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Exploring Churn and Alignment between Retention and Occupational Culture as Perceived by Professional Truck Drivers

Catherine M. Cole
University of Southern Mississippi

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Exploring Churn and Alignment between Retention and Occupational
Culture as Perceived by Professional Truck Drivers

by

Catherine M. Cole

A Dissertation

Submitted to the Graduate School,
the College of Science and Technology
and the Department of Human Capital Development
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved by:

Dr. Heather M. Annulis, Committee Chair

Dr. Cyndi H. Gaudet

Dr. H. Quincy Brown

Dr. Dale L. Lunsford

Dr. Heather M. Annulis
Committee Chair

Dr. Cyndi H. Gaudet
Department Chair

Dr. Karen S. Coats
Dean of the Graduate School

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ABSTRACT

Despite advances in logistics software and increased driver pay, the trucking industry continues a historic wave of human capital risks in the form of driver turnover and driver shortages. Previous efforts to understand the phenomenon of driver turnover rely heavily on supply chain, transportation, and logistics based disciplines. The current study provides a human capital ontology towards understanding professional truck driver perceptions. Within the interpretive framework of pragmatism, the study applied a simultaneous ethnographic and phenomenological research design to explore the phenomenon of churn and professional truck driver perceptions of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. Perceived environmental alignment reduces barriers with external social and cultural institutions while facilitating improved organizational performance and individual performance and behavior.

The study provides a network model of the occupational culture of professional truck drivers. The study found the occupational culture, cognitive and normative dimensions form the occupational needs of professional truck drivers. The study further found environmental alignment and environmental misalignment exists between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. The study concluded that although the phenomenon of churn exists, the phenomenon is not an attribute of nor promulgated by the occupational culture of professional truck drivers.

The study's findings of strategies environmentally aligned with occupational needs and culture of professional truck drivers, could serve as the foundation for

improving industry and individual driver performance beyond retention. The study's conceptualization of the trucking industry as a population ecology and professional truck drivers as a culture sharing group, advances research of human capital risks at a collective or industry level. Finally, alignment between human capital strategies and occupational cultures has the potential to improve performance across industries and occupations beyond the trucking industry.

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The results of this study are absent without the participants who graciously shared their feelings and stories as professional truck drivers. Thank you for your trust. It is my hope this study reflects your fortitude and the importance of your work in our everyday lives.

DEDICATION

To the person who supports me the most while sacrificing the most—my husband. Tony, you never waver, you never complain, and you always catch me when I fall. As my partner and friend, you are always ready for the next adventure.

To Mom and Dad, who raised my brother and I to challenge the status quo, explore the unknown, never doubt the possible, take responsibility for our failures, command our success, and give of ourselves. To Mother and Granddaddy, who give the most unconditional love a granddaughter could ever want or need. To my family and friends, you continually bless me with your prayers, love, and encouragement. Thank you.

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LIST OF ABBREVIATIONS

<i>CMC</i>	Computer-mediated Communication
<i>TL</i>	Truckload
<i>LTL</i>	Less than Truckload

CHAPTER I – INTRODUCTION

From milk in your refrigerator to gas in your car, the U.S. trucking industry moves nearly 14 million tons of freight a year (U.S. Department of Transportation, Bureau of Transportation Statistics, 2015). The U.S. Department of Transportation (2015) predicts an increase in freight demand as part of the United States' long term economic growth. In 2040, the value of trucking's freight will reach nearly 21.5 billion dollars (U.S. Department of Transportation, Bureau of Transportation Statistics, 2015). Despite economic success, the trucking industry continues its nearly 40 year struggle with driver turnover and driver shortages (Adam, 1979; Corsi & Martin, 1982; Costello, 2017; Costello & Suarez, 2015; LeMay, Johnson, Williams, & Garver, 2013; Schulz, Luthans, & Messersmith, 2014; Sersland & Natarajan, 2015; Williams, Thomas, & Liao-Troth, 2017). The trucking industry's human capital risks disrupt the macro, meso, and micro levels of the U.S. workforce and economy.

The subsequent study qualitatively explored professional truck driver perceptions of churn, the trucking industry's (truckload carrier and less than truckload carrier) retention strategies, and the environmental alignment of retention strategies with the occupational needs and culture of professional truck drivers. Chapter I begins with background of the study. The chapter continues with the statement of the problem, statement of purpose, significance of the study, overarching research question, research objectives, conceptual framework, assumptions, delimitations, and operationalized definitions.

Background of the Study

Since the late 1970s, the trucking industry struggles with driver turnover and driver shortages (Adam, 1979; Corsi & Martin, 1982). Deregulation during the 1970s and 1980s is often cited as the origin of the trucking industry’s human capital risks (Berwick, Bitzan, Rodriquez, & Griffin, 1998; Casavant et al., 2010; Corsi & Martin, 1982; Dobie, Rakowski, & Southern, 1998; Dobie et al., 1998; Faulkner, 2015; Griffin, Kalnback, Lantz, & Rodriquez, 2000; LeMay et al., 2013; Short, 2014). Deregulation reduced barriers to entry, increased the number of trucking firms, and in turn increased competition (Berwick et al., 1998; Corsi & Martin, 1982; Griffin et al., 2000; Moore, 1983, 1986; Short, 2014). Figure 1 depicts a synopsis of the trucking industry’s progression from deregulation in the late 1970s to trucking industry strategies in response to driver turnover.

