2009). In particular, the smallholder farmer plays a key role in Honduran agrarian systems.

The agriculture development strategies of nations frequently examine the performance of the agriculture sector. In Latin America, the smallholder farm sector represents two-thirds of the rural population or approximately 75 million people (Altieri & Nicholls, 2008; Lowder, Scoet & Raney, 2016). In Latin America, the term “campesino,” refers to the rural population which often participates in agriculture on resource-limited small farms (Loker, 1996). Loker (1996) describes resource-limited farms in Latin America as lacking income and assets, with a large reliance on self and family employment for labor needs, and production for home use along with cash crops for income. Additionally, the farmers may not have access to production technologies such as agrochemical inputs or means to lower the high labor inputs required to operate their farm (Ruben, 2005). The smallholder farmer may often rely on other sources of income for survival such as off-farm employment and remittances (Valdés & Foster, 2005; Loker, 1996).

Smallholder farmers may have disadvantages that make it more difficult to get their product to market, such as being from a remote disadvantaged group, having poor roads and technology to reach markets, and unfair market agreements (Kisamba-Mugerwa, 2005). Eakin, Tucker, and Castellanos (2006) stated that the crisis that results from risk in rural farming communities could be compared to other sources of social unrest such as migration, increased poverty, and malnutrition. Farmers in Honduras often deal with poor road systems, weak support and



unorganized national markets (p. 169). As a result, the farmer's in-country conditions may result in disadvantages for their businesses on a structural level.

Honduras is a multiethnic country, with a collectivist national culture which emphasizes family and social relationships, and paternalistic and autocratic styles of management (Discua Cruz, Hamilton, & Jack, 2012). For example, Discua Cruz, Hamilton, and Jack (2012) demonstrated that the family context guides future generations in business from an early age, through family entrepreneurial teams. Traditionally, collectivist cultures place more value on the needs of a group, as opposed to the needs of specific individuals (Gambrel & Cianci, 2003). For instance, business decisions made by farmers may place more value on, "How would the decision impact the people around me?" as opposed to, "How would the decision impact me personally?" Similarly, paternalistic leadership styles place less importance on personal autonomy and group decision-making. Mansur, Sobral, and Goldszmidt (2017) demonstrate that paternalistic leadership styles in Latin America emphasize authority, benevolence, and integrity. Although nations and their regional cultures may vary, Hofstede et al. (2010) found that data from Latin American countries provide evidence for higher power distance scores. For example, power distance may explain workplace behaviors, where unequal distributions of power, authority, and disparities in the decision-making process are less questioned.

Another area of research describes gender disparities for Honduran women in the business world, where due to discrimination, there are unequal opportunities for access (De Hoyos, Bussolo, & Núñez, 2012). For example, Mollett (2010) demonstrated that men in Honduras may impact a women's traditional land inheritance, due to the overall societal structures which help men become economically dominant. Her research in the Miskito culture of Honduras (an indigenous ethnic group) demonstrated that gender relations can be viewed by

some individuals as “complementarity” (p. 366) where men and women have naturally prescribed roles. Additionally, it may be understood that the gender roles of men and women are the decision of God (Humphries et al., 2012). A women’s struggle to maintain ownership of land may be explained by race and gender discrimination (Mollett, 2010; Mollett, 2015; Mollett & Faria, 2013). In sum, land ownership and gender equality in the workplace of farmers may disproportionately impact women.

The division of labor among farmers typically follows the pattern of the male as the head of the farm (Humphries et al., 2012). Consequently, research on the gender division of labor in Honduras has emphasized the unequal burdens and incorporation of women into decision-making processes (Gibbons & Luna, 2015; Humphries et al., 2012). Therefore, to understand farmer’s job performance, a gendered lens may help understand labor activities.

Historically, rural farmers in Latin America have served a vital role in their nation’s prosperity, security, and political landscape. The political implications and historical relations of rural farmers in Honduras have featured prominently in the literature (e.g., Bulmer-Thomas, 1987; Booth, 1991; Euraque, 1996; Edelman, 2008; Shipley, 2016). In the early 1900s, the term “Banana Republic,” was coined to describe Honduras, the banana exportation business, and the influence of U.S. companies in the country. In *Prisión Verde* or “Green Prison” (1957) Honduran author Ramón Amaya Amador wrote about Honduran banana farmers’ job conditions regarding social justice outcomes and national and international interference. His book described the class tension among farmer groups, large landowners, and corporations. *Green Prison* was written from the communist perspective and during the Cold War’s “left-wing vs. right-wing,” clashes in Latin America. As illustrated in *Green Prison* and work by more recent authors, (e.g. Edelman, 2008; Shipley, 2016), the dichotomy of ideological viewpoints persists in Latin American

politics regarding job performance success and improved livelihoods. In sum, Honduran farmers and their job performance holds a strong meaning in their nation's social, economic and political landscape.

In the wake of pressures both nationally and internationally, today, rural farmers in Honduras face many challenges. Academic research may provide possible solutions to improve the livelihoods of individuals who depend on agriculture for a source of income. It seems that HRD research may have an opportunity to provide solutions to farmer's job performance and help understand the individual, group, and systems levels of challenges.

### **Why Study Farmers and Farmers in Honduras?**

In the world, millions of people are employed as farmers on over 570 million farms (The Food and Agriculture Organization of the United Nations, 2014). While the exact number of farmers is unknown, it is clear that much of the world's labor force are farmers. Currently, many people in the world face food insecurity, due to reasons including food loss and waste, poor access, and political and financial pressures. Additionally, world health and agriculture agencies have suggested that sustainable increases to food production will be necessary to feed an ever-growing population (Godfray et al., 2010), while the exact amount of increases needed or the vision of an ideal food system is debated (Bene et al., 2015; Tomlinson, 2011). As world populations increase and resources are depleted, humanity may rely more on efficient and productive farmers while considering the importance of social justice (Godfray et al., 2010). As such, the need to understand and improve farmer's job performance is a necessity to sustain, feed and clothe a growing population.

Farmers are a critical component of the world labor force and millions of families worldwide rely on this employment. In addition to the importance of the labor force, the production of raw materials for the food, fiber and fuel of nations and societies is critical to the sustenance of the world. As global competition for high-quality agricultural products increases with rising world populations and disposable incomes, the talent and workforce of the agricultural industry will need significant attention. In many economies, peace and national security are tied to the stability of the agricultural workforce.

Currently, 1.2 billion people in the world live in extreme poverty, of which 75% live in rural areas, and 800 million are suffering from chronic undernutrition (Grant, 2011). However, most people who live in poverty in the world are subsistence and semi-subsistence farmers who themselves have poor access to quality and consistent food supplies (Grant, 2011). Farmers are vulnerable to global economic volatility and market fluctuations (Eakin, Tucker, & Castellanos, 2006). Understanding psychological, motivational, and social factors to improve farmer's job performance could lead to improved outcomes for individual households and to the development of new interventions that may impact agricultural productivity. Furthermore, Latin America may provide a "natural laboratory" (p. 4) to conduct management research due to the unique social and cultural conditions to test theory and the large proportion of the workforce employed in agriculture (Aguinas et al, 2020). For instance, Honduras has a large population of farmers which makes up a significant amount of the workforce.

The population of Honduras is estimated to be 9,256,899 (March 2020 est.) (National Statistical Institute of Honduras (INE), 2020). Within Honduras, Olancho is the largest state by land mass and located in the northeastern part of the country, bordered by Nicaragua. The population of Olancho is estimated to be 537,306 (National Statistical Institute of Honduras

(INE), 2013). The Olancho economy is dominated by farms that produce cattle, dairy products, coffee, cacao, grains, and horticultural products. Researchers have estimated that the agriculture sector accounts for 68% of employment in developing nations, and smallholder farms constitute 12% of agricultural land worldwide (The World Bank Group, 2019). In Honduras, the agriculture sector employs 1/3 of the workforce (IHS Markit, 2018). Value-added agriculture in Honduras is the top-ranked sector comprised of 13.4% of the nominal gross domestic product (IHS Markit, 2018). While products are used for local consumption, the Honduran economy relies on the U.S. economy as the export market for agricultural goods (IHS Markit, 2018). In 2017, the United States imported \$808 million dollars of agricultural products from Honduras, including fresh fruits and vegetables, unroasted coffee, bananas and plantains, and both processed fruit and vegetables (Office of the United States Trade Representative, 2017). Hence, both the United States and Honduras rely on each other for the trade of agricultural products.

In contrast to the small farms and the large labor market in Honduras, the average farm size in the United States is 441 acres, specialized and driven by technology which allow more acres and reduced individual labor (MacDonald, Korb & Hoppe, 2013; USDA National Agricultural Statistics Service, 2017). Olancho, Honduras was selected for the study location due to the ideal setting for answering the research questions, including the dominance and importance of agriculture in the economy, the large labor force of farmers, and the convenience of access to farmers through the local National Agriculture University (UNA). Furthermore, Olancho has a diversity of both smallholder and large farms which were included in the study, as well as a representative sample of various crops grown in Honduras.

## **Purpose of the Study and Research Questions**

The purpose of this study was to examine the impact of psychological empowerment, workplace motivation, and social capital on farmers' perceptions of their job performance in Honduras, and to understand their interpretations and perceptions of these psychosocial factors in their farming contexts. As one mixed methods approach, a convergent design was used for the study with an embedded data approach, in which quantitative and qualitative data were collected separately (Creswell & Plano Clark, 2011). The quantitative data was used to predict how psychological empowerment, workplace motivation, and social capital affected farmer's job performance in Honduras. The qualitative data from interviews and a focus group provided further understanding of and expanded on the quantitative results, by seeking to explain how the farmers felt the constructs influenced their job performance. The collection of both quantitative and qualitative data formed a more complete picture of how the variables are related than could be seen by one type of data alone.

This study was guided by the following primary research question: What is the relationship among psychological empowerment, workplace motivation, social capital, and job performance of farmers in Olancho, Honduras? The secondary research questions provide additional detail in addressing the primary research question:

- 1) What is the relationship between psychological empowerment and the job performance of farmers?
- 2) What is the relationship between workplace motivation and the job performance of farmers?
- 3) What is the relationship between social capital and the job performance of farmers?

The qualitative study aimed to discover the nature of how farmers in Honduras described their experience of psychological empowerment, workplace motivation, and social capital in regard to their job performance, by asking farmers to describe how they felt the individual factors affected their job performance. The following questions addressed this aspect:

- 4) How do farmers describe their experiences with psychological empowerment on their job performance?
- 5) How do farmers describe their experiences with workplace motivation on their job performance?
- 6) How do farmers describe their experiences with social capital on their job performance?

The following question was used to frame the findings of the mixed methods approach used:

- 7) How do the findings of the qualitative data help understand the results of the quantitative data?

### **Significance and Contribution of the Study**

This study provides significant contributions to the literature and has several practical and policy implications. The overall significance and contribution of the study is to improve farmer's job performance through a better understanding of the psychosocial factors that impact them, to improve their workplaces and livelihoods. Therefore, the contributions of the study have implications for both individual farmers, the agricultural industry, and HRD theory and practice.

First, this study aimed to add to the global discussion on how to improve farmer's livelihoods by empirically testing the impact of psychosocial factors on their job performance. A need existed for more HRD research to empirically understand factors that impact farmer's job performance. The study analyzed whether psychological empowerment, workplace motivation,

and social capital had an impact on farmer's job performance in Olancho, Honduras.

Additionally, the study provided the farmer's point of view and their experiences with how these factors influenced their job performance.

Second, the study attempted to overcome the methodological limitations of a single method by using a mixed methods approach. Too few mixed methods empirical studies exist in HRD to fully understand how psychosocial factors impact farmer's job performance. The study attempted to gather quantitative and qualitative data from farmers to understand how their job performance was impacted by the study variables in the Honduran farming context.

Third, the findings of this study could be important to HRD through further understanding of theory and practice for improving farmer's job performance. The study attempted to further the understanding of self-determination, social capital, and social network theories in relation to job performance for farmers in Olancho, Honduras. The research provided support to theories and assumptions of human behavior and helped begin to fill the gap in the HRD literature.

Finally, understanding farmer's HRD challenges is critical to making industry interventions and policy recommendations to improve the performance of workers and ultimately the food supply chain. This study addressed this important area. HRD research that helps improve farmer's job performance may contribute to improved livelihoods of individual families and societies. Also, the findings of this study has practical implications for the farmers in Olancho, Honduras by providing insight into their own psychological empowerment, workplace motivation, and social capital to improve their job performance. The study also provides policymakers, researchers, and implementers of agricultural development plans with insight into the consideration of psychosocial factors in job performance strategies.



## **Definition of Terms**

The following definitions were used for the purpose of this study:

### **Farmer**

In this study, a farmer is defined as an individual who rears animals or cultivates land for agricultural products as a source of income. The farmers in this study included small-holder, family, agricultural workers, and large-scale farmers in Olancho, Honduras.

### **Food Security**

The ability for all the people in the world to have social, physical and economic access to safe and nutritious food, at all times, to meet both their preferences and dietary needs (UN FAO, 2008). For food security to exist, there must be both access and availability of food, as well as the education and ability to utilize the food for nutrition. Additionally, within this definition, the stability of access, availability, and utilization is a necessity (p. 1).

### **Job Performance**

Job performance in this study is understood as an employee's formal requirements in their role as an employee to meet quantitative and qualitative standards of their organization and working towards a job description (Borman & Motowidlo, 1993; Katz & Kahn, 1978; Murphy, 1989; Rutundo & Sackett, 2002; Welbourne, Johnson, & Erez, 1998;). In-role job performance is related to activities and actions formally required under an employee's position (Borman & Motowidlo, 1997) and looks at the actions specified and required by an employee's job description (Janssen & Van Yperen, 2004). For this study, specifically, "perceived job

performance,” “employee perception of self-performance,” “self-appraised performance,” in the farmers was studied.

### **Machismo**

Machismo in the workplace is a male ideology and behavior which includes the characteristics of aggressiveness, hypersexuality, male supremacy, and dominant behaviors towards women (Ingoldsby, 1991; Mirandé, 1977; Osland, 1997). The machismo is not to be confused with, “familism,” or putting the needs of the family, before individual interests (Ingoldsby, 1991).

### **Psychological Empowerment**

Psychological Empowerment is a psychological state in which people feel meaning, competence, self-determination, and impact (Spreitzer, 1995). An employee’s psychological empowerment state is their own perception of control in their own work. Psychological empowerment in work is defined as the employee’s belief that they can influence and have a significant impact on their own work (Spreitzer, 1995).

### **Social Capital**

The networks and relationships of an individual make up their social capital. The study uses the definition of Putnam (1993) who defined social capital as the “trust, norms and networks,” that can improve efficiency in the workplace.

### **Smallholder Farm**

A smallholder farm is defined by relative and absolute socioeconomic characteristics particular to the specific farm location and context. However, a typical smallholder farm has low

resources and low market access, involves family labor, and has a higher vulnerability to shocks (Khalil, Conforti, Ergin, & Gennari, 2017). The average size of a smallholder farm varies by context. A general average area is 4.94 acres (2 hectares), although the threshold may be above 24.71 acres (10 hectares) of land owned by the farmer, leased or both (Khalil et al., 2017; Nagayets, 2005). Additionally, smallholder aquaculture, fishery, or forestry operations are defined by similar criteria of vulnerability, and not through land size.

### **Tropical Region**

The tropics are located around the equator, between the Tropic of Cancer (north) and Tropic of Capricorn (south) (Forsyth & Miyata, 1987). The subtropical regions are located between the tropical and temperate zones. The tropical region has a variety of climates, however, the sunlight is more direct, the length of the days are constant, and the weather is generally warmer (p.8).

### **Workplace Motivation**

Workplace motivation is defined as the intrinsic and extrinsic factors that inspire or encourage employees to complete tasks in their employment. The motivation that stems from the outside of a person is extrinsic and motivation that arises internally is considered intrinsic (Herath, 2010). Both extrinsic and intrinsic motivations of farmers were measured in this study.

### **Summary**

Although farmers are a large part of the world's labor force, few HRD studies are conducted on farmer's job performance. The aim of this study was to understand psychosocial factors of farmers in Olancho, Honduras. Self-determination, social capital, and social network

theories were used as a framework to understand how psychological empowerment, workplace motivation, and social capital impact farmer's job performance.

The purpose of this study was to provide data to better understand farmer's job performance and contribute to the HRD literature by providing insight into psychosocial factors that impact the agriculture industry. In Honduras, the agriculture sector is a vital part of the workforce and it employs a large segment of the population. A mixed methods research design was used in which the qualitative data provided additional details to understand the quantitative data. This study was guided by the following research question: What is the relationship among psychological empowerment, workplace motivation, social capital and job performance of farmers in Olancho, Honduras? The relationship among psychological empowerment, workplace motivation, social capital and farmer's job performance in Honduras was studied. The study aimed to provide additional data for theory, practice, and policy for addressing farmer's HRD challenges.

## **CHAPTER 2. REVIEW OF LITERATURE**

This chapter presents a review of existing literature related to the research questions presented. The following review will present the theoretical framework of the study, the definition and foundations of job performance, and the relationship among job performance and the variables of interest. Based on the review of the literature, hypotheses are presented to describe the relationships among variables.

### **Theoretical Framework**

The theoretical underpinnings of this research are in self-determination theory, social capital theory, and social network theory. The relationship among self-determination theory, social capital theory, and social network theory with psychological empowerment, workplace motivation, social capital, and job performance provide evidence for supporting relationships among research variables. As a research strategy, these theories provided a framework to understand and analyze the study data.

### **Self-determination Theory**

Self-determination theory was developed based on early theories of motivation (Gagné & Deci, 2005). Early theories of motivation by Maslow (1943) described that humans have a hierarchy of requirements to reach the final and highest stage of self-actualization or fulfillment of one's talents and potential. Before one can reach the highest stage, their physiological, safety, social, and esteem needs must be met. This early theory of motivation suggested that empowerment and social capital are necessary to reach self-actualization. More recently, self-determination theory was developed and suggests that humans have three innate needs that are essential to optimal functioning and well-being: the need for competence, relatedness, and

autonomy (Ryan & Deci, 2000). This theory holds that human beings need autonomy, intrinsic motivation, and relation to others (Deci & Ryan, 2012). Deci and Ryan (2012) explain that these basic needs have been consistently shown to be tied to effective performance.

Additionally, the four cognitions in psychological empowerment (meaning, self-determination, competence, and impact) are closely associated with the three psychological needs in the self-determination theory (relatedness, competence, and autonomy) (Taylor, 2013). The underlying assumption of self-determination theory is that “human beings are active, growth-oriented organisms who are naturally inclined toward integration of their psychic elements into a unified sense of self and integration of themselves into larger social structures” (Deci & Ryan, 2000, p. 229). Tremblay, Blanchard, Taylor, Pelletier, and Villeneuve (2009) found that research guided by theories of social exchange, justice, and self-perspective - such as self-determination theory - have led to managerial practices that enhance individual job performance. For the study purpose, self-determination theory provides an ideal framework for understanding explanatory variables that impact farmer’s job performance.

### **Social Capital Theory**

Social capital theory has its early roots in political theories related to democracy and pluralist societies, such as the work by James Madison and Alexis de Tocqueville (Garson, 2006). These authors explored the meaning of social capital and the meaning for democratic forms of government. In their research defining a general theory for social capital, Häuberer (2011) defines the founding theorists of social capital theory as Pierre Bourdieu and James Coleman in their works, “Bourdieu’s Theory of Capital (1972),” and “Coleman’s Rational-Choice (1990).” Recent contributors to the framework for social capital theory link social capital

to economic development. Putnam (1995) described the “networks, norms and social trust,” that enable societies, organizations, and individuals to operate efficiently.

Social capital theory emphasizes the beneficial impact of relationships, strong connections, and environments of trust, helpfulness, and rapport on successful performance and learning (Ellinger, Ellinger, Bachrach, Wang, & Elmadağ Baş, 2011). For instance, social capital theory supports the idea that more social capital for an individual would lead to better job performance, due to the strength and value of social capital (Ellinger et al., 2011). The theory offers a conceptual framework to help understand the relationship between social capital and job performance. Therefore, the theory may offer understanding into the job performance of farmers.

### **Social Network Theory**

Social networks, according to Lin (1999), facilitate the flow of information. Social credentials are used to access resources and reinforce identity and recognition. He emphasized that social capital is derived from, “embedded resources in social networks” (p. 28). In animal behavioral ecology, the social network theory approach has been used to understand cooperation in antipredator behavior, social learning, eavesdropping, partner selection, altruism, information flow and other animal survival behaviors (Sih, Hanser, & McHugh, 2009). For instance, social network structures may influence an animal’s access to information for survival.

Correspondingly, social network theory may help explain how social networks in the workplace influence job performance.

In Sparrowe, Liden, Wayne & Kraimer’s (2001) description of social network theory, social networks increase or constrain an individual’s access to resources. In the workplace, they tested the relationship among social network structure and individual job performance and found

that an individual's access to resources had a positive relationship to job performance. Examples of work-related resources gained through a network include advice, access to information, social support, and social identity (Sparrowe et al., 2001). Specifically, advice networks in the workplace include sharing of information, guidance, assistance and any other resources workers use to help facilitate job performance. In this study, social network theory helps frame an understanding of how farmer's social structures may influence their job performance.

### **Job Performance**

Job performance is an important variable in HRD research. The definitions of job performance have varied throughout research. In addition to HRD, various fields of research attempt to understand the job performance of individuals.

#### **Definition**

In HRD research, job performance has been considered an important dependent variable (Beltrán-Martín & Bou-Llusar, 2018; Campbell, 1999). Swanson and Holton (2009) defined HRD as “a process of developing and unleashing expertise for the purpose of improving performance” (p. 99). HRD performance literature explores diverse contexts and various work structures. Scholars have used various terms to describe the construct of job performance, including in-role performance (Borman & Motowidlo, 1993; Hui, Law, & Chen, 1999), task performance (Borman & Motowidlo, 1997; Murphy & Kroeke, 1988), productivity (Mahoney, 1988; Murphy, 1990), efficiency (Budd & Colvin, 2008), extra-role performance (Hui et al., 1999), contextual performance (Borman & Motowidlo, 1993), adaptive job performance (Pulakos, Arad, Donovan, & Plamondon, 2000), and citizenship performance (Borman, Penner, Allen, & Motowidlo, 2001). Job performance in the workplace has been defined as the total expected value to a business of a worker's behavior over time (Motowidlo & Kell, 2003).



Alternatively, job performance has been defined loosely as “a function of outcomes at work” (Yilmaz, 2015, p. 36). It is challenging to define performance in HRD in terms of including all “criterion problems” (p. 7) and dimensions within and outside of an individual’s control (Ilgen & Pulakos, 1999).

One area of HRD literature differentiates between task and contextual performance (Borman & Motowidlo, 1993; Motowidlo & Schmit, 1999; Motowidlo & Vanscoter, 1994) when defining job performance. Task performance is the functional activities that are directly related to meeting the goals of the job mission, whereas contextual performance relates to the behavior patterns that help meet the requirements of the position (Motowidlo & Schmit, 1999). The task performance is related more closely to ability, whereas contextual performance is tied to personality.

In-role job performance is related to activities formally required under an employee’s position (Borman & Motowidlo, 1997); the actions specified and required by an employee’s job description (Janssen & Van Yperen, 2004). Campbell, McCloy, Oppler, and Sager (1993) included behaviors relevant to meeting organization goals into the definition of job performance. Campbell et al. (1993) addressed the complexity of job performance by addressing both the task and contextual behaviors that meet the goal within the organization. Campbell et al. (1993) defined job performance as the actions or behaviors of individuals that can be observed and measured and are relevant to the organization’s goals. They distinguished performance from effectiveness and productivity and from the determinants of performance. Effectiveness can be influenced by variables outside the control of a person (e.g. sales in dollars). Productivity is an index related to effectiveness and the cost of achieving effectiveness.

Performance is a phenomenon which is dependent on the context and mission or goal of the individual or organization (Campbell et al., 1993). For example, performance can be measured both in the context of family goals or in the context of formal employment. “Cognitive, motor, psychomotor, or interpersonal,” actions that an individual can control embody the definition of performance (p. 40-41). The Campbell et al. (1993) model is a conceptual structure for performance and recognizes that a job is a “complex activity,” (p. 41); the performance components of different positions are varied per position. The individual is the unit of analysis and the determinants and covariation patterns of variables of performance are specific to the type of job.

While each definition explains different aspects of job performance, all the definitions seek to explain activities and/or behaviors that lead to a unit of change in the workplace. The various definitions of job performance and related constructs are summarized in Table 1.

Table 1. Definitions of Job Performance and Related Constructs

Terminology	Authors	Definition
Job Performance	Brayfield & Crockett (1955)	Productivity of workers influenced by attitudes, morale, individual differences in motivation, satisfaction, skill, social systems and structures.
	Bernberg (1952)	“The average weighted score of adaptability, dependability, job knowledge, quality and quantity” (p. 401).
	Vroom (1962)	“Job performance consists of quality of work; quantity of work; dependability, knowledge of job; judgement and

(table cont'd.)

Terminology	Authors	Definition
		common sense; personality; ability to learn, initiative; cooperation; and industry and application” (p. 166).
	Lawler & Porter (1967)	Job performance is synonymous with “accomplishment,” (p. 23).
	Murphy & Kroecker (1988)	“The set of behaviors that are relevant to the goals of the organization or the organizational unit in which a person works” (p. 6).
	Campbell et al. (1993)	“Performance is herein defined as synonymous with behavior. It is something that people actually do and can be observed. By definition, it includes only those actions or behaviors that are relevant to the organization’s goals and that can be scaled (measured) in terms of each individual’s proficiency (that is, level of contribution)” (p. 40).
	Heskath & Neal (1999)	“People’s responsiveness to technology and their capacity to take advantage of it” (p. 49).
	London & Mone (1999)	“Proficiency with regard to continuous self-directed training, which puts the measurement emphasis on knowledge and skill, rather than performance itself” (p. 415).
	Motowidlo & Kell (2003)	The total expected value to a business of a worker’s behavior over time.

(table cont'd.)

Terminology	Authors	Definition
	Swanson & Holton (2009)	“Accomplishing units of mission-related outcomes or outputs” (p. 149).
	Yilmaz (2015)	“A function of outcomes at work” (p. 36).
	Ramawickrama, Opatha, & Pushpakumari (2017)	“The extent to which the employee has shown his or her traits, engaged in behaviors and produced results which are appropriate to task performance and has engaged in citizenship performance and counterproductive performance during a particular period of time” (p. 77).
In-Role Performance	Hui et al. (1999)	“Work behaviors that are prescribed by formal job roles” (p. 4).
	Borman & Motowidlo (1993)	“Role-prescribed tasks that must be performed by incumbents in exchange for rewards that accrue from organizational membership” (p. 74).
Task Performance	Murphy & Kroeker (1988)	“An incumbent's success in carrying out the tasks that are included in a set of occupational standards” (p. 2).
	Borman & Motowidlo (1997)	“The effectiveness in which job incumbents perform activities that contribute to the organization’s technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services” (p. 99).
Productivity	Mahoney (1988)	“The efficiency of transforming inputs into outputs” (p. 35).

(table cont'd.)

Terminology	Authors	Definition
	Murphy (1990)	“The ratio of output variables such as the value of goods and services of an organization and input variables such as capital, labor, equipment, and materials” (p. 159).
Efficiency	Budd & Colvin (2007)	“The effective, profit-maximizing use of scarce resources and captures concerns with productivity, competitiveness, and economic prosperity” (p. 3).
Extra-Role Performance	Hui et al. (1999)	“Work behaviors, such as organizational citizenship behavior, that are beyond formal job roles” (p. 4).
Contextual Performance	Borman & Motowidlo (1993)	“Activities that support the organizational, social and psychological environment in which the technical core must function” (p. 73).
Adaptive Job Performance	Pulakos et al. (2000)	Behaviors including, “solving problems creatively; dealing with uncertain and unpredictable work situations; learning work tasks, technologies, and procedures; demonstrating interpersonal adaptability; demonstrating cultural adaptability; demonstrating physically oriented adaptability” (pp. 613-614).
Citizenship Performance	Borman et al. (2001)	“Includes activities in the workplace such as helping others with their jobs, supporting the organization and volunteering for additional work or responsibility” (p. 52).

This study was based on Hui et al. (1999) and Borman and Motowidlo’s (1993) definition of in-role job performance, in which the behaviors and tasks are performed by workers for

reward in their employment. The aim of this research was to measure farmer's perception of their own in-role performance and to accommodate the tendency for farmers in the sample to be self-employed. Measuring the job performance of workers can range from subjective to objective measurements, with a goal to avoid conditions outside a person's control (Ilgen & Pulakos, 1999). For this study, a self-appraisal of farmer's job performance was examined. Self-appraised job performance provides unique psychometric properties for data which are relevant based on the specific study (Thorton, 1980) and provide a farmer opportunities to rate their own needs, capabilities, strengths, and weaknesses (McGregor, 1972).

### **Foundations of Job Performance Research**

HRD scholars have studied job performance historically since the foundation of the field. Job performance in the labor force is an important challenge on the national level (Campbell, 1999). The performance paradigm of HRD determines to improve the capabilities of individuals and the systems of their workplace to help individuals and their organization reach their full potential (Swanson & Holton, 2009). Based on the importance of performance on the success of people and organizations, a wide variety of HRD scholars have focused on how to improve job performance in the workplace. HRD is concerned with, "using industrial and organizational psychology research and theory to understand and improve individual and group behavior in work settings" (Campbell, 1999). Early studies on job performance emerged from economics, education, management, and psychology research.

**Economics.** Job performance from an economic perspective has been studied from various angles, with the goal to improve the economic viability of nations, companies, and individual households. The early foundations of job performance research in economics focused on standards of living and the changing nature of jobs. Hall (1922) described that in the early

1800s, industrial development in the United States shifted work from an individual process to larger production and machinery. The industrial revolution in the United States and Europe shifted the workforce from agrarian, individual artisan, and laborer societies to more mechanized systems, which resulted in a focus on improving employee performance in a factory setting. Additionally, Kornhauser (1922) discussed the changing economy and types of employment to “functionalized and centralized employment,” (p. 193) which emphasized the value of a selection of candidates for a position. Henry Ford (1929) discussed employee performance in *Foundations of Prosperity* in terms of the relationship with wages and standard of living in the United States (Crowther & Ford, 1929). Ford discussed the complexity among job performance, wages, and standard of living and touched on the need for harmony among the business output and motivations of employees. Ford emphasized a mutual benefit for both well-performing workers and companies, because it increases prosperity for workers through the development of capital and results in social justice.

The economic lens examines society and the scarcity of resources to meet human demands. Economic theories view labor in society as a limited resource (Debertin, 2012). Therefore, the contributions of economics to job performance research, and specifically in agriculture, focuses on labor relations, profit maximization, farm efficiency, decision-making, and labor productivity. The economic perspective focuses on how farmers make decisions to maximize efficiency on the farm and explores the behaviors and motives for decision-making to maximize profit. In the context of agricultural economics, job performance research focuses on the goals and objectives of the farm for profit maximization, which may include the study of the farmer’s behavior and motivations (Debertin, 2012). Agricultural economics emphasizes the study of profit, cost, and revenues of the farm. Gasson (1973) explored the motives of farmers

through an economic lens. The paper recommended expanding beyond the profit maximization factor in a farmer's decision-making model and suggested that a farmer's decision-making process goes beyond economic motivation. Rougoor, Trip, Huirne and Renkema (1998) stated that economic literature for decision-making should be further analyzed for motives beyond the production maximization approach. Amos (2007) analyzed the productivity and technical efficiency of Cacao farmers with factors such as levels of inputs, age, education and family structures of farmers. The technical efficiency of farmers and their production levels were found to be related to factors such as education and family size. Overall, economics is important to job performance research because of the emphasis on improving the productivity of the farm.

Human capital theory emphasizes the economic relationship of investment in education to the output of an individual. This economic theory links job performance to investment in education and to worker productivity (Friedman & Kuznets, 1945; Sweetland, 1996). Human capital is seen as a factor of production (Mincer, 1981). The history of job performance has been viewed differently depending on the economic system. The majority of economics and HRD research has been conducted within capitalist, economically developed and democratic countries. However, the model of economic development and systems of job performance may vary based on the individual economy in the state, country or region of research. For example, Borzutzky and Kranidis (2005) characterized the productivity and economic performance of farms under collectivization in Poland through agricultural output. The research in this area compared the dilemmas of performance in communist vs. private sector agrarian reforms. Similarly, in terms of production improvement, Alvarez and Puerta (1994) discussed efficiency and production in Cuba under state control. They found that less state control over agriculture led to higher quality of products, despite farmers having fewer inputs. This suggests that various government types



and economic models, such as liberalization or controlled economies, may have an impact on the production of agriculture.

**Education.** Early studies on job performance are seen in vocational education literature. Dooley (1946) linked the origin of expanding education for workers to factory workers in World War II, in which training was used to study and promote the job performance of workers. Training activities were expanded for employees during the war to meet the demands in the factories to supply armed forces, and after the war to help factories remain competitive in a shrinking market. Kattsoff in 1950 was among one of the first to argue that a worker's education should develop more than just skills to impact job performance. He stated, "The aims and objectives of workers' education must include some provision for imparting information relevant to home problems, to marital problems, to personality problems and in short to human problems," (p. 62) The writings by Kattsoff suggest that early writers in education who examined improving the job performance of workers recognized the importance of work-life balance and employee benefits, in addition to education.

Education-oriented job performance research for farmers focuses on technology adoption, access to formal education, and non-formal education through extension. Lockheed, Jamison, and Lau (1980) examined the role of education and extension services on a farmer's productivity. The study found that exposure to education and extension services (non-formal education) had a positive relationship to farmer's efficiency and productivity and allowed them to adapt to modern techniques. Therefore, the output of farmers was increased with exposure to formal and non-formal education. Kilpatrick (1997) demonstrated a positive relationship between education and farm business profit. Hence, the higher rate of education for farmers

equated to positive profit performance. It was suggested that education and training allowed farmers to have the skills to respond to changes in agriculture.

Huffman (2001) explored the role of education in agriculture and found differences in the impact of education on farm performance in different environments. Investments in, “schooling, research, extension, commodity, and credit programs with some intention of increasing farm families’ income (p. 38),” varied among the types of economies studied. Similarly, Pudasaini (1983) found that the impact of farmer education was different in hilly vs. non-hilly regions. Education impacted farmer’s productivity more in environments that had the opportunity for modernizing. Strauss, Barbosa, Teixeira, Thomas, and Junior (1991) found a positive relationship among farmer education and the adoption of technology in Brazil. Noor and Dola (2011) found that the majority of farmers reported that training had an impact on their performance through an increase in their knowledge, skills, and abilities. Restrepo, Leleal, and Kaufmann (2018) used the Kirkpatrick model to evaluate the training of dairy farmers in Kenya and found that education made a positive impact on production, leading to healthier animals and more efficient workloads.

**Management.** The economic shift to industry yielded a new view on employees, who were no longer only working for themselves, but for someone else. Hall (1922) explored morale, leadership and sharing power and found that in the early 1900s, even though the individual incomes were rising, worker’s interests and attitudes showed a lack of motivation. To improve the job performance of workers and the way they were managed, the human factor became important. Hall (1922) discussed the idea of “leadership to performance,” instead of, “driving to performance.” He emphasized that to increase production, employees should be treated as partners instead of servants to help the worker succeed. Hall (1922) expressed “to the extent that

we can enlist his brains, his heart, his will----his goodwill----to that extent we shall have found a solution to this industrial problem,” (p. 24). The early writings from management science emphasized leadership development to improve the job performance of workers.

Management sciences contribute to job performance research in agriculture by placing an emphasis on decision-making in farm practices to optimize farm efficiency and production. Fairweather & Keating (1994) analyzed the management styles of farmers. In the sample of farmers in New Zealand the three management styles included dedicated producer, flexible strategist, and environmentalist. Each management style resulted in a different application of goals in decision-making practices. Rougoor et al. (1998) analyzed studies related to farmer’s management capacity. They grouped management decision-making into personal aspects of farmers, practices, and procedures. Job performance in management studies are linked to practices and procedures which increase the technical, price and economic efficiencies on farms. Baumgart-Getz, Prokopy, and Floress (2011) summarized best management practices in agriculture literature for the United States and found that adoption practices were influenced by farmer attitudes and environmental awareness.

Risk management strategies have also been emphasized in the management literature related to agriculture. Meuwissena, Huirnea, and Hardaker (2001) observed differences in risk management strategies among dairy farmers, pig farmers, and mixed commodity farmers. Price and production risks varied among the farmer groups which indicated the importance of farmer specific analysis. Additionally, Miller, Dobbins, Pritchett, Boehlje, and Ehmke (2004) presented sources of operational and strategic risk that can impact operational performance in agriculture including uncertainties in price, production, and technology, in addition to the personal situations of farmers, and legal frameworks. In comparing risk mitigation decisions for farmers, Lien et al.

(2006) compared strategies among part-time and full-time farmers in Norway for off-farm employment. The study indicated that decision-making for the two groups varied when off-farm employment provided another source of income. The study explored the motivation for farmers to seek off-farm employment, which represented a stable source of income and a reduction of potential household income risk. Ahsan (2010) analyzed the risk perceptions and management strategies of aquaculture farmers in Bangladesh. The decision-making process of farmers was influenced by risk perception, which affected their farm management strategies to improve their operations.

In addition to management studies, the literature on agricultural sciences cites specific types of studies to help improve farmer's job performance through sector-specific improvements. Examples of the various types of technical management practices are summarized in Table 2.

Table 2. Types of Technical Management Practices

• Agroecosystem management	• Irrigation management	• Plant health management
• Drought management	• Land and landscape management	• Post-harvest management
• Environmental management	• Livestock manure management	• Seed management
• Feeding management	• Microclimate management	• Soil management
• Fertilizer management	• Natural resource management	• Tillage & crop residue management
• Habitat management	• Pest management	• Watershed & wetland management
• Herd health management	• Pesticide management	• Weed management
• Information management		

**Psychology.** The use of psychological methods to select employees who will perform well in their job started with the United States Army Personnel Selection (Kornhauser, 1922; Munsterberg, 1913). Job performance research evaluated the psychological qualities of workers to fulfill job requirements. Questions asked included, “what abilities does a man have and what

does the end product require?” (Haire, 1959, p. 172). Early use of personnel psychology examined the correlation among predictor variables, including motor skills, mental abilities, motives and performance under a job. During the early 1950s, bodies of academic social science research and funding were developed to solve problems of industry and business. Haire (1959) described the motivations, individual differences, and non-financial motivations of people in industrial work. His research on the psychological differences of workers was also related to the operation of complex war-equipment. Hendrick (1943) studied job performance in the view of a “work principle,” and, “pleasure principle.” He described work as an important function in society for survival, in which humans seek to maximize pleasure and minimize pain. Early psychology research has been used to understand job performance and improve the performance of workers.

Psychology oriented research in relation to farmer’s job performance has focused on understanding factors that influence their behavior. Brayfield and Marsh (1957) conducted a psychological study on the job performance of farmers in relation to their aptitudes, interests, and personality characteristics. The study found that numerical aptitude and scientific interest were predictors of farmer’s job performance. Other studies have examined levels of occupational stress (physical and psychological) on farmers, and the effect on job performance (Ang, 2010). The stressors of farmers included financial issues and farm hazards. In the year of the study, the group of farmers surveyed in New Zealand experienced low strains such as weather, government regulatory pressures or diseases. The study compared the stressors to farmers in the United Kingdom during the same year and revealed the differences in stressors had implications for job performance. Occupational stress led to a psychological strain in farmers. The study explored the impact of stressors on farmers from policy decisions. Similarly, Richards (1973) emphasized the

importance of psychological work in farmers for agricultural productivity. He suggested research areas should include measuring farmers' choice, success, satisfaction and vocational psychology to measure openness to change, motivation, skills, and knowledge. He argued that these areas of research in farmers would impact the food supply and agricultural productivity.

Eden and Leviatan (1974) discussed the need for agricultural psychology, especially in developing countries, over industrial psychology. In their research, farmworkers in Kibbutz communities in Israel rated higher on "self-realization, control, participation, peer relations, and job information," than their industrial peers in the same community. They tested the job performance of farmers through supervisor ratings, mental health, feelings of alienation, and job satisfaction. Farmers rated lower on alienation and higher on control, peer relations, information, responsibility, and leadership, compared to their industrial peers. The farmers and industrial workers were ranked similarly on their job performance. Also, Hinsz and Nelson (1990) found that farmers experienced psychological states of meaning, autonomy, responsibility, work motivation, and satisfaction which helped them work in adverse conditions.

Psychology research has also examined farmer's job performance in relation to personality traits. Austin, Deary and Willcock (2001) explored the personality and intelligence of farmers along with their decision-making processes and economic decisions. In a study regarding farmer welfare decisions towards animals, Austin, Deary, and Willock (2005) sampled Scottish farmers to understand their motivation and attitudes in connection to how they treated their animals. The attitudes of the farmers regarding animal welfare, and their business orientation, personality traits, and education were possible predictors of their occupational behaviors. Bin, Lamm, and Tipples (2008) suggested that stressors can affect a farmer's performance and decision-making abilities and moderate their self-esteem, locus of control and self-efficacy.

O'Leary, Tranter & Bennett (2018) demonstrated that farmer personality traits were associated with farm profitability. The study found that measures of farmer's personality, including detail consciousness, ability to relax, and leadership qualities, affected their farm's financial performance.

### **Factors Influencing Job Performance**

Self-determination, social capital, and social network theories provide a framework for the conceptualization of job performance factors. The psychological and social aspects of a worker's performance are emphasized in HRD. Additionally, economics, education, management, and psychology research provide a foundation for previous research on job performance. The theoretical and foundational literature on job performance describes the influence of psychosocial factors on the performance of workers. As antecedents of job performance, the relationships among psychological empowerment, workplace motivation, and social capital are discussed, and hypotheses are proposed.

### **Psychological Empowerment**

The performance paradigm of HRD assumes that the empowerment of people will lead to better performance (Swanson & Holton, 2009). Psychological empowerment can be seen as a psychological state and the degree to which people feel meaning, competence, self-determination, and impact (Spreitzer, 1995). Psychological empowerment is an employee's belief that they can influence, and have a significant impact on, their work (Spreitzer, 1995). As a result, psychological empowerment allows people to have control over their decision-making and independence. Conger and Kanungo (1988) defined empowerment as a process in which feelings of self-efficacy are emphasized through the formal and informal processes which

remove powerlessness in an organization. They emphasized that the removal of powerlessness in organizational structures, along with the leadership style, job design, and incentive structures, leads to self-efficacy. Thomas and Velthouse (1990) expanded on the definition of empowerment by including four cognitions: a sense of impact, competence, meaningfulness, and choice.

Spreitzer (1995) defined psychological empowerment as, “a motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact” (p. 1444). The antecedents for psychological empowerment include a locus of control, self-esteem, and access to information and rewards, and the consequences are managerial effectiveness and innovation. Psychological empowerment leads to stability and a socially desirable workplace. Spreitzer (1995) defined “meaning” as a cognition of psychological empowerment in the workplace in which the job has purpose and value that connects to an employee’s own goals and sense of identity. “Competence” is equated with an employee’s self-efficacy and belief that they are capable of performing their job. “Self-determination” is the employee’s sense of autonomy in making decisions in their job. “Impact” is a sense of having the ability to influence their work outcomes. Together, these four cognitions describe psychological empowerment in the workplace.

**Psychological empowerment and workplace motivation.** Prior research has supported the relationship among psychological empowerment and workplace motivation (Brislin, MacNab, Worthley, Kabigting, & Zukis, 2005; Brooks, 2007; Šajeva, 2007; Upusna, Gede, & Ketut, 2019). Thomas and Velthouse (1990) defined empowerment as, “increased intrinsic task motivation” (p. 666). Spreitzer (1995) described psychological empowerment as a motivational construct that is active in nature. Employees who experience the cognitions of psychological



empowerment (meaning, competence, self-determination, and impact) in the workplace experience higher levels of workplace motivation as demonstrated in the literature.

Brislin et al. (2005) found that employee empowerment is a motivating factor for managers and employees in their research in various industries in Japan. Brooks (2007) found empowerment as a motivation theme that emerged from qualitative interviews in the workplace of employees in various industries. Šajeva (2007) emphasized that an employee motivator includes empowerment. In evaluating the relationship among motivation and coercion, Miller (2016) discussed in her research on nurses in the health industry that empowerment and motivation were linked, whereas coercive behaviors led to a loss of control and decreased motivation. Boudrias, Gaudreau, Savoie, and Morin (2009) suggested that empowering management practices lead to psychological empowerment or “empowered mindset” (p. 628), a motivational drive that leads to performance. Upusna, Gede, and Ketut (2019) conducted a study to investigate the impact of psychological empowerment on workplace motivation that found when employees felt more meaning, competence, self-determination, and impact in the workplace, they experienced more motivation. Given the evidence presented, the following hypothesis is proposed:

*Hypothesis 1: Psychological empowerment is positively related to workplace motivation.*

**Psychological empowerment and job performance.** Chiang and Hsieh (2012) found that psychological empowerment positively influenced job performance in their research of hotel employees in Taiwan. Chiang and Jang (2008), referring to the ideas of Tannenbaum (1997), found that empowered employees had fewer failures and low self-esteem was one of the reasons people left the hotel industry. Also, in a competitive catering market, where workers are often paid a low wage, psychological empowerment has been shown to significantly improve job

performance in catering service staff (Chow, Lo, Sha, & Hong, 2006). Psychological empowerment has specific behavioral outcomes that help affect performance, such as self-efficacy and adaptability (Conger & Kanungo, 1988; Scott & Bruce, 1994). Hechanova, Regina, Alampay and Franco (2006) found in their sample of workers in hotels, food service, banking, call centers, and airlines in the Philippines that psychological empowerment was positively correlated with job performance and that men reported greater empowerment than women.

Psychological empowerment has been shown to have a positive impact on commitment and quality of service in the \$120 billion Indian hospitality and tourism industry (Jaiswal & Dhar, 2016). Karvardar (2014) found a strong relationship among psychological empowerment and job performance in the fast-food industry in Turkey. In the luxury hotel service settings, Klidas, Van Den Berg, and Wilderom (2007) found that management styles that were empowering had a strong correlation with empowered behavior in employees. Liden, Wayne, and Sparrowe (2000) examined the mediating role of psychological empowerment on job performance and found a significant effect. The link between perceived control and job performance has been found to be positive (Spector, 1986). Therefore, the following hypothesis has been established:

*Hypothesis 2: Psychological empowerment is positively related to job performance.*

**Psychological empowerment and social capital.** Several researchers have suggested a relationship among psychological empowerment and social capital (Fullick-Jagiela, Verbos, & Wiese, 2015; Munir, Ansari, & Gregg, 2012; Wallerstein, 2002). Psychological empowerment in work environments occurs in relational and socially constructed structures (Spreitzer, 1996; Thomas & Velthouse, 1990; Christens, 2012). Psychological empowerment, or the degree to which people feel meaning, competence, self-determination, and impact, has been linked to

social determinants such as poverty, poor working conditions, and discrimination. The degree to which individuals feel psychological empowerment may impact their ability to develop and maintain the norms, networks, and trust of social capital. Munir, Ansari, and Gregg (2012) described a bottom-of-the-pyramid approach for creating markets for resource poor individuals. Those in poverty have “a lack of capabilities,” (p. 813) which can be enhanced through social capital. As resource-poor individuals gain more empowerment, capability or “freedom” (p. 819), they can access more social opportunities. The authors emphasized the need for careful consideration of consequences in poverty alleviation programs, in relation to empowerment and social capital. The authors describe how a product sold to communities in India, such as a ‘Fair and Lovely’ skin whitening face cream, may reinforce a negative self-image for women, which would have a negative impact on social capital in the community by reinforcing negative norms. In addition, Robinson and Alfred (2012) discussed negative stereotypes which resulted from a legacy of colonialism and slavery in Jamaica, in which “feelings of inferiority and internalized self-deprecation,” (p. 157) leads to a dangerous form of social capital gained through skin bleaching. These examples demonstrate that when self-esteem, an antecedent of psychological empowerment (Spreitzer, 1995), is negatively impacted, it results in lowered empowerment and reinforces negative norms in social capital.

Wallerstein (2002) discussed psychological empowerment and social capital as methods for strengthening “social protective factors,” (p. 72). Over the construct of “powerlessness,” (p. 73), in a case study of a youth policy project in New Mexico, Wallerstein found that empowerment strategies could be used to enhance social protective factors such as social capital. Wallerstein’s (2002) case study suggested that increasing empowerment could build more social protective relationships. Spreitzer (1996) indicated that psychological empowerment was related

to social structural characteristics in the workplace. She found that role ambiguity, control, sociopolitical support, and access to information and work climate (which are a part of social capital) are related to psychological empowerment. Employees with psychological empowerment perceive themselves to have the social support to accomplish work tasks. She emphasized that work units with high involvement led to an environment in which employees could have an active role in the organization.

Thomas and Velthouse (1990) suggested that empowered employees impact social structures in the workplace. He analyzed the elements of meaning, impact, competence, and self-determination. They found that factors of empowerment influence elements of social structures. An individual who feels that they cannot make a difference (low impact) will behave in ways congruent with universal helplessness, depression and an inability to see opportunities. In addition, low competence leads to avoidance behaviors. Individuals who experienced meaninglessness displayed apathy. Low self-determination leads to less initiative. Therefore, psychological empowerment can influence the relationship with social structures for individuals in the workplace.

Fullick-Jagiela, Verbos, and Wiese (2015) explored the impact of psychosocial support on protégés in mentoring relationships. The authors suggested that as mentees self-determination increases, their mentoring bond should also increase. This relationship suggests that an increase in one cognition of psychological empowerment has a positive relationship on the ability to benefit from psychosocial support. Moreover, Read and Laschinger (2015) examined the impact of structural empowerment on relational social capital. They found that in environments with authentic leadership, there was structural empowerment, which led to relational social capital. They hypothesized that more empowerment in the workplace would lead to a sense of

community and trust, in which employees could focus on building positive relationships. In addition, Christens (2012) suggested that psychological empowerment results in a relational component which includes collaboration, network development, empowering others, and lowering social divisions. He also suggested that psychological empowerment has a behavioral component that leads to community involvement and organizational participation.

In another area, psychological empowerment has also been used to examine the effect of self-help groups on social capital. In a study on crime and gang participation, Briggs (2010) found that when programs empowered youth, there were often positive impacts on their family relations and social relationships with peers. This included a new sense of respect among members and reduced social pressure. Participation in self-help groups in Ethiopia called *iddirs* (mutual aid cooperatives that help members with burial costs) led to the empowerment of individuals and social capital (Teshome, Zenebe, Metaferia, & Biadgilign, 2012). In a study of self-help groups in Hong Kong, Mok (2005) found that self-help groups empowered individuals and provided a means for individuals to solve their challenges through a social group. The members of the self-help group felt a sense of self-efficacy and were able to expand their social networks and feel part of a community of people who were struggling to overcome the same challenges. Considering the evidence presented, the following hypothesis has been proposed:

*Hypothesis 3: Psychological empowerment is positively related to social capital.*

## **Workplace Motivation**

Workplace motivation is an important factor for understanding the job performance of individuals. Fields such as HRD, management, and psychology have been intrigued by understanding how to motivate people in the workplace. Herzberg (1968) described workplace

motivation as, “How do I get an employee to do what I want him to do?” (p. 53). The study of workplace motivation is related to the study of motivation and behavior itself and many theories have been developed to understand human motivation.

Motivation is critical to human survival. Frankl (1946, 2006) studied human survival in Nazi concentration camps and found that “the will to meaning” was the motivation for human life. Theories such as Maslow’s hierarchy of needs (Maslow, 1954), expectancy (Vroom, 1964; Lawler & Porter, 1967), self-determination and cognitive evaluation (Deci & Ryan, 1980; 1985) have been used to understand motivation. Maslow (1943) emphasized that five basic needs, “physiological, safety, love, esteem, and self-actualization,” (p. 394) should be considered as a framework for understanding human motivation. Expectancy theory (Vroom, 1964) emphasizes that individuals perform to obtain outcomes that bring them value. Self-determination and cognitive evaluation theories both emphasize that universal innate needs, competence, autonomy, relatedness, and environmental and social factors are related to human motivation (Ryan & Deci, 2000). Each characterization theorizes different aspects of human motivation; however, all the theories emphasize the human needs and social factors that influence human behavior.

The various definitions of motivation and related constructs are summarized in Table 3.

Table 3. Definitions of Workplace Motivation and Related Constructs

Terminology	Authors	Definition
Workplace Motivation	Vroom (1962)	“A person’s motivation for effective performance in a task may be a function of the extent to which his self-evaluation is increased by high performance and decreased by low performance” (p. 160).

(table cont'd.)

Terminology	Authors	Definition
	Herzberg (1968)	“How do I get an employee to do what I want him to do?” (p. 53)
Intrinsic Motivation	Amabile (1993)	“Individuals are intrinsically motivated when they seek enjoyment, interest, satisfaction of curiosity, self-expression, or personal challenge in the work” (p. 188).
	Gagne & Deci (2005)	“Intrinsic motivation involves people doing an activity because they find it interesting and derive spontaneous satisfaction from the activity itself” (p. 331).
	Ratelle, Guay, Vallerand, Larose, Senecal (2007)	“performing a behavior for reasons inherent to it, such as pleasure and satisfaction” (p. 735).
Extrinsic Motivation	Amabile (1993)	“Individuals are extrinsically motivated when they engage in the work in order to obtain some goal that is apart from the work itself” (p. 188).
	Gagne & Deci (2005)	“requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads” (p. 331).
	Ratelle et al. (2007)	“refers to doing something for reasons that are external to the activity itself” (p. 735).
Autonomous Motivation	Koestner, Otis, Powers,	“The mean of intrinsic and identified ratings” (p. 1207).

(table cont'd.)

Terminology	Authors	Definition
	Pelletier, Gagnon (2008); Sheldon & Elliot (1998)	
Controlled Motivation	Koestner et al., (2008); Sheldon & Elliot (1998)	“the mean of external and introjected regulation” (p. 1207).
	Powers, Koestner, & Zuroff (2007)	“Someone is considered to be motivated in a controlled fashion if he or she is controlled by external or internal pressures” (p. 827).
Amotivation/ Amotivated Regulation	Tremblay et al., (2009)	“Individuals either lack the intention to act or act passively”( p. 214).
Integrated regulation/ Autonomous motivation	Gagne & Deci (2005)	“people have a full sense that the behavior is an integral part of who they are, that it emanates from their sense of self and is thus self-determined. If integrated, the nurses would not only identify with the importance of the activities for maintaining their patients' comfort and health, but regulation of the activities would be integrated with other aspects of their jobs and lives. Thus, the profession of nurse would be more central to their identity, they would be more likely to act in ways that are consistent with caring for people more generally, and they could come to appreciate the importance of doing uninteresting activities” (p. 335).

(table cont'd.)



Terminology	Authors	Definition
	Powers, Koestner, & Zuroff (2007)	"An individual is considered autonomously motivated if he or she experiences goals and decisions to be self-generated or freely chosen" (p. 827).
	Tremblay et al. (2009)	"identifying with the value of an activity to the point that it becomes part of the individual's sense of self" (p. 214).
Identified regulation	Tremblay et al. (2009)	"doing an activity because one identifies with its value or meaning, and accepts it as one's own" (p. 214).
	Gagne & Deci (2005)	"people feel greater freedom and volition because the behavior is more congruent with their personal goals and identities. They perceive the cause of their behavior to have an internal PLOC. PLOC-that is, to reflect an aspect of themselves. If nurses strongly value their patients' comfort and health and understand the importance of doing their share of the unpleasant tasks for the patients' well-being, the nurses would feel relatively autonomous while performing such tasks (e.g., bathing patients), even though the activities are not intrinsically interesting" (p. 335).
Introjected regulation	Tremblay et al. (2009)	"the regulation of behavior through self-worth contingencies (e.g., self-esteem, guilt)" (p. 214).
	Gagne & Deci (2005)	A regulation that has been taken in by the person but has not been accepted as his or her own is said to be introjected and provides the basis for introjected regulation. With this

(table cont'd.)

Terminology	Authors	Definition
		type of regulation, it is as if the regulation were controlling the person. Examples of introjected regulation include contingent self-esteem, which pressures people to behave in order to feel worthy, and ego involvement, which pressures people to behave in order to buttress their fragile egos (deCharms, 1968; Ryan, 1982)” (p. 334).
External Regulation	Tremblay et al. (2009)	“doing an activity only to obtain a reward” (p. 214).
	Gagne & Deci (2005)	“When externally regulated, people act with the intention of obtaining a desired consequence or avoiding an undesired one, so they are energized into action only when the action is instrumental to those ends (e.g., I work when the boss is watching). External regulation is the type of extrinsic motivation that was considered when extrinsic motivation was contrasted with intrinsic motivation” (p. 334).
Motivation	Lazarus (1991)	“First, it is a trait or characteristic of a person, a dispositional variable that people bring with them to every encounter, in the form of goal hierarchies. Second, the disposition to attain a goal must be activated in any encounter by the demands, constraints, and resources presented by the environment of action. In other words, motivation is transactional as well as dispositional, inasmuch as it depends on the juxtaposition of a motive trait and a suitable environment. These ideas have, of course, been around a long time” (p. 820).
	Deci & Ryan (2000)	“Motivation concerns energy, direction, persistence and equifinality--all aspects of activation and intention” (p. 69).

(table cont'd.)

Terminology	Authors	Definition
Employee Motivation	Budd & Colvin (2007)	“The effective, profit-maximizing use of scarce resources and captures concerns with productivity, competitiveness, and economic prosperity” (p. 3).
Performance Motivation	Hui et al. (1999)	“Work behaviors, such as organizational citizenship behavior, that are beyond formal job roles” (p. 4).
Motivational Synergy	Amabile (1993)	“The positive combination of intrinsic and extrinsic motivation” (p. 196).
Employee Motivation/ Vision	Hays & Hill (2006)	“The degree to which a firm’s employees have a desire to provide high quality service and have a clear vision of the role that service quality plays in the company’s overall strategy,” (p. 756).

In this study, workplace motivation was measured through intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation (Gagne & Deci, 2005; Tremblay et al., 2009). Although scholars have used different expressions and emphasized various aspects of motivation, these are common measurements of workplace motivation. For example, Hardré (2003) emphasized motivation as a complex and dynamic interaction among, “internal, external, interpersonal, and organizational,” (p. 66) factors, while Tremblay et al. (2009) emphasized the self-determination theory and the use of intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation to measure workplace motivation in their measurement scale. Workplace motivation is an interaction among various cognitions (Kanfer, 1994; Kanfer, 2012). Together, these cognitions conceptualize workplace motivation.

**Workplace motivation and job performance.** The motivations of farmers may be intrinsic or extrinsic. These behaviors are likely to influence the performance goals of the individual farm. A previous study by Jansen et al. (2009) explored the link among the attitudes, behaviors and the occurrence of mastitis in dairy farming in the Netherlands. The results indicated that farmers' attitudes were a more important predictor of their animal health than their behavior. This study suggested that the focus of mastitis control programs should include motivation, instead of only farmers' behavior, to improve their job performance in controlling animal diseases.

Intrinsic motivation supports creativity and risk-taking in a research and development environment, where this is considered good job performance (Dewett, 2007). Joo, Jeung, and Yoon (2010) found that employees perceived a higher in-role job performance when they had intrinsic motivation. In a study in the Turkish banking sector, intrinsic motivation had a positive relationship with job performance (Karatepe & Tekinkus, 2006). Valeeva, Lam, and Hogeveen (2007) found that farmers were motivated by both intrinsic factors, such as taking pleasure in the health of their products, and extrinsic motivators such as monetary rewards and economic performance. Cerasoli, Nicklin, and Ford (2014) in a 40-year meta-analysis found that intrinsic motivation and extrinsic incentives jointly predict performance. Intrinsic and extrinsic motivation have been linked to improved job performance (Sansone & Harackiewicz, 2000). Accordingly, farmers who have workplace motivation are likely to show behaviors needed to meet the goals of their farm. Therefore, the following hypothesis has been established:

*Hypothesis 4: Workplace motivation is positively related to job performance.*

## **Social Capital**

Various definitions have sought to explain social capital. Bordieu (1972) described that power relations and modes of dominance among individuals develop through the accumulation of social capital. He emphasized that power in society rests in “social universes” (p. 184). He argued that even economic power lies in the relationship based on “trust,” and “good faith” (p. 186). Coleman (1988) examined social capital and theorized the factors which determine the formation in a social structure. He emphasized that these factors originate from relations among individuals, and that social capital contains, “obligations and expectations, which depend on trustworthiness of the social environment, information-flow capability of the social structure and norms accompanied by actions” (p. 119). Putnam (1995) captures the definition of social capital as, “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (p. 2).

In the structure of interconnected human relationships, social capital is the essence of the harnessed power of the social structure. Studies related to workplace or labor tend to exist within social structures. Adler and Kwon (2002) defined social capital as, “the goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action” (pg.17). The measure of social capital is not merely in social relations, but the ability to harness them to facilitate goals. Li, Pickles, and Savage (2005) conceptualized social capital as three different types of relationships, including neighborhood attachment, social network, and civic participation.

The network in social capital is an interconnected group of individuals. McDonald (2011) analyzed how demographic features of networks, such as gender and race, lead to labor

market inequality. He described the “good old boy” network of high-status men which can leave minorities without access to status, influence, and information. The author found that specific network features, such as race and gender, influence the ability to access the labor market, such as hearing about job openings or information. While groups may benefit from their internal community and homophily, McDonald proposed that membership in groups with greater resources may facilitate access to more resources. Burt (2001) distinguished among two types of network structures that create social capital: structural holes and network closure. He theorized that through structural holes, an individual has an advantage when their network spans its reach to access information in another group. The cohesion of a group, without structural holes, is described as rigid. Network closure, on the other hand, provides trust within a group, however, it may not lead to as much cooperation to meet goals as with structural holes. Tan, Zhang, and Wang (2014) explored the network factor in social capital to determine the meaning of being better connected. They suggested that the advantage of “bonding or bridging” or “closure or brokerage” (Burt, 2001) p. 350, may depend on the context of the goal. Tan, Zhang, and Wang (2014) drawing on the research of Xiao and Tsui (2007), report that in collectivist societies bonding may be a more useful form of social capital than bridging. Therefore, the bonding or bridging of social capital may vary in societies.

Brown and Ferris (2007) compared the factors of network and norms of social capital on philanthropic giving. They conceptualized norms as social trust and good citizenship which have expectations of reciprocity. Norms included trust and faith in others, whereas networks were measured in the wealth of relationships. The study emphasized the differences in the two forms of social capital. In the case of philanthropic giving, norms were associated with secular donations and networks were more closely tied to religious giving. The structure of social

relationships are the networks of social capital, whereas the quality of the relations are the norms. In describing norms, Kao (2004) recognized that social relations can have norms that encourage or reinforce negative behaviors.

Within Putnam's framework, Onyx and Bullen (2000) attempted to conceptualize and empirically measure social capital to find the key factors which define it. The authors found that social capital was best defined as a sum of the following factors, "participation in the local community, social agency or proactivity in a social context, feelings of trust and safety, neighborhood connections, family and friends connections, tolerance of diversity, value of life, work connections," (p. 40-41).

The workplace is influenced by social capital. The literature shows that social factors such as trust, norms, and networks influence the workplace behaviors of workers. In organizational studies, social capital has been associated with knowledge sharing (Chang & Chuang, 2011), organizational citizenship behaviors (Chow, 2009; Wech, 2002), and employee volunteering (Muthuri, 2009). Social capital affects the workplace motivation and job performance of farmers. In the case of resource-limited farmers, Loker (1996) emphasized the reliance on social capital such as vertical (e.g., landowners) and horizontal relationships (e.g., family-based labor sharing) as resources for surviving poverty. Sánchez de Roldán (2012) recognized social capital as a key factor for social and economic development in Latin America. The nature of social capital may allow people to access resources and cooperation for successful job performance.

**Social capital and workplace motivation.** Several studies have discussed the correlation among social capital and workplace motivation (Chang & Chuang, 2011; Grant, 2007; Kanfer, 2009; Lloyd & Mertens, 2018). Lloyd and Mertens (2018) explored the impact of social context

on workplace motivation. They emphasized that in order to understand the complex nature of motivating individuals in the workplace, the social context must be examined. A person's workplace motivation is influenced by social status, intrinsic motivation to provide for their family, and desire to adhere to norms and behaviors which meet the expectations of their group. Grant (2007) and Kanfer (2009) both emphasized the idea that workplace motivation is often the result of interpersonal relationships. Workplace motivation is impacted by an employee's understanding of the impact of their behavior on others. Grant (2007) explained that lifeguards, car safety engineers and medical device makers are more likely to have workplace motivation if they see the possibility of saving a human life. Additionally, Chang and Chuang (2011) found that social capital had a positive impact on an employee's motivation to share quality over quantity of knowledge with other workers.

Hinsz (2008) emphasized that work motivation takes place in a social context. Social exchange and interactions among co-workers and work motivation must be studied together. She emphasized social-psychological theory in understanding workplace motivation. A person's workplace motivation can be shaped by their intention, collaboration, competition, normative influences, habits, cooperation, stereotype threat, affect and emotion, which are all linked to social contexts. Social capital is the overarching social context of humans, which may also influence their work motivation. Erez (2008) investigated social-cultural influences on workplace motivation. Family, community, teams and interpersonal relations are related and can impact workplace motivation differently under collectivist vs. individualistic cultures. Social capital may influence the way in which people perceive intrinsic, extrinsic, and social rewards, which impact workplace motivation. Massenberg, Spurk, and Kauffeld (2015) extended this theory by determining the positive impact that social capital has on workplace motivation. They



assessed social support in the workplace, including supervisor and peer support, in predicting motivation to transfer. Supervisor and peer support had a positive relationship with the motivation to transfer. Consequently, the following hypothesis has been established:

*Hypothesis 5: Social capital is positively related to workplace motivation.*

**Social capital and job performance.** Research suggests that social capital is positively related to job performance (Bandiera, Barankay & Rasul, 2008; Brooks and Nafukho, 2006; Carmeli et al., 2009). Interventions that have focused on improving the social capital of workers has been linked to improvements in job performance for workers in the service industry (Carmeli et al., 2009). Social capital has been researched in relation to career success, and it has been shown that social capital leads to access to resources, career sponsorship, and access to information, and thus there is a positive relationship among social capital and job performance (Seibert, Kraimer, & Liden, 2001). In examining friendships in the workplace, Bandiera, Barankay & Rasul (2008) found that employees on farms are more productive when their manager is socially connected to them. Finally, understanding the HRD challenges of farmers is critical to making industry interventions to improve the performance of workers and ultimately the food supply chain, and this research proposed to address this important area.

Putnam (1993) defined social capital as the “trust, norms and networks,” that can improve efficiency in the workplace. The networks and relationships of an individual make up their social capital. Brooks and Nafukho (2006) demonstrated that the relationship among social capital and productivity are highly related. A leader’s relational behavior, which encourages social capital, can lead to vigor, which is positively related to employee job performance (Carmeli et al., 2009). Ellinger et al. (2011) found that organizational investments in social

capital are positively related to employee job performance. Therefore, the following hypothesis has been established:

*Hypothesis 6: Social capital is positively related to job performance.*

### **The Role of Workplace Motivation and Social Capital as Mediators**

The role of workplace motivation as a mediator has been explored in relation to workplace well-being (Nie, Chua, Yeung, Ryan & Chan, 2015), organizational citizenship behaviors (Güntert, 2015), emotional exhaustion and job performance (Halbesleben & Bowler, 2007) and workplace safety (Conchie, 2013). Workplace motivation's mediation between psychological empowerment and job performance has been suggested in psychological constructs. Nie et al. (2015) demonstrated that intrinsic motivation, identified regulation, introjected regulation and external regulation mediated the relationship among autonomy support and employee wellbeing. Similarly, Güntert, (2015) found that intrinsic motivation and identified regulation mediated the relationship among autonomy support and work outcomes such as organizational citizenship behaviors. Halbesleben & Bowler (2007) found that motivation (achievement, status, and communion striving) mediated the relationship among emotional exhaustion and performance and organizational citizenship behaviors. In addition, Conchie (2013) found that the relationship among safety leadership and citizenship behaviors was partially mediated by intrinsic motivation.