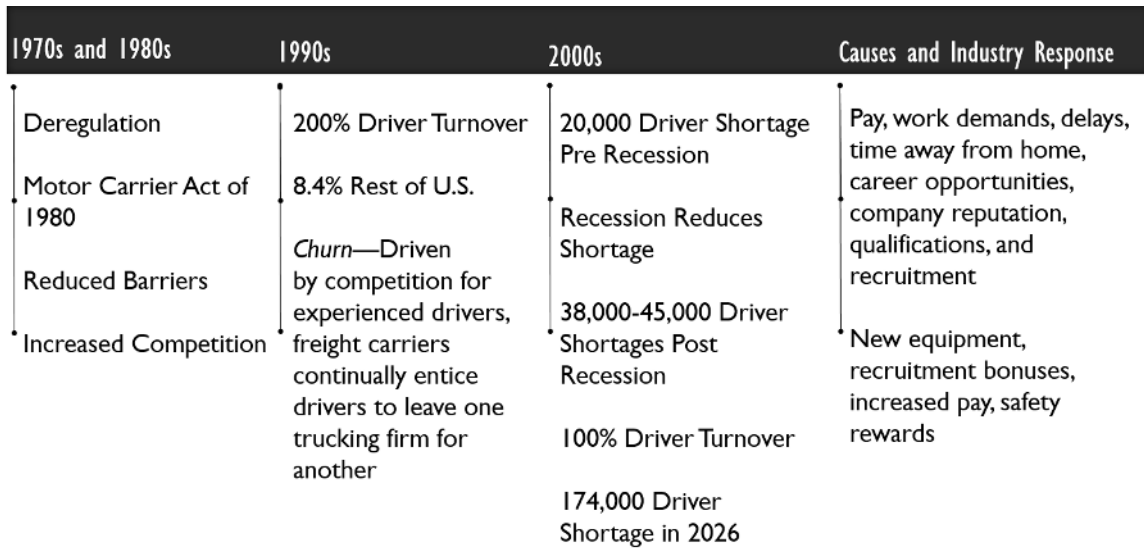


Figure 1. Trucking industry’s progression to driver turnover and shortages. The figure provides a synopsis of high driver turnover and projected driver shortages post deregulation and the trucking industry’s response to causes of turnover (Adam, 1979;

Corsi & Martin, 1982; Costello, 2017; Costello & Suarez, 2015; Dobie et al., 1998; Griffin et al., 2000; Hawes, 2016; Josephs, 2016; LeMay et al., 2013; Mele, 1989; Moore, 1983, 1986; Schulz et al., 2014; Sersland & Natarajan, 2015).

In 1992, for-hire truckload carrier turnover rates reached 200% annually (Min & Emam, 2003). At the time, the median turnover rate for the United States totaled 8.4% (Min & Emam, 2003). In 2015, the turnover rate reached over 100% for large truckload carriers and nearly 80% for small truckload carriers (Hawes, 2016; McNally, 2016a). High turnover rates continued in 2017 with large truckload carriers experiencing their highest churn rate since the close of 2015 (McNally, 2017c). Figure 2 provides a general schematic of the trucking industry with truckload and less than truckload serving as primary operations within the for-hire sector.

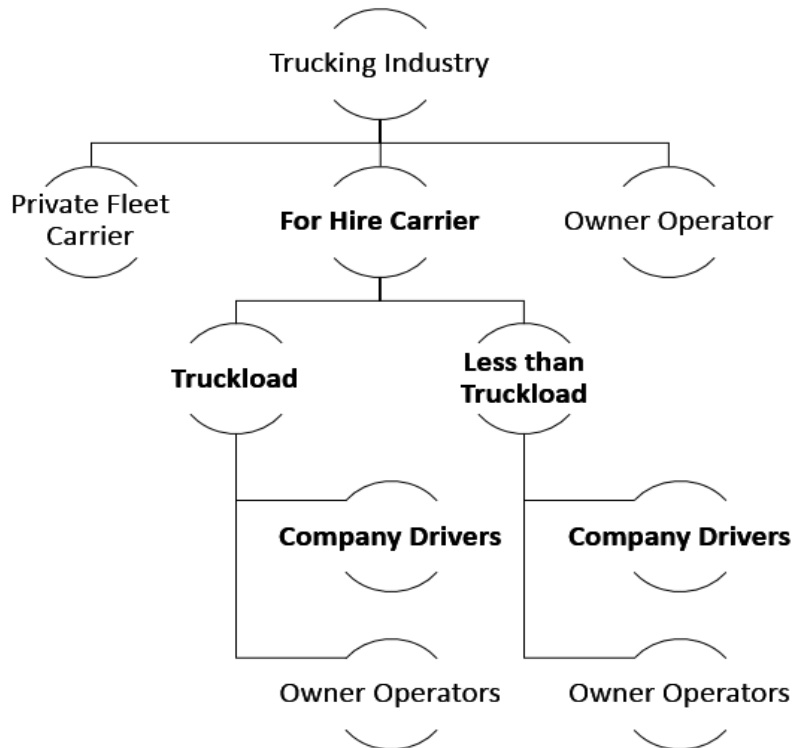


Figure 2. General schematic of the trucking industry structure. The figure places emphasis on for-hire company drivers most prone to driver turnover and driver shortages

(American Transportation Research Institute, 2016a, 2017a; Casavant et al., 2010; Costello, 2017; McNally, 2014, 2017a; Short, 2014).