Research has suggested that motivation mediates the relationship among the levels of meaning, competence, impact, and self-determination experienced in the workplace (psychological empowerment) and job performance (Gagne & Deci, 2005; Vroom, 1962). Specifically, the prediction of job performance has been described as a function of workplace

motivation (Vroom, 1962). Vroom (1962) emphasized that ego-involvement and an employee's perception of self-determination in their job is linked to job performance. He hypothesized that more autonomy in the workplace (a foundation of intrinsic motivation), increased the positive relationship among ego-involvement and job performance. Ego-involvement is the self-esteem involved in job performance, a closely related construct to psychological empowerment. From the self-determination theory perspective, when psychological needs such as autonomy, competence and relatedness are met, intrinsic and extrinsic motivation are enhanced, which yields effective performance (Gagne & Deci, 2005). The factors of workplace motivation and psychological empowerment are closely related. Gagne and Deci (2005) explained self-determination theory needs such as autonomy, competence, and relatedness. Dimensions in psychological empowerment are meaning, competence, impact, and self-determination. Considering the arguments presented, the following hypothesis has been proposed:

*Hypothesis 7: Workplace motivation mediates the link between psychological empowerment and job performance.*

Several researchers have suggested that social capital mediates the relationship among psychological empowerment and job performance (Adler & Kwon, 2002; Gagne & Deci, 2005; Perry, Rosenfeld & Kendall; 2008). Adler and Kwon (2002) described ability or competence leading to social capital, which results in value. Gagné and Deci (2005) use cognitive evaluation theory to explain that social-contextual factors, which lead to feelings of autonomy and competence, increase positive outcomes. When social-contextual factors cause feelings of autonomy and competence to be low, people feel controlled and lack motivation. Gagne and Deci (2005) also emphasize that competence, relatedness, and autonomy in self-determination theory are not based on the strengths in individuals, but rather in social environments. Perry,

Rosenfeld, and Kendall (2008) extended this theory in a qualitative health study for rural women participating in a health walking program. They showed that being part of a group and group comradery led to more competence and seeing impact, which had a positive influence on sustaining a regular walking routine. These findings lead to the following hypothesis:

*Hypothesis 8: Social capital mediates the link between psychological empowerment and job performance.*

### **Summary**

The review of the literature and consequent hypotheses presented in this chapter provide an overview of the variables of interest and the conceptual framework in the study. Job performance is one of the most studied variables in HRD literature. In this study, job performance is defined as the tasks and behaviors a farmer is required to complete on their farm. Psychological empowerment is the degree to which people feel meaning, competence, self-determination, and impact. Workplace motivation is the intrinsic and extrinsic factors that cause employees to perform in their job. Social capital is the networks and relationships of an individual. The literature review revealed that previous studies and self-determination theory, social capital theory and social network theory help explain possible relationships among the variables. Based on the literature review and theoretical framework, the following research model is established (see Figure 1):

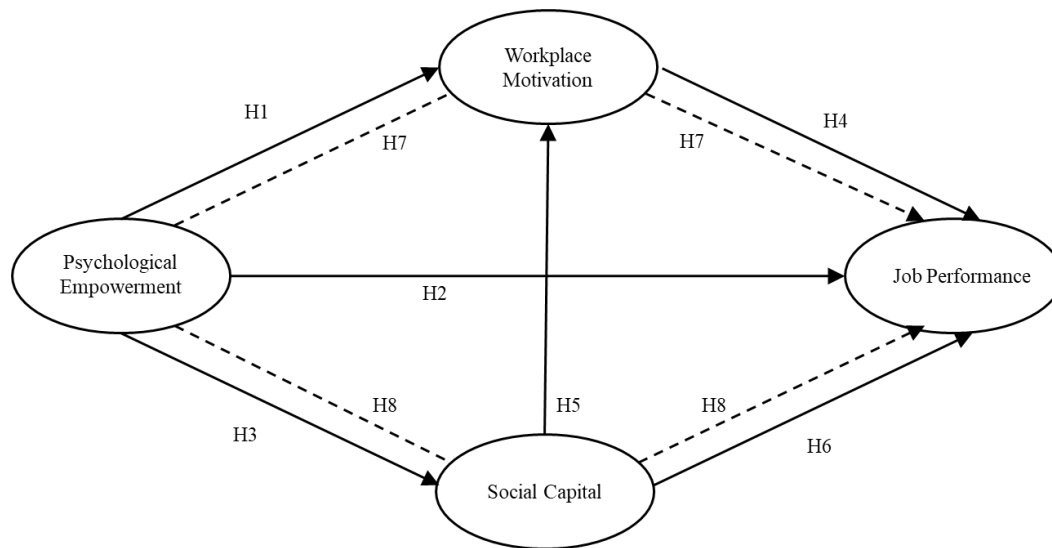


Figure 1. Hypothesized model

The hypotheses proposed in the study are as follows:

*Hypothesis 1: Psychological empowerment is positively related to workplace motivation.*

*Hypothesis 2: Psychological empowerment is positively related to job performance.*

*Hypothesis 3: Psychological empowerment is positively related to social capital.*

*Hypothesis 4: Workplace motivation is positively related to job performance.*

*Hypothesis 5: Social capital is positively related workplace motivation.*

*Hypothesis 6: Social capital is positively related to job performance.*

*Hypothesis 7: Workplace motivation mediates the link between psychological empowerment and job performance.*

*Hypothesis 8: Social capital mediates the link between psychological empowerment and job performance.*

## **CHAPTER 3. METHODOLOGY**

This chapter provides a detailed account of the research methods used in this study, including the research design, the target population and sample, instrumentation, data collection, and data analysis. The main research question which guided the study was: What is the relationship among psychological empowerment, workplace motivation, social capital, and job performance of farmers in Olancho, Honduras? A mixed methods approach was adopted with the use of a questionnaire, interviews, and a focus group. The quantitative data were analyzed using descriptive statistics and structural equation modeling. The qualitative data were analyzed using the constant comparison method of analysis. Finally, the data were merged to develop a complete understanding of the research questions. The ethical considerations of the study and institutional review board approval will be discussed.

### **Research Design**

A mixed methods data collection approach was used to collect both quantitative and qualitative data to understand the relationship among psychological empowerment, workplace motivation, social capital, and farmer's job performance. The convergent design was used for the study with an embedded data approach. The convergent design is a mixed method research design where both qualitative and quantitative datasets are collected, separately analyzed and merged to make comparisons (Creswell & Plano Clark, 2018). The embedded data approach is used where quantitative data is collected to answer the primary research questions and qualitative data is collected to provide supplementary explanations about correlations among variables (Creswell & Plano Clark, 2011). The quantitative data were collected to test the hypotheses proposed from motivation and social capital theories that psychological empowerment, workplace motivation, and social capital will positively influence job performance in farmers in

Olancho, Honduras. The qualitative data, collected through one-on-one semi-structured interviews and a focus group, provide elaboration on how psychological empowerment, workplace motivation, and social capital affect job performance in farmers. The basic interpretive approach was used for the qualitative component of the research (Merriam, 2002). The data were collected through interviews and a focus group, analyzed for themes and descriptive findings provided and situated in the study literature (pp. 6-7). The qualitative component is embedded in this study design to provide more understanding of the research questions, elaborate the context of farmers in Honduras for the research questions, and to help explain the outcomes of the research model and provide additional detail with colorful data (Anguera, Camerino, & Castañer, 2012; Creswell & Plano Clark, 2018).

### **Population and Sample**

The target and accessible population for the study were farmers in Olancho, Honduras. The sample consisted of farmers located in the municipalities of Catacamas, Dulce Nombre de Culmi, Gualaco, Juticalpa, San Esteban, San Francisco de La Paz, Santa Maria del Real, and Patuca. Farmers were recruited to participate in the study based on their availability through a convenience and purposive sampling method through the local National Agriculture University of Honduras (UNA), Secretary of Agriculture and Fisheries Office in the department of Olancho (Servicio Nacional de Sanidad e Inocuidad Agroalimentaria (SENASA)), agricultural cooperatives and farm supply businesses. The data collection was administered in various settings convenient for the farmers, including their homes, farms, agricultural supply businesses, classrooms, and cooperative meetings. The criteria to participate in the study was that an individual identifies as a farmer and produces an agricultural product for an income. Individuals

who identified as farmers, who did not produce products for an income, were excluded from the study.

Participants for the quantitative portion of the study were selected through a convenience sampling method and for the qualitative portion of the study through a purposeful sampling method. Convenience and purposeful sampling are both non-probability sampling methods. The convenience sampling method is a common method of sampling in quantitative research in large and unknown populations by allowing researchers to select subjects available and accessible to participate in the study (Etikan, Musa, & Alkassim, 2016; Kelley, Clark, Brown, & Sitzia, 2003; Passmore & Baker, 2005). According to the last official census, the farmer population in Olancho was estimated to be 91,686 (National Statistical Institute of Honduras (INE), 2013) and site enumerations for all farmers are not readily available. The convenience sampling method is commonly used when population samples are not well enumerated, like this study (Stoecklin-Marois, Hennessy-Burt, & Schenker, 2011).

The purposeful sampling method is commonly used in qualitative research. Purposeful sampling allows the researcher to use judgment to select informants based on their ability to provide insight into the phenomenon studied by the researcher (Abrams, 2010; Marshall, 1996; Patton, 1990). Purposeful sampling employed in this study allowed the researcher to choose informants with the qualities and characteristics that were likely to provide the most information to the study (MacNealy, 1999). According to Marshall (1996), random sampling in qualitative research is equivalent to, “randomly asking a passer-by how to fix a broken car, rather than asking a garage mechanic---the former might have a good stab, but asking the latter is more likely to be productive” (p. 523). The selection of the purposeful sampling method allowed the researcher to choose subjects for the interviews and focus group to meet the study objectives.



In the embedded data approach of the study, the subjects used for the qualitative data collection were selected from the quantitative data pool (Gelo et al., 2008). Interview and focus group participants were selected with purposeful intent, as experts are willing and able to talk about job performance and the impact of psychological empowerment, workplace motivation, and social capital. The researcher identified participants for the interview with a wide range of age, products grown for income, and farmland. At times, the researcher encountered difficulty finding females to participate in the survey and interviews due to male-centered decision-making attitudes and behaviors (Speizer, Whittle, & Carter, 2005). A dyadic focus group was organized by the researcher for access to female farmer's views regarding the study research questions. The dyadic focus group format allowed the researcher to obtain more detail from individual participants and due to the complex constructs in the questions, provide more depth (Morgan, 2018). The intimate setting, among farmers who knew each other, also allowed the women to speak freely without men present. In the focus group, a female participant, identified as María, was also invited for a one-on-one interview. The interviews lasted between 20-60 minutes and the focus group lasted 40 minutes.

The researcher resided in Catacamas, Olancho from July 3, 2018-August 4, 2018. The researcher visited eight municipalities in which relationships existed with the local university or farmers were known to be living in the area by local experts. Figure 1 identifies with a star the locations where the study was administered.



Source: United Nations Development Programme

★ Areas Surveyed for Farmers

Figure 2. Municipalities of Olancho, Honduras and surveyed areas

To collect quantitative data, six hundred questionnaires were distributed, 497 farmers filled out the form, and their data collected. After excluding 101 unusable responses, the final response rate to the survey was 66% (n=396). A higher percentage of male farmers participated in the survey (86.1%, n=341), compared to females (13.9%, n=55). The majority of participants were between the ages of 18-24 (50.3%, n=199), followed by 25-34 (16.7%, n=66), and 34-44 (15.2%, n=60). The participants' highest reported level of education was high school (51.8%, n=205) followed by 6<sup>th</sup> grade (20.7%, n=82). Participants in the study primarily identified themselves of the Mestizo ethnicity (79.3%, n=314), followed by Lenca (12.4%, n=49). The

majority of farmers classified themselves as the owner of the farm (62.6%, n=248) and possessing 3-10 hectares of land (33.8%, n=134), followed by 0-2 hectares (27.3%, n=108). The farmers in the study produced at least one of the major agricultural commodities of Honduras for an income, including fruits, vegetables, grains, animal products, aquaculture, forest products, and ornamentals. The quantitative data showed that 40.2% of farmers produced more than one commodity for income. The additional demographic information is summarized in Table 4.

Table 4. Demographic Survey Results

		Total	Frequency %
Total		396	100
Gender	Male	341	86.1
	Female	55	13.9
Age	18-24	199	50.3
	25-34	66	16.7
	35-44	60	15.2
	45-54	25	6.3
	55-64	31	7.8
	> 65	15	3.8
Highest level of Education	Grades 7-11	205	51.8
	Grades 1-6	82	20.7
	College	59	14.9
	Grades 7-8	44	11.1

(table cont'd.)

		Total	Frequency %
Total		396	100
Post Graduate degree (Master's or Doctorate)		6	1.5
Ethnic Identity	Mestizo	314	79.3
	Lenca	49	12.4
	Ch'orti'	12	3.0
	Otra	9	2.3
	Tolupan	7	1.8
	Bay Isleno	1	.3
	Garifuna	1	.3
	Creole	0	0
	Miskito	0	0
	Pech	3	.8
	Sumo or Tawahka	0	0
Farmer Job Function	Owner	248	62.6
	Worker	81	20.5
	Administrator	67	16.9
Land Ownership (Hectares)	3-10	134	33.8
	0-2	108	27.3
	11-22	49	12.4
	48-122	45	11.4

(table cont'd.)

		Total	Frequency %
Total		396	100
	> 123	33	8.3
	23-47	27	6.8
Land Leased (Hectares)	0-2	346	87.4
	3-10	32	8.1
	11-22	7	1.8
	23-47	5	1.3
	48-122	4	1.0
	> 123	2	.5
Product(s) for \$	Grains	252	63.6
	Animal Husbandry and Animal Origin	206	52.0
	Fruits and Vegetables	66	16.7
	Forestry	18	4.5
	Fisheries & Aquaculture	9	2.3
	Ornamentals	5	1.3
	Other	3	.8

For qualitative data, individual interviews with six farmers and a focus group session with three farmers were conducted. The names of the farmers were replaced with common Honduran names as pseudonyms to protect their anonymity. The participants for the interview were primarily male (n=4), between the ages of 23-65, had a college degree or higher (n=5),

were Mestizo, identified as owners of the farm, and possessed between 3-400 hectares of land.

The focus group consisted of females (n=3) with ages 29, 61 and 23. One of the participants had a college degree, one participant had a high school degree, and one had completed school up to eighth grade. The participants produced the following products for income; Avocado, Bananas, Beans, Beef Cattle, Cacao, Chicken, Chilies, Coffee, Corn, Dairy Cattle, Guanabana, Passion Fruit, and Yucca. Additional demographic information for the interview and focus group participants are presented in Table 5 and 6.

Table 5. Interview Participants

Pseud.	Gender	Ethnic Identity	Farmer Job Function	Age	Land (Hectares)	Highest Educ.	Products for \$
Diego	Male	Mestizo	Owner	65	400	Doctorate	Corn and Beans
Felipe	Male	Mestizo	Owner	61	3	Grade 6	Corn and Beans
Javier	Male	Mestizo	Owner	48	128	College	Beef Cattle, Dairy Cattle, Corn
Juan	Male	Mestizo	Owner	23	10	College	Corn, Beans, Coffee
Julietta	Female	Mestizo	Owner	32	23	College	Beef Cattle, Coffee, Cacao, Passion Fruit, Yucca

(table cont'd.)

Pseud.	Gender	Ethnic Identity	Farmer Job Function	Age	Land (Hectares)	Highest Educ.	Products for \$
María	Female	Mestizo	Owner	29	3	College	Dairy Cattle (Cheese), Corn

Table 6. Focus Group Participants

Pseud.	Gender	Ethnic Identity	Farmer Job Function	Age	Land (Hectares)	Highest Educ.	Products for \$
Ana	Female	Mestizo	Owner	61	5	Grade 8	Beans, Corn, Chicken, Bananas, Chilies, Guanabana, Avocado
María	Female	Mestizo	Owner	29	3	College	Dairy Cattle (Cheese) and Corn
Helen	Female	Mestizo	Administrator	23	3	Grade 11	Chicken

The survey, interview, and focus group participant profiles represented various farmer demographics. Additionally, the demographic data provided a picture of the composition of the study participants and a more complete understanding of the farmer's specific roles and farm products.

## **Instrumentation**

### **Survey**

A cross-sectional paper survey design was used to collect data from farmers. The instrument used to collect data for this study consisted of a questionnaire with 53 items and 9 demographic questions (Appendix A). The questionnaire consisted of a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The final instrument consisted of 5 parts and required approximately 30 minutes to complete. The survey was shared and reviewed with faculty experts in Honduras at the National Agriculture University of Honduras and pilot tested prior to distribution for any feedback to improve the instrument and to ensure the instrument was appropriate for the Honduran context. A pilot testing of the original survey instrument was conducted previously with farmers in a similar setting in Kenya (n=164). Adjustments were made to the instrument to 1) keep the language as simple as possible 2) provide simple instructions 3) schedule enough time for participants to complete the survey 4) take into consideration driving time in rural areas 5) be present to answer questions for the survey.

Additionally, the questionnaire was translated from English to Spanish with the back-translation method, reviewed by two Honduran faculty members at Louisiana State University with doctorates in the agricultural area, a Honduran alumnus from the master's degree program in the LSU School of Leadership and Human Resource Development, and a faculty member at the National Agriculture University of Honduras. The back-translation method served to protect the integrity of the survey instrument. The final instrument consisted of 5 parts (demographic data, job performance, psychological empowerment, workplace motivation, and social capital) and required approximately 30 minutes to complete.



## **Job Performance**

To measure the job performance of farmers, a five-item scale for in-role job performance was adopted. These items were developed by Podsakoff and MacKenzie (1989) and modified by Janssen and Van Yperen (2004). The tool was adapted to measure self-reported job performance, instead of the job performance of the employee by the supervisor. For example, instead of, "This worker always completes the duties specified in his/her job description," the item is, "I always complete the duties required in my job description." In previous studies, reliability was between .85 and .86. (Chen, Lam, & Zhong, 2007; Dizgah, Chegini, & Bisokhan, 2012). In this study, the reliability estimate for job performance was .81. Question 5, "I often fail to perform essential duties," was removed from the scale to improve the reliability of the instrument, after the initial Cronbach's alpha was low. A sample item was, "I fulfill all the responsibilities required by my job." This measure examines a farmer's own perception of their job performance.

## **Psychological Empowerment**

To measure the psychological empowerment of the farmers, the scale developed by Spreitzer (1995) was used. The scale measures four components of psychological empowerment; meaning, competence, self-determination, and impact. Sample items include: "The work I do is meaningful to me" (Meaning), "I am self-assured about my capabilities to perform my work activities" (Competence), "I can decide on my own how to go about doing my work" (Self-Determination), and "I have a great deal of control over what happens in my department" (Impact). The scale's target of questions was modified to meet the farmer's context. For example, instead of, "I have a great deal of control over what happens in my department," the item was modified to, "I have a great deal of control over what happens in my farm." One item for Impact 3 (I have significant influence over what happens in my department) was removed,

due to the nature of the question not fitting well in a farmer's context. In this study, the reliability estimate for psychological empowerment was .82. In previous studies, reliability was between .85 and .87 (Aryee & Chen, 2006; Knol & Van Linge, 2009).

### **Workplace Motivation**

To measure the workplace motivation of the farmers, the 18-item Work Extrinsic and Intrinsic Motivation Scale (WEIMS) developed by Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve (2009) was used. The scale has six subscales; intrinsic motivation, integrated regulation, identified regulation, introjected regulation external regulation, and amotivation. A sample item is, "Why Do You Do Your Work? Because I want to be very good at this work, otherwise I would be very disappointed." In previous studies, reliability was between .82 and .95 (Dahling & Lauricella, 2017; Pearson et al., 2017; Jayaweera, 2015). In this study, the reliability estimate for workplace motivation was .83.

### **Social Capital**

To measure the social capital of the farmers, 19 items from the 36 question Social Capital Questionnaire developed by Onyx and Bullen (2000) was used. The original questionnaire is classified into eight social capital elements including; Participation in Local Community (7 items), Social Agency or Proactivity in a Social Context (7 items), Feelings of Trust and Safety (5 items), Neighborhood Connections (5 items), Family and Friends Connections (3 items), Tolerance of Diversity (2 items), Value of Life (2 items) and Work Connections (3 items). After removing several items because of the nature of the question not fitting well with the farmer's context, the final questionnaire had a total of 19 questions with eight social capital elements including; Participation in Local Community (3 items), Social Agency or Proactivity in a Social

Context (3 items), Feelings of Trust and Safety (3 items), Neighborhood Connections (2 items), Family and Friends Connections (1 items), Tolerance of Diversity (2 items), Value of Life (2 items) and Work Connections (3 items).

Sample items used from the questionnaire include: “Are you an active member of a local organization or club (e.g., sport, craft, social club)?” (Participation in the Local Community), “If you disagree with what everyone else agreed on, would you feel free to speak out?” (Social Agency or Proactivity in a Social Context), “Do you feel safe walking down your street after dark?” (Feelings of Trust and Safety), “If you were caring for a child and needed to go out for a while, would you ask a neighbor for help?” (Neighborhood Connections), “Over the weekend do you have lunch/dinner with other people outside your household?” (Family and Friends Connections), “Do you think that multiculturalism makes life in your area better?” (Tolerance of Diversity), “Do you feel valued by society?” (Value of Life), and “Do you feel part of the local geographic community where you work?” (Work Connections). Items in the original questionnaire were described in a question format, such as, “Are you on a management committee or organizing committee for any local group or organization?” This study paraphrased the question into a statement form, such as, “I am on a management committee or organizing committee for a local group or organization.” In previous studies, reliability was between .76 and .78 (Ali, Farooq, Bhatti, & Kuroiwa, 2012; Valentine & Fleischman, 2003). In this study, the reliability estimate for social capital was .79.

### **Demographic Measurements**

Demographic characteristics of the farmers in the study included gender, ethnicity (Mestizo, Bay Isleno, Ch'orti', Garifuna, Lenca, Creole, Miskito, Pech, Sumo or Tawahka, or Tolupan), function on the farm (owner, administrator, or worker), age, amount of land owned,

amount of land leased, highest education level, and type of agricultural product used to obtain a salary. The demographic data were collected to understand the characteristics of the study participants. The following table summarizes the components of the questionnaire for the quantitative portion of the study. The constructs, authors, and previous study reliabilities are summarized in Table 7.

Table 7. Questionnaire Research Components

Construct	Authors	Items	$\alpha$
Job Performance	Podsakoff and MacKenzie's (1989) (modified/validated by Janssen and Van Yperen (2004))	5	.85-.86
Psychological Empowerment	Spreitzer (1996) (11 items used out of 12 due to fit for farmer's context)	11	.85-.91
Workplace Motivation	Tremblay et al. (2009)	18	.84 -.95
Social Capital	Onyx and Bullen (2000) (19 items used out of 36 to fit for farmer's context and survey time considerations)	19	.75- .78
Demographic Variables		9	
	Total	62	

A confirmatory factor analysis (CFA) was conducted to test the factor structure of the data and the construct validity of the survey. CFA is used when items are based on theory and factors are expected to fit data (Thompson, 2004). Items with low factor loadings ( $< .45$ ) were removed to improve the model fit for structural equation modeling (Brown, 2006). It was

determined that with the items removed, the latent variables were more structurally parsimonious, without affecting the overall aim of the research questions. Additionally, each question was carefully screened prior to removal and it was determined whether the question fit or did not fit the context or was not culturally translated well. Confirmatory factor analysis provides a strong framework for analyzing data in distinct demographic groups or cultures where known constructs may operate differently (Brown, 2006). Table 8 shows the reliability measurements of each construct.

Table 8. Instrument Reliability

Construct	Items	Reliability ( $\alpha$ )		
		previous studies	Pilot study	current study
Job Performance*	4	.85-.86	.81	.81
Psychological Empowerment	11	.85-.91	.82	.82
Workplace Motivation	18	.84 -.95	.78	.83
(table cont'd.) Social Capital	19	.75- .78	.81	.79

\*Question 5 was removed from instrument to improve reliability.

## Interview and Focus Group

Qualitative data were collected using semi-structured interviews and a focus group. Participants were asked about their own perceived job performance and their own thoughts and feeling on how and why psychological empowerment, workplace motivation, and social capital affected their job performance. The questions for the semi-structured interviews and focus group are summarized in Table 9.

Table 9. Interview Question Examples

Variables	Questions
Psychological empowerment	<ul style="list-style-type: none"> <li>• Do you feel that your job performance is better when you feel that you can control the activities of the farm and that you have independence?</li> <li>• Do you feel that your job performance is better when you feel your farming has an impact on your community and society?</li> </ul>
Workplace motivation	<ul style="list-style-type: none"> <li>• Do you feel that you work because of the money and security? Do you feel that your job performance is better when you have a better income?</li> <li>• Do you feel that you have realistic working conditions? How do you feel that this affects your job performance?</li> </ul>
Social capital	<ul style="list-style-type: none"> <li>• Do you feel that you where you live, and work is safe? Can you trust people? How does this affect your job performance?</li> <li>• Do you feel that you are part of a team at work? Are the people you work with also your friends? Does this impact your job performance?</li> </ul>

Each construct was explained before the corresponding questions were asked during the interviews and focus group. For example, the researcher was interested in the question, “Do you feel that you have psychological empowerment in your workplace? How do you feel that this affects your job performance?” The farmers were provided with an explanation of the purpose of the section. After the concept was explained, the researcher moved to the questions to understand the construct, such as, “Do you feel that your job performance is better when you feel your farming is meaningful to you? If yes or no, please explain why.” The full list of the questionnaire

and focus group questions are located in Appendix B. The interview and focus group questions were based on the quantitative instruments. As the embedded data approach was used, the questions were developed to receive further elaboration from the quantitative questions asked.

### **Data Collection**

Data collection strategies in this study included questionnaires, semi-structured one-on-one interviews, and a focus group. All participation in the study was voluntary and non-compensated. For the questionnaires, a paper and pencil survey were provided to each participant. The paper survey contained questions related to psychological empowerment, workplace motivation, social capital, and job performance. Assistance was provided to each participant in cases of low literacy. Each survey was independently collected after completion. The researcher was available to answer any questions about the instrument, to check the survey per submission in case the participant provided an instrument with missing data, and to remind the participant if an item was not filled out.

The semi-structured one-on-one interviews with Diego, Felipe, Javier, Juan, Julieta, and María were conducted at the location most convenient for the participants such as on their farm premises or the local university. The focus group with Ana, María and Helen was conducted at the home of Ana where her farm was also located. The researcher used an interview guide to ensure all the questions were covered. Additionally, the participants were encouraged to describe freely how they felt and the order of the questions were adjusted as needed to provide dialogue. The interview consisted of both close-ended questions and open-ended questions. The researcher had no appointments scheduled after interviews to allow ample time for building rapport. Additionally, the researcher held casual conversations with the participants prior to and after the interviews to establish trust and an empowering atmosphere in which the farmers could feel

comfortable. The researcher described the study and was available to answer any questions. The researcher developed rapport through a warm, genuine, and approachable style and used both verbal and non-verbal forms to build, “mutual attentiveness, positivity, and coordination,” (Tickle-Degnen & Rosenthal, 1990, p. 286). Interview data was recorded on a recording device and transcribed.

### **Louisiana State University Institutional Review Board Approval**

Permission to conduct the study was requested and received from the Louisiana State University Institutional Review Board. The approved application may be found in Appendix D. A consent form and an explanation of the study was provided to each participant and written consent was required prior to participation. The consent forms may be found in Appendix E. The researcher protected the data collected from the study using anonymous numbers for each survey instrument and recording. Paper copies of the surveys, consent forms and recordings were loaded onto the researcher’s secured and password-protected computer. Precautions were taken to protect all participants’ confidentiality and anonymity.

### **Data Analysis**

A total of 396 responses were analyzed, excluding 101 incomplete responses. Descriptive statistics, correlations, and reliabilities were conducted, using SPSS 25.0. Confirmatory factor analysis and structural equation modeling were conducted, using AMOS 22.0. The results of the quantitative study are reported in four parts. First, the descriptive statistics and correlations are presented. Second, the reliability of the instrument is provided. Third, a confirmatory factor analysis was conducted to determine the construct validity of the instrument. Finally, structural equation modeling was used to test the hypotheses and analyze the results.



To evaluate the fit of the model,  $\chi^2/df$ , P-value, standardized root mean square residual (SRMR); root mean square error of approximation (RMSEA), non-normed fit index (NNFI), and comparative fit index (CFI) were used. Hair, Black, Babin, and Anderson (2014) described acceptable goodness of fit indices for samples across various model situations.

Absolute fit indices provide a measure of how well the data fit the theory proposed (Hair et al., 2014). For samples with more than 30 observed variables, it is recommended to have a chi-square ( $\chi^2$ ) with a significant p-value, and a normed chi-square ( $\chi^2/df$ ) with a close to a 3:1 or less ratio tends to be a better fit (Hair et al., 2014), and between 1.0-5.0 is considered an acceptable fit (Schumacker & Lomax, 2004); standardized root mean square residual  $<.10$ ; root mean square error of approximation  $<.10$ . Incremental fit indices include the non-normed fit index and comparative fit index which compared the model to a null model with uncorrelated observed variables. It is recommended to have at least NNFI  $>.80$  and CFI  $\geq .90$ . Parsimony fit indices describe the explanatory predictive power of the data. An adjusted goodness-of-fit index (AGFI)  $>.85$  is an accepted value (Schermelleh-Engel, Moosbrugger, & Müller, 2003). The following table describes the fit indices and acceptable thresholds.

Table 10. Fit Indices and Acceptable Thresholds

Fit Index	Acceptable Threshold	Type of Fit
Chi-Square ( $\chi^2$ )	A significant p-value of $p < 0.05$ (Hooper, Coughlan, & Mullen, 2008)	Absolute fit
Normed chi-square ( $\chi^2/df$ )	Close to a 3:1 or less ratio indicates better fit (Hair et al., 2014); Between 1.0-5.0 is considered an acceptable fit (Schumacker & Lomax, 2004)	Absolute fit

(table cont'd.)

Fit Index	Acceptable Threshold	Type of Fit
Standardized Root Mean Square Residual (SRMR)	<0.10 (Hair et al., 2014)	Absolute fit
Root Mean Square Error of Approximation (RMSEA)	Values <.08 preferred; Values <.10 accepted (Hair et al., 2014; MacCallum, Browne, & Sugawara, 1996)	Absolute fit
Non-Normed Fit Index (Tucker Lewis Index) (NNFI)	Values that approach 1 are preferred (Hair et al., 2014); 0 indicates no fit, while 1 indicates perfect fit (Schumacker & Lomax, 2004); Values as low as >.80 have been suggested and $\geq 0.95$ preferred (Hooper et al., 2008)	Incremental fit indices
Comparative Fit Index (CFI)	Values $\geq .90$ are preferred (Hair et al., 2014)	Incremental fit indices
Adjusted goodness-of-fit index (AGFI)	Values >.85 are acceptable (Schermelleh-Engel et al., 2003)	Parsimony Fit Indices

The qualitative interviews and focus groups were transcribed verbatim and reviewed for accuracy. The findings were translated from Spanish to English. Brislin's model of translation (Brislin, 1970; Jones, Lee, Phillips, Zhang, & Jaceldo, 2001) was used to translate the transcripts into English. The translated version of the interviews and focus group were blindly back-translated by a native Spanish speaker with a doctorate in agricultural education for recommendations for culturally appropriate meanings and validation of the translation.

The data were analyzed through constant comparative strategies (Creswell & Plano Clark, 2018; Saldaña, 2009; Glaser & Strauss, 1967), to identify themes and subthemes in the data with the software ATLAS. ti 8.0. Following Saldaña (2009), first, the researcher wrote analytic and personal memos throughout the hard copy printed interview transcripts, from field notes and reading the transcripts, as intuitive reminders of the personal qualities of the participants. In the first cycle of coding, the researcher read the transcripts again. Descriptive codes were developed in each interview and focus group on the hard copy. Next, the researcher uploaded the interview transcripts on ATLAS. ti 8.0 and reread the interview transcripts to look for the descriptive codes and any codes that may have been not been generated in the initial review. The interview transcripts were read several times again on ATLAS. ti 8.0 and coded until saturation (Guest, Bunce, & Johnson, 2006). In the second cycle, focused coding was used to categorize the initial coded data into categories (Saldaña, 2009). The categories were organized into themes. The themes were organized by how they explained the constructs and research questions of the study.

As a practical example, the researcher read the transcripts, underlined, and highlighted words and phrases which provided insight into the study research questions. The transcripts were then uploaded on ATLAS. ti 8.0, coded electronically and organized. Items were coded across the transcripts, which the researcher interpreted as the farmer's description of how psychological empowerment impacts their job performance. Based on the codes, the impact on community (through products) and impact through employment were identified as categories. The influence of these categories explaining how psychological empowerment impacted job performance was repeated constantly and across the respondents. The theme emerged from the data, described by

farmers as, “impact on others,” which described relevance to the research question of how the farmers described psychological empowerment influencing their job performance.

For psychological empowerment and job performance, three major themes emerged from the data. For workplace motivation and job performance, three major themes emerged from the data. For social capital and job performance, one major theme emerged. Several themes were shared among the variables.

The findings of the qualitative analysis were checked for, trustworthiness, authenticity, and credibility (Lincoln, Lynham, & Guba, 2011; Creswell & Miller, 2000). To establish the trustworthiness, authenticity, and credibility of the findings, five strategies were used including triangulation, member checking, an academic advisor audit on the data and procedures of the research, the use of an independent specialist to determine whether they agreed on codes and themes chosen based on the evidence, and the results were reviewed by an agricultural specialist in Olancho, Honduras (Creswell & Plano Clark, 2018).

### **Subjectivity Statement**

Qualitative data analysis requires the researcher to understand themselves in the process of analyzing data to expose biases and assumptions (Ruona, 2005). Through a process of understanding their own position, the researcher sought to be aware of how personal persuasions and power may influence the research. The researcher in the study is from the United States, is non-Latino and female. Her education level is considered globally privileged, due to the fact that she graduated from high school and attended universities to obtain both undergraduate and postgraduate degrees. Furthermore, she administered development projects for farmers throughout the world, including in Central America. Additionally, the researcher is fluent in the Spanish language and has lived, worked, and studied in Spanish speaking countries.

Prior to conducting the study, the researcher managed projects with various universities in Honduras and developed specialized agricultural training for students and faculty from Honduras from 2011-2018. She made several visits to Olancho prior to the study to build relationships with the faculty, staff, and students. The researcher was awarded a fellowship by the National Agriculture University of Honduras to conduct research relevant to the development of Honduras (Appendix C).

### **Data Merging**

The quantitative and qualitative datasets were collected, and each dataset were analyzed independently (Creswell & Plano Clark, 2018). The supportive qualitative component was embedded in the quantitative study and analyzed independently. The quantitative data and qualitative findings were compared to provide further understanding of the study research questions. The themes of the qualitative findings were compared to the quantitative data to reveal confirmation, expansion, or discordance. For this purpose, the researcher used a pragmatic worldview to develop and interpret the study.

The pragmatic worldview is the most common paradigm used in mixed methods research (Creswell, & Plano Clark, 2018). The researcher started with theories of motivation and social capital to develop the study hypotheses, and the mixed methods approach was identified as the best method to answer the study research questions. Unlike the postpositivist or constructivist worldview, the pragmatic worldview seeks to understand data through both objective and subjective findings (Brierley, 2017; Creswell & Plano Clark, 2018). Subsequently, the combined quantitative data and qualitative findings provided more of an understanding of the study research questions, than one method alone could provide.

## Summary

The methodology of the mixed methods study are presented in this chapter. A convergent design with an embedded data approach was used to collect both quantitative and qualitative data. The population for the study were farmers in Olancho, Honduras. A cross-sectional paper survey design was used to collect quantitative data from farmers. Qualitative data were collected using semi-structured interviews and a focus group. A total of 396 responses were analyzed, excluding 101 incomplete responses. Descriptive statistics, correlations, and reliabilities were conducted, using SPSS 25.0. A confirmatory factor analysis and structural equation modeling were conducted, using AMOS 22.0. The qualitative data were collected using semi-structured individual interviews (six farmers) and a focus group session (three farmers). Participants were asked about their own thoughts and feeling on how and why psychological empowerment, workplace motivation, and social capital affected their job performance. The qualitative data were analyzed through constant comparative strategies to identify codes, themes, and subthemes in the data. The data were analyzed with the software ATLAS. ti 8.0. Strategies to establish the trustworthiness, authenticity, and credibility of the findings included triangulation, member checking, an academic advisor audit, the use of an independent specialist to review the established codes and themes, and the results were reviewed by an agricultural specialist in Olancho, Honduras. Finally, the data were combined to provide an understanding of the research questions.

## **CHAPTER 4. RESULTS**

This chapter reports the findings of the mixed methods study. First, the quantitative results are summarized, including the descriptive statistics, confirmatory factor analysis, and structural equation modeling. Second, the qualitative findings and themes are described. Finally, the findings of the merged data are presented for an overall response to the research questions.

### **Quantitative Results**

The quantitative results display the relationship among the study variables. Through structural equation modeling, the study hypotheses were tested. As a result, the connection among the independent and dependent variables of the study are displayed.

#### **Descriptive Statistics**

The first step of the analysis was to conduct descriptive statistics of the quantitative data to summarize the information collected and observe patterns in the data set. There was a high positive correlation between psychological empowerment and workplace motivation at .56. The correlation between psychological empowerment and job performance was .44, the correlation between psychological empowerment and social capital was .50, the correlation between workplace motivation and job performance was .43, the correlation between social capital and job performance was .41, and the correlation between social capital and workplace motivation was .39.

Data analysis was conducted for a reliability estimate for each item measured in the final survey instrument to determine internal consistency reliability. The Cronbach's alpha test, a common statistical estimate of reliability for psychometric testing was used. The Cronbach's alpha test revealed an overall score of .77, indicating an acceptable level of internal consistency.

The reliability of an instrument indicates that how well the test correlates with itself and the measurement error (Tavakol & Dennick, R., 2011). The initial reliability estimate for job performance was 0.55. However, the removal of JP5 improved the reliability to .81. The reliability estimate for psychological empowerment was .82. The reliability estimate for workplace motivation was .83. and the reliability estimate for social capital was .79. The descriptive statistics, correlations, and reliabilities of the data are described in the following table.

Table 11. Descriptive Statistics, Correlations, and Reliabilities

Variables	Mean	SD	1	2	3	4
1. Job Performance	3.98	.48	(.81)			
2. Psychological Empowerment	4.35	.41	.44	(.82)		
3. Workplace Motivation	4.09	.42	.43	.56	(.83)	
4. Social Capital	3.88	.45	.41	.50	.39	(.79)

n=396. Reliability estimates are in parentheses; correlations are  $p < .01$

### Measurement Model

The confirmatory factor analysis evaluated the discriminant validity of the measurement model prior to structural equation modeling. Each construct was individually evaluated for model fit and improved in cases where removing weak items improved the model fit. The four latent variables in the study, psychological empowerment, workplace motivation, social capital, and job performance were individually evaluated. From psychological empowerment, item 6, “I have mastered the skills necessary for my job” was removed. From social capital, Social Agency or Proactivity in a Social Context (items 33-35); “If I were caring for a child and needed to go



out for a while, I would ask a neighbor for help” (item 40); “Over the weekend, I have lunch/dinner with other people outside my household” (item 41), and Value of Life (items 44&45) were removed. From workplace motivation, amotivation was removed (items 14, 23, 28). The final revised model consisted of 41 items, instead of 53 items.

**Job performance.** To measure the job performance of farmers, a four-item scale was used. The factor loadings ranged from .68-.75. The measurement model displayed a poor absolute fit measure due to a p-value of  $p > 0.05$ . A significant p-value of  $p < 0.05$  is acceptable for absolute fit. Two additional measures of absolute fit were evaluated, and it was determined that the model displayed an acceptable fit to the data. Specifically, SRMR = .01 and RMSEA = .000. The rest of the fit measures also represent a good fit to data (CFI = 1.00; NNFI = 1.00; SRMR = .01; RMSEA = .000; AGFI = .99). The model for job performance displayed acceptable fit measures (Figure 3).

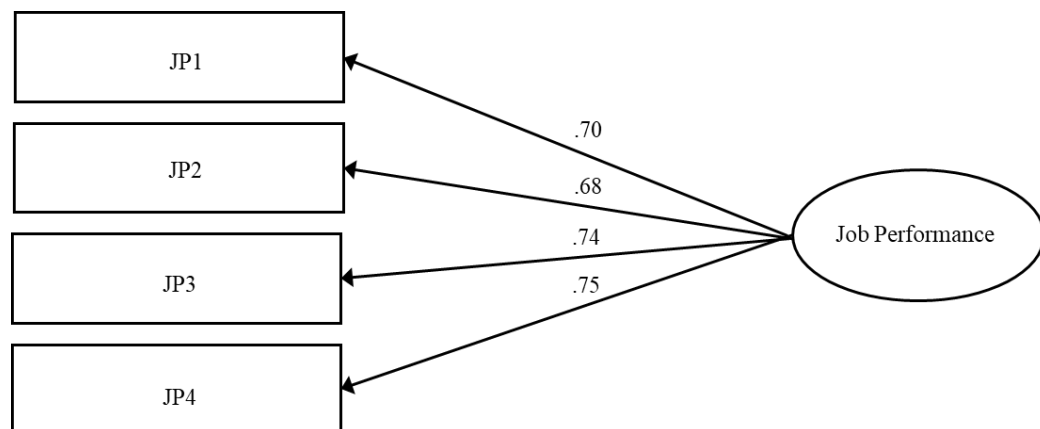


Figure 3. Job performance measurement model

**Psychological empowerment.** The variable has four subscales, including meaning, competence, self-determination, and impact. Psychological empowerment contained eleven items and displayed factor loadings from .46-.85. The fit measures represent a good fit to data ( $\chi^2 = 137.77$ ;  $df = 38$ ;  $\chi^2 / df = 3.63$ ; CFI = .93; NNFI = .89; SRMR = .07; RMSEA = .08;

AGFI=.89). The model for psychological empowerment displayed acceptable fit measures (Figure 4).

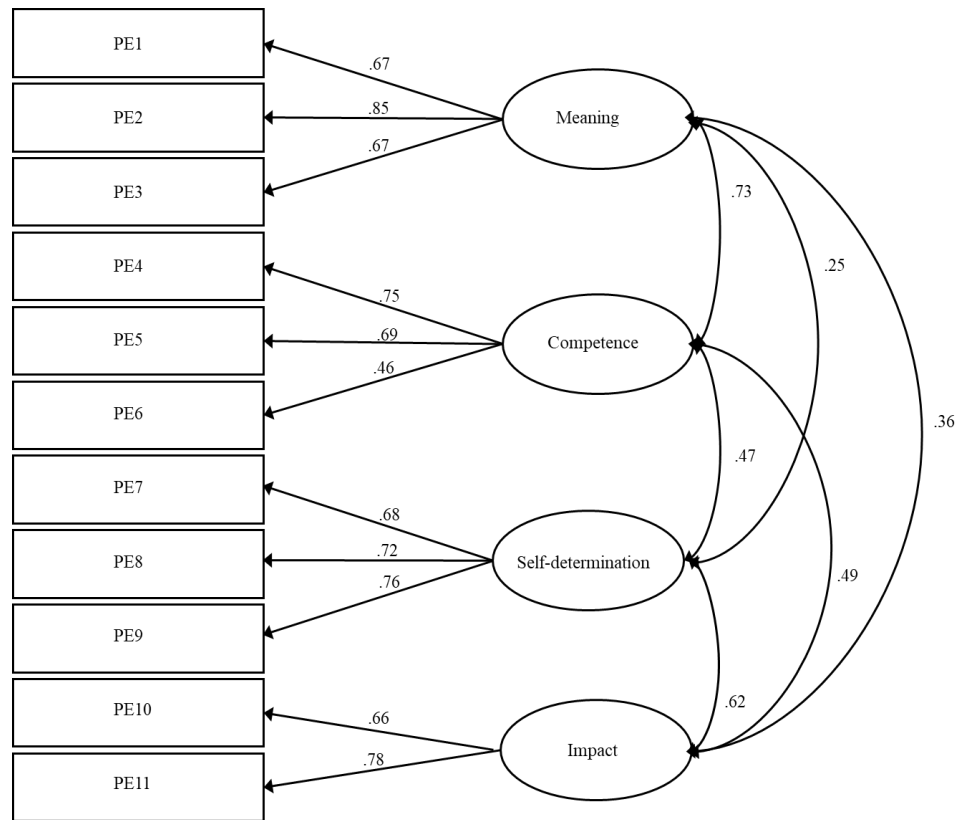


Figure 4. Psychological empowerment measurement model

**Workplace motivation.** To measure the workplace motivation of the farmers, an 18-item scale was used. The scale has six subscales, including intrinsic motivation, integrated regulation, identified regulation, introjected regulation external regulation, and amotivation. The factor loadings ranged from .21-.83. The fit measures represent a good fit to the data ( $\chi^2 = 32.32$ ;  $df = 9$ ;  $\chi^2 / df = 3.59$ ; CFI = .97; NNFI = .95; SRMR = .04; RMSEA = .08; AGFI = .94). However, due to a low factor loading for amotivation (<.45), a respecified model was selected. The measurement model was altered to improve the factor loadings. The new factors loadings ranged from .60-.84. The Cronbach's alpha was .83. The fit measures represent a good fit to data ( $\chi^2$

=14.14; df =5;  $\chi^2 / df = 2.83$ ; CFI =.99; NNFI =.97; SRMR =.03; RMSEA =.07; AGFI=.96). The respecified model for workplace motivation displayed acceptable fit measures (Figure 5).

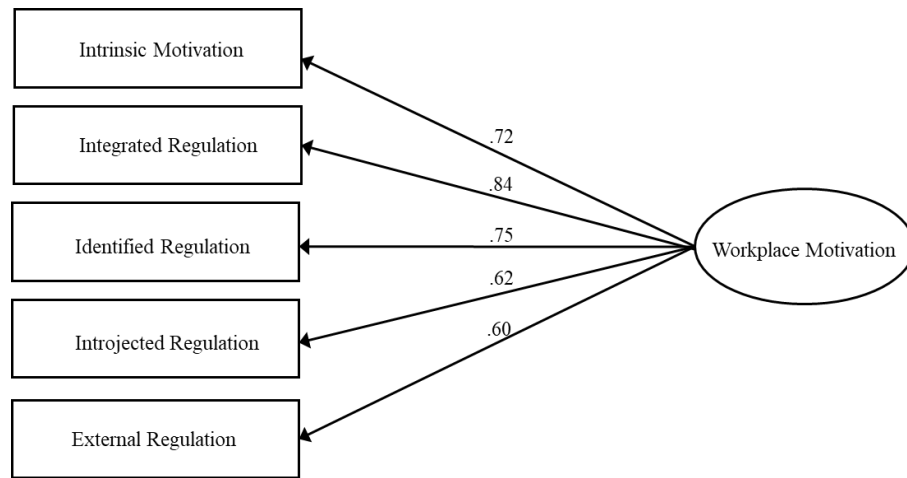


Figure 5. Respecified measurement model of workplace motivation

**Social capital.** To measure the social capital of the farmers, 19 items were used. The variable has eight subscales, including participation in local community, social agency or proactivity in a social context, feelings of trust and safety, neighborhood connections, family and friends connections, tolerance of diversity, value of life, and work connections and displayed factor loadings from .31-1.0. The fit measures represent a good fit to data ( $\chi^2 = 261.84$ ; df =124;  $\chi^2 / df = 2.11$ ; CFI =.93; NNFI =.90; SRMR .00; RMSEA =.05; AGFI=.90). The original model for social capital displayed acceptable fit measures. Due to the low factor loadings (<.45) in social agency or proactivity in a social context, the items were removed. The removal respecified the model and the final subscale consisted of five subscales, including feelings of trust and safety, neighborhood connections, tolerance of diversity, value of life, and work connections. The respecified model displayed factor loadings from .49 and .75. The fit measures represent a good fit to data ( $\chi^2 = 73.830$ ; df =44;  $\chi^2 / df = 1.68$ ; CFI =.97; NNFI =.96; SRMR =.04; RMSEA

=.04; AGFI=.95). The respecified model for social capital displayed acceptable fit measures (Figure 6).

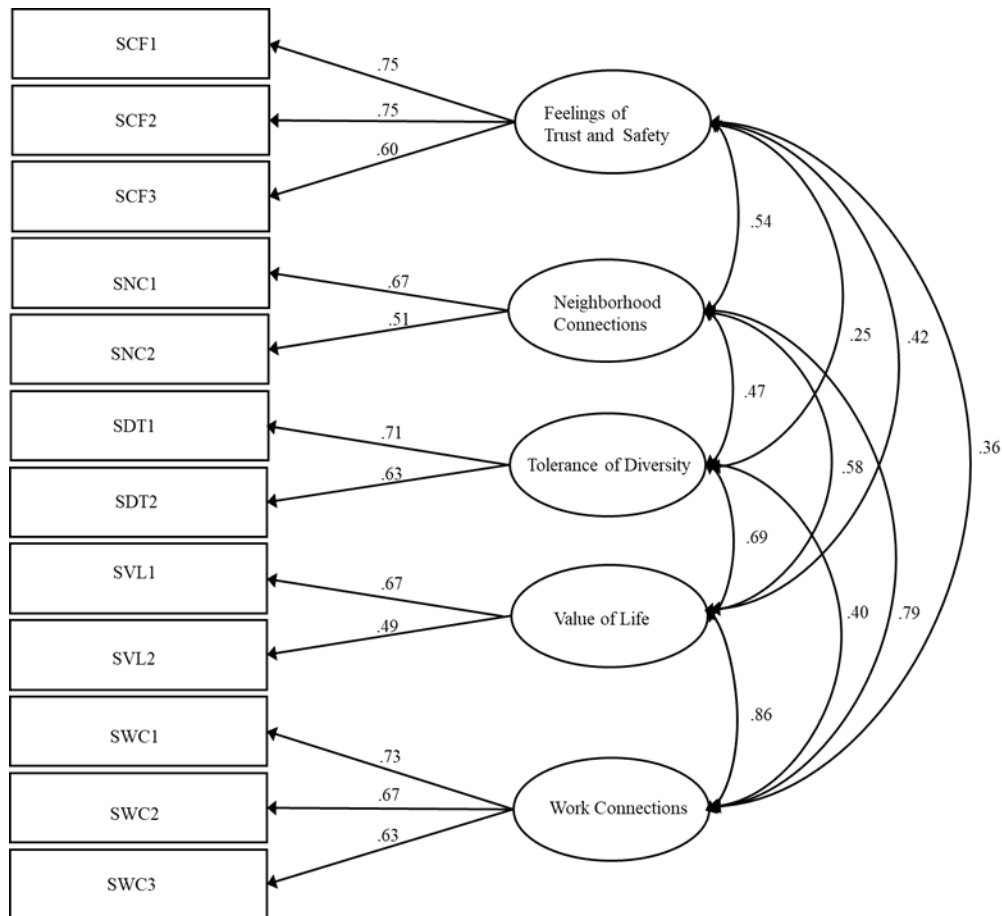


Figure 6. Respecified measurement model of social capital

**Overall measurement model.** The overall measurement model fit measures represented a good fit to data ( $\chi^2 = 289.38$ ;  $df = 129$ ;  $\chi^2 / df = 2.24$ ; CFI = .93; NNFI = .92; SRMR = .05; RMSEA = .06; AGFI = .90). The factor loadings ranged between .41-.81. Due to the low factor loadings, items (<.45) were removed. The removal respecified the model and the final subscale of social capital to consist of three subscales: neighborhood connections, value of life, and work connections. The respecified model displayed factor loadings from .50 and .81. The fit measures represent a good fit to data ( $\chi^2 = 220.77$ ;  $df = 98$ ;  $\chi^2 / df = 2.25$ ; CFI = .95; NNFI = .93; SRMR

=.045; RMSEA =.056; AGFI=.91). The respecified model for overall measurement displayed acceptable fit measures (Figure 7).

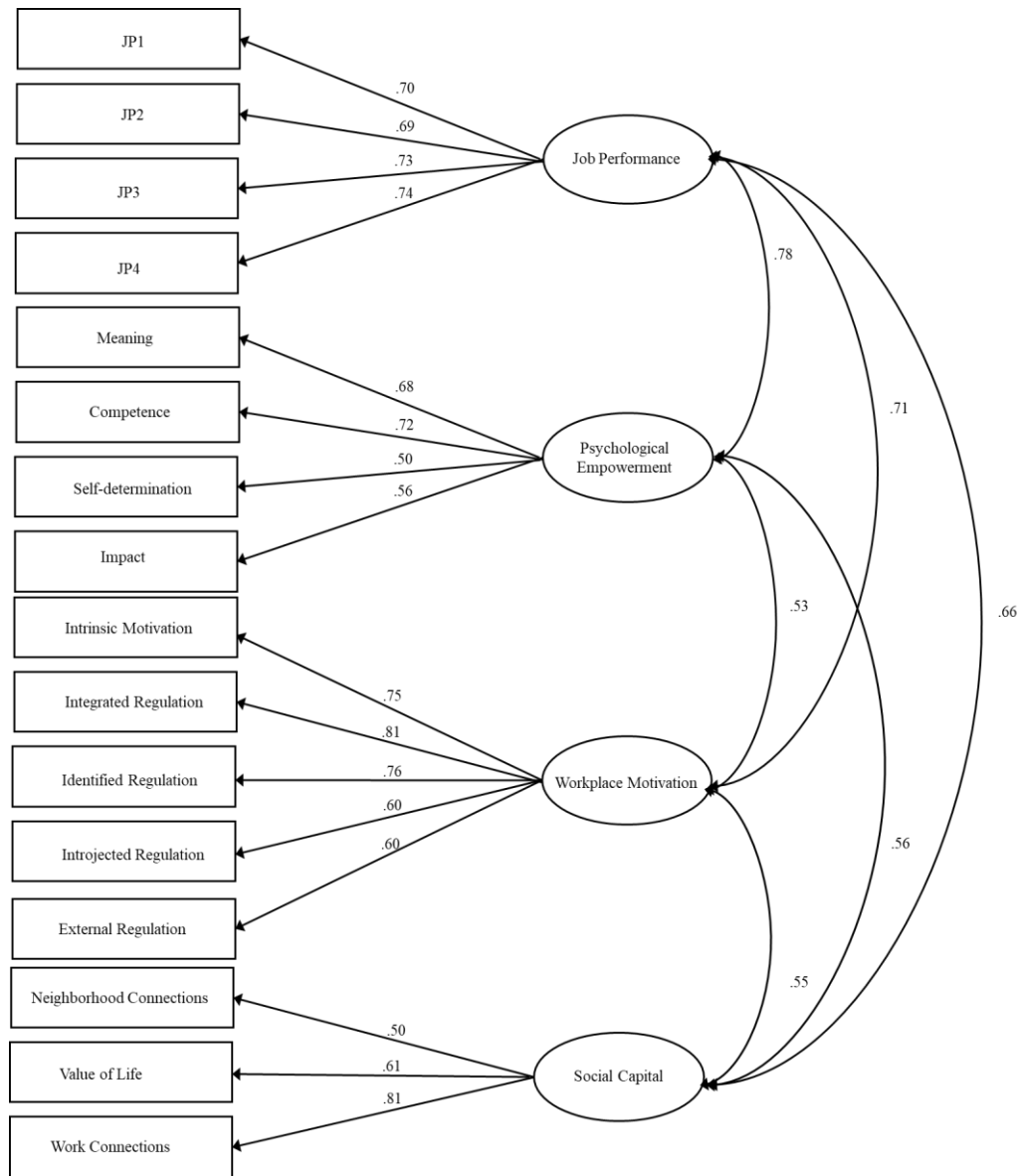


Figure 7. Overall respecified measurement model

Table 12. Measurement Model Results

Construct	$\chi^2$	<i>df</i>	$\chi^2/df$	CFI	NNFI	SRMR	RMSEA
Job Performance	1.854	2	.93	1.00	1.00	.010	.000
Psychological Empowerment	73.217	29	2.525	.964	.943	.047	.062
Workplace Motivation	14.144	5	2.83	.987	.974	.026	.068
Social Capital	66.095	48	1.38	.986	.981	.034	.031
Measurement model	220.77	98	2.25	.950	.930	.045	.056
Fit Criteria			<3	≥.90	>.80	<0.10	<.10

CFI = comparative fit index; NNFI=non-normed fit index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

### Structural Model

The structural model represents the hypothesized relationships of the research. The overall structural model fit measures represent a good fit to data ( $\chi^2=180.10$ ; *df*=96;  $\chi^2/df=1.88$ ; CFI =.96; NNFI =.95; SRMR =.04; RMSEA =.05; AGFI=.92). The results of the structural model displayed acceptable fit measures (Figure 8).

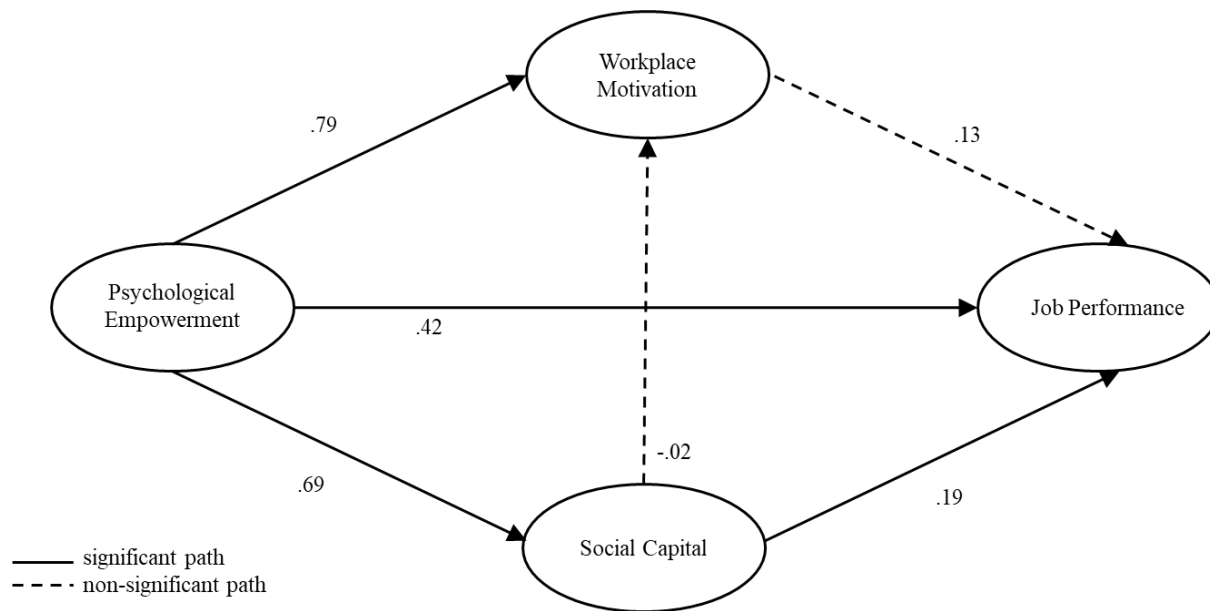


Figure 8. Hypothesized structural model

Due to the structural model being a good fit to the data, the hypotheses were tested to determine the statistical relationships. The respecified measurement model was determined to be consistent with the data. Alternative models were not tested due to the design of the mixed methods study.

## Hypothesis Testing

The eight hypotheses were examined to determine the relationships among the variables. Table 13 displays the effects of path estimates. Hypothesis 1 predicted that psychological empowerment is positively related to workplace motivation. The hypothesis was supported ( $\gamma = .79$ ,  $t = 6.92$ ) and indicated that psychological empowerment has a meaningful impact on workplace motivation. Hypothesis 2 stated that psychological empowerment is positively related to job performance. The hypothesis was supported ( $\gamma = .42$ ,  $t = 2.92$ ). Hypothesis 3 stated that psychological empowerment is positively related to social capital. The hypothesis was supported

( $\gamma = .69$ ,  $t = 9.73$ ) and indicated a strong relationship. Hypothesis 4 stated that workplace motivation is positively related to job performance. The hypothesis was not supported ( $\gamma = .13$ ,  $t = 1.25$ ). Hypothesis 5 stated that social capital is positively related to workplace motivation. The hypothesis was not supported ( $\gamma = -.02$ ,  $t = -.24$ ). Hypothesis 6 stated that social capital is positively related to job performance. The hypothesis was supported ( $\gamma = .19$ ,  $t = 2.01$ ) although the impact was not very large.

Table 13. Hypothesis Testing: Effects of Path Estimates

Hypothesis	Direct Effects	Indirect Effects	Total Effects	Results
H1: Psychological Empowerment → Workplace Motivation	.79	_____	.79** (6.918)	Supported
H2: Psychological Empowerment → Job Performance	.42	_____	.42* (2.924)	Supported
H3: Psychological Empowerment → Social Capital	.69	_____	.69** (9.731)	Supported
H4: Workplace Motivation → Job Performance	.13	_____	.13 (1.25)	Not Supported
H5: Social Capital → Workplace Motivation.	-.02	_____	-.02 (-.238)	Not Supported
H6: Social Capital → Job Performance	.19	_____	.19* (2.010)	Supported
H7: Psychological Empowerment → Workplace Motivation → Job Performance	_____	.10	.10	Not Supported

(table cont'd.)



Hypothesis	Direct Effects	Indirect Effects	Total Effects	Results
H8: Psychological Empowerment → Social Capital → Job Performance	_____	.13	.13*	Supported

Note. \*\* p<.01 \*p<.05 (t>1.96), t-values are in parentheses.

Bootstrapping was conducted at the 95% confidence interval to test whether the indirect effects were statistically significant. Hypothesis 7 stated that workplace motivation mediates the link between psychological empowerment and job performance. The hypothesis was not supported ( $\gamma = .10$ ). Hypothesis 8 stated that social capital mediates the link between psychological empowerment and job performance. The hypothesis was supported ( $\gamma = .13$ ).

### Qualitative Findings

The qualitative portion of the study aimed to discover the nature of how farmers in Honduras described their experience of psychological empowerment, workplace motivation, and social capital, with regard to job performance, to build on the quantitative research. The interview transcripts revealed codes, which were categorized and identified for global themes (Table 14).

Table 14. From Codes to Global Themes

Codes	Categories Identified	Organizing Themes	Global Themes
-Abandoned land	-Control	Control	1. Farmers interviewed indicated that they must feel a sense of control. If a farmer loses control, they lose everything. Control of the farm impacts job performance. Competence
-Ancestors	-Education		
-Autonomy and imagination			
-Benefit to society			

(table cont'd.)

Codes	Categories Identified	Organizing Themes	Global Themes
-Bring benefits to others -Chaos if no control -Climate change -Cohesion -Corruption -Create jobs -Customs -Diversity -Drought -Education -Education leads to control -Emigration -Employment for others -Employment impact -Empowerment -Extortion -Family -Family farm -Family heritage -Family ties -Farm referred to as "Casa"	-Impact on Community (through products) -Impact through Employment  Machismo          Money	Impact on Others  Machismo	<p>or education is needed to learn more. A lack of education and learning new methods or technologies causes a farmer to lose control and job performance will go down.</p> <p>2. When farmers feel that their work has an impact on others through the products they sell, the employment opportunities they develop, or both, the feeling of impact on others causes them to perform better.</p> <p>3. To be a women farmer in Honduras, it is important to have a man behind you. Machismo affects the ability for women to be able to access education and trainings, which has a negative impact on job performance. There is an extra layer or fight that you must have as a woman. This is demotivating, but can be cured with having a strong, "character."</p> <p>4. More money means more investment to be able to perform</p>

(table cont'd.)

Codes	Categories Identified	Organizing Themes	Global Themes
-Farmer due to lack of opportunities			better. For example, with more money you can purchase inputs and be more efficient. More money means less problems. There is less stress, for example with family matters, so a farmer can focus and perform better. Money is not the only motivation for being a farmer, however, it helps job performance by providing more access and helps to solve life challenges.
-Fear			
-Feels capable			
-Freedom			
-Friends = help on the farm			
-Friendship			
-From childhood			
-Grandparents were farmers too			
-Helping each other	-Safety	Work Conditions	
-Helping others	-Political Systems		
-Heritage	-Uncertainty		
-High control	-Machismo		
-Impact on community			
-Impact through employment	-Heritage	Heritage	5. Work Conditions (includes political support, safety, machismo) affect motivation, which impacts job performance. When farmers feel that they have realistic work conditions, they have better job performance.
-Impact through helping people	-An Honest Living		
-Inheritance			
-Interdependence			
-Knowledge			
-Learn from experience			
-Lifestyle			

(table cont'd.)

Codes	Categories Identified	Organizing Themes	Global Themes
<ul style="list-style-type: none"> <li>-Loans</li> <li>-Low help from government</li> <li>-Machismo</li> <li>-Money for investment</li> <li>-Money = less stress</li> <li>-More technology needed</li> <li>-Mother's land</li> <li>-Not all about money</li> <li>-Part of life</li> <li>-Passion</li> <li>-People depend on me</li> <li>-Physical and emotional capability</li> <li>-Positive impact on society</li> <li>-Pride of being farmer</li> <li>-Rely on each other</li> <li>-Safety</li> <li>-Social capital as capacity building</li> </ul>	<ul style="list-style-type: none"> <li>-Interdependence</li> <li>-Social capital as business linkages</li> <li>-Social capital as education</li> <li>-Social capital as labor</li> </ul>	<ul style="list-style-type: none"> <li>The Power of Unity</li> </ul>	<p>7. Unity leads to business connections, which impacts job performance. You cannot have job performance without each other. While a farmer does have independence in their work, increased job performance relies on interdependence. Unity leads to education, due to farmers learning from each other. The experience of unity also leads to labor, due to being able to help each other. When you face “machismo,” you can also ask a male relative to help you.</p>

(table cont'd.)

Codes	Categories Identified	Organizing Themes	Global Themes
-Sentimental			
-Share ideas			
-Success			
-Survival			
-Tradition			
-Training			
-Underemployment			
-Unity			
-Valued by society			
-Violence			
-Violence = people move			

For psychological empowerment and job performance, three major themes emerged from the data, for workplace motivation and job performance, three major themes also emerged from the data, and for social capital and job performance, one major theme emerged from the data (Table 15). Additionally, within the variables, evidence on the nature of the relationships between psychological empowerment and workplace motivation, psychological empowerment to workplace motivation and job performance, social capital to workplace motivation, and social capital to workplace motivation and job performance were found.

Table 15. The Emerged Themes for the Nature of Psychological Empowerment, Workplace Motivation, Social Capital Impact on Job Performance

Psychological Empowerment	Workplace Motivation	Social Capital
<ul style="list-style-type: none"> <li>• Control</li> <li>• Impact on Others</li> <li>• Machismo</li> </ul>	<ul style="list-style-type: none"> <li>• Money</li> <li>• Work Conditions</li> <li>• Heritage</li> </ul>	<ul style="list-style-type: none"> <li>• The Power of Unity</li> </ul>

### Psychological Empowerment

Farmers interviewed expressed several themes that described how psychological empowerment relates to job performance. Three major themes emerged: 1) control, 2) impact on others, and in female farmers, 3) machismo.

**Control.** Farmers emphasized the relationship between having control of their farm and their job performance. As farmer Juan described:

Because if I don't have control over something, what I will get is luck. I will just obtain just what comes and nothing more. Then I will lose control over everything and everything will go to chaos. So it is very important that I have control over the things (on the farm), because if not, I will lose everything.

Examples of control on the farm included meticulous planning, training and education, using trained individuals to help identify challenges, adjusting to challenges, and always using prevention on the farm to the best of their ability. When a farmer could maintain control of their farm, their job performance was better. There were areas that the farmers could not control, such as unexpected natural phenomena, safety challenges or accidental damages. As farmer Felipe stated:

For example, it affects my job performance when I do not have water. For example, there are some places that are quite dry. And if you are missing water. Then your job performance will be low.

However, working with prevention and proven methods, the farmers could hedge against costly mistakes that would negatively impact their job performance. A lack of education or learning new methods or technologies might cause a farmer to lose control and job performance could go down. The farmers described the need for access to training and new technologies to increase their competence, to be able to better control their farms. As an example, farmer Helen described in the focus group the need for more education regarding the planting seasons:

The cornfields that are out right now, they need water. Look how they are right now, how they need water, the cornfields. So right now, one does not know, how we made a mistake at the time of planting, like it wasn't the right moment to do it. So now we are understanding that the time for planting, we are going to have to change it. And it is no longer the season that we have been accustomed to planting.

In response to Helen's description of the constant need for updated training, Ana describes:

Despite this, I believe we are empowered in these areas. Like they said, we need more training and to perhaps modernize in some areas. And also, to understand with better depth, what is the planting time and the time of harvesting. Because for example, here we have modernized some technology related things, but it wasn't how one hoped.... Yes, like they said. If one receives trainings, of course you will have better job performance.

**Impact on others.** The farmers also described how the impact they felt they had on others influenced their job performance. Examples included the employment opportunities they provided for their community through farming, and also the impact they felt they had on society through their products. Farmer Julieta described the impact her farming activities have on society through producing products:

In addition, the feeling of impact through providing meaningful and better priced products for their community, affects the job performance of farmers, because when they feel impact, they try to find a way to perform better.

Farmer Felipe describes the impact on society which causes better job performance:

I feel valued because from what I cultivate and produce, a lot of people benefit. Because they come to buy, more than anything for the prices.... I work better. And then try to find a way to do even more.

**Machismo.** A finding that developed from interviews with female farmers while examining the relationship between psychological empowerment and job performance.

“machismo” or male chauvinism was described by the female farmers as a culture or custom of “men first.” Examples of machismo included the greater difficulty for female farmers to receive training, to make decisions on the farm and lead male employees (men more reluctant to take orders from a woman), and to be the sole proprietor of a farm business or land. For example, María described her experience of machismo:

For example, when I want to contract people to help me, I prefer my cousin doing it on my behalf. Because when a woman contracts people, the worker does not take you seriously. They think, “you are not capable of doing this,” like you are not able to achieve it. Also, they see more formality with men who contract them. Also from the aspect of when you go the field to work with them, it’s you and 15 guys. In many occasions, there is always one of them who does not show respect to you and the others treat you like you are not a woman, but rather like you are a lesbian. Like your sexuality is gay, I don’t know how to tell you. Because it is not common in Olancho to see a woman in charge of a farm, or in charge of production. But rather there is always a husband behind her, or son, or family member.

As described, the farmer’s sexuality is also questioned when she does not fill traditional gender roles. For the female farmers interviewed, machismo affected their psychological empowerment, which impacted their job performance. Farmer Julieta also described machismo:

To be a woman here in Honduras farming as a producer in the field, how do I say it. Our work is considered strange by other people. Because not all women like the field, except the woman agricultural engineers. In the field, I have had to live through men saying, “why should I work with a woman,” “if I knew a woman was the owner of this place, I would not have come.”



The women farmers described coping mechanisms they used to deal with machismo, such as avoiding problems with neighbors, seeking men colleagues to do their talking, seeking male employees who are cooperative, as well as the importance of having a strong personality and self-esteem or “carácter,” to succeed in their workplace.

## **Workplace Motivation**

To answer the question of how workplace motivation impacts job performance, various themes emerged from the interviews with farmers including money, work conditions, and heritage. The farmers interviewed discussed the question of, “Why do your Work?” or workplace motivation and the relationship to their job performance.

**Money.** The theme of money was linked to job performance in two ways. First, money would allow more opportunity for investing in farm inputs, which would have a positive impact on their job performance, as farmer Helen described:

Also, there are not good conditions, due to lacking money. The inputs are very expensive and at times the farmer does not have the money to purchase the inputs.