In 2005, Class 8 driver for-hire shortages reached 20,000 (Costello & Suarez, 2015). In 2008, the recession helped dissipate driver shortages (Costello & Suarez, 2015). Recovering from the recession, shortages returned in 2011 (Costello & Suarez, 2015). By 2014, the shortage reached 38,000 (Costello & Suarez, 2015). The American Trucking Associations estimates a driver shortage of 174,000 by 2026 (Costello, 2017).

Research attributes turnover to decreased pay, increased work demands, and dispatcher delays (Griffin et al., 2000; LeMay et al., 2013). Pay and work demands continue as contributing to driver turnover, as well as time away from home, career opportunities, company reputation, and recruitment (Griffin et al., 2000; Johnson, Bristow, McClure, & Schneider, 2011; LeMay et al., 2013; McElroy, Rodriguez, Griffin, Morrow, & Wilson, 1993; Schulz et al., 2014). New areas of research explore the psychological causes of driver turnover (Schulz et al., 2014; D. F. Williams et al., 2017).

The trucking industry's attempts to respond directly to causes of driver turnover precipitate additional challenges. The American Transportation Research Institute (2015, 2016b) finds new equipment and more time at home as successful strategies for retaining drivers. However, new equipment is a capital investment (Saia, Inc., 2016; Werner Enterprises, Inc., 2016). Trucking firms investing in new equipment as a recruitment and retention strategy still fail to retain and recruit drivers and face equipment remaining idle and no longer a source of revenue (YRC Worldwide Inc., 2016).

The desire for more time at home and increased pay create a dichotomy difficult to reconcile (LeMay, Taylor, & Turner, 1993). Professional truck driver pay structures

often include mileage (LeMay et al., 1993). Time on the road results in greater pay, conversely time at home results in less pay. Irrespective, driver pay and recruitment bonuses steadily increase (Costello, 2017; Costello & Suarez, 2015).

Historically, fuel costs account for the largest share of average marginal costs. In 2015 this changed (American Transportation Research Institute, 2016a). The American Transportation Research Institute's (2016a) analysis of operational costs report driver pay and benefits account for 39% of average marginal costs. Industry wide pay increases cause yet another dichotomy within the trucking industry. Pay and bonuses devised to recruit drivers actually result in industry induced turnover known as *churn* (American Transportation Research Institute, 2015; Costello, 2017; Costello & Suarez, 2015; Lilly, 2015; Mansfield, 2014; Min, 2002; Rodriquez, Kosir, Lantz, Griffin, & Glatt, 2000; Schulz et al., 2014; Short, 2014; Williams, Garver, & Stephen, 2011).

Two types of driver turnover behavior exist (Min, 2002; Rodriquez et al., 2000). First, the driver who simply quits the trucking industry. Second, the driver who engages in churn; moving from one trucking firm to another (Min, 2002; Rodriquez et al., 2000; Short, 2014; Staplin, Gish, Decina, & Brewster, 2003; The Gallup Organization, 1997; Z. Williams et al., 2011). Driven by competition for experienced drivers, freight carriers induce churn by continually increasing pay and other incentives to entice experienced drivers to leave one organization for another (American Transportation Research Institute, 2015; Costello, 2017; Costello & Suarez, 2015; Mansfield, 2014; Min, 2002; Rodriquez et al., 2000; Schulz et al., 2014; Short, 2014).

Although the days of 200% turnover are in the past, the trucking industry's high driver turnover and shortages continue (American Transportation Research Institute,

2015, 2016b, 2017b; Costello, 2017; McNally, 2017a, 2017c; Saia, Inc., 2016; Schulz et al., 2014, 2014; Swift Transportation Company, 2016; Werner Enterprises, Inc., 2016; YRC Worldwide Inc., 2016). An emerging phenomenon of drivers continually engaging in churn, even when pay and incentives are equal among competing trucking firms, permeates the industry (Mansfield, 2014). Churn not only increases the trucking industry's human capital risks and costs but additionally driver accident rates. Staplin (2003) reports a relationship between the number of times a driver changes jobs and a driver's risk of an accident (Staplin et al., 2003).

Supply chain, transportation, and logistics based disciplines lead the extant research on driver turnover and retention (Z. Williams et al., 2011). Missing from driver turnover and retention research are disciplines poised to introduce a human capital ontology with the theoretical foundations of human capital, organizational ecology, and social and cultural influences of the environment on driver behavior and perceptions of retention. Despite driver human capital risks as an industry wide epidemic, research does not examine the trucking industry's retention strategies as a population ecology nor adaption to the environment in the form of environmental alignment.