Without money, farmers are not able to invest in the necessary inputs needed to operate their farm successfully. Second, money reduces the basic stresses of life, allowing access to food, healthcare, and shelter, and schooling for children, which potentially helps farmers to focus on their work and perform better. However, farmers described that money was not the only motivator to perform. Farmer Javier described an intrinsic motivation that went beyond money:

I say that, in the first place, it is for the passion. It is something that I like. Something that I like. That I am going to give to people, give to people. And of course, one works for a salary, but for me, it is to reach these goals. To arrive at these goals and have a good quality product.... Look, I am going to tell you something. We work with artificial insemination of cattle. And for me to see, imagine that there are 9 months of pregnancy. For me to see this cow, me, I am not seeing the money, I am seeing the cow. This calls my attention.... How am I

going to develop this animal? At the end, I am going to have a benefit, but I am not seeing this. I am not focused on the money.

**Work conditions.** Farmers described work conditions which could lead to amotivation and affect their job performance. Examples included political systems, safety, machismo, uncertainty, economic situations, and infrastructure. The political systems were described as influencing workplace motivation, such as whether the farmers felt the agriculture industry was supported. Farmers mentioned that due to politics, certain crops were more supported by the government than others. Additionally, corruption was described as causing amotivation. Political systems can influence farmer's job performance by affecting motivation.

Farmers also described theft, delinquency, or safety affecting job performance. For example, in the case of theft of harvests or animals, farmers felt unmotivated to perform. In the case of delinquency or safety, farmers might move and abandon their farms. Additionally, when there is a fear of delinquency, the hours that farmers can work and travel freely is affected, which affects job performance. The economic situation of the farmer, particularly one in which they must produce a basic amount per their loan agreement to make a profit, can cause stress, and impact motivation and job performance. Their economic situation also determines their ability to invest in the farm to purchase inputs to increase production. Infrastructure can also influence the job performance of farmers, in terms of availability of roads, water, and electricity for agricultural production. Farmer María described work conditions potentially causing amotivation:

Limitations include highways, communication also, there are places we go that does not have electricity, drinking water, and also the issue of security in some of the places we go. This makes our work difficult and on occasions demotivates me.

While work conditions influenced the job performance of farmers, the heritage of farmers also influenced their job performance.

**Heritage.** The farmers described how heritage provides motivation for their work and influences their performance. Most of the farmers interviewed described their relationship to farming as originating from their parents or grandparents, which provides them with meaning, gives them motivation, and influences their job performance. For example, farmer Julieta described why her work was meaningful:

Because I am a Campesino. I come from a father who is a campesino. It is meaningful to me because these are my origins. I come from parents who have cultivated from as long as I can remember. I followed this path as the boss. Of the 15 siblings that I have, it's just me. I am the only person who does what I do. For these reasons, I think this is why it's meaningful.

All farmers interviewed grew up with farming parents and in a community of farmers. As farmer Felipe described:

Yes, because where we go to work, is our own. It was my mother's land, the land where we work.

There was a sense of meaning in the work at the end of the day, which served as motivation to keep going. As farmer Juan described:

I feel that my work is part of my life, because I have been doing this from childhood and I grew up with this.

Every farmer in the interviews described heritage as providing meaning and motivation for their work.

## **Social Capital**

A theme that emerged from interviews regarding social capital and job performance was the power of unity.

**Power of unity.** Examples of the power of unity provided by farmers include business linkages which helps their job performance and education that results from neighborhood, family

and friends' connections, and participation in the local community. With social capital, farmers can assist each other with labor needs on their farms, and linkages in the market are driven by social capital, as described by farmer Felipe:

Yes, for example, with my workmates who we work together in this zone, where we live, we have to get along well. Additionally, if someone has a difficulty, even though you may not know him well, we all help each other.... Because, due to them, you feel secure. Secure in what I am doing. Additionally, we share discussions on agriculture, so this helps us.

The closeness in the community also contributes to feelings of trust and safety. As María describes the educational aspect of having social capital:

In the aspect of communication, it is important to have your neighbors as friends. Because perhaps you see a problem and you don't know how to solve it. Many times we have had emergencies and the neighbor has had to assist. And you have to assist them. We do not have a veterinary hospital nearby. Nor do we have a veterinarian nearby. We also don't have an agronomist nearby who can come for free and tell you what you need to do with your fruits and vegetables or basic grains. So you need to have Friends. You have to have contacts and the freedom to ask them whatever type of question. It helps also because we strengthen ourselves with others in the area of knowledge. There are people who have 50-60 years of experience and this helps us avoid mistakes that they have made in one point.

Farmer to farmer advice is not always a positive for job performance, but it does help reduce uncertainty, especially in areas of agriculture where there are not many other sources of government or supported technical education. Social capital allows farmers to mobilize, receive an education, and gain more power - *injerencia política* (political influence). Social capital and farmers working together also leads to greater access to markets. Additionally, the value of life, another important aspect of social capital, is derived from the perceived impact on the community and interdependence. The power of unity is affected when trust and safety are breached. Farmers interviewed generally felt safe, however, they indicated that violence and

corruption cause people to abandon their farms, and this clearly causes their job performance to go down.

**Cross themes.** When the farmers felt psychological empowerment, they often described that it motivated them to perform better. Julieta described that when she felt meaning or impact in her job, this led to workplace motivation which impacted her performance.

As far as workers on the farm, people have employment. It is not permanent work, but they have it. It is beneficial for society. Because where there is work, there is money. Where there is money, there food. Where there is money, there is education. When farmers see the impact, their job has in providing employment sources, this leads to motivation, which leads to better job performance.

Additionally, farmers described that social capital led to more realistic working conditions for them and a reduction in uncertainty. The farmers described their social capital leading to more workplace motivation and job performance as farmer Ana describes:

Yes, it helps us, because it motivates us to keep working. To keep producing and preserving our customs that we have learned or that they have taught us for valuing the land.

The farmer's described that the social capital among farmers increased workplace motivation which facilitated job performance.

### **Combined Findings**

The findings of the qualitative interviews provided confirmation, discordance or expansion quantitative data. The quantitative data found a significant relationship among psychological empowerment and job performance. The farmer's described that their feelings of control impacted their job performance. Female farmers described how machismo influenced their job performance. The quantitative data did not indicate a significant relationship among workplace motivation and job performance. However, conflicted results were discovered, due to

the qualitative data showing evidence for the relationship (Slonim-Nevo & Nevo, 2009). The farmer's in the study described that through money, work conditions and heritage, the impact of workplace motivation on job performance may be understood. In integrating results, the researcher's approach was that "conflicts do not imply contradictions; hence, it is possible to make consistent sense of conflicting methods" (p. 111). The quantitative data found a significant relationship among social capital and job performance. The farmers described that through the power of unity, they can perform better in their jobs. The quantitative data suggested that the role of workplace motivation as a mediator for the relationship among psychological empowerment and job performance was not significant. However, farmers described that when they felt their work was impactful, they felt workplace motivation, which impacted their job performance. Additionally, the farmers described that their social capital leads them to feel workplace motivation, which influences their job performance. The results of the quantitative and qualitative findings are summarized in Table 16.

Table 16. Joint Display of Quantitative, Qualitative and Mixed Methods Meta-Inferences of Functional Constructs related to Job Performance

Construct	Total Effects	Qualitative subcategories and findings	Mixed methods meta-inferences
Psychological empowerment	.42* (2.924)	<i>Control</i> Because if I don't have control over something, what I will get is luck. I will just obtain just what comes and nothing more. Then I will lose control over everything and everything will go to chaos. So it is very important that I have control over the things (on the farm), because if not, I will lose everything. (Juan)	<i>Confirmation</i> Farmers expressed that their job performance is influenced by feelings of meaning, competence, self-determination, and impact.

(table cont'd.)

---

For example, it affects my job performance when I do not have water. For example, there are some places that are quite dry. And if you are missing water. Then your job performance will be low. (Felipe)

The cornfields that are out right now, they need water. Look how they are right now, how they need water, the cornfields. So right now, one does not know, how we made a mistake at the time of planting, like it wasn't the right moment to do it. So now we are understanding that the time for planting, we are going to have to change it. And it is no longer the season that we have been accustomed to planting. (Helen)

Despite this, I believe we are empowered in these areas. Like they said, we need more training and to perhaps modernize in some areas. And also, to understand with better depth, what is the planting time and the time of harvesting. Because for example, here we have modernized some technology related things, but it wasn't how one hoped.... Yes, like they said. If one receives trainings, of course you will have better job performance. (Ana)

*Impact on Others*

In addition, the feeling of impact through providing meaningful and better priced products for their community, affects the job performance of farmers, because when they feel impact, they try to find a way to perform better. (Julieta)

*Expansion*

Female farmers described that their job performance was influenced by machismo, which impacts feelings of meaning, competence, self-determination and impact.

---

I feel valued because from what I cultivate and produce, a lot of people benefit. Because they come to buy, more than anything for the prices.... I work better. And then try to find a way to do even more. (Felipe)

*Machismo*

For example, when I want to contract people to help me, I prefer my cousin doing it on my behalf. Because when a woman contracts people, the worker does not take you seriously. They think, “you are not capable of doing this,” like you are not able to achieve it. Also, they see more formality with men who contract them. Also from the aspect of when you go the field to work with them, it’s you and 15 guys. In many occasions, there is always one of them who does not show respect to you and the others treat you like you are not a woman, but rather like you are a lesbian. Like your sexuality is gay, I don’t know how to tell you. Because it is not common in Olancho to see a woman in charge of a farm, or in charge of production. But rather there is always a husband behind her, or son, or family member. (María)

To be a woman here in Honduras farming as a producer in the field, how do I say it. Our work is considered strange by other people. Because not all women like the field, except the woman agricultural engineers. In the field, I have had to live through men saying, “why should I work with a woman,” “if I knew a woman was the owner of this

---

(table cont'd.)



		place, I would not have come. (Julieta)	
Workplace motivation	. 13  (1.25)  (Not Significant)	<p><i>Money</i></p> <p>Also, there are not good conditions, due to lacking money. The inputs are very expensive and at times the farmer does not have the money to purchase the inputs. (Helen)</p> <p>I say that, in the first place, it is for the passion. It is something that I like. Something that I like. That I am going to give to people, give to people. And of course, one works for a salary, but for me, it is to reach these goals. To arrive at these goals and have a good quality product.... Look, I am going to tell you something. We work with artificial insemination of cattle. And for me to see, imagine that there are 9 months of pregnancy. For me to see this cow, me, I am not seeing the money, I am seeing the cow. This calls my attention.... How am I going to develop this animal? At the end, I am going to have a benefit, but I am not seeing this. I am not focused on the money. (Javier)</p> <p><i>Work Conditions</i></p> <p>Limitations include highways, communication also, there are places we go that does not have electricity, drinking water, and also the issue of security in some of the places we go. This makes our work difficult and on occasions demotivates me. (María)</p>	<p><i>Discordance</i></p> <p>Farmers describe workplace motivation having an impact on their job performance. The cognitions within workplace motivation, such as intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation were discussed within these three themes.</p>

(table cont'd.)

---

*Heritage*

Because I am a Campesino. I come from a father who is a campesino. It is meaningful to me because these are my origins. I come from parents who have cultivated from as long as I can remember. I followed this path as the boss. Of the 15 siblings that I have, it's just me. I am the only person who does what I do. For these reasons, I think this is why it's meaningful.  
(Julieta)

Yes, because where we go to work, is our own. It was my mother's land, the land where we work. (Felipe)

I feel that my work is part of my life, because I have been doing this from childhood and I grew up with this.  
(Juan)

---

Social capital	.19*	<i>The Power of Unity</i>	<i>Confirmation</i>
	(2.010)	<p>Yes, for example, with my workmates who we work together in this zone, where we live, we have to get along well. Additionally, if someone has a difficulty, even though you may not know him well, we all help each other.... Because, due to them, you feel secure. Secure in what I am doing. Additionally, we share discussions on agriculture, so this helps us. (Felipe)</p> <p>In the aspect of communication, it is important to have your neighbors as friends. Because perhaps you see a problem and you don't know how to solve it. Many times we have had emergencies and the neighbor has had to assist. And you have to assist</p>	<p>The farmer's descriptions of the influence of social capital on job performance were linked to descriptions of social relations and factors such as trust, norms, and networks, connections which enabled them to have better job performance.</p>

---

(table cont'd.)

them. We do not have a veterinary hospital nearby. Nor do we have a veterinarian nearby. We also don't have an agronomist nearby who can come for free and tell you what you need to do with your fruits and vegetables or basic grains. So you need to have friends. You have to have contacts and the freedom to ask them whatever type of question. It helps also because we strengthen ourselves with others in the area of knowledge. There are people who have 50-60 years of experience and this helps us avoid mistakes that they have made in one point. (María)

Cross Themes	. 10	<i>Impact on Others</i>	<i>Discordance</i>
(Not Significant)		As far as workers on the farm, people have employment. It is not permanent work, but they have it. It is beneficial for society. Because where there is work, there is money. Where there is money, there food. Where there is money, there is education. When farmers see the impact, their job has in providing employment sources, this leads to motivation, which leads to better job performance. In addition, the feeling of impact through providing meaningful and better priced products for their community, affects the job performance of farmers, because when they feel impact, they try to find a way to perform better. (Julieta)	The farmers described that when they felt psychological empowerment, such as seeing the impact they had on their community, this led them to feel workplace motivation, which impacted their performance.
	N/A	<i>The Power of Unity</i> Yes, it helps us, because it motivates us to keep working. To keep producing and preserving our	<i>Expansion</i> When a farmer felt like her life was valued by her friends, family and

(table cont'd.)

---

customs that we have learned or that they have taught us for valuing the land. (Ana)	community, this feeling caused her to feel workplace motivation, which she felt influenced her job performance.
--	---

---

Note. \*\* p<.01 \*p<.05 (t>1.96), t-values are in parentheses. Table design adapted from Creswell and Clark (2018)

### Summary

The findings of the mixed methods study were presented in this chapter. The convergent design of the study with an embedded data approach allowed for an analysis of survey results to test the hypotheses of the data. The interviews and a focus group provided data to understand the nature of how psychological empowerment, workplace motivation, and social capital are related to farmer's job performance. A confirmatory factor analysis and structural equation modeling were used to test the hypotheses of the study. The quantitative analysis confirmed that H1, H2, H3, H5, and H8 were significant. H4, H6, H7 did not obtain significant results. The qualitative findings revealed that control, impact on others, and machismo were themes that helped explain the relationship among psychological empowerment and job performance. For the nature of the relationship between workplace motivation and job performance, money, work conditions, and heritage were themes that emerged. For the relationship between social capital and job performance, the power of unity was a theme that emerged from the data. The quantitative, qualitative and mixed methods findings were combined to reveal confirmation, discordance, and expansion.

## **CHAPTER 5. SUMMARY, DISCUSSION, RECOMMENDATIONS**

This chapter provides a summary of the study, discussion, and recommendations. First, an overview of the study is presented. Second, the findings of the study are discussed. Finally, the implications, limitations of the study, and recommendations for future research provide a full understanding of the research question and findings.

### **Summary of the Study**

Farmers are a critical component of the world labor force and millions of families worldwide rely on farm employment. However, very few studies related to HRD have studied farmer's job performance or the agriculture industry. The aim of this study was to understand psychosocial factors in farmers and their impact on job performance. Specifically, the impact of farmer's psychological empowerment, workplace motivation, and social capital on job performance were assessed through surveys and interviews conducted in Olancho, Honduras.

### **Purpose, Research Questions, and Hypotheses**

The purpose of this study was to examine the impact of psychological empowerment, workplace motivation and social capital on farmers' perceptions of their job performance in Olancho, Honduras and to understand their interpretations and perceptions of these psychosocial factors on their job performance on their farm. This study was guided by the following primary research question: What is the relationship among psychological empowerment, workplace motivation, social capital, and job performance of farmers in Olancho, Honduras? The secondary research questions provided additional detail in addressing the primary research question:

- 1) What is the relationship between psychological empowerment and the job performance of farmers?

2) What is the relationship between workplace motivation and the job performance of farmers?

3) What is the relationship between social capital and the job performance of farmers?

The qualitative portion of the study aimed to discover the nature of how farmers in Honduras experienced psychological empowerment, workplace motivation, and social capital, in regard to their job performance, by asking farmers to describe how they felt the individual factors affected their job performance. The following questions addressed this aspect:

4) How do farmers describe their experiences with psychological empowerment on their job performance?

5) How do farmers describe their experiences with workplace motivation on their job performance?

6) How do farmers describe their experiences with social capital on their job performance?

By converging the results of the quantitative findings and qualitative data, the study aimed to address the question:

7) How do the findings of the qualitative data help understand the results of the quantitative data?

To answer the research questions, the following hypotheses were developed and tested:

Hypothesis 1: Psychological empowerment is positively related to workplace motivation.

Hypothesis 2: Psychological empowerment is positively related to job performance.

Hypothesis 3: Psychological empowerment is positively related to social capital.

Hypothesis 4: Workplace motivation is positively related to job performance.

Hypothesis 5: Social capital is positively related to workplace motivation.

Hypothesis 6: Social capital is positively related to job performance.

Hypothesis 7: Workplace motivation mediates the relationship between psychological empowerment and job performance.

Hypothesis 8: Social capital mediates the relationship between psychological empowerment and job performance.

## **Methods**

The population for this study was farmers in Olancho, Honduras. A mixed methods research design was utilized to gather survey, interview, and focus group data. The convergent design was used for the study with an embedded data approach. The qualitative component was embedded into the study design to elaborate on the outcomes of the quantitative research.

The quantitative results of survey data (n=396) were collected through a questionnaire with 53 items and 9 demographic questions. The internal consistency reliability was determined for each variable and the overall instrument. The Cronbach's alpha test revealed an overall score of .77, indicating an acceptable level of internal consistency. The final reliability of the variables ranged from .79-.81. The quantitative data were analyzed through descriptive statistics and structural equation modeling (SEM).

The qualitative data were collected using semi-structured individual interviews (six farmers) and a focus group session (three farmers). Participants were asked about their own perceived job performance and their own thoughts and feeling on how and why psychological empowerment, workplace motivation, and social capital affected their job performance. The qualitative data were analyzed through constant comparative strategies to identify themes and subthemes in the data. Strategies to establish the trustworthiness, authenticity, and credibility of the qualitative findings included triangulation, member checking, an academic advisor audit, the

use of an independent specialist to review the established codes and themes, and the results were reviewed by an agricultural specialist in Olancho, Honduras.

## **Quantitative Results**

The descriptive statistics were analyzed to observe the patterns in the data set. The correlation among psychological empowerment and workplace motivation was the highest at .56, followed by psychological empowerment and social capital (.50), psychological empowerment and job performance (.44), workplace motivation and job performance (.43), social capital and job performance (.41), and social capital and workplace motivation (.39.). As hypothesized, the correlations among the variables were all positive.

Each construct in the model was evaluated through eight indices to determine goodness of fit of the model ( $\chi^2$ ; df;  $\chi^2$  /df; CFI; NNFI; SRMR; RMSEA; AGFI). Workplace motivation and social capital were respecified due to a low factor loading. The overall structural model fit measures represented a good fit to data ( $\chi^2$  =180.10; df =96;  $\chi^2$  /df =1.88; CFI =.96; NNFI =.95; SRMR =.04; RMSEA =.05; AGFI=.92). Structural equation modeling was used to test the hypotheses and analyze the results. As predicted, psychological empowerment was positively related to workplace motivation ( $\gamma$  =.79,  $t$  =6.92), job performance ( $\gamma$  =.42,  $t$  =2.92) and social capital ( $\gamma$  =.69,  $t$  =9.73). The relationship among psychological empowerment and workplace motivation was the highest, followed by social capital and job performance. The relationship between workplace motivation and job performance and social capital and workplace motivation were not statistically significant and not supported. As predicted, social capital was positively related to job performance, although the impact was not very large ( $\gamma$  =.19,  $t$  =2.01). Additionally, the role of social capital as a mediator between psychological empowerment and job performance was statistically significant and supported ( $\gamma$  =.13).



However, it was found that workplace motivation does not mediate the link between psychological empowerment and job performance.

### **Qualitative Findings**

The qualitative findings aimed to explain how farmers in Honduras described their experiences of psychological empowerment, workplace motivation, and social capital, with regards to their job performance. Several themes emerged from the data to provide insight into the farmer's experience of the research questions.

**Research question 4.** (How do farmers describe their experiences with psychological empowerment on their job performance?). There were three themes which emerged from the data to help explain the relationship between psychological empowerment and job performance. The farmers expressed that control, impact on others and machismo explained the relationship between feeling empowered and their job performance. The farmers expressed feelings of meaning, competence, self-determination, and impact that affected their job performance.

**Research question 5.** (How do farmers describe their experiences with workplace motivation on their job performance?). There were three themes that emerged from the data to help explain the relationship between workplace motivation and job performance. The farmers expressed that money, work conditions, and heritage explained the relationship between workplace motivation and their job performance. The cognitions within workplace motivation, such as intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation were discussed within these three themes.

**Research question 6.** (How do farmers describe their experiences with social capital on their job performance?). There was one theme that emerged from the data to help explain the

relationship between social capital and job performance. The farmers expressed that the power of unity explained the relationship between social capital and the impact on their job performance.

### **Combined Findings**

The quantitative data and qualitative findings were merged to reveal confirmation, discordance, and expansion among the results.

**Research question 7.** (How do the findings of the qualitative data help understand the results of the quantitative data?) The results of the quantitative and qualitative data were combined to reveal confirmation, discordance, and expansion in the understanding of the relationship between psychological empowerment, workplace motivation, social capital, and job performance. The qualitative results confirmed that psychological empowerment has a positive relationship to job performance through control and impact and on others. Machismo was an expansion to quantitative data, which revealed that for female farmers, gender relations may impact their psychological empowerment and job performance. The qualitative data displayed discordance to the quantitative results for the relationship among workplace motivation and job performance. The qualitative data revealed that money, work conditions, and heritage impact the job performance of farmers. The qualitative results for social capital confirmed that social capital has a positive impact on job performance. It was found that through the power of unity, farmers are able to perform better in their jobs.

### **Discussion**

The findings from this study are discussed in terms of psychological empowerment, workplace motivation, social capital, job performance, and their relationships.

## **Psychological Empowerment**

In this study, psychological empowerment had a strong positive relationship to workplace motivation. This suggests that when farmers experience the value of their work (meaning), their capability to farm with good skills (competence), their autonomy of their work (self-determination) and the influence of their work (impact), they are more likely to increase workplace motivation. The finding is consistent with previous studies on the impact of psychological empowerment on workplace motivation (Brislin et al., 2005; Brooks, 2007; Šajeva, 2007; Miller, 2016; Boudrias et al. 2009; Upusna & Ketut, 2019). Moreover, in the context of farmers, this finding does not challenge previous research in the HRD research area. Psychological empowerment is a key construct that leads to workplace motivation.

Second, psychological empowerment was positively related to job performance. This finding suggests that when farmers identify as having psychological empowerment, their job performance increases. The findings are consistent with previous studies that describe a positive relationship among constructs of psychological empowerment and job performance (Spector, 1986). Psychological empowerment allows people to have control over their decision-making, independence, and gives people the belief that they can influence and have a significant impact on their work (Spreitzer 1995). Therefore, employees with psychological empowerment tend to perform better (Conger & Kanungo, 1998; Scott & Bruce, 1994).

The relationship among psychological empowerment and social capital was positive and strong. It is highly likely that meaning, impact, competence, and self-determination influence elements of social structures (Thomas & Velthouse, 1990). Additionally, the finding confirms the relationship among psychological empowerment and socially constructed structures in the workplace (Spreitzer, 1996; Thomas & Velthouse, 1990; Christens, 2012).

The quantitative findings revealed that psychological empowerment was positively related to job performance. This finding suggests that when farmers identify as having psychological empowerment, their job performance increases. The qualitative data both confirmed this finding and expanded on it. Specifically, the qualitative data showed themes of control and impact on others in how psychological empowerment is felt and leads to job performance. The findings expanded how meaning, competence, self-determination, and impact influence job performance. Farmer's control is related to competence and self-determination. Meaning is derived from the feeling of impact on others through providing employment or the development of products to feed community members. The qualitative data also suggested that psychological empowerment may be experienced differently by female farmers, as explained by a reoccurring theme, machismo. Female farmers explained that machismo impacts their psychological empowerment negatively and has a negative impact on their job performance.

**Control.** The job of a farmer is to have meticulous control over all aspects of their farm to have a positive influence on job performance. However, there are many aspects of the position which a farmer may not be able to control, such as the prices of the market, weather patterns, safety, or accidental damages. However, the farmers in this study described that training and education and the opportunity to invest in technologies for their farm leads to control and prevention of losses and the ability to perform better. The farmers described control as a necessary part of their job, around which decisions were centered. For farmers, it seems that impact, self-determination, and competence are closely related to control. The ability to have control is related to having impact (e.g. affect production), competence (e.g. through training) and self-determination (e.g. access to technology).

Several authors have explored the feelings of control in farmers and the psychological states which enable farmers to work under adverse conditions (Eden and Leviatan, 1974; Hinsz and Nelson, 1990; Bin, Lamm & Tipples, 2008). This finding agrees with previous research and theory. Spector (1986) emphasized that “Individual control is a variable that has been shown to play a significant role in human behavior” (p. 1005). The locus of control of an individual has been described as an antecedent for psychological empowerment and allows people to govern their decision-making processes (Spreitzer, 1995).

Previous studies on personality psychology factors in farmers have explored the concept of the locus of control and the impact on technology adoptions. Rogers (1957) explored the impact of personality on the adoption of technologies by farmers. An internal locus of control in farmers has been previously shown to impact their adoption of new technologies (Jahromi & Zamani, 2007; Abay, Blalock & Berhane, 2017). Jahromi & Zamani, (2007) demonstrated that the yield of wheat farmers was positively correlated to their internal locus of control.

Additionally, Abay, Blalock, and Berhane (2017) found that a farmer’s locus of control predicted their adoption of agricultural technology. The authors demonstrated that farmers with an internal locus of control adopted technologies and argued for improving the non-cognitive skills of rural farmers to lead to their productivity. Nuthall (2010) emphasized that the locus of control of farmers was not a significant factor in their managerial abilities and suggested it may be related to the satisfaction they feel. The findings of this study may be related to the locus of control that farmers feel about whether they believe they have an impact on their farm.

**Impact on others.** The farmers emphasized how their psychological empowerment led to better job performance when they felt they had an impact on others through their farming activities. The farmers described that their impact on others included the employment

opportunities they provided and the impact through the products they produced. While farmers are independent, they also experience interdependence through contracting employment for their farms or the dependence on the markets to sell products. Farmers experienced meaning in their job through the impact they had on others. These findings are consistent with the cognitive model of empowerment, which suggests that when individuals feel that they can make an impact, their tasks will energize their behavior and impact their activity, initiative, and resiliency (Thomas and Velthou, 1990).

**Machismo.** The female farmers described machismo when discussing psychological empowerment. Machismo is described as a socially constructed gender role in which men are expected to hold a hyper image of masculinity and women are expected to be more passive (Basham, 1976). Machismo influenced their psychological empowerment, and even when they could resist the influence, through having a strong, “character,” the structures could still influence their job performance negatively. As examples provided, female farmers may be expected to take care of children (instead of attend a training), they may need to rely on a male family member to negotiate certain business transactions or spend extra energy proving themselves.

Findings suggest that machismo negatively impacts a female farmer’s job performance by impacting the cognitions of psychological empowerment including meaning, competence, self-determination, and impact. Meaning is negatively impacted when a female farmer’s goals are affected by the negative feeling of having to justify her value and decisions. The competence of a female farmer may be affected when she does not have access to training programs or is perceived by male colleagues as incapable. Self-determination and impact are influenced when

she must conduct business through male relatives or when the decisions she makes on her farm are not respected or valued.

Another area that has been explored in relation to empowerment of female farmers is the ability to inherit land (Agarwal, 1994; Deere & Leon, 2003; Casolo, 2009). Even when land ownership is permitted for a female farmer through marriage in Honduras, Casolo (2009) described, “women also saw their de jure rights and promised ownership as interacting in very uneven ways with their de facto everyday experience of labor, income and power in the household and the community” (p. 411). Hechanova, Regina, Alampay, and Franco (2006) found that gender differences impacted womens’ competence and experience of meaning in their jobs. The female farmer’s experience of machismo may be understood through literature which discusses the influence of gendered experiences of empowerment. The feminist lens may help explain the findings which suggest that power and gender relations are not independent (Yoder & Kahn, 1992; Eylon & Bamberger, 2000). The feminist lens may help further understand the phenomena of machismo. The qualitative finding of machismo when discussing psychological empowerment may lead towards Boudrias, Gaudreau, and Laschinger’s (2004) claim that the quantitative scale used to understand psychological empowerment may be male-biased. The psychological empowerment of female farmers cannot be understood clearly without attention paid to potential gender dynamics.

Additionally, the qualitative data showed that the relationship among psychological empowerment and job performance is not always direct. The farmers described that when they felt cognitions of psychological empowerment, such as the impact they felt they had on their community, this led them to feel workplace motivation, which impacted their performance.

Farmers also described that the power of unity, leads them to feel workplace motivation, which has a positive impact on their job performance.

The descriptive information revealed by the qualitative data helped provide a more comprehensive understanding of how farmers in Honduras felt psychological empowerment affected their job performance. Overall, the results of merged quantitative and qualitative data suggest that for farmers to perform effectively, they must feel psychological empowerment. The theme of control (psychological empowerment) was emphasized by farmers as critical to their job performance. Farmers suggested that competence, through training programs and education, allowed them to control their farm to perform effectively. When farmers feel control, they can determine the outcomes on their farm and have positive job performance. The qualitative data suggested that when farmers experience meaning through impacting others through their work, it leads to a positive impact on their job performance.

### **Workplace Motivation**

In this study, the relationship among workplace motivation and job performance was not significant. This finding was unexpected, and the non-significant result contradicts previous research in this area (Cerasoli, Nicklin, & Ford, 2014; Jansen et al., 2009; Joo, Jeung, & Yoon, 2010; Sansone & Harackiewicz, 2000). The reasons could be related to the instrument of workplace motivation. The measure included the factors of intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation. Although the instrument has covered diverse aspects of workplace motivation, it may have some limitations to reflect the complex phenomena of Honduran farmers' workplace motivation. Additionally, farmers could have different motivation and expectation levels to obtain results and achieve performance compared to other worker groups, as Porter and Lawler (1973) suggested in



their expectancy theory model. Moreover, motivation revealed in the workplace can be different according to the context. For example, job design can affect workplace motivation, which can influence job performance (Dahling & Lauricella, 2017). Cerasoli, Nicklin, and Ford (2014) also discussed that, “it is undetermined if intrinsic motivation has the same predictive utility in academia as it does in athletic or work contexts, or if the intrinsic motivation–performance link varies based on demographic or environmental conditions” (p. 981).

The quantitative findings suggest that workplace motivation does not mediate the relationship among psychological empowerment and job performance. The non-significant finding was unexpected and may be interpreted that for farmers in Honduras, the relationship among psychological empowerment and job performance is direct. This theory is supported by literature which suggests that psychological empowerment directly impacts job performance.

The statistical analysis revealed that the relationship among workplace motivation and job performance was not significant. However, the findings of the qualitative data conflicted with the quantitative findings. The farmers described that their workplace motivation impacts their job performance. There were three themes that emerged from the qualitative data, 1) money, 2) work conditions, and 3) heritage, which the farmers explained impacted their job performance. The cognitions within workplace motivation, such as intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation were discussed within these three themes.

**Money.** The farmers discussed money as they conceptualized their feelings about workplace motivation and job performance. Money provides farmers with the opportunity to invest more in their farms, to grow and protect their operations, and to reduce the stresses of life (e.g. access to healthcare and food). Farmers described a sense of workplace motivation which

led them to perform better in their work, and money can be understood as a type of extrinsic motivation. Extrinsic motivation occurs when work is completed for the rewards or consequences beyond completion of the work alone (Amabile, 1993; Gagne & Deci, 2005; Ratelle, Guay, Vallerand, Larose, Senecal, 2007). However, money was also consistently noted as not being the only influence on why farmers were motivated to work and perform.

**Work conditions.** The farmers described certain aspects of their work conditions which led to amotivation. The farmers described that their work motivation was affected by political systems, safety, machismo, uncertainty, economic situations, and infrastructure. These pressures caused a sense of amotivation, which had a negative impact on their job performance.

Amotivation occurs when people feel that they do not want to perform with intention or they perform passively (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). Early theories of human motivation, such as Maslow's Hierarchy of Needs (1954), emphasized that basic human needs such as "physiological, safety, social and esteem needs," must be met for motivation to occur. Additionally, self-determination theory (Gagné & Deci, 2005) may explain why influences such as political systems, safety, machismo, uncertainty, economic situations, and infrastructure, if not seen as positive, may influence a farmer's motivation and performance.

**Heritage.** The farmers explained that heritage provided them with the motivation for better job performance. The farmers described a sense of pride and passion for being farmers and doing work that has been passed down from their ancestors. The farmers were proud to identify as a farmer, work toward their goals in life, and earn an honest living. Heritage can be explained in the literature as a form of both integrated and identified regulation. Integrated regulation is a cognition of workplace motivation, in which individuals feel their work is a part of their identity, and identified regulation occurs when an individual feels a sense of value from their work

(Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009; Gagne & Deci, 2005). In both types of identified and integrated regulation, the motivation is self-determined and comes from an inner drive. As farmers described heritage, the pride and passion they felt was a force of motivation that led to better job performance. The farmers interviewed did not describe feelings of introjected regulation, such as guilt, which might have impacted their motivation to perform.

The farmers explained that money was a motivator for their job performance; money allowed them to live a more comfortable life, and therefore encouraged them to perform better in their jobs. Money also allowed the farmers to invest in their farm, and therefore improve their job performance through access to better technologies and inputs. The work conditions of the farmer, which at times could be difficult, also influenced their motivation and job performance. The farmer may feel amotivation due to poor conditions, and therefore have a negative impact on their job performance. Heritage was another important motivator for why the farmers performed in their jobs. The farmers clearly expressed that their workplace motivation impacts job performance.

The conflicting findings among the quantitative and qualitative data suggest a complexity of the phenomena of workplace motivation and the impact on farmer's job performance. The survey data demonstrated a non-significant finding, while the qualitative data suggested that workplace motivation does impact job performance through money, work conditions, and heritage. While the quantitative data did not show a significant relationship between workplace motivation and farmer's job performance, the qualitative findings may offer insight into the subjective social reality of the farmers (Slonim-Nevo & Nevo, 2009). The qualitative findings revealed nuances in workplace motivation which may be perceived differently than the items on the survey instrument. As an example, workplace motivation may be understood differently in

more collectivist societies, such as Honduras, where fulfillment may be more driven through meeting societal needs, over personal needs (Gambrel & Cianci, 2003). Whereas, individualistic societies place a greater emphasis on autonomy and self-reliance (Mansur, Sobral, & Goldszmidt, 2017). Therefore, the results of the combined findings may be influenced by country-specific cultural factors.

Accordingly, this finding suggests that further research on the relationship between farmer's workplace motivation and their job performance may provide more insight into the phenomena. The discordance among the quantitative and qualitative results implies that further studies on these constructs may provide more understanding of how workplace motivation impacts farmer's job performance in Honduras.

### **Social Capital**

The relationship between social capital and workplace motivation was not statistically significant. The non-significant finding was unexpected and contradictory to previous studies. The finding may suggest that for farmers in Honduras, additional factors may affect whether social capital has an influence on workplace motivation. Bandiera, Barankay, and Rasul (2008) described the impact of social ties among farmers in which the work environment influenced the level of interactions. A variation they emphasized from their study sample is that social ties of farmers may vary due to factors such as the time of arrival on the farm, seasonal contracts, or fruit ripening at different times in the field. They also indicated that factors such as a short fruit picking season may influence the investment a farmer makes into developing social ties. Their research also suggested that farmers may choose friends with similar attitudes. The non-significant finding in this research may be a result of similar complex interactions or additional

factors specific to the work environment, social ties or motivation of farmers in Olancho, Honduras.

The findings also suggested that social capital is positively related to job performance in farmers, although it is likely that the impact is not very large. Previous research suggests that social capital influences job performance because of increased access to information and resources (Seibert, Kraimer, & Liden, 2001). However, the low impact seen in this research may be explained by previous research on social capital which recognized that social relations may reinforce negative behaviors (Kao, 2004). Additionally, the low impact may be further explained by literature that examines how social capital can contribute to market inequality based on gender and race (McDonald, 2011).

Finally, the findings suggest that social capital mediates the relationship between psychological empowerment and job performance. This finding suggests that psychological empowerment affects farmer's social capital, which then affects job performance. This finding is consistent with cognitive evaluation theory which indicates that feelings of autonomy and competence are enhanced by social factors and lead to positive outcomes (Gagne & Deci, 2005). The statistical analysis suggested that social capital is positively related to farmer's job performance. For the qualitative findings, the farmers described a consistent theme, the power of unity, to help explain how social capital leads to job performance in farmers.

**The power of unity.** The farmers reported that social capital factors such as trust, norms, and networks enabled them to have better job performance. The power of unity among farmers enabled them to assist each other with various needs. Farmers described the importance of neighbors, friends, and family connections to help them physically with a harvest or offer knowledge about best farming practices. The unity among the farmers also served as an

agricultural business link and a source of employment. The power of unity helped farmers navigate political systems which may not favor them. These findings suggest that the power of unity helps farmers to help each other and reduce uncertainty. Farmers expressed that they felt safe in general in their communities, however, incidences of theft, violence, and corruption affect their social capital which negatively influences their job performance. The power of unity helped create a sense of trust and safety to counteract this.

Additionally, the farmers expressed that social capital influenced their workplace motivation, which enhanced their job performance. For example, when a farmer felt like her life was valued by her friends, family and community, she felt motivated in her work, which then influenced her job performance. This suggests that the effect of social capital on job performance may follow an indirect path through workplace motivation.

The relationship among social capital and job performance, as described by the farmers, is consistent with theories of social capital and social network which both emphasize the power groups gain through connections (Ellinger et al., 2011; Sparrowe et al., 2001). Through their networks, farmers gain support, advice, access to information, social support and social identity (Sparrowe et al., 2001). The connections of farmers facilitated better job performance. The trust, norms, and networks of farmers enabled them to rely on each other which positively impacted their job performance.

### **Implications**

The overall implications of the study are discussed with regards to theory, practice and policy.

## **Implications for Theory**

First, this study is an initial step towards enhancing the understanding of farmer's job performance through human resource development (HRD). By focusing on diverse psychosocial factors (i.e., psychological empowerment, workplace motivation, and social capital) influencing job performance, this study provides individual and contextual information to explore critical factors affecting farmers' performance. The findings also indicate that psychological empowerment and social capital can enhance farmer's job performance and workplace motivation differently according to personal attributes or environmental characteristics. This study also expands the knowledge and research scope to explore the antecedents of farmer's job performance and their dynamics in the field of HRD.

Second, the mixed methods research design highlighted the way farmers may experience psychological empowerment, workplace motivation, and social capital and the impact on their job performance in the Honduran context. The qualitative findings displayed evidence of confirmation, expansion, and discordance to the quantitative findings. In the case of expansion, it was revealed that psychological empowerment may be impacted by gender relations. The mixed methods research involved the use of both qualitative and quantitative research to maximize the advantages of using one method alone (Gelo, Braakmann, & Benetka, 2008). The design provided a more complete understanding of the research problem than a quantitative or qualitative study alone would provide; the quantitative results demonstrated relationships between variables, while the qualitative study helped elaborate on those results. (Creswell & Plano Clark, 2018; Creswell & Creswell, 2017).

Third, the study explored self-determination, social capital, and social network theories and conceptualized a relationship with job performance. Based on previous research, self-

determination theory, and social capital theory, the research model helped understand psychological empowerment, workplace motivation, and social capital and their relationship with farmer's job performance in Honduras. The relationship among workplace motivation, psychological capital, and job performance provided support for using self-determination theory to understand the behavior of farmers. The findings from the research contribute to the scientific knowledge of social capital theory by demonstrating that the relationship among psychological empowerment, workplace motivation, and job performance can be explained by relatedness, competence, and autonomy in farmers. The study provides evidence for social capital and social network theories, indicating the important influence of social relations among farmers on their job performance.

Finally, this study may serve as a guide to conduct individual-level research with farmers using commonly studied constructs in HRD, such as psychological empowerment, workplace motivation, social capital, and job performance. The approach used for sampling farmers was novel in HRD research. For example, an individual-level study with farmers may be more applicable in economies where a large part of the labor force are individual farmers, and not classified into small and medium enterprises or corporations. The study took samples from farmers as individuals, within a farming community. Accordingly, this novel approach may provide future scholars with a framework to conduct individual-level HRD research with farmers.

### **Implications for Practice**

This study demonstrates that psychosocial factors play a fundamental role in farmer success; psychological empowerment, workplace motivation, social capital influence a farmer's job performance. The results of this study could be considered by HRD based programs that



implement projects to help farmers improve their job performance. Specifically, intervention programs in Honduras that seek to improve farmer's job performance may consider psychological empowerment. For example, when introducing new technologies or initiatives for farmers, it may be beneficial to emphasize how they will exercise control of their farm better and to also pay attention to issues of machismo when planning training exercises or implementation processes.

It is important to understand the empowerment that farmers feel through providing job opportunities or through producing products for the market. Programs could consider how the implementation of a program will impact the ability of the farmers to provide jobs or feed their community. While technology advancement is critical to advancing agriculture in Honduras and will impact farmer control over their farm, this aspect of psychological empowerment may interplay with the impact on jobs in the community. For example, in the case of the introduction of various high-value crops vs. supporting traditional crops, programs might consider offering both types to balance both the potential for increased incomes and the ability for farmers to feed their community. Because workplace motivation can mediate psychological empowerment, and the heritage of farmers is an important factor in why farmers work, programs could seek local input from farmers regarding how to interplay technological advances (more money) with traditional culture and values.

The study revealed that money, heritage, and work conditions are important to farmer's workplace motivation. Therefore, in programs, loans, or government support that require investment by farmers, it may be beneficial to emphasize the financial returns. The farmers revealed that heritage is an important reason why they work as farmers. Therefore, the importance of pride and heritage of farmers could be considered in the design of programs to

help farmers improve their job performance. Programs to improve farmer's job performance might also consider the overall impact of work conditions on the motivation of farmers. Daily challenges faced by farmers, such as poor roads, debts, or safety concerns, may cause the work motivation of farmers to decrease. Poor work conditions, despite interventions, may have a negative influence on work motivation and therefore job performance.

Finally, HRD interventions should consider the influence of social capital on farmers in improving their job performance. Farmer's social relations and factors such as trust, norms, and networks are critical to their job performance. Farmers rely on each other for information and labor. Therefore, development programs might consider how their interventions influence social bonds among farmers.

### **Implications for Policy**

Policymakers could consider the effect of psychosocial influences on farmers in their decision-making processes. While the job performance of farmers may be critical to a nation's economy and food security, the policy-making decisions may influence psychosocial factors. For example, a policy may seek to improve the agricultural productivity of farmers. Therefore, writers of the policy might consider how the decision may influence factors such as psychological empowerment, workplace motivation, and social capital of farmers, as this study demonstrated that the factors are related to job performance.

Investment could be made in programs that improve the psychological empowerment of farmers through increasing their competence and ability to control their farms. Policymakers might consider how a new policy affecting farmers will influence the meaning, competence, self-determination, and perceived impact of their work. As an example, a policy could invest in the education of farmers, so they may feel more control over their farms. Additionally, policymakers

should consider the influence of machismo and implement gender-inclusive policies and initiatives which may increase the job performance of female farmers.

Workplace motivation is an important part of job performance. Policy decisions regarding access to loans, land, roads, extension services, security, and in-country research may impact the work conditions of farmers. Additionally, policy decisions that help certain sectors, and exclude other sectors, may influence workplace motivation. A critical part of workplace motivation is the working conditions in the country, which policymakers may have the ability to influence. Additionally, policymakers should consider the impact of their decision-making processes on the social relations among farmers. The social relations among farmers may influence policy and conversely, policymakers can influence social relations. For example, policymakers might consider promoting programs that support unity within farming communities, as this study demonstrated that social capital has a positive influence on farmer's job performance.

### **Delimitations and Limitations of the Study**

Several delimitations and limitations of the study are discussed regarding the quantitative, qualitative and mixed methods research.

#### **Delimitations**

The study aimed to understand the relationship among the variables within one population; to discover the impact of psychological empowerment, workplace motivation, social capital and job performance within an agriculture-based economy. The researcher does not seek to generalize the results of the findings to all farmers throughout the world in all time periods. The goal of the researcher was to understand the relationship among psychological empowerment, workplace motivation, and social capital on the job performance of farmers in

Olancho, Honduras. To participate in the study, an individual had to identify as a farmer and grow crops for an income. The demographic data of the farmers in the study varied, across age, gender, type of crops grown for income, size of the farm and their level of responsibility as a farmer. The variation in the farmers allowed the researcher to capture various perspectives to provide a deeper understanding of the research questions.

### **Limitations**

A limitation of the study is that the quantitative data were collected through self-reported measures of farmer's psychological empowerment, workplace motivation, social capital, and job performance. Self-reported measures may be influenced by common method variance (Spector, 1994). Common method variance may introduce biases into the data caused by the instrument's aim to measure specific relationships. The qualitative data may also be subject to social desirability bias, in which the participants provide data that they feel the researcher may want to hear, despite the researcher probing to elicit candid responses and member checking the final data analysis.

Another limitation is that the data were collected during one time period (July 3, 2018-August 4, 2018). There was a period of drought during the rainy season. The short time period for data collection in a farming community may be considered a limitation due to the potential difference in responses during a different type of weather pattern or growing season.

The development of the quantitative survey instrument and qualitative interview protocol was a convergent design with an embedded data approach, in which the quantitative data were the priority. There were unequal sample sizes for each strand of data collection, which were later merged. The purpose of the combined data was to provide additional details to the quantitative

stream of data. The analysis of data between surveys and discussions with farmers may be considered an unequal comparison of evidence.

Finally, the study was conducted with instruments and assumptions mainly developed and tested in the HRD studies in the United States, Western Europe or East Asia. The theoretical assumptions and foundations of the research were also predominantly developed in the United States research and Western European contexts. The majority of previous job performance research related to psychosocial factors was conducted in non-farm settings, for example with office workers (Joo et al., 2010). Therefore, there may be underlying constructs or cultural understandings that are not understood or reflected using the study instruments.

### **Recommendations for Future Research**

Further empirical research examining the impact of psychological empowerment, workplace motivation and social capital on the job performance of farmers may provide more evidence to support the results of this study and address the limitations of the research.

To help address the generalizability of the research, more studies could be conducted with farmers throughout the world, under various conditions, and with more exemptions to participate. Also, studies may compare various types of demographic data such as the age of farmers or their level of education. The study may be conducted during various seasons, times of conflict or prosperity, and for example with comparisons specific to types of crops grown for income. An analysis might compare two different types of farms (smallholder farmers vs. large-scale farmers) or compare the constructs in growers of different types of commodities. In addition, the factor of off-farm employment could be studied for individuals who are farmers and also have another employment position. Additionally, if data are collected over a long period of time, it may be possible to determine whether seasons impact the psychosocial factors in farmers.

The comparison of farmers in different cultures or countries may also provide more data to compare patterns and trends for research results.

Additionally, for social capital, the level of bonding or bridging should be explored further. A comparison of networks among farmers may reveal how groups outside of their farming communities interact with their social capital and job performance. Research on the bridging of social capital could seek to understand more closely how connections between heterogenous and homogenous groups interact. Some of the recent literature on the relationship between psychological empowerment and social relations has emphasized social relationships like mentoring (Fullick-Jagiela, Verbos & Wiese, 2015). The results of this study revealed that farmers assist each other with educational aspects on their farms. Future studies may also seek to understand how mentoring relationships function among farmers to impact job performance. In addition, the current study revealed that gender relations impact the psychological empowerment of female workers, and also impact their workplace motivation. Future studies may seek to further understand how gender impacts the psychological empowerment and job performance of farmers. The discordance found in the study, among the quantitative and qualitative results of the impact of workplace motivation on job performance and the role of workplace motivation as a mediator among psychological empowerment and job performance may also be an area of exploration for future studies.

For future researchers, the use of mixed methods studies with a convergent design and the embedded data approach is recommended. The mixed design has the strength to provide more information on farmers than one method alone can provide and encourages a team approach to research with both quantitative and qualitative expertise (Creswell & Plano Clark, 2011). The data uncovered from adding the qualitative portion of the study provided a context

which the quantitative data alone did not provide. It is therefore suggested that future researchers consider this approach when studying farmer's job performance.

Finally, a great deal of research has been conducted on job performance in various types of organizations, but few studies have examined the impact of psychosocial factors on farmer's job performance in agriculture-based economies. Future studies may find additional variables and constructs that will add to the overall understanding of farmer's job performance throughout the world.

## APPENDIX A. SURVEY INSTRUMENT

(English and Spanish Version)

<b>Psychological Empowerment</b>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The work I do is very important to me.					
2. My job activities are personally meaningful to me.					
3. The work I do is meaningful to me.					
4. I am confident about my ability to do my job.					
5. I am self-assured about my capabilities to perform my work activities.					
6. I have mastered the skills necessary for my job.					
7. I have significant autonomy in determining how I do my work.					
8. I can decide on my own how to go about doing my work.					
9. I have considerable opportunity for independence and freedom in how I do my job.					
10. My impact on what happens in my farm is large.					
11. I have a great deal of control over what happens in my farm.					

<b>Workplace Motivation Why Do You Do Your Work?</b>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12. Because this is the type of work I chose to do to attain a certain lifestyle.					
13. For the income it provides me.					
14. I ask myself this question, I don't seem to be able to manage the important tasks related to this work.					
15. Because I derive much pleasure from learning new things.					
16. Because it has become a fundamental part of who I am.					



17. Because I want to succeed at this job, if not I would be very ashamed of myself.					
18. Because I chose this type of work to attain my career goals.					
19. For the satisfaction I experience from taking on interesting challenges.					
20. Because it allows me to earn money.					
21. Because it is part of the way in which I have chosen to live my life.					
22. Because I want to be very good at this work, otherwise I would be very disappointed.					
23. I don't know why we are provided with unrealistic working conditions.					
24. Because I want to be a "winner" in life.					
25. Because it is the type of work I have chosen to attain certain important objectives.					
26. For the satisfaction I experience when I am successful at doing difficult tasks.					
27. Because this type of work provides me with security.					
28. I don't know, too much is expected of us.					
29. Because this job is a part of my life					

<b>The General Social Capital Factor</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<i>Participation in Local Community</i>					
30. I am on a management committee or organizing committee for a local group or organization.					
31. I am an active member of a local organization or club (e.g., sport, craft, social club)?					

32. In the past 3 years, I have taken part in a local community project.					
<i>Social Agency or Proactivity in a Social Context</i>					
33. If I disagree with what everyone else agreed on, I feel free to speak out.					
34. If I have a dispute with my neighbors (e.g., over fences or dogs), I am willing to seek mediation.					
35. In the past week at work, I have helped a workmate, even though it was not in my job duties.					
<i>Feelings of Trust and Safety</i>					
36. I feel safe walking down the street after dark.					
37. Most people can be trusted.					
38. My area has a reputation for being a safe place.					
<i>Neighborhood Connections</i>					
39. I can get help from friends when I need it.					
40. If I were caring for a child and needed to go out for a while, I would ask a neighbor for help.					
<i>Family and Friends Connections</i>					
41. Over the weekend, I have lunch/dinner with other people outside my household.					
<i>Tolerance of Diversity</i>					
42. I think multiculturalism makes life in my area better.					
43. I enjoy living among people of different lifestyles.					
<i>Value of Life</i>					
44. I feel valued by society.					
45. If I were to die tomorrow, I would be satisfied with what my life has meant.					
<i>Work Connections</i>					
46. I feel part of the local geographic community where I work.					
47. My workmates are also my friends.					

48. I feel part of a team at work.					
------------------------------------	--	--	--	--	--

<b>(In-Role) Job Performance</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
49. I always complete the duties required in my job description.					
50. I meet all the formal performance requirements of the job.					
51. I fulfill all the responsibilities required by my job.					
52. I never neglect aspects of my job that I am obligated to perform.					
53. I often fail to perform essential duties.					

Demographic Information	Please Circle One or Fill in Answer		
54. Gender	Male		Female
55. Farmer	Yes		No
56. Ethnicity	a. Mestizo d. Garifuna g. Miskito Tawahka j. Tolupan	b. Bay Isleno e. Lenca h. Pech k. Otra	c. Ch'orti' f. Creole i. Sumo or
57. Job Function on Farm	1= Owner	2 = Administrator	3=Worker
58. What is your age?	a. 18-24 d. 45- 54	b. 25-34 e. 55-64	c. 35-44 f. 65-older
59. How many hectares (ha) of agricultural land do you own?	a. 0ha-2ha d. 23ha-47ha f. mas de 123ha	b. 3ha-10ha e. 48ha-122ha	c. 11ha-22ha
60. How many hectares (ha) of agricultural land do you lease?	a. 0ha-2ha d. 23ha-47ha f. mas de 123ha	b.3ha-10ha e.48ha-122ha	c.11ha-22ha
61. Please circle the highest educational level you have completed.	a. Elementary School (Grades 1-6) b. Middle School (Grades 7-8) c. High school (Grades 7-11)      d. Higher Education e. Post-Graduate Education (Masters or Doctorate)		
62. Please circle all the products that you farm, own and sell for income.	a. Fruits and Vegetables      b. Grains c. Animals or products of animal origin d. Aquaculture & Fisheries      e. Forestry f. Ornamentals      g. Other h. List other products		

--	--

### Cuestionario de recurso humano para productores agrícolas

<b>Empoderamiento Psicológico</b>	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
1. El trabajo que yo hago es muy importante para mí.					
2. Mis actividades laborales son personalmente valiosas.					
3. El trabajo que yo realizo es significativo para mí.					
4. Yo confié en mis habilidades para realizar mi trabajo.					
5. Yo tengo confianza en mis capacidades para realizar las actividades que se requieren en mi trabajo.					
6. Yo he perfeccionado las habilidades necesarias para realizar mi trabajo.					
7. Yo tengo suficiente autonomía para determinar cómo hacer mi trabajo.					
8. Yo puedo decidir por mí mismo como organizar mi trabajo.					
9. Yo tengo suficiente libertad e independencia para decidir cómo hacer mi trabajo.					
10. Mi impacto es grande en lo que ocurre en mi finca/hacienda.					
11. Yo tengo suficiente control sobre lo que ocurre en mi finca/hacienda.					

<b>Motivación Laboral ¿Por qué realizas este trabajo?</b>	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo	De acuerdo	Totalmente de acuerdo
---	--------------------------	---------------	---------------	------------	-----------------------

			ni en desacuerdo		
12. Porque este es el tipo de trabajo que he escogido para obtener un cierto estilo de vida.					
13. Por la cantidad de dinero que me genera.					
14. Yo me hago la misma pregunta, yo no me miro capaz de manejar las actividades más importantes de mi trabajo.					
15. Porque me da mucho placer aprender nuevas cosas.					
16. Porque se ha convertido en una parte importante de quien soy.					
17. Porque me gustaría tener éxito en este trabajo, o si no me sentiría avergonzado de mí mismo.					
18. Porque este tipo de trabajo me ayudará a cumplir mis metas profesionales.					
19. Por la satisfacción que me brinda el cumplir nuevos retos.					
20. Porque me permite ganar dinero.					
21. Porque forma parte de la vida que he elegido para mí.					
22. Porque quiero ser muy bueno en este trabajo, o si no yo me sentiría decepcionado.					
23. Yo no sé, porque no nos han dado condiciones realistas de trabajo.					
24. Porque quiero triunfar en la vida.					

25. Porque es el tipo de trabajo que he escogido para cumplir ciertas metas en la vida.					
26. Por la satisfacción que me brinda cuando yo completo trabajos difíciles.					
27. Porque este tipo de trabajo me brinda seguridad.					
28. Yo no lo sé, se espera demasiado de nosotros.					
29. Porque este trabajo es parte de mi vida.					

<b>Capital Social</b>	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
<i>Participación en la comunidad local</i>					
30. Yo soy parte del comité de organización o administración de una organización o grupo local.					
31. Yo soy un miembro activo de una organización o club local (ej.: deportivo, artesanía, club social, patronatos).					
32. En los últimos 3 años, he sido parte de un proyecto de mi comunidad.					
<i>Agencia social o Proactividad en el Contexto Social</i>					
33. Si estoy en desacuerdo con la opinión de los demás, yo siento la libertad de compartir mi opinión.					
34. Si estoy en conflicto con mis vecinos (ej... acerca de las cercas, perros), estoy dispuesto a buscar un acuerdo con ellos.					
35. La semana pasada ayudé a un compañero de					

trabajo, aun cuando no era mi responsabilidad.					
<i>Sentido de confianza y seguridad</i>					
36. Yo me siento seguro(a) caminando en la noche por la calle.					
37. La mayoría de la gente es de confianza.					
38. El área en donde vivo tiene la reputación de ser seguro.					
<i>Relaciones de Vecindarios</i>					
39. Yo puedo recibir ayuda de mis amigos cuando la necesito.					
40. Si yo estuviera cuidando a un niño, y necesito salir de casa, yo puedo pedirle ayuda al vecino.					
<i>Relaciones de familia y amigos</i>					
41. Durante el fin de semana, yo almorcé o cené con personas que no son parte de mi círculo familiar.					
<i>La Tolerancia por la Diversidad</i>					
42. Yo pienso que la diversidad de culturas hace la calidad de vida mejor en mi zona.					
43. Yo disfruto vivir con gente con distintos estilos de vida.					
<i>El Valor de Vida</i>					
44. Me siento valorado (a) por la sociedad.					
45. Si me muriera mañana, yo me sentiría satisfecho(a) con lo que mi vida ha significado.					
<i>Relaciones de Trabajo</i>					
46. Me siento parte de la comunidad en donde trabajo.					

47. Mis compañeros de trabajo son mis amigos también.					
48. Yo me siento parte de un equipo en el trabajo.					

<b>Desempeño Laboral</b>	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
49. Yo siempre termino las actividades requeridas en mi trabajo.					
50. Yo cumplo con todos los requisitos necesarios para desempeñar lo que el trabajo requiere.					
51. Yo cumplo con todas las responsabilidades requeridas en mi trabajo.					
52. Yo nunca descuido los aspectos de mi trabajo que estoy obligado a cumplir.					
53. Usualmente yo fallo en realizar actividades esenciales de mi trabajo.					

<b>Información Demográfica</b>	<b>Marque un círculo alrededor de las opciones o llene sus respuestas</b>		
54. Género	Masculino	Femenino	
55. Productor Agrícola	Sí	No	
56. Identidad étnica	a. Mestizo d. Garífuna g. Miskito j. Tolupán	b. Bay Isleno e. Lenca h. Pech k. Otra	c. Ch'orti' f. Creole i. Sumo or Tawahka
57. Función de trabajo en la finca	1= Dueño(a)    2 = Administrador(a)    3=Trabajador(a)		
58. ¿Cuál es tu edad?	a. 18 a 24 años d. 45 a 54 años	b. 25 a 34 años e. 55 a 64 años	c. 35 a 44 años f. 65 o mayor
59. ¿Cuántas hectáreas (ha) de cultivo posees?	a. 0ha-2ha d. 23ha-47ha	b.3ha-10ha e.48ha-122ha	c.11ha-22ha f. más de 123ha



60. ¿Cuántas hectáreas (ha) de cultivo alquilas?	a. 0ha-2ha d. 23ha-47ha	b.3ha-10ha e.48ha-122ha	c.11ha-22ha f. más de 123ha
61. Circula el nivel de educación más alto que has obtenido.	a. Preescolar escuela (Grados 1-6)    b. Colegio (Grados 7-8) c. Carrera (Grados 7-11)    d. Educación superior (universidad) e. Educación postgrado (maestría o doctorado)		
62. Productos que cultivas, posees y vendes para obtener ingresos.	a. Producción de frutas y hortalizas.    b. Producción de granos c. Producción animal o productos de origen animal d. Producción pesca y acuicultura    e. Producción forestal f. Producción ornamentales    g. Otra h. Lista de otros productos: _____		

## APPENDIX B. INTERVIEW AND FOCUS GROUP QUESTIONS

(English and Spanish Versions)

### Purpose and Research Questions

The purpose of this study is to investigate the impact of psychological empowerment, workplace motivation and social capital on job performance, specifically by examining employees of the agricultural industry in Honduras. The main research question to guide this study is, "How do psychological empowerment, workplace motivation, and social capital impact the job performance of farmer's in Honduras?" The goal of the research is to provide information to increase the performance of farmers, through a holistic approach of seeing the relationship between performance and psychological empowerment, workplace motivation, and social capital. The ultimate goal of the research is to improve the profession of farming, create better working environments and tailor interventions to meet the actual workplace needs of farmers.

This study will be guided by the following research questions:

What is the relationship between psychological empowerment, workplace motivation and social capital on the individual perceptions of job performance of farmers in Honduras?

1. What is the relationship between psychological empowerment and the job performance of farmers?
2. What is the relationship between workplace motivation and the job performance of farmers?
3. What is the relationship between social capital and the job performance of farmers?
4. How do farmers describe their experiences with psychological empowerment on their job performance?
5. How do farmers describe their experiences with workplace motivation on their job performance?
6. How do farmers describe their experiences with social capital on their job performance?
7. How do the findings of the qualitative data help understand the results of the quantitative data?

1.	Do you feel that you have psychological empowerment in your workplace? How do you feel that this affects your job performance?
	a. Do you feel that your job performance is better when you feel your farming is meaningful to you? If yes or no, please explain why.
	b. Do you feel that your job performance is better when you feel that you are capable of performing your job on the farm (you have the skills, abilities, etc.)? If yes or no, please explain why.
	c. Do you feel that your job performance is better when you feel that you can control the activities of the farm and that you have independence? If yes or no, please explain why.
	d. Do you feel that your job performance is better when you feel your farming has an impact on your community and society? If yes or no, please explain why.

2.	Do you feel that you are motivated in your workplace? How do you feel that your motivation affects your job performance? (Why do you do your work?)
	a. Do you feel that you work because of the money and security? Do you feel that your job performance is better when you have a better income? If yes or no, please explain why.
	b. Do you feel that you work because you enjoy learning new things and completing difficult tasks? Do you feel that your job performance is better when you are learning new things at work? If yes or no, please explain why.
	c. Do you feel that you have realistic working conditions? How do you feel that this affects your job performance? If yes or no, please explain why.
	d. Do you feel that you work in farming because this is part of your life? How do you feel that this affects your job performance? If yes or no, please explain why.
3.	Do you consider yourself to have social capital? If so, how much? How do you feel that this affects your job performance? (Participation in Local Community; Proactivity in a Social Context; Feelings of Trust and Safety; Neighborhood Connections; Family and Friends Connections; Tolerance of Diversity; Value of Life; Work Connections)
	a. What kinds of social relationships, support from your colleagues, family, neighbors, associations do you have? Do you think the relationships and support helps your job performance? If yes or no, please explain why.
	b. Do you feel that you have freedom speak out if you have differences with neighbors and colleagues? Do you think this helps your job performance? If yes or no, please explain why.
	c. Do you feel that you where you live and work is safe? Can you trust people? How does this affect your job performance? If yes or no, please explain why.
	d. Do you feel that you like you a diversity of cultures and lifestyles in your area? Does this affect your job performance? If yes or no, please explain why.
	e. Do you feel valued by society and that your life is meaningful? Does this impact your job performance? If yes or no, please explain why.
	f. Do you feel that you are part of a team at work? Are the people you work with also your friends? Does this impact your job performance? If yes or no, please explain why.

### Propósito y Preguntas de Investigación

Este estudio tiene el objetivo de investigar el impacto del Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras. La pregunta más importante que guía este estudio es, “¿Como impacta el Empoderamiento Psicológico, la Motivación Laboral y el Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras?” La meta de este estudio es ayudar a mejorar el desempeño laboral de los Productores Agrícolas en Honduras, con el descubrimiento de información sobre la relación entre Empoderamiento Psicológico, Motivación Laboral y Capital Social. El último logro es que este estudio mejore los profesionales en el área de agricultura y ganadería, desarrollando mejores ambientes de trabajo y dirigir intervenciones en las necesidades específicas del lugar de trabajo de productores.

Este estudio será guiado por las siguientes preguntas:

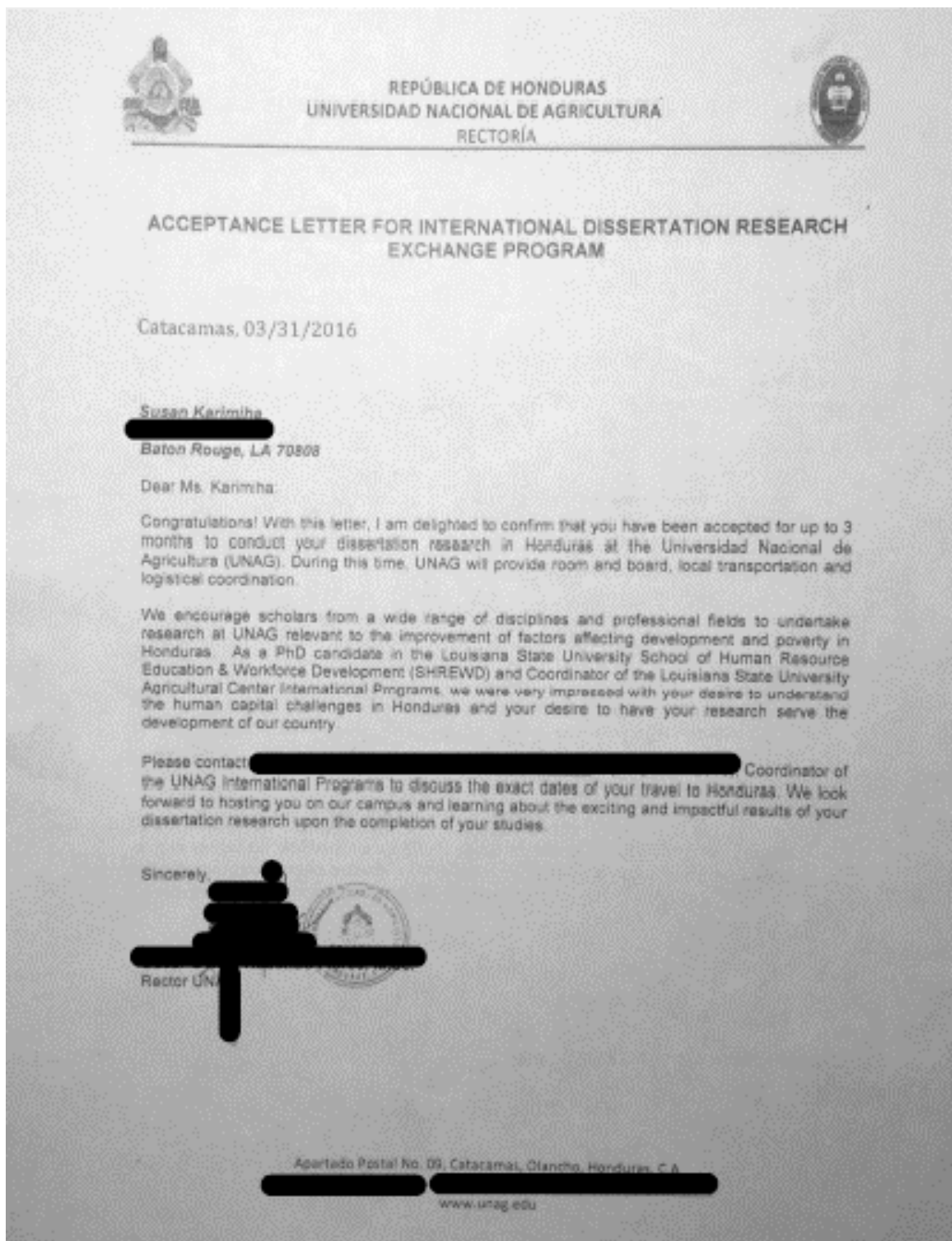
- ¿Cuál es la relación entre el Empoderamiento Psicológico, la Motivación Laboral y el Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras?
  1. ¿Cuál es la relación entre el empoderamiento psicológico y el desempeño laboral de productores agrícolas en honduras?
  2. ¿Cuál es la relación entre la motivación laboral y el desempeño laboral de productores agrícolas en honduras?
  3. ¿Cuál es la relación entre el capital social y el desempeño laboral de productores agrícolas en honduras?
  4. ¿Como describen los productores sus experiencias de empoderamiento psicológico en relación con su desempeño laboral los productores agrícolas en honduras?
  5. ¿Como describen los productores sus experiencias de motivación laboral en relación con su desempeño laboral los productores agrícolas en honduras?
  6. ¿Como describen los productores sus experiencias de capital social en relación con su desempeño laboral los productores agrícolas en honduras?
  7. ¿Como ayuden los datos cualitativos en explicar los datos cuantitativos?