Environment includes occupational culture (Karahanna, Evaristo, & Srite, 2005; Van Maanen & Barley, 1982; Walsh & Kefi, 2008) and social and cultural demands of social institutions (DiMaggio & Powell, 1983; Luhman & Cunliffe, 2014; Najeeb, 2014). Occupational cultures form based on a shared profession or specialized skill (Dauber, Fink, & Yolles, 2012; Guzman, 2006; Guzman et al., 2004; Karahanna et al., 2005; Trice, 1993; Van Maanen & Barley, 1982; Walsh & Kefi, 2008). Social institutions provide its members with group norms, rules of behavior, cultural practices, and relationship

expectations (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005). This study provides a framework where occupational needs and culture exist within the environment as a social institution with social and cultural demands. Environmental demands influence an organization's strategy, operational domains, decision making, performance and individual work behavior and performance (Carroll, 1984; Dauber et al., 2012; DiMaggio & Powell, 1983; Hall & Taylor, 1996; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013; Karahanna et al., 2005; Lawrence & Lorsch, 1967; Miterev, Turner, & Mancini, 2017).

Alignment, specifically environmental alignment, is a strategic response to the needs, demands, and pressures of the environment (Alagaraja, Rose, Shuck, & Bergman, 2015; Semler, 1997). Specific to this study are driver perceptions of environmental alignment between the occupational needs and culture of professional truck drivers and the trucking industry's retention strategies. Organizations with the ability to understand and implement alignment, have the potential to improve organizational performance and individual performance and behavior (Alagaraja et al., 2015; Alagaraja & Shuck, 2015; Chorn, 1991; Miterev et al., 2017; Quiros, 2009; Semler, 1997).

Statement of the Problem

Occupational culture influences individual behavior, performance, and the shared occupational needs of the membership (Gallivan & Srite, 2005; Guzman, 2006; Karahanna et al., 2005; Schein, 2010; Schein & Scheiner, 2016; Trice, 1993; Van Maanen & Barley, 1982). Occupational culture is part of an organization's environment (Dauber et al., 2012; Gallivan & Srite, 2005; G. Hofstede, Hofstede, & Minkov, 2010; Karahanna et al., 2005; Walsh & Kefi, 2008). Environments influence not only

individual behavior but organizational behavior and performance (Alagaraja, 2013b; Alagaraja et al., 2015; Dauber et al., 2012; Karahanna et al., 2005; Quiros, 2009; Semler, 1997; Yamakawa, Yang, & Lin, 2011). Environmentally aligning organizational goals and tactics with environmental needs, improves both individual and organizational performance (Alagaraja, 2013b; Alagaraja et al., 2015; Alagaraja & Shuck, 2015; Chorn, 1991; Mitrev et al., 2017; Quiros, 2009; Semler, 1997; Yamakawa et al., 2011).

The trucking industry continues to experience high driver churn and shortages (American Transportation Research Institute, 2016a, 2016b, 2017b; Costello, 2017; McNally, 2017a, 2017c; Schulz et al., 2014). The third quarter of 2017 experienced a 95% turnover rate for large truckload carriers and 84% for small truckload carriers (McNally, 2017c). In 2017, driver shortage estimates reached 50,000 with driver shortages ranked the number one issue facing the trucking industry (American Transportation Research Institute, 2017b; Costello, 2017; McNally, 2017b).

Unaddressed, the trucking industry's human capital risks disrupt the macro, meso, and micro levels of the U.S. workforce and economy. At the macro level, long-term economic growth domestically and abroad increases the demand for freight transportation (U.S. Department of Transportation, Bureau of Transportation Statistics, 2015). Sustainable economic growth depends on increased labor productivity and expandable labor markets (Levanon et al., 2016). Historically, strong economies coincide with driver turnover exceeding 100% (Short, 2014). At the meso level, strong economies increase competition for both experienced drivers and new driver graduates (Short, 2014; Werner Enterprises, Inc., 2016). Driver shortages and turnover result in decreased competitiveness, idle equipment, difficulty meeting customer demands, decreased

productivity, reduced profitability, increased freight rates, and restricted growth (Costello & Suarez, 2015; LeMay et al., 1993; LeMay & Taylor, 1989; Min & Emam, 2003; Rodriquez et al., 2000; The Gallup Organization, 1997; U.S. Department of Transportation, Federal Highway Administration, 2004; YRC Worldwide Inc., 2016). Turnover and shortages increase spending on recruitment, hiring, training, and retention (American Transportation Research Institute, 2015, 2016b; LeMay et al., 2013; Min & Emam, 2003; Rodriquez et al., 2000; Staplin et al., 2003; Stephenson & Fox, 1996; Swift Transportation Company, 2016; The Gallup Organization, 1997). At the micro level, increased freight rates result in consumers paying higher costs for goods and services (Casavant et al., 2010; Phillips, 2015; Werner Enterprises, Inc., 2016). Ignoring the influences of occupational culture and the environment, the trucking industry continues a path of decreased retention performance and a failure to gain and sustain the competitive advantage, efficiency, and productivity resulting from environmental alignment.

Statement of Purpose

The purpose of this study is to explore professional truck driver experiences with the phenomenon of churn and their perceptions of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers.

Significance of the Study

Environmental alignment increases an organization's competitive advantage, efficiency, productivity, performance, and individual performance and behavior (Alagaraja et al., 2015; Chorn, 1991; Gallear et al., 2014; Quiros, 2009; Semler, 1997, 1997; Yamakawa et al., 2011). Quiros (2009) observes the need to make "explicit the

relationships involved in the alignment of organizational strategy, culture, and structure” so as to contribute to a body of knowledge advancing performance (p. 301-302). Yet alignment remains an underexplored area of research (Alagaraja et al., 2015). Furthermore, research fails to explore how specific types of alignment relate to varying levels of an organization (Alagaraja et al., 2015). The study reduced research gaps by exploring relationships, culture, organizations at a population level, and a specific type of alignment (environmental).

The study conceptualizes the performance potential of environmental alignment between the trucking industry’s retention strategies and the occupational and cultural environment of professional truck drivers. This knowledge provides the trucking industry greater understanding of the interplay between the phenomena of driver churn, driver retention, and the occupational needs and culture of professional truck drivers. In doing so, the study advances environmental alignment as a construct when developing human capital and performance strategies devised to improve individual retention behavior and performance.

Research Question and Objectives

One overarching question guides the study: Do trucking industry retention strategies environmentally align with professional truck driver occupational needs and culture as perceived by professional truck drivers? Five subsequent research objectives explore the ethnographic construct of occupational culture and the phenomenon of driver churn as perceived by professional truck drivers.

RO1: Describe participant demographics in terms of years of driving experience, driver type, tenure with current employer, employer size, gender, and age.

- RO2: Describe trucking industry strategies to retain professional truck drivers.
- RO3: Explore professional truck driver occupational needs and culture (shared beliefs, values, norms, collective perceptions, cultural forms, and practices) as perceived by professional truck drivers.
- RO4: Explore environmental alignment between trucking industry retention strategies and professional truck driver occupational needs and culture as perceived by professional truck drivers.
- RO5: Explore professional truck driver perceptions of churn as perceived by professional truck drivers.

Conceptual Framework

The study's conceptual framework (Figure 3) depicts the trucking industry as an organizational ecology with small and large truckload carriers and less than truckload carriers at the population level of the ecology paradigm. Occupational culture and human capital risks result in environmental turbulence as a population level input. The framework conceptualizes environmental alignment as a performance improvement output when populations of trucking firms positively adapt to environmental turbulence. Guiding theoretical foundations and perspectives include environment, population ecology, and environmental alignment.

Environment

Environments not only define the space or domain organizations operate in (Luhman & Cunliffe, 2014) but also serve as a source of information for understanding activities, systems, and structures as a result of the environment (Pfeffer, 2003). Structures within the environment include social and cultural institutions (Hall & Taylor,

1996; Hannan & Freeman, 1977; Mischke, 2014; Oliver & Mossialos, 2005). These institutions reflect and convey the cultural and social demands of members (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005).

Applying institutional theory (DiMaggio & Powell, 1983; Luhman & Cunliffe, 2014; Najeeb, 2014), the conceptual framework conceptualizes occupational needs and culture as a social and cultural institution. Within the framework, occupational needs and cultural demands, along with other human capital risks, become environmental turbulence. Emphasis is placed on the environment not only for its strong relationship to organizational ecology, but relevance across multiple human capital related disciplines to include organizational development (Cummings & Worley, 2009; Swanson & Holton, 2009), occupational culture (Dauber et al., 2012), organizational performance (Rothwell, 2005; Tosti, 2006; Van Tiem, Moseley, & Dessinger, 2012), and human resources management (Alagaraja, 2013a; Stiles & Kulvisaechana, 2003).

Population ecology

Organizational ecology draws upon biological models of ecology as a framework for assessing how organizations form, succeed, fail, and change as a result of their environment (Carroll, 1984; Singh & Lumsden, 1990). Carroll (1984) describes three levels of organizational ecology and their accompanying approach—*organizational demography* (lowest level, developmental approach), *population ecology* (second level, selection approach), and *community ecology* (third level, macroevolutionary approach).

Population ecology provides a model for observing organizations collectively versus individually (Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015). These collectives are *populations of organizations* or a *population* (Aldrich, 1979; Carroll,

1984; Hannan & Freeman, 1977; Wei & Lin, 2015). Theoretical foundations and research questions guiding the study determine the population ecology's boundaries (Carroll, 1984).

The study's population boundary includes small or large truckload carriers and less than truckload carriers. Both large and small firms experience high turnover rates (McNally, 2016c). Shared boundaries and structures (blueprints) narrow the population's human capital to company drivers. Population ecology further postulates environment, specifically an unstable environment, predisposes an organization's viability (Aldrich, 1979; Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015).

Environmental alignment

Environmental alignment is the strategic fit between an organization's strategies and the demands of the environment (Alagaraja et al., 2015; Semler, 1997). Demands include various social and cultural pressures emanating from the environment (Carroll, 1984; DiMaggio & Powell, 1983; Hall & Taylor, 1996; Hannan & Freeman, 1977; Mischke, 2014; Oliver & Mossialos, 2005). Social institutions serve as one source of social and cultural demands and pressure (DiMaggio & Powell, 1983; Luhman & Cunliffe, 2014; Najeeb, 2014).

The environment facilitates turbulence in the form of the occupational needs and culture of professional truck drivers. Human capital risks of driver of churn generate additional turbulence for the trucking industry at the population level. The population level reflects the truckload and less than truckload sectors of the trucking industry. Environmental alignment improves retention performance when professional truck

drivers perceive congruence between the population level’s driver retention strategies and the occupational needs and culture of professional truck drivers.

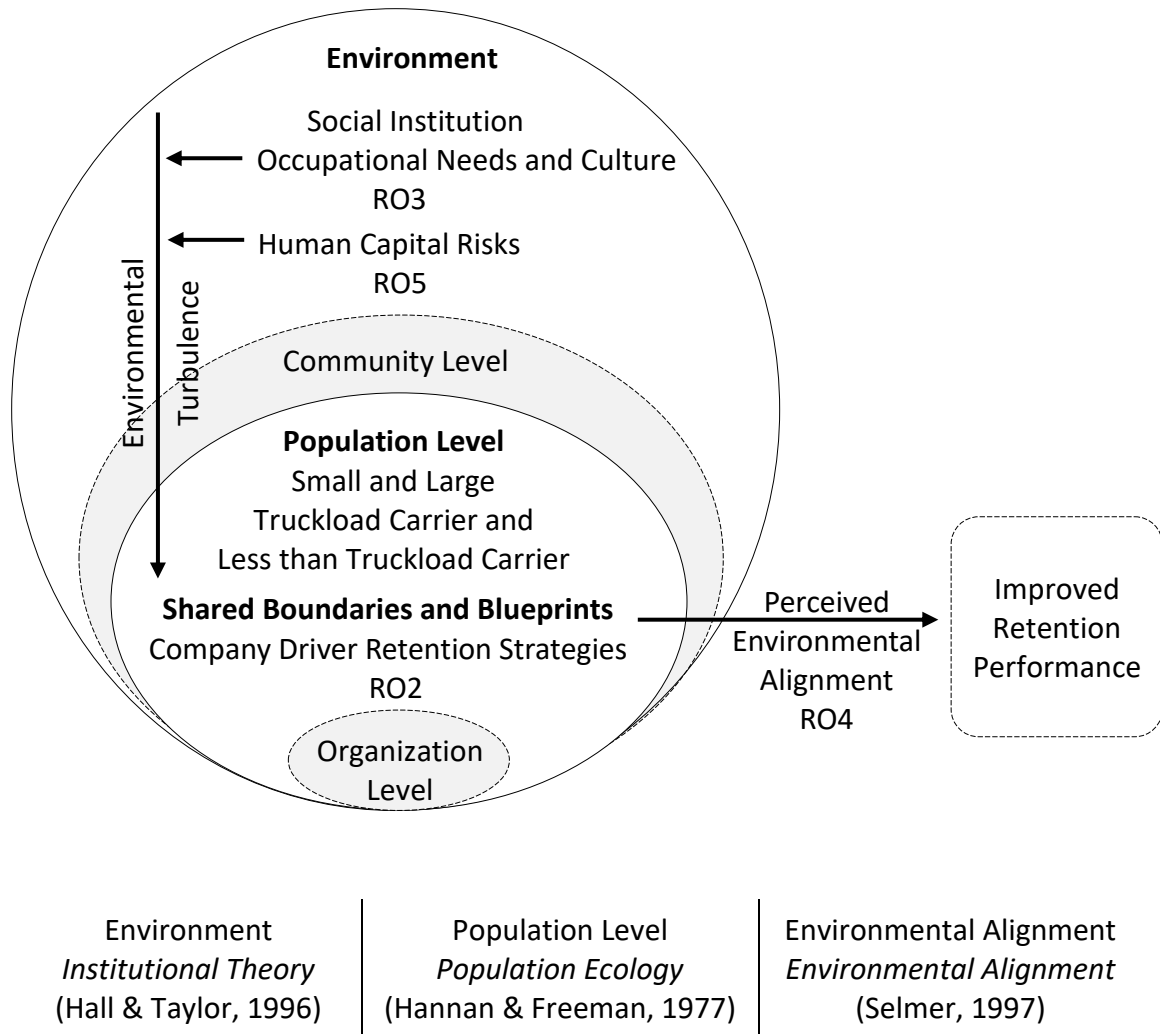


Figure 3. Conceptual framework.

Assumptions

Assumptions outline premises the study accepts as existing and operationalized as part of the study (Lunenburg & Irby, 2008). The study advances six assumptions. First, the study assumes the sample population represents the total population of professional truck drivers meeting the sample population’s criteria. Second, the study

assumes the sample population's familiarity and willingness to describe the occupational needs and culture (shared beliefs, values norms, collective perceptions, cultural forms, and practices) of professional truck drivers. Third, the study assumes the sample population's familiarity and willingness to share experiences regarding churn. Fourth, in addition to the sample population, the study assumes computer-mediated communication (blogs) further describe the occupational needs and culture of professional truck drivers and their experiences with churn. Fifth, the study assumes culture, environments, and populations of organizations remain continuous in nature. The study finally assumes the collective perceptions of the sample population meet the study's objectives.

Delimitations

Delimitations describe the study's self-imposed boundaries (Lunenborg & Irby, 2008; Roberts, 2010). The current study's delimitations include researcher defined data collection criteria and boundaries. Data collection occurred across a number of participants working for various trucking firms, as opposed to a single or predetermined list of trucking firms and participants. Data collection of public documents derived from trucking firms reflecting the Population Level of the study's conceptual framework (small or large truckload carriers; small or large less than truckload carriers). Eligible interview participants included any drivers meeting the sample criterion (company driver of a truckload or less than truckload carrier). Interviews occurred telephonically to meet the geographic diversity of the sample population and the transient nature of the sample population's work. Data collection of computer-mediated communication was limited to blogs focused on retention, churn, occupational needs and culture as perceived by

professional truck drivers. Additional delimitations include environmental alignment and occupational needs and culture boundaries.

The study explored occupational needs and culture as part of the trucking industry's shared external environment as opposed to a subculture within a single organization. The study did not explore organizational culture or any other subcultures within the internal environment of the trucking industry or a specific trucking firm. In addition, the study investigated only one type of alignment—environmental alignment as perceived by professional truck drivers meeting the sample criteria. Trucking industry and specific trucking firm perceptions remained unexplored.

Operationalized Definitions

This section provides the definition and interpretation of terms and concepts used throughout the study.

Churn. A term supported by the literature and trucking industry as a form of driver turnover occurring when trucking firms continually offer increased pay, benefits, and signing bonuses as recruitment incentives; resulting in drivers continually leaving one trucking firm for another (Costello & Suarez, 2015; Mansfield, 2014; Min, 2002; Rodriguez et al., 2000; Short, 2014).

Class 8. A single trailer vehicle with four or less axles and greater than 33,000 pounds (U.S. Department of Transportation, Federal Highway Administration, n.d.; U.S. Department of Transportation, Federal Motor Carrier Safety Administration, 2014a).

Environmental alignment. An aspect of organizational alignment reflecting congruency between an organization's vision, goals, and strategies and the demands of the environment (Alagaraja et al., 2015; Semler, 1997).

Environment. A factor to the organization that can influence, challenge, effect (experiences, values, resources, beliefs), or provide opportunities for the organization's internal environment (Dauber et al., 2012; Semler, 1997).

Freight carrier. Within this study, refers to and used interchangeably with carrier, trucking company, trucking firm, and fleet as a general reference to establishments hauling freight by truck.

For-hire carrier. A freight carrier transporting freight belonging to others (American Trucking Associations, n.d.-b; U.S. Department of Transportation, Federal Motor Carrier Safety Administration, 2014b).

Freight. Goods, products, cargo, commodities, or property other than “express and passenger baggage transported by air” (U.S. Department of Transportation, Bureau of Transportation Statistics, n.d.-a, para. 18).

Large trucking firm or carrier. American Trucking Associations' designation for truckload freight carriers with at least \$30 million a year in revenue (Costello, 2015; McNally, 2016b).

Less than truckload (LTL). Freight generally less than 10,000 pounds and less than what is required for a truckload (TL) rate (American Trucking Associations, n.d.-b; U.S. Department of Transportation, Bureau of Transportation Statistics, n.d.-b). Multiple shipments, to different locations, combine into a single truck scheduled that makes several deliveries within a network. LTL establishments are generally characterized by their network activities that include: local pickup, line-haul, destination sorting and terminal operations, local sorting and terminal operations, and local delivery (U.S. Census Bureau, 2012a).

Occupational community. A group of individuals engaged in the same type of work; identify with their work; share values, norms, and perspectives applicable to and beyond work related factors; and “whose social relationships meld the realms of work and leisure” (Van Maanen & Barley, 1982, p. 12) irrespective of geography, genetic ties, or other social factors (Tolbert, 1996; Trice, 1993; Van Maanen & Barley, 1982).

Occupational culture. Unique and shared: ideologies, beliefs, values norms, interpretations, collective perceptions, rules of conduct, linguistics, cultural forms, and practices derived from early socialization during education and training for a specific occupation, profession, or work; yet continues as a result of shared occupational, professional, or work experiences (Guzman, 2006; Schein, 2010; Schein & Scheiner, 2016; Van Maanen & Barley, 1982; Trice, 1993).

Organizational alignment. The extent to which congruency exists among an organization’s internal environment (culture, strategy, structure, operations, processes, people, leadership, systems) in achieving organizational strategic and performance goals (Alagaraja et al., 2015; Semler, 1997).

Owner-operator. Self-employed truck driver that operates a truck that the driver owns or leases (Corsi & Martin, 1982; Rose, 1987).

Professional truck driver. A person whose main job is to drive a truck with three or more axles for at least 12 months as an employee of a trucking firm; may or may not be required to unload a truck; and whose freight meets the definition of TL or LTL (Chen et al., 2015). This study excludes owner operator drivers and narrows the definition to for-hire, LTL or TL, company truck drivers.

Small trucking firm or carrier. American Trucking Associations' designation for truckload freight carriers with less than \$30 million a year in revenue (Murray, 2004).

Truckload (TL). "Quantity of freight required to fill a truck. When used in connection with freight rates, the quantity of freight necessary to qualify a shipment for a truckload rate. Usually in excess of 10,000 pounds" (U.S. Department of Transportation, Bureau of Transportation Statistics, n.d.-b, para. 14). TL trailer is generally freight going to a single location and a long distance to include travel between metropolitan areas that extend across the United States and or the borders of North American countries borders (U.S. Census Bureau, 2012b).

Summary

Deregulation of the trucking industry expanded the number of trucking firms and put into motion a nearly 40 year continuous competition to recruit and retain professional truck drivers (Berwick et al., 1998; Corsi & Martin, 1982; Griffin et al., 2000; Moore, 1983, 1986; Short, 2014). Salient research examines driver satisfaction, causes of driver turnover, and demographics contributing to driver shortages with research generally occurring at the organizational level (LeMay et al., 2013; Schulz et al., 2014; Short, 2014; D. F. Williams et al., 2017). However, human capital constructs of high driver turnover and driver shortages remain absent in research driven by human capital perspectives and factors.

Research advancing improved driver retention requires not only exploring what occurs within the trucking industry but also the trucking industry's external environment. Factors influencing retention vary with some factors directly within the trucking industry's control (strategies to retain drivers) and other factors controlled by the trucking

industry's environment (truck driver occupational needs and culture). In addition, the phenomena of churn traverses both factors as an industry induced behavior and a truck driver induced behavior.

The study sought to explore environmental alignment between the occupational needs and culture of professional truck drivers and the trucking industry's retention strategies. Attaining environmental alignment improves organizational performance and individual behavior (Alagaraja et al., 2015; Chorn, 1991; Quiros, 2009; Semler, 1997; Yamakawa et al., 2011). The study's significance stems from not only a research gap but also the direct impact of the trucking industry's success and failure on the United States economy.

The remainder of this study consist of four chapters. Chapter II reviews the constructs and literature in support of the study's theoretical foundations. In addition, Chapter II provides a primer of the trucking industry's deregulation history. Chapter III details the research methodology and design for a multi qualitative approach to include defining the field environment, data collection, and data analysis plans and processes. Chapter IV reports the results and Chapter V discusses the study's findings.

CHAPTER II – LITERATURE REVIEW

The review includes multiple source types, across multiple media but not limited to research articles, books, public sector reports, private sector reports, industry reports, and dissertations. Multiple sources contribute to a literature review's representation and legitimation (Onwuegbuzie, Leech, & Collins, 2012). The review begins with the study's central theoretical foundation and perspective of human capital, ecological paradigm, environment, institutional theory, occupational culture, environmental alignment, and an examination of the interplay between performance and ecological foundations. The review concludes with a historical primer for understanding the systemic nature of the trucking industry's human capital challenges and retention efforts to reduce those risks.

Human Capital

Since Becker's (1964) conception of firm specific and general forms of human capital, research continues to expand and contrast interpretations of human capital. Pasban and Nojehdeh (2016) broadly describe human capital as anything not considered physical capital. Crook et al. (2011) narrow the definition to recognition of the knowledge, skills, and ability within people. Organization, economic, and labor research includes comparing and contrasting value and capabilities of human capital by typologies of industry specific human capital, firm specific human capital, and occupational human capital (Lagoa & Suleman, 2016; Mayer, Somaya, & Williamson, 2012; Nawakitphaitoon, 2014; Sullivan, 2010).

Human capital should generate more value than it costs to acquire and develop (Chakravorty, 2012). Human capital continues its prevalence in providing value at both the management and individual levels of an organization (Crook et al., 2011; Nemati,

Bhatti, Maqsal, Mansoor, & Naveed, 2010). Investing in human capital results in favorable organizational performance and individual performance (Crook et al., 2011). Not as common, yet continually explored, is human capital as a performance element on a macro level (Wei & Lin, 2015). Ecological perspectives of organizational development provide constructs for exploring the interplay between organization, human capital, and environment on a macro level (Wei & Lin, 2015). The next three sections review modern interpretations of the organization-environment relationship to include population ecology, institutional theory, and resource dependence theory. Hatch and Cunliffe (2013) describe these three theories as among the most influential on modern perspectives for understanding the environment's influence on how an organization operates.

Ecological Paradigm

Ecological paradigm introduces the premise that organizations, like organisms, expose themselves to environmental influences (Wei & Lin, 2015). Organizations with similar resource needs and structures, access the same external environment for resources (Carroll, 1984; Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014) to include human capital (Wei & Lin, 2015). Finite resources induce competition within and among organizations (Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014). Additional relevancies of environment, from an ecological perspective, are threefold.

First, organizations depend on resources to operate. The environment becomes a significant supplier of valued resources. Multiple communities and populations share the same environment prompting competition for a limited number of resources (Aldrich,

1979; Carroll, 1984; Hannan, 2005; Hannan & Freeman, 1977; Heine & Rindfleisch, 2013; Pfeffer, 2003; T