### Entrevista y Preguntas de Grupo Focal

1.	¿Usted siente que tiene empoderamiento psicológico en su lugar de trabajo? ¿Cómo siente que el empoderamiento se influye su desempeño laboral? (Significado-significativo, competente, autodeterminación e impacto. (Sienten que tienen poder para tomar decisiones en su trabajo, impacto, si sienten que están capacitados/as para el trabajo y si sienten que su trabajo es significativo)
	a. ¿Usted siente que su desempeño laboral es mejor cuando siente que su trabajo es significativo para usted? ¿Si o no? Por favor explique por qué.
	b. ¿Usted siente que su desempeño laboral es mejor cuando siente que es capaz de cumplir los trabajos que se requieren en su finca? ¿Si o no? Por favor explique por qué.
	c. ¿Usted siente que su desempeño laboral es mejor cuando siente control en sus actividades laborales y que tienes independencia en cumplir los trabajos que se requieren en su finca? ¿Si o no? Por favor explique por qué.
	d. ¿Usted siente que su desempeño laboral es mejor cuando siente que tiene un impacto en su comunidad y en la sociedad a través de sus actividades laborales? ¿Si o no? Por favor explique por qué.
2.	Usted se siente motivado/a en su lugar de trabajo? ¿Cómo siente que su motivación afecta su desempeño laboral? (¿Por qué realiza este trabajo?)
	a. ¿Usted siente que trabaja por el dinero y la seguridad? ¿Usted siente que su desempeño laboral es mejor cuando tiene mejores ingresos? ¿Si o No? Por favor explique.
	b. ¿Usted siente que trabaja porque le da placer aprender nuevas cosas y cumplir trabajos difíciles? ¿Usted siente que su desempeño laboral es mejor cuando está aprendiendo nuevas cosas en su trabajo? ¿Si o No? Por favor explique.

	c. ¿Usted siente que tiene condiciones de trabajo que son realistas? ¿Usted siente que su desempeño laboral se ve afectado por esto? ¿Si o No? Por favor explique.
	d. ¿Usted siente que trabaja como productor/a porque es parte de su vida? ¿Cómo afecta eso su desempeño laboral? ¿Si o No? Por favor explique.
3.	¿Usted se considera una persona que cuenta con capital social? ¿Si o No? ¿Usted siente que su desempeño laboral se ve afectado por esto? (El poder que se obtiene a través de las relaciones humanas, esto puede ser las actividades con compañeros de trabajo, deportes, gimnasio, actividades sociales, iglesia, etc.---La red de relaciones)
	a. ¿Qué tipos de relaciones sociales y apoyo tiene de sus compañeros de trabajo, vecinos, asociaciones, etc.? ¿Cómo ayudan estas relaciones en su desempeño laboral? ¿Si o No? Por favor explique.
	b. ¿Usted siente que tiene la libertad de compartir su opinión si tiene desacuerdos con sus vecinos y compañeros? ¿Si o No? Por favor explique.
	c. ¿Usted siente que donde vive y trabaja es seguro? ¿Puede confiar en estas personas? ¿Influye esto en su desempeño laboral? ¿Si o No? Por favor explique.
	d. ¿Usted siente que le gusta la diversidad de culturas y estilos de vida en su zona? ¿Esto afecta su desempeño laboral? ¿Si o No? Por favor explique.
	e. ¿Usted como productor/a se siente valorado/a por la sociedad y que su vida es significativa? ¿Si o No? ¿Esto afecta su desempeño laboral? Por favor explique.
	f. ¿Usted siente que es parte de un equipo en su trabajo? ¿Sus compañeros de trabajo son sus amigos también? ¿Si o No? ¿Esto afecta su desempeño laboral? ¿Si o No? Por favor explique.

## APPENDIX C. HONDURAS NATIONAL FELLOWSHIP AWARD LETTER



## APPENDIX D. LOUISIANA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL LETTERS



### ACTION ON EXEMPTION APPROVAL REQUEST

TO: Susan Karimiha  
SHREWD

FROM: Dennis Landin  
Chair, Institutional Review Board

DATE: July 27, 2018

RE: IRB# E10549

Institutional Review Board  
Dr. Dennis Landin, Chair  
130 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8682  
F: 225.578.5983  
[irb@lsu.edu](mailto:irb@lsu.edu)  
[lsu.edu/research](http://lsu.edu/research)

TITLE: How do psychological empowerment, workplace motivation and social capital impact the job performance of farmer's in Kenya?

New Protocol/Modification/Continuation: New Protocol

Review Date: 7/25/2018

Approved X Disapproved \_\_\_\_\_

Approval Date: 7/26/2018 Approval Expiration Date: 7/25/2021

Exemption Category/Paragraph: 2b

Signed Consent Waived?: No

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

Protocol Matches Scope of Work in Grant proposal: (if applicable)

By: Dennis Landin, Chairman 

### PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING – Continuing approval is **CONDITIONAL** on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects\*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. **SPECIAL NOTE:** When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

\* All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at <http://www.lsu.edu/irb>

**ACTION ON EXEMPTION APPROVAL REQUEST**



**TO:** Susan Karimiha  
SHREWD

**FROM:** Dennis Landin  
Chair, Institutional Review Board

**DATE:** July 27, 2018

**RE:** IRB# E10549

**TITLE:** How do psychological empowerment, workplace motivation and social capital impact the job performance of farmer's in Kenya?

Institutional Review Board  
Dr. Dennis Landin, Chair  
130 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.5983  
[irb@lsu.edu](mailto:irb@lsu.edu)  
[lsu.edu/research](http://lsu.edu/research)

**New Protocol/Modification/Continuation:** Modification

**Brief Modification Description:** Add a qualitative portion to the research in Honduras, conduct interviews and a focus group; add a qualitative portion; updated consent form.

**Review date:** 7/25/2018

**Approved** X **Disapproved** \_\_\_\_\_

**Approval Date:** 7/26/2018 **Approval Expiration Date:** 7/25/2021

**Re-review frequency:** (three years unless otherwise stated)

**LSU Proposal Number** (if applicable):

**Protocol Matches Scope of Work in Grant proposal:** (if applicable)

**By:** Dennis Landin, Chairman 

**PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –**  
Continuing approval is **CONDITIONAL** on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects\*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. **SPECIAL NOTE: Make sure you use bcc when emailing more than one recipient. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.**

*\*All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at <http://www.lsu.edu/irb>*



## **APPENDIX E. PARTICIPANT CONSENT FORMS**

(English and Spanish Versions)

### **The Impact of Psychological Empowerment, Workplace Motivation and Social Capital on the Job Performance of Farmers in Honduras**

I am a PhD Candidate in the LSU School of Human Resource Education and Workforce Development. I am conducting a study on the impact of psychological empowerment, workplace motivation and social capital on the job performance of farmers in Honduras.

#### **Background Information**

The purpose of this study is to investigate the impact of psychological empowerment, workplace motivation and social capital on job performance, specifically by examining employees of the agricultural industry in Honduras. The main research question to guide this study is, "How do psychological empowerment, workplace motivation, and social capital impact the job performance of farmer's in Honduras?" The goal of the research is to provide information to increase the performance of farmers, through a holistic approach of seeing the relationship between performance and psychological empowerment, workplace motivation, and social capital. The ultimate goal of the research is to improve the profession of farming, create better working environments and tailor interventions to meet the actual workplace needs of farmers.

#### **Procedures**

The questionnaire is for 600 farmers between the ages of 18 and 75. A paper survey will be provided to you with questions related to psychological empowerment, workplace motivation, social capital and the impact on your job performance. The questionnaire should not take you more than 30 minutes to complete.

#### **Ethical Concerns: Voluntary Nature and Confidentiality**

Please note that you are not required to participate in this study. Participation is strictly voluntary. There is no penalty for not participating, nor will there be any compensation for participating in this study. There are no more than minimal risks associated with participating in this study, and participants will remain anonymous through the use of pseudonyms. Should you decide to participate in this study, please stay to fill out the survey. You may choose to withdraw from this study at any time without penalty of any kind.

#### **Contacts and Questions**

The researcher conducting this study is Susan Karimiha. If any participants have questions, you can contact me as follows- Address: Susan Karimiha, 160 P Hatcher Hall, Baton Rouge, LA 70803, USA; Phone: [REDACTED] (Cellular); Email: [skarim2@lsu.edu](mailto:skarim2@lsu.edu). Or you may contact my advisor, Dr. Sunyoung Park, [sparks@lsu.edu](mailto:sparks@lsu.edu), or 291 Coates Hall, Baton Rouge, LA, 70803. For questions or concerns, regarding this study, you may also contact Dennis Landin, Ph.D., Chair; and Elizabeth Cadarette, IRB Coordinator, 130 David Boyd Hall, Louisiana State University, Baton Rouge, LA 70803, Email: [irb@lsu.edu](mailto:irb@lsu.edu), Phone: 225-578-8692; Fax: 225-578-5983. Please feel free to keep a copy of this form for your records.

### **Statement of Consent**

I have read the above information. I have asked questions and have received answers. I give my consent for participation in this study.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **El Impacto de Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras**

Soy candidata de doctorado en La Escuela del Desarrollo de Recursos Humano y Desarrollo de la Fuerza Laboral en La Universidad Estatal De Luisiana. Estoy investigando el Impacto del Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras.

### **Información General**

Este estudio tiene el objetivo de investigar el impacto del Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras. La pregunta más importante que guía este estudio es, “¿Como impacta el Empoderamiento Psicológico, la Motivación Laboral y el Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras?” La meta de este estudio es ayudar a mejorar el desempeño laboral de los Productores Agrícolas en Honduras, con el descubrimiento de información sobre la relación entre Empoderamiento Psicológico, Motivación Laboral y Capital Social. El ultimo logro es que este estudio mejore los profesionales en el área de agricultura y ganadería, desarrollando mejores ambientes de trabajo y dirigir intervenciones en las necesidades específicas de el lugar de trabajo de productores.

### **Instrucciones**

El cuestionario esta diseñado para 600 productores entre las edades de 18-75 años. Un cuestionario en la forma tradicional en papel con preguntas relacionados a ¿Como impacten Empoderamiento Psicológico, Motivación Laboral, Capital Social y el Desempeño Laboral? El cuestionario no debe tomar más de 30 minutos para completar.

### **Preocupaciones éticas: Carácter Voluntario y Confidencialidad**

Por favor, tenga en cuenta que no es obligatorio participar en este estudio. La participación es exclusivamente voluntaria. Usted no será sancionado por no participar y no hay ninguna compensación. El riesgo existente de participar en el estudio es mínimo y los participantes serán anónimos en el estudio con el uso de seudónimos. Si usted decide a participar en este estudio, por favor llene el cuestionario. Los participantes pueden elegir retirarse del estudio en cualquier momento con ninguna sanción.

### **Contactos y Preguntas Frecuentes**

El nombre de la investigadora de este estudio es Susan Karimiha. Si existen participantes que tienen preguntas sobre el estudio, me pueden contactar con esta información:

Dirección- Susan Karimiha, 160 P Hatcher Hall, Baton Rouge, LA 70803, USA; Celular y Whatsapp: [REDACTED]; Correo electrónico: [skarim2@lsu.edu](mailto:skarim2@lsu.edu)

O usted puede contactar mi asesora la Dra. Sunyoung Park, Correo electrónico: [sparks@lsu.edu](mailto:sparks@lsu.edu) o dirección: 291 Coates Hall, Baton Rouge, LA, 70803.

Si usted tiene alguna pregunta o preocupación respecto a este estudio y quiere hablar con una persona diferente de la investigadora o asesor, lo invitamos que se comuniquen con el Dr. Dennis Landin, PhD, Chair; and Elizabeth Cadarette, IRB Coordinator, 130 David Boyd Hall, Universidad Estatal De Luisiana, Baton Rouge, LA 70803, Correo electrónico: [irb@lsu.edu](mailto:irb@lsu.edu), Teléfono: 225-578-8692; Fax: 225-578-5983. Si usted pide una copia de esta forma, la investigadora puede darle una copia.

### **Declaración de Consentimiento**

He leído la información en este documento. He formulado preguntas y he recibido respuestas. He comprendido la información descrita anteriormente en este documento y lo firmo voluntariamente para participar en este estudio.

Nombre: \_\_\_\_\_ Firma: \_\_\_\_\_ Fecha: \_\_\_\_\_

### **The Impact of Psychological Empowerment, Workplace Motivation and Social Capital on the Job Performance of Farmers in Honduras**

I am a PhD Candidate in the LSU School of Human Resource Education and Workforce Development. I am conducting a study on the impact of psychological empowerment, workplace motivation and social capital on the job performance of farmers in Honduras.

### **Background Information**

The purpose of this study is to investigate the impact of psychological empowerment, workplace motivation and social capital on job performance, specifically by examining employees of the agricultural industry in Honduras. The main research question to guide this study is, "How do psychological empowerment, workplace motivation, and social capital impact the job performance of farmer's in Honduras?" The goal of the research is to provide information to increase the performance of farmers, through a holistic approach of seeing the relationship between performance and psychological empowerment, workplace motivation, and social capital. The ultimate goal of the research is to improve the profession of farming, create better working environments and tailor interventions to meet the actual workplace needs of farmers.

### **Procedures**

The study will be conducted in two phases. Approximately 8 subjects will be asked to participate in-depth, 60-90 minute interviews at a convenient location. Additionally, a focus group will be held for 60-90 minutes with an additional 8 participants at a convenient location. The questions are for farmers between the ages of 18 and 75. The questions asked will be related to psychological empowerment, workplace motivation, social capital and the impact on your job performance. Each interview or focus group should not take more than 60-90 minutes to complete.

### **Ethical Concerns: Voluntary Nature and Confidentiality**

Please note that you are not required to participate in this study. Participation is strictly voluntary. There is no penalty for not participating, nor will there be any compensation for participating in this study. There are no more than minimal risks associated with participating in this study, and participants will remain anonymous through the use of pseudonyms. Should you decide to participate in this study, please stay to fill out the survey. You may choose to withdraw from this study at any time without penalty of any kind.

### **Contacts and Questions**

The researcher conducting this study is Susan Karimiha. If any participants have questions, you can contact me as follows- Address: Susan Karimiha, 160 P Hatcher Hall, Baton Rouge, LA 70803, USA; Phone: [REDACTED] (Cellular); Email: [skarim2@lsu.edu](mailto:skarim2@lsu.edu). Or you may contact my advisor, Dr. Sunyoung Park, [sparks@lsu.edu](mailto:sparks@lsu.edu), or 291 Coates Hall, Baton Rouge, LA, 70803. For questions or concerns, regarding this study, you may also contact Dennis Landin, Ph.D., Chair; and Elizabeth Cadarette, IRB Coordinator, 130 David Boyd Hall, Louisiana State University, Baton Rouge, LA 70803, Email: [irb@lsu.edu](mailto:irb@lsu.edu), Phone: 225-578-8692; Fax: 225-578-5983. Please feel free to keep a copy of this form for your records.

### **Statement of Consent**

I have read the above information. I have asked questions and have received answers. I give my consent for participation in this study.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **El Impacto de Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras**

Soy candidata de doctorado en La Escuela del Desarrollo de Recursos Humano y Desarrollo de la Fuerza Laboral en La Universidad Estatal De Luisiana. Estoy investigando el Impacto del Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras.

### **Información General**

Este estudio tiene el objetivo de investigar el impacto del Empoderamiento Psicológico, Motivación Laboral y Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras. La pregunta más importante que guía este estudio es, “¿Como impacta el Empoderamiento Psicológico, la Motivación Laboral y el Capital Social en el Desempeño Laboral de Productores Agrícolas en Honduras?” La meta de este estudio es ayudar a mejorar el desempeño laboral de los Productores Agrícolas en Honduras, con el descubrimiento de información sobre la relación entre Empoderamiento Psicológico, Motivación Laboral y Capital Social. El ultimo logro es que este estudio mejore los profesionales en el área de agricultura y ganadería, desarrollando mejores ambientes de trabajo y dirigir intervenciones en las necesidades específicas del lugar de trabajo de productores.

### **Instrucciones**

El estudio se desarrolla en dos etapas. Aproximadamente a 8 sujetos en este estudio se les pedirá que participen en entrevistas de 60-90 minutos. Adicionalmente, se desarrollará un grupo focal de 60-90 minutos con aproximadamente 8 sujetos en un lugar conveniente. Las preguntas están diseñadas para productores entre las edades de 18-75 años. Las preguntas son relacionadas a Empoderamiento Psicológico, Motivación Laboral, Capital Social y Desempeño Laboral. Las entrevistas y grupo focal no deben tomar más de 60-90 minutos para completar.

### **Preocupaciones éticas: Carácter Voluntario y Confidencialidad**

Por favor, tenga en cuenta que no es obligatorio participar en este estudio. La participación es exclusivamente voluntaria. Usted no será sancionado por no participar y no hay ninguna compensación. El riesgo existente de participar en el estudio es mínimo y los participantes serán anónimos en el estudio con el uso de seudónimos. Si usted decide a participar en este estudio, por favor llene el cuestionario. Los participantes pueden elegir retirarse del estudio en cualquier momento con ninguna sanción.

### **Contactos y Preguntas Frecuentes**

El nombre de la investigadora de este estudio es Susan Karimiha. Si existen participantes que tienen preguntas sobre el estudio, me pueden contactar con esta información:

Dirección- Susan Karimiha, 160 P Hatcher Hall, Baton Rouge, LA 70803, USA; Celular y Whatsapp: [REDACTED]; Correo electrónico: [skarim2@lsu.edu](mailto:skarim2@lsu.edu)

O usted puede contactar mi asesora la Dra. Sunyoung Park, Correo electrónico: [sparks@lsu.edu](mailto:sparks@lsu.edu) o dirección: 291 Coates Hall, Baton Rouge, LA, 70803.

Si usted tiene alguna pregunta o preocupación respecto a este estudio y quiere hablar con una persona diferente de la investigadora o asesor, lo invitamos que se comuniquen con el Dr. Dennis Landin, PhD, Chair; and Elizabeth Cadarette, IRB Coordinator, 130 David Boyd Hall, Universidad Estatal De Luisiana, Baton Rouge, LA 70803, Correo electrónico: [irb@lsu.edu](mailto:irb@lsu.edu), Teléfono: 225-578-8692; Fax: 225-578-5983. Si usted pide una copia de esta forma, la investigadora puede darle una copia.

### **Declaración de Consentimiento**

He leído la información en este documento. He formulado preguntas y he recibido respuestas. He comprendido la información descrita anteriormente en este documento y lo firmo voluntariamente para participar en este estudio.

Nombre: \_\_\_\_\_ Firma: \_\_\_\_\_ Fecha: \_\_\_\_\_

## REFERENCES

- Abay, K. A., Blalock, G., & Berhane, G. (2017). Locus of control and technology adoption in developing country agriculture: Evidence from Ethiopia. *Journal of Economic Behavior & Organization*, 143, 98–115. doi:10.1016/j.jebo.2017.09.012
- Abrams, L. S. (2010). Sampling ‘hard to reach’ populations in qualitative research: The case of incarcerated youth. *Qualitative Social Work*, 9(4), 536–550. doi:10.1177/1473325010367821
- Adler, P. S., & Kwon, S.-W. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, 27(1), 17–40. doi:10.5465/amr.2002.5922314
- Agarwal, B. (1994). *A field of one’s own: Gender and land rights in South Asia*. Cambridge: Cambridge University Press.
- Aguinis, H., Villamor, I., Lazzarini, S. G., Vassolo, R. S., Amorós, J. E., & Allen, D. G. (2020). Conducting management research in Latin America: Why and what’s in it for you? *Journal of Management*. doi:10.1177/0149206320901581
- Ahsan, D. A. (2011). Farmers’ motivations, risk perceptions and risk management strategies in a developing economy: Bangladesh experience. *Journal of Risk Research*, 14(3), 325–349. doi:10.1080/13669877.2010.541558
- Ali, M., Farooq, N., Bhatti, M. A., & Kuroiwa, C. (2012). Assessment of prevalence and determinants of posttraumatic stress disorder in survivors of earthquake in Pakistan using Davidson Trauma Scale. *Journal of Affective Disorders*, 136(3), 238–243. doi:10.1016/j.jad.2011.12.023
- Altieri, M. A., & Nicholls, C. I. (2008). Scaling up agroecological approaches for food sovereignty in Latin America. *Development*, 51(4), 472–480. doi:10.1057/dev.2008.68
- Alvarez, J., & Puerta, R. (1994). State intervention in Cuban agriculture: Impact on organization and performance. *World Development*, 22(11), 1663–1675. doi:10.1016/0305-750X(94)00074-3
- Amabile, T. M. (1993). Motivational synergy: toward new conceptualizations of intrinsic and extrinsic motivation in the workplace. *Human Resource Management Review*, 3(3), 185–201. doi:10.1016/1053-4822(93)90012-S
- Amaya Amador, R. (1950). *Prisión verde*. Buenos Aires, Argentina: Agepe.
- Amos, T. T. (2007). An analysis of productivity and technical efficiency of smallholder cocoa farmers in Nigeria. *Journal of Social Sciences*, 15(2), 127–133. doi:10.1080/09718923.2007.11892573
- Ang, H. B. (Andy). (2010). Occupational stress among the New Zealand farmers—a review. *Labour, Employment and Work in New Zealand*, 1–8. doi:10.26686/lew.v0i0.1708

- Anguera, M. T., Camerino, O., & Castañer, M. (2012). Mixed methods procedures and designs for research on sport, physical education and dance. In O. Camerino, M. Castañer, & M.T. Anguera (Eds.), *Mixed Methods Research in the Movement Sciences: Case studies in sport, physical education and dance* (pp. 3–27). New York, NY: Routledge.
- Aryee, S., & Chen, Z. X. (2006). Leader–member exchange in a Chinese context: Antecedents, the mediating role of psychological empowerment and outcomes. *Journal of Business Research*, 59(7), 793–801. doi:10.1016/j.jbusres.2005.03.003
- Austin, E. J., Deary, I. J., Edwards-Jones, G., & Arey, D. (2005). Attitudes to farm animal welfare: Factor structure and personality correlates in farmers and agriculture students. *Journal of Individual Differences*, 26(3), 107–120. doi:10.1027/1614-0001.26.3.107
- Austin, E. J., Deary, I. J., & Willock, J. (2001). Personality and intelligence as predictors of economic behaviour in Scottish farmers. *European Journal of Personality*, 15(1), S123–S137. doi:10.1002/per.421
- Bakhshi Jahromi, A. B., & Zamani, G. H. (2007). Comparison of high and low performance wheat growers with respect to their locus of control. *Journal of Agricultural Science and Technology*, 9, 179–190.
- Bandiera, O., Barankay, I., & Rasul, I. (2008). Social capital in the workplace: Evidence on its formation and consequences. *Labour Economics*, 15(4), 724–748. doi:10.1016/j.labeco.2007.07.006
- Basham, R. (1976). Machismo. *Frontiers: A Journal of Women Studies*, 1(2), 126–143. doi:10.2307/3346074
- Baumgart-Getz, A., Prokopy, L. S., & Floress, K. (2012). Why farmers adopt best management practice in the United States: A meta-analysis of the adoption literature. *Journal of Environmental Management*, 96(1), 17–25. doi:10.1016/j.jenvman.2011.10.006
- Beins, B. C. (2017). *Research method: A tool for life*. Cambridge, England: Cambridge University Press.
- Beltrán-Martín, I., & Bou-Llusar, J. C. (2018). Examining the intermediate role of employee abilities, motivation and opportunities to participate in the relationship between HR bundles and employee performance. *BRQ Business Research Quarterly*, 21(2), 99–110. doi:10.1016/j.brq.2018.02.001
- Béné, C., Barange, M., Subasinghe, R., Pinstup-Andersen, P., Merino, G., Hemre, G.-I., & Williams, M. (2015). Feeding 9 billion by 2050 – Putting fish back on the menu. *Food Security*, 7(2), 261–274. doi:10.1007/s12571-015-0427-z
- Bernberg, R. E. (1952). Socio-psychological factors in industrial morale: I. The prediction of specific indicators. *Journal of Social Psychology*, 36(1), 73–82. doi:10.1080/00224545.1952.9919090

- Bin, H., Lamm, F., & Tipples, R. (2008). The impact of stressors on the psychological wellbeing of New Zealand farmers and the development of an explanatory conceptual model. *Policy and Practice in Health and Safety*, 6(1), 79–96. doi:10.1080/14774003.2008.11667717
- Booth, J. A. (1991). Socioeconomic and political roots of national revolts in Central America. *Latin American Research Review*, 26(1), 33–73. Retrieved from <https://www.jstor.org/stable/2503764>
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel selection in organizations* (pp. 71–98). San Francisco, CA: Jossey-Bass
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99–109. doi:10.1207/s15327043hup1002\_3
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International journal of selection and assessment*, 9(1-2), 52–69. doi:10.1111/1468-2389.00163
- Borzutzky, S., & Kranidis, E. (2005). A struggle for survival: The polish agricultural sector from communism to EU accession. *East European Politics and Societies: And Cultures*, 19(4), 614–654. doi:10.1177/0888325404270670
- Boudrias, J.-S., Gaudreau, P., & Laschinger, H. K. S. (2004). Testing the structure of psychological empowerment: does gender make a difference? *Educational and Psychological Measurement*, 64(5), 861–877. doi:10.1177/0013164404264840
- Boudrias, J., Gaudreau, P., Savoie, A., & Morin, A. J. S. (2009). Employee empowerment: From managerial practices to employees' behavioural empowerment. *Leadership & Organisational Development Journal*, 30(7), 625–638. doi:10.1108/01437730910991646
- Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. *Psychological Bulletin*, 52(5), 396–424. doi:10.1037/h0045899
- Brayfield, A. H., & Marsh, M. M. (1957). Aptitudes, interests, and personality characteristics of farmers. *Journal of Applied Psychology*, 41(2), 98–103. doi:10.1037/h0043236
- Brierley, J. A. (2017). The role of a pragmatist paradigm when adopting mixed methods in behavioural accounting research. *International Journal of Behavioural Accounting and Finance*, 6(2), 140–154. doi:10.1504/IJBAF.2017.10007499
- Briggs, D. (2010). “True stories from bare times on road”: Developing empowerment, identity and social capital among urban minority ethnic young people in London, UK. *Ethnic & Racial Studies*, 33(5), 851–871. doi:10.1080/01419870903254687



- Brislin, R.W. (1970). Back-translation for cross cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216.
- Brislin, R. W., MacNab, B., Worthley, R., Kabigting, F., & Zukis, B. (2005). Evolving perceptions of Japanese workplace motivation: An employee-manager comparison. *International Journal of Cross Cultural Management*, 5(1), 87–10. doi:10.1177/1470595805050829
- Brooks, A. M. (2007). *It's all about the motivation: Factors that influence employee motivation in organizations* (Doctoral dissertation, University of Tennessee). Retrieved from [https://trace.tennessee.edu/utk\\_graddiss/4229/](https://trace.tennessee.edu/utk_graddiss/4229/)
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.
- Brooks, K., & Nafukho, F. (2006). Human resource development, social capital, emotional intelligence: Any link to productivity? *Journal of European Industrial Training*, 30(2), 117–128. doi:10.1108/03090590610651258
- Brown, E., & Ferris, J. M. (2007). Social capital and philanthropy: An analysis of the impact of social capital on individual giving and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 36(1), 85–99. doi:10.1177/0899764006293178
- Browne, R. C. (1947). A conception of industrial health. *British Medical Journal*, 1(4510), 838–842. doi:10.1136/bmj.1.4510.838
- Budd, J. W., & Colvin, A. J. S. (2008). Improved metrics for workplace dispute resolution procedures: Efficiency, equity, and voice. *Industrial Relations*, 47(3), 460–479. doi:10.1111/j.1468-232X.2008.00529.x
- Bulmer-Thomas, V. (1987). *The political economy of Central America since 1920*. Cambridge, U.K.: Cambridge University Press.
- Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345–423. doi:10.1016/S0191-3085(00)22009-1
- Campbell, J. P. (1999). The definition and measurement of performance in the new age. In D. R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 399–430). San Francisco, CA: Jossey-Bass.
- Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 35–70). San Francisco, CA: Jossey-Bass.
- Cafferata, J.P. (2003). Honduras at a glance. *Food and Agriculture Organization of the United Nations*. 1–21. Retrieved from <http://www.fao.org/docrep/005/y4632e/y4632e0e.htm>

- Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, 94(6), 1553–1561. doi:10.1037/a0016429
- Carney, R. B. (1949). The foundations of future navy planning. *Naval War College Review*, 2(8), 1–12. Retrieved from: <https://www.jstor.org/stable/44792510>
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, 140(4), 980–1008. doi:10.1037/a0035661
- Chang, H. H., & Chuang, S.-S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & Management*, 48(1), 9–18. doi:10.1016/j.im.2010.11.001
- Chang, J., & Jacobs, R. L. (2012). Determinants and outcomes of employee participation in a strategic community of practice: A mixed-method approach. *Human Resource Development Quarterly*, 23(3), 341–362. doi:10.1002/hrdq.21141
- Chen, Z., Lam, W., & Zhong, J. A. (2007). Leader-member exchange and member performance: A new look at individual-level negative feedback-seeking behavior and team-level empowerment climate. *Journal of Applied Psychology*, 92(1), 202–212. doi:10.1037/0021-9010.92.1.202
- Chiang, C. F., & Hsieh, T. S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International journal of hospitality management*, 31(1), 180–190. doi:10.1016/j.ijhm.2011.04.011
- Chiang, C. F., & Jang, S. (2008). The antecedents and consequences of psychological empowerment: The case of Taiwan's hotel companies. *Journal of Hospitality & Tourism Research*, 32(1), 40–61. doi:10.1177/1096348007309568
- Cho, T., Faerman, S. R., & Yoon, S. (2012). Participative practices and in-role performance in the Korean local government: Focusing on an individual's perceptions of human resource development practices. *The Korean Journal of Policy Studies*, 27 (2), 43–65.
- Chow, I. H.-S. (2009). The relationship between social capital, organizational citizenship behavior, and performance outcomes: An empirical study from China. *SAM Advanced Management Journal* (07497075), 74(3), 44–53.
- Chow, I. H. S., Lo, T.W.C., Sha, Z., & Hong, J., (2006). The impact of developmental experience, empowerment, and organizational support on catering service staff performance. *International Journal of Hospitality Management*, 25(3), 478–495. doi:10.1016/j.ijhm.2005.03.002
- Christens, B. (2012). Toward relational empowerment. *American Journal of Community Psychology*, 50(1/2), 114–128. doi:10.1007/s10464-011-9483-5

- Conchie, S. M. (2013). Transformational leadership, intrinsic motivation, and trust: A moderated-mediated model of workplace safety. *Journal of Occupational Health Psychology, 18*(2), 198–210. doi:10.1037/a0031805
- Conger, J. A., & Kanungo, R.N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review, 13*(3), 471–482. doi:10.5465/amr.1988.4306983
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice, 39*(3), 124–130. doi:10.1207/s15430421tip3903\_2
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research (2nd ed.)*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California: Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334.
- Crowther, S., & Ford, H. (1929). Foundations of prosperity. *The North American Review, 228*(2), 129–136. Retrieved from <https://www.jstor.org/stable/25110803>
- Dahling, J. J., & Lauricella, T. K. (2017). Linking job design to subjective career success: A test of self-determination theory. *Journal of Career Assessment, 25*(3), 371–388. doi:10.1177/1069072716639689
- Debertin, D. (2012). *Agricultural Production Economics*. New York, NY: Macmillan.
- Deci, E. L., & Ryan, R. M. (1980). The empirical exploration of intrinsic motivational processes. *Advances in Experimental Social Psychology, 13*, 39–80. doi:10.1016/S0065-2601(08)60130-6
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry, 11*, 227–268. doi:10.1207/S15327965PLI1104\_01
- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R.M. Ryan, *The Oxford handbook of human motivation* (pp. 85–107). New York, NY: Oxford University Press.

- Deere, C. D., & Leon, M. (2003). The gender asset gap: Land in Latin America. *World Development*, 31(6), 925–947. doi:10.1016/S0305-750X(03)00046-9
- De Hoyos, Rafael E., Bussolo, M., & Núñez, O. (2012). Exports, gender wage gaps, and poverty in Honduras. *Oxford Development Studies*, 40(4), 533–551. doi:10.1080/13600818.2012.732562
- De Soysa, I., & Gleditsch, N. P. (1999). To cultivate peace: Agriculture in a world of conflict. *Environmental Change and Security Report*, 5, 15–25.
- Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management*, 37(3), 197–208. doi:10.1111/j.1467-9310.2007.00469.x
- Discua Cruz, A., Hamilton, E., & Jack, S. L. (2012). Understanding entrepreneurial cultures in family businesses: A study of family entrepreneurial teams in Honduras. *Journal of Family Business Strategy*, 3(3), 147–161. doi:10.1016/j.jfbs.2012.05.002
- Dizgah, M. R., Chegini, M. G., & Bisokhan, R. (2012). Relationship between job satisfaction and employee job performance in Guilan public sector. *Journal of Basic and Applied Scientific Research*, 2(2), 1735–1741.
- Dooley, C. R. (1946). Training within industry in the United States. *International Labour Review*, 54, 160–178.
- Eakin, H., Tucker, C. & Castellanos, E. (2006). Responding to the coffee crisis: a pilot study of farmers' adaptations in Mexico, Guatemala and Honduras, *The Geographical Journal*, 172(2), 156–171. doi:10.1111/j.1475-4959.2006.00195.x
- Edelman, M. (2008). Organizing in agrarian Central America: Histories, challenges, prospects. *Journal of Agrarian Change*, 8(2), 229–257. doi:10.1111/j.1471-0366.2008.00169.x
- Eden, D., & Leviatan, U. (1974). Farm and factory in the kibbutz: A study in agrico-industrial psychology. *Journal of Applied Psychology*, 59(5), 596–602. doi:10.1037/h0037327
- Ellinger, A. D., Ellinger, A. E., Bachrach, D. G., Wang, Y. L., & Elmadağ Baş, A. B. (2011). Organizational investments in social capital, managerial coaching, and employee work-related performance. *Management Learning*, 42(1), 67–85. doi:10.1177/1350507610384329
- Erez, M. (2008). Social-cultural influences on work motivation. In R. Kanfer & G. Chen & R. Pritchard (Eds.), *Work motivation: past, present and future* (pp. 501–530). New York, NY: Routhledge.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. doi:10.11648/j.ajtas.20160501.11

- Euraque, D. A. (1996). *Reinterpreting the Banana Republic: Region and state in Honduras, 1870–1972*. Chapel Hill, NC: The University of North Carolina Press.
- Eylon, D., & Bamberger, P. (2000). Empowerment cognitions and empowerment acts: Recognizing the importance of gender. *Group & Organization Management*, 25, 354–372. doi:10.1177/1059601100254003
- Fairweather, J. R., & Keating, N. C. (1994). Goals and management styles of New Zealand farmers. *Agricultural Systems*, 44(2), 181–200. doi:10.1016/0308-521X(94)90160-H
- Fogaça, N., Rego, M. C. B., Melo, M. C. C., Armond, L. P., & Coelho Jr, F. A. (2018). Job performance analysis: Scientific studies in the main journals of management and psychology from 2006 to 2015. *Performance Improvement Quarterly*, 30(4), 231–247. doi:10.1002/piq.21248
- Forsyth, A., & Miyata, K. (1987). *Tropical nature: Life and death in the rain forests of Central and South America*. New York, NY: Touchstone.
- Frankl, V. E. (2006). *Man's search for meaning*. Boston, MA: Beacon Press
- Friedman, M., & Kuznets, S. (1945). *Income from independent professional practice*. Cambridge, MA: National Bureau of Economic Research.
- Fullick-Jagiela, J. M., Verbos, A. K., & Wiese, C. W. (2015). Relational mentoring episodes as a catalyst for empowering protégés: A conceptual model. *Human Resource Development Review*, 14(4), 486–508. doi:10.1177/1534484315610730
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. doi:10.1002/job.322
- Gambrel, P., & Cianci, R. (2003). Maslow's hierarchy of needs: Does it apply in a collectivist culture. *Journal of Applied Management and Entrepreneurship*, 8(2), 143–161.
- Garg, P., & Rastogi, R. (2006). New model of job design: Motivating employees' performance. *Journal of Management Development*, 25(6), 572–587. doi:10.1108/02621710610670137
- Garson, G. D. (2006). Social capital theory. Retrieved from <https://www.hks.harvard.edu/>
- Gasson, R. (1973). Goals and values of farmers. *Journal of Agricultural Economics*, 24(3), 521–542. doi:10.1111/j.1477-9552.1973.tb00952.x
- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative psychological and behavioral science*, 42(3), 266–290. doi:10.1007/s12124-008-9078-3
- Gibbons, J. L., & Luna, S. E. (2015). For Men Life is Hard, for Women Life is Harder: Gender Roles in Central America. In S. Safdar & N. Kosakowska-Berezecka (Eds.), *Psychology*

- of Gender Through the Lens of Culture* (pp. 307–325). New York, NY: Springer International Publishing. doi:10.1007/978-3-319-14005-6\_15
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Piscataway, NJ: Aldine.
- Godfray, H. C., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F.,... Toulmin, C. (2010). Food security: the challenge of feeding 9 billion people. *Science*, 327, 812–818. doi:10.1126/science.1185383
- Grant, A. M., Campbell, E. M., Chen, G., Cottone, K., Lapedis, D., & Lee, K. (2007). Impact and the art of motivation maintenance: The effects of contact with beneficiaries on persistence behavior. *Organizational Behavior and Human Decision Processes*, 103(1), 53–67. doi:10.1016/j.obhdp.2006.05.004
- Grant, W. (2011). The political economy of global food governance: Political economy of global food governance. *International Studies Review*, 13(2), 304–309. doi:10.1111/j.1468-2486.2011.01028.x
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. doi:10.1177/1525822X05279903
- Güntert, S. T. (2015). The impact of work design, autonomy support, and strategy on employee outcomes: A differentiated perspective on self-determination at work. *Motivation and Emotion*, 39(1), 74–87. doi:10.1007/s11031-014-9412-7
- Hardré, P. L. (2003). Beyond two decades of motivation: A review of the research and practice in instructional design and human performance technology. *Human Resource Development Review*, 2(1), 54–81. doi:10.1177/1534484303251661
- Halbesleben, J. R. B., & Bowler, Wm. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93–106. doi:10.1037/0021-9010.92.1.93
- Haire, M. (1959). Psychological problems relevant to business and industry. *Psychological Bulletin*, 56(3), 169–194. doi:10.1037/h0041259
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis (7th ed)*. Harlow, United Kingdom: Pearson.
- Hall, E. K. (1922). *Management's responsibility for and opportunities in the personnel job*. New York, NY: Kraus Reprint Association
- Häuberer, J. (2011). *Social capital theory: Towards a methodological foundation*. Prague, Czech Republic: Charles University

- Hechanova, M., Regina, M., Alampay, R. B. A., & Franco, E. P. (2006). Psychological empowerment, job satisfaction and performance among Filipino service workers. *Asian Journal of Social Psychology*, 9(1), 72–78. doi:10.1111/j.1467-839X.2006.00177.x
- Hendrick, I. (1943). Work and the pleasure principle. *The Psychoanalytic Quarterly*, 12(3), 311–329. doi:10.1080/21674086.1943.11925533
- Herath, C. S. (2010). Motivation as a potential variable to explain farmers' behavioral change in agricultural technology adoption decisions. *Ekonomika a Management*, 62(3), 62–71.
- Herzberg, F. (1968). One more time: How do you motivate employees? *Harvard Business Review*, 1, 53–62.
- Hesketh, B., & Neal, A. (1999). Technology and performance. In D.R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 21–55). San Francisco, CA: Jossey-Bass.
- Hinsz, V. B., & Nelson, L. C. (1990). Family farmers' reactions to their work: A job diagnostic survey. *Family Business Review*, 3(1), 35–44. doi:10.1111/j.1741-6248.1990.00035.x
- Hinsz, V. B. (2008). The social context of work motivation: A social-psychological perspective. In R. Kanfer & G. Chen & R. Pritchard (Eds.), *Work motivation: past, present and future* (pp. 553–567). New York, NY: Routhledge.
- Hofstede, G., Garibaldi de Hilal, A. V., Malvezzi, S., Tanure, B., & Vinken, H. (2010). Comparing regional cultures within a country: Lessons from Brazil. *Journal of Cross-Cultural Psychology*, 41(3), 336–352. doi:10.1177/0022022109359696
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Huffman, W. E. (2001). Human capital: Education and agriculture. In B. L. Gardner & G. C. Rausser (Eds.), *Handbook of agricultural economics* (pp. 333–381). Amsterdam, Netherlands: Elsevier.
- Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational Behavior and Human Decision Processes*, 77(1), 3–21. doi:10.1006/obhd.1998.2812
- Humphries, S., Classen, L., Jiménez, J., Sierra, F., Gallardo, O., & Gómez, M. (2012). Opening cracks for the transgression of social boundaries: An evaluation of the gender impacts of farmer research teams in Honduras. *World Development*, 40(10), 2078–2095. doi:10.1016/j.worlddev.2012.05.008
- IHS Markit. (2018). *Country Reports - Honduras*. 1–42. London, U.K.: IHS Markit

- Ilgen, D. R., & Pulakos, E. D. (1999). Introduction: Employee performance in today's organizations. In D. R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 1–18). San Francisco, CA: Jossey-Bass.
- Ingoldsby, B. B. (1991). The Latin American Family: Familism vs. Machismo. *Journal of Comparative Family Studies*, 22(1), 57–62. doi:10.3138/jcfs.22.1.57
- Jaiswal, D., & Dhar, R. L. (2016). Impact of perceived organizational support, psychological empowerment and leader member exchange on commitment and its subsequent impact on service quality. *International Journal of Productivity and Performance Management*, 65(1), 58–79. doi:10.1108/IJPPM-03-2014-0043
- Jansen, J., Van den Borne, B. H., Renes, R. J., Van Schaik, G., Lam, T. J., & Leeuwis, C. (2009). Explaining mastitis incidence in Dutch dairy farming: The influence of farmers' attitudes and behaviour. *Preventive Veterinary Medicine*, 92(3), 210–223. doi:10.1016/j.prevetmed.2009.08.015
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47(3), 368–384. doi:10.5465/20159587
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47(3), 368–384. doi:10.5465/20159587
- Jayaweera, T. (2015). Impact of work environmental factors on job performance, mediating role of work motivation: A study of hotel sector in England. *International Journal of Business and Management*, 10(3), 271–278. doi:10.5539/ijbm.v10n3p271
- Jones, P. S., Lee, J. W., Phillips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An Adaptation of Brislin's Translation Model for Cross-Cultural Research. *Nursing Research*, 50(5), 300–304. doi:10.1097/00006199-200109000-00008
- Joo, B. K., Jeung, C. W., & Yoon, H. J. (2010). Investigating the influences of core self-evaluations, job autonomy, and intrinsic motivation on in-role job performance. *Human Resource Development Quarterly*, 21(4), 353–371. doi:10.1002/hrdq.20053
- Kanfer, R. (1994). Work motivation: New directions in theory and research. In C. L. Cooper & I. T. Robertson (Eds.), *Key reviews in managerial psychology: Concepts and research for practice: Work motivation: New directions in theory and research*. (pp. 1–53). Hoboken, NJ: John Wiley & Sons.
- Kanfer, R. (2009). Work motivation: Advancing theory and impact. *Industrial and Organizational Psychology*, 2(1), 118–127. doi:10.1111/j.1754-9434.2008.01120.x



- Kanfer, R. (2012). Work motivation: Theory, practice, and future directions. In S. W. J. Kozlowski, *The Oxford handbook of organizational psychology* (pp. 455–495). Oxford, UK: Oxford University Press.
- Kao, G. (2004). Social capital and its relevance to minority and immigrant populations. *Sociology of Education*, 77(2), 172–175. doi:10.1177/003804070407700204
- Karatepe, O. M., & Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, 24(3), 173–193. doi:10.1108/02652320610659021
- Karavardar, G. (2014). Perceived organizational support, psychological empowerment, organizational citizenship behavior, job performance and job embeddedness: A research on the fast food industry in Istanbul, Turkey. *International Journal of Business and Management*, 9(4), 131–139. doi:10.5539/ijbm.v9n4p131
- Kattsoff, L. O. (1950). Education or indoctrination in workers' education? *The Educational Forum*, 15(1), 51–62. doi:10.1080/00131725009342085
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. New York: Wiley.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261–266. doi:10.1093/intqhc/mzg031
- Kesselman, G. A., Hagen, E. L., & Wherry, R. J. (1974). A factor analytic test of the Porter-Lawler expectancy model of work motivation. *Personnel Psychology*, 27(4), 569–579. doi:10.1111/j.1744-6570.1974.tb01177.x
- Khalil, C. A., Conforti, P., Ergin, I., & Gennari, P. (2017). Defining small-scale food producers to monitor target 2.3. of the 2030 agenda for sustainable development. *FAO Statistics Division*, 1-51. Retrieved from: <http://www.fao.org/3/a-i6858e.pdf>
- Kilpatrick, S. (1997). Education and training: Impacts on profitability in agriculture. *Australian and New Zealand Journal of Vocational Education Research*, 5(2), 11–36.
- Kisamba-Mugerwa, W. (2005). The politics of and policies for smallholder agriculture. In R.P Pandya-Lorch & P. Hazell & S. Wiggins & C. Poulton & A. Dorward (Eds.), *The future of small farms proceedings of a research workshop* (pp. 269–282). Wye, United Kingdom: International Food Policy Research Institute (IFPRI) / 2020 Vision Initiative Overseas Development Institute (ODI). Imperial College, London.
- Klidas, A., Van Den Berg, P. T., & Wilderom, C. P. (2007). Managing employee empowerment in luxury hotels in Europe. *International Journal of Service Industry Management*, 18(1), 70–88. doi:10.1108/09564230710732902

- Knol, J., & Van Linge, R. (2009). Innovative behaviour: The effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing*, 65(2), 359–370. doi:10.1111/j.1365-2648.2008.04876.x
- Koestner, R., Otis, N., Powers, T. A., Pelletier, L., & Gagnon, H. (2008). Autonomous motivation, controlled motivation, and goal progress. *Journal of Personality*, 76(5), 1201–1230. doi:10.1111/j.1467-6494.2008.00519.x
- Kornhauser, A. W. (1922). The psychology of vocational selection. *Psychological Bulletin*, 19(4), 192–229. doi:10.1037/h0065566
- Lawler, E. E., & Porter, L. W. (1967). Antecedent attitudes of effective managerial performance. *Organizational Behavior and Human Performance*, 2(2), 122–142. doi:10.1016/0030-5073(67)90026-8
- Lawler III, E. E. (1969). Job design and employee motivation. *Personnel Psychology*, 22(4), 426–435. doi:10.1111/j.1744-6570.1969.tb00343.x
- Leisink, P., & Steijn, B. (2009). Public service motivation and job performance of public sector employees in the Netherlands. *International Review of Administrative Sciences*, 75 (1), 1–18. doi:10.1177/0020852308099505
- Li, Y., Pickles, A., & Savage, M. (2005). Social capital and social trust in Britain. *European Sociological Review*, 21(2), 109–123. doi:10.1093/esr/jci007
- Lien, G., Flaten, O., Jervell, A. M., Ebbesvik, M., Koesling, M., & Valle, P. S. (2006). Management and risk characteristics of part-time and full-time farmers in Norway. *Review of Agricultural Economics*, 28(1), 111.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22(1), 28–51.
- Lincoln, Y. S., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (5th ed., pp. 97–128). Los Angeles, California: SAGE.
- Liden, R.C., Wayne, S.J., Sparrowe, R.T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85(3), 407–416. doi:10.1037/0021-9010.85.3.407
- Lloyd, R., & Mertens, D. (2018). Expecting more out of expectancy theory: History urges inclusion of the social context. *International Management Review*, 14(1), 24–37.
- Lockheed, M. E., Jamison, D. T., & Lau, L. J. (1980). Farmer education and farm efficiency: A survey. *Economic Development & Cultural Change*, 29(1), 37. doi:10.1086/451231
- Loker, W. M. (1996). “Campesinos” and the crisis of modernization in Latin America. *Journal of Political Ecology*, 3(1), 69. doi:10.2458/v3i1.21774

- London, M., & Mone, E.M. (1999). Continuous learning. In D. R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 119–153). San Francisco, CA: Jossey-Bass.
- Lowder, S. K., Skoet, J., & Raney, T. (2016). The number, size, and distribution of farms, smallholder farms, and family farms worldwide. *World Development*, 87, 16–29. doi:10.1016/j.worlddev.2015.10.041
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power Analysis and Determination of Sample Size for Covariance Structure Modeling. *American Psychological Association*, 1(2), 130–149. doi:1082-989X/96/S3.00
- MacDonald, J. M., Korb, P., & Hoppe, R. A. (2013). Farm size and the organization of U.S. crop farming. *USDA Economic Research Service*, 152, 1–61.
- MacNealy, M. S. (1999). *Strategies for empirical research in writing*. New York, NY: Addison Wesley Longman.
- Mahoney, T. A. (1988). Productivity defined: The relativity of efficiency, effectiveness, and change. In J.P. Campbell & R.J. Campbell (Eds), *Productivity in organizations: New perspectives from industrial and organizational psychology*, (pp. 13–38). San Francisco, CA: Jossey-Bass.
- Mansur, J., Sobral, F., & Goldszmidt, R. (2017). Shades of paternalistic leadership across cultures. *Journal of World Business*, 52(5), 702–713. doi:10.1016/j.jwb.2017.06.003
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522–526. doi:10.1093/fampra/13.6.522
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. doi:10.1037/h0054346
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper.
- Massenberg, A.C., Spurk, D., & Kauffeld, S. (2015). Social support at the workplace, motivation to transfer and training transfer: A multilevel indirect effects model. *International Journal of Training and Development*, 19(3), 161–178. doi:10.1111/ijtd.12054
- McDonald, S. (2011). What’s in the “old boys” network? Accessing social capital in gendered and racialized networks. *Social Networks*, 33(4), 317–330. doi:10.1016/j.socnet.2011.10.002
- McGregor, D. (1972). An uneasy look at performance appraisal. *Harvard Business Review*, 50(5), 133–138.
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.

- Meuwissen, M. P. M., Huirne, R. B. M., & Hardaker, J. B. (2001). Risk and risk management: An empirical analysis of Dutch livestock farmers. *Livestock Production Science*, 69(1), 43–53. doi:10.1016/S0301-6226(00)00247-5
- Miller, A., Dobbins, C., Pritchett, J., Boehlje, M., & Ehmke, C. (2004). *Risk management for farmers*. Purdue University Department of Agricultural Economics Staff Paper 04-11, 1–31.
- Miller, V. N. (2016). When push comes to shove: A comparative concept analysis of motivation and coercion in nursing education. *Nursing Forum*, 51(3), 164–172. doi:10.1111/nuf.12134
- Mirandé, A. (1977). *Hombres y machos: Masculinity and Latino culture*. Boulder, CO: Westview Press
- Mok, B.-H. (2005). Organizing self-help groups for empowerment and social change: Findings and insights from an empirical study in Hong Kong. *Journal of Community Practice*, 13(1), 49–68. doi:10.1300/J125v13n01\_04
- Mollett, S. (2010). Está listo (Are you ready)? Gender, race and land registration in the Río Plátano Biosphere Reserve. *Gender, Place & Culture*, 17(3), 357–375. doi:10.1080/09663691003737629
- Mollett, S. (2015). “Displaced futures”: Indigeneity, land struggle, and mothering in Honduras. *Journal of Politics, Groups, and Identities*, 3(4), 678–683. doi:10.1080/21565503.2015.1080620
- Mollett, S., & Faria, C. (2013). Messing with gender in feminist political ecology. *Geoforum*, 45, 116–125. doi:10.1016/j.geoforum.2012.10.009
- Morgan, D. L. (2018). *Basic and advanced focus groups*. Newbury Park, California: SAGE Publications.
- Motowidlo, S. J. & Kell, H.J. (2003). Job performance. In W.C. Borman, & D.R. Ilgen & R.J. Klimoski & I.B. Weiner (Eds.), *Handbook of psychology, industrial and organizational psychology* (pp. 91–130). Hoboken, NJ: John Wiley & Sons
- Motowidlo, S. J., & Schmit, M. J. (1999). Performance assessment in unique jobs. In D.R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 56–86). San Francisco, CA: Jossey-Bass.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79(4), 475–480. doi:10.1037/0021-9010.79.4.475
- Munir, K., Ansari, S., & Gregg, T. (2010). Beyond the hype: Taking business strategy to the “bottom of the pyramid.” In B. Joel A.C. & J. Lampel (Eds.), *Advances in Strategic*

- Management* (Vol. 27, pp. 247–276). Emerald Group Publishing Limited.  
doi:10.1108/S0742-3322(2010)0000027012
- Munsterberg, H. (1913). *Psychology and industrial efficiency*. Boston, MA: Houghton Mifflin
- Muthuri, J. N., Matten, D., & Moon, J. (2009). Employee volunteering and social capital: Contributions to corporate social responsibility. *British Journal of Management*, 20(1), 75–89. doi:10.1111/j.1467-8551.2007.00551.x
- Murphy, K.R., & Kroecker, L.P. (1988). *Dimensions of job performance*. San Diego, CA: Navy Personnel Research and Development Center.
- Murphy, K. R. (1990). Job performance and productivity. In K.R. Murphy & F.E. Saal (Eds.), *Psychology in organizations: Integrating science and practice*, (pp. 157–176). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Murphy, K. R. (1989). Dimensions of job performance. In R. Dillon & J. Pellingrino (Eds.), *Testing: Applied and theoretical perspectives* (pp. 218–247). New York, NY: Praeger
- Nagayets, O. (2005). Small farms: Current status and key trends. *Information brief of the Future of Small Farms Research Workshop*. Retrieved from:  
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.146.4632&rep=rep1&type=pdf>
- National Statistical Institute of Honduras (INE). (2020, March 9). *La población total de Honduras*. Retrieved from <https://www.ine.gob.hn/V3/>
- National Statistical Institute of Honduras (INE). (2013). *Censo de población y vivienda de Olancho*. Retrieved from  
<http://170.238.108.227/binhnd/RpWebEngine.exe/Portal?BASE=MUNDEP15&lang=ESP/>
- National Statistical Institute of Honduras (INE). (2013). *Censo de población y vivienda de Olancho, frecuencia simple por ocupación*. Retrieved from  
<http://170.238.108.227/binhnd/RpWebEngine.exe/Portal?BASE=MUNDEP15&lang=ESP>
- Noor, K. B. M., & Dola, K. (2011). Investigating training impact on farmers' perception and performance. *International Journal of Humanities and Social Science*, 1(6), 145–152.
- New Agriculturist: Country profile - Honduras. (2009). Retrieved from <http://www.new-ag.info/en/country/profile.php?a=691>
- Nie, Y., Chua, B. L., Yeung, A. S., Ryan, R. M., & Chan, W. Y. (2015). The importance of autonomy support and the mediating role of work motivation for well-being: Testing self-determination theory in a Chinese work organisation. *International Journal of Psychology*, 50(4), 245–255. doi:10.1002/ijop.12110

- Nuthall, P. L. (2010). Should farmers' locus of control be used in extension? *The Journal of Agricultural Education and Extension*, 16(3), 281–296. doi:10.1080/1389224X.2010.489768
- Office of the United States Trade Representative. (2017). Honduras. Retrieved February 6, 2019, from <https://ustr.gov/countries-regions/americas/honduras>
- Ohme, M., & Zacher, H. (2015). Job performance ratings: The relative importance of mental ability, conscientiousness, and career adaptability. *Journal of Vocational Behavior*, 87, 161–170. doi:10.1016/j.jvb.2015.01.003
- O'Leary, N., Tranter, R., & Bennett, R. (2018). Are farmer personality traits associated with farm profitability? Results from a survey of dairy farmers in England and Wales. *International Journal of Agricultural Management*, 7(2), 17–25. doi:10.5836/ijam/2018-07-17
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1), 23–42. doi:10.1177/0021886300361002
- Osland, A. (1997). The impact of machismo in promoting women in Central America. *Journal of Workplace Learning*, 9(2), 61–66. doi:10.1108/13665629710164940
- Park, S., Kang, H.-S. (Theresa), & Kim, E.-J. (2018). The role of supervisor support on employees' training and job performance: An empirical study. *European Journal of Training and Development*, 42(1/2), 57–74. doi:10.1108/EJTD-06-2017-0054
- Passmore, D. L., & Baker, R. M. (2005). Sampling strategies and power analysis. In R. A. Swanson, & E. F. Holton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 46–55). San Francisco, CA: Berrett-Koehler.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods (2nd ed.)*. Newbury Park, CA: Sage.
- Pearson, J. A. & Mangold, K. & Kosiorek, H. E. & Montez, M. & Smith, D. M. & Tyler, B. J. (2017). Registered nurse intent to promote physical activity for hospitalized liver transplant recipients. *Journal of Nursing Management*, 1–7. doi: 10.1111/jonm.12561
- Perry, C. K., Rosenfeld, A. G., & Kendall, J. (2008). Rural women walking for health. *Western Journal of Nursing Research*, 30(3), 295–316. doi:10.1177/0193945907303036
- Podsakoff, P. M., & MacKenzie, S. B. (1989). *A second-generation measure of organizational citizenship behavior* (Unpublished manuscript). Indiana University, Bloomington.
- Porter, L. W. and Lawler, E. E. (1968). *Managerial attitudes and performance*. Homewood, Illinois: Irwin-Dorsey.

- Powers, T. A., Koestner, R., David, & Zuroff, C. (2007). Self-criticism, goal motivation, and goal progress. *Journal of Social and Clinical Psychology*, 826–840. doi:10.1521/jscp.2007.26.7.826
- Pudasaini, S. (1983). The effects of education in agriculture: Evidence from Nepal. *American Journal of Agricultural Economics*, 65(3), 509–515. doi:10.2307/1240499
- Putnam, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam, R. (1995). *Bowling alone: The collapse and revival of american community*. New York: Simon and Schuster.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612–624. doi:10.1037//0021-9010.85.4.612
- Ramawickrama, J., Opatha, H. H., & Pushpakumari, D. (2017). A synthesis towards the construct of job performance. *International Business Research*, 10(10), 66–81. doi:10.5539/ibr.v10n10p66
- Ratelle, C. F., Guay, F., Vallerand, R. J., Larose, S., & Senécal, C. (2007). Autonomous, controlled, and amotivated types of academic motivation: A person-oriented analysis. *Journal of Educational Psychology*, 99(4), 734–746. doi:10.1037/0022-0663.99.4.734
- Read, E. A., & Laschinger, H. K. S. (2015). The influence of authentic leadership and empowerment on nurses' relational social capital, mental health and job satisfaction over the first year of practice. *Journal of Advanced Nursing*, 71(7), 1611–1623. doi:10.1111/jan.12625
- Restrepo, M. J., Lelea, M. A., & Kaufmann, B. A. (2018). Evaluating knowledge integration and co-production in a 2-year collaborative learning process with smallholder dairy farmer groups. *Sustainability Science*, 13(5), 1265–1286. doi:10.1007/s11625-018-0553-6
- Richards, J. M. (1973). The psychology of farming: A review of twenty-five years of research. *Journal of Vocational Behavior*, 3(4), 485–501. doi:10.1016/0001-8791(73)90060-2
- Rivera, W. M. (1995). Human resource development in the agriculture sector: Three levels of need. *International Journal of Lifelong Education*, 14(1), 65–73. doi:10.1080/0260137950140106
- Robinson, P. A., & Alfred, M. (2010). Jamaica's bleaching story: Learning to negotiate social capital as an adult. *Proceedings of the CIAE International Pre-Conference*, 156–164. Retrieved from <https://files.eric.ed.gov/fulltext/ED529427.pdf#page=160>
- Rogers, E. M. (1957). Personality correlates of the adoption of technological practices. *Rural Sociology*, 22(3), 267–268.

- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87(1), 66–80. doi:10.1037/0021-9010.87.1.66
- Rougoor, C. (1998). How to define and study farmers' management capacity: Theory and use in agricultural economics. *Agricultural Economics*, 18(3), 261–272. doi:10.1016/S0169-5150(98)00021-8
- Ruben, R. (2005). Smallholder farming in less-favored areas: Options for pro-poor and sustainable livelihoods. In R.P Pandya-Lorch & P. Hazell & S. Wiggins & C. Poulton & A. Dorward (Eds.), *The future of small farms proceedings of a research workshop* (pp. 83–102). Wye, United Kingdom: International Food Policy Research Institute (IFPRI) / 2020 Vision Initiative Overseas Development Institute (ODI). Imperial College, London.
- Ruona, W. E. (2005). Analyzing qualitative data. In R. A. Swanson, & E. F. Holton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 223–263). San Francisco, CA: Berrett-Koehler.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. doi: 10.1037/0003-066X.55.1.68
- Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers*. Los Angeles, California: Sage.
- Sánchez de Roldán, K. S. (2012). Social exclusion, social cohesion: Defining narratives for development in Latin America. *Journal of International Development*, 24(6), 728–744. doi:10.1002/jid.2864
- Šajeva, S. (2007). Identifying factors affecting motivation and loyalty of knowledge workers. *Economics & Management*, 12, 643–652.
- Sansone, C., & Harackiewicz, J. M. (Eds.). (2000). *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*. San Diego, CA: Academic Press.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M. E., Guichard, J.,... Van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behaviour*, 1–12. doi:10.1016/j.jvb.2009.04.004
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23–74.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling (2nd ed)*. Mahwah, N.J: Lawrence Erlbaum Associates.



- Scott, S., & Bruce, R. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607. doi:10.5465/256701
- Schindler, L. A., & Burkholder, G. J. (2016). A mixed methods examination of the influence of dimensions of support on training transfer. *Journal of Mixed Methods Research*, 10(3), 292–310. doi:10.1177/1558689814557132
- Seibert, S., Kraimer, M. & Liden, R. (2001). A social capital theory of career success. *Academy of Management Journal*, 44(2), 219-237. doi:10.5465/3069452
- Sheldon, K. M., & Elliot, A. J. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, 24(5), 546–557. doi:10.1177/0146167298245010
- Shipley, T. (2016). Enclosing the commons in Honduras. *American Journal of Economics and Sociology*, 75(2), 456–487. doi:10.1111/ajes.12146
- Sih, A., Hanser, S.F., & McHugh, K.A. (2009). Social network theory: New insights and issues for behavioral ecologists. *Behavioral Ecology and Sociobiology*, 63, 975–988. doi:10.1007/s00265-009-0725-6
- Slonim-Nevo, V., & Nevo, I. (2009). Conflicting findings in mixed methods research: An illustration from an Israeli study on immigration. *Journal of Mixed Methods Research*, 3(2), 109–128. doi:10.1177/1558689808330621
- Sparrowe, R. T., Liden, R.C., Wayne, S.J, & Kraimer, M.L. (2001). Social networks and the performance of individuals and groups. *Academy of Management Journal*, 44(2), 316–325. doi:10.5465/3069458
- Speizer, I. S., & Whittle, L., & Carter, M. (2005). Gender relations and reproductive decision making in Honduras. *International Family Planning Perspectives*, 31(3), 131–139. Retrieved from <https://www.jstor.org/stable/3649517>
- Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39(11), 1005–1016. doi:10.1177/001872678603901104
- Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, 15(5), 385–392. doi:10.1002/job.4030150503
- Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *The Academy of Management Journal*, 38(5), 1442–1465. doi:10.5465/256865

- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39(2), 483–504. doi:10.5465/256789
- Stoecklin-Marois, M. T., & Hennessy-Burt, T.E., & Schenker, M.B. (2011). Engaging a hard-to-reach population in research: Sampling and recruitment of hired farm workers in the MICASA study. *Journal of Agricultural Safety and Health*, 17(4), 291–302. doi:10.13031/2013.39803
- Strauss, J. (1991). Role of education and extension in the adoption of technology: A study of upland rice and soybean farmers in Central-West Brazil. *Agricultural Economics*, 5(4), 341–359. doi:10.1016/0169-5150(91)90027-I
- Swanson, R. A., & Holton, E. F., III. (2009). *Foundations of human resource development*. San Francisco, CA: Berrett-Koehler.
- Sweetland, S. R. (1996). Human capital theory: Foundations of a field of inquiry. *Review of Educational Research*, 66(3), 341–359. doi:10.3102/00346543066003341
- Tan, J., Zhang, H., & Wang, L. (2015). Network closure or structural hole? The conditioning effects of network-level social capital on innovation performance. *Entrepreneurship Theory and Practice*, 39(5), 1189–1212. doi:10.1111/etap.12102
- Tannenbaum, S. I. (1997). Enhancing continuous learning: Diagnostic findings from multiple companies. *Human Resource Management*, 36(4), 437–452. doi:10.1002/(SICI)1099-050X(199724)36:4<437::AID-HRM7>3.0.CO;2-W
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. doi:10.5116/ijme.4dfb.8dfd
- Taylor, J. (2013). Goal setting in the Australian public service: Effects on psychological empowerment and organizational citizenship behavior. *Public Administration Review*, 73(3), 453–464. doi:10.1111/puar.12040
- Teshome, E., Zenebe, M., Metaferia, H., & Biadgilign, S. (2012). The role of self-help voluntary associations for women empowerment and social capital: The experience of women's iddirs (burial societies) in Ethiopia. *Journal of Community Health*, 37(3), 706–714. doi:10.1007/s10900-011-9503-2
- The Food and Agriculture Organization of the United Nations (2014). The state of food and agriculture in brief. Retrieved from <http://www.fao.org/3/a-i4036e.pdf>
- The World Bank Group. (2019). *The Changing Nature of Work*. Washington, D.C.
- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666–681. doi:10.5465/amr.1990.4310926

- Thompson, B. (2004). *Exploratory and Confirmatory Factor Analysis*. Washington, D.C.: American Psychological Association.
- Thorton, G.C. (1980). Psychometric properties of self-appraisals of job performance. *Personnel Psychology*, 33, 263–271. doi:10.1111/j.1744-6570.1980.tb02348.x
- Tickle-Degnen, L., & Rosenthal, R. (1990). The nature of rapport and its nonverbal correlates. *Psychological Inquiry*, 1(4), 285. doi:10.1207/s15327965pli0104\_1
- Tomlinson, I. (2013). Doubling food production to feed the 9 billion: A critical perspective on a key discourse of food security in the UK. *Journal of Rural Studies*, 29, 81–90. doi:10.1016/j.jrurstud.2011.09.001
- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational psychology research. *Canadian Journal of Behavioural Science*, 41, 213–226. doi:10.1037/a0015167
- Upusna, P., Gede, S., & Ketut, S. (2019). The effect of psychological empowerment on motivation and performance of health center employees in Tomohon City. *Russian Journal of Agricultural and Socio-Economic Sciences*, 91(7), 15–25. doi:10.18551/rjoas.2019-07.02
- United Nations Development Programme. (2010). Programa de las Naciones Unidas para el desarrollo de Honduras documento de proyecto. Retrieved from: [http://www.undp.org/content/dam/honduras/docs/proyectos/ProDoc\\_ESPANOL\\_final.pdf](http://www.undp.org/content/dam/honduras/docs/proyectos/ProDoc_ESPANOL_final.pdf)
- UN FAO. (2008). An introduction to the basic concepts of food security. *UN FAO Food Security Programme*. Retrieved from: <http://www.fao.org/3/al936e/al936e00.pdf>
- USDA National Agricultural Statistics Service (2017, February 6). *2017 Census of Agriculture*. Retrieved from <https://www.nass.usda.gov>
- Valdés, A. & Foster, W. (2005). Reflections on the role of agriculture in pro-poor growth. In R.P Pandya-Lorch & P. Hazell & S. Wiggins & C. Poulton & A. Dorward (Eds.), *The future of small farms proceedings of a research workshop* (pp. 3–22). Wye, United Kingdom: International Food Policy Research Institute (IFPRI) / 2020 Vision Initiative Overseas Development Institute (ODI). Imperial College, London.
- Valeeva, N. I., Lam, T. J. G. M., & Hogeveen, H. (2007). Motivation of dairy farmers to improve mastitis management. *Journal of Dairy Science*, 90(9), 4466–4477. doi:10.3168/jds.2007-0095
- Valentine, S., & Fleischman, G. (2003). The impact of self-esteem, Machiavellianism, and social capital on attorneys' traditional gender outlook. *Journal of Business Ethics*, 43(4), 323–335. doi:10.1007/s10551-006-9306-z

- Vroom, V. H. (1962). Ego-involvement, job satisfaction, and job performance. *Personnel Psychology*, 15(2), 159–177. doi:10.1111/j.1744-6570.1962.tb01858.x
- Vroom, V.H. (1964). *Work and motivation*. Hoboken, NJ: Wiley.
- Wallerstein, N. (2002). Empowerment to reduce health disparities. *Scandinavian Journal of Public Health*, 30, 72–77. doi:10.1177/14034948020300031201
- Wech, B. A. (2002). Trust context: Effect on organizational citizenship behavior, supervisory fairness, and job satisfaction beyond the influence of leader-member exchange. *Business & Society*, 41(3), 353–360. doi:10.1177/0007650302041003006
- Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal*, 41, 540–555. doi:10.5465/256941
- Yeung, A. C. L., Lai, K., & Yee, R. W. Y. (2007). Organizational learning, innovativeness, and organizational performance: A qualitative investigation. *International Journal of Production Research*, 45(11), 2459–2477. doi:10.1080/00207540601020460
- Yoder, J. D., & Kahn, A. S. (1992). Toward a feminist understanding of women and power. *Psychology of Women Quarterly*, 16, 381–388. doi:10.1111/j.1471-6402.1992.tb00263.x
- Yilmaz, O. D. (2015). Revisiting the impact of perceived empowerment on job performance: Results from front-line employees. *Turizam*, 19(1), 34–46. doi:10.5937/Turizam1501034Y
- Xiao, Z., & Tsui, A. S. (2007). When brokers may not work: The cultural contingency of social capital in Chinese high-tech firms. *Administrative Science Quarterly*, 52(1), 1–31. doi:10.2189/asqu.52.1.1

## **VITA**

Susan Karimiha is a native of Atlanta, Georgia and received her bachelor's degrees in 2008 from the University of Colorado, Boulder in Economics and International Affairs. Thereafter, she served as a junior economist in the research department of BBVA in Madrid, Spain where she researched the impacts of the 2008 recession. As her research interests grew, she moved to Louisiana and entered graduate school in the LSU School of Leadership and Human Resource Development. At the same time, she pursued a career in international agriculture development at the Louisiana State University Agricultural Center International Programs office where she managed projects in over 35 countries and conducted research assignments in Central Asia, East and West Africa, and Latin America. Susan received a master's degree in 2012 in Human Resource Education from the LSU College of Agriculture and anticipates graduating from the LSU School of Leadership and Human Resource with a doctoral degree in May 2020 and a doctoral minor in Information Systems and Decision Sciences from the LSU E.J. Ourso College of Business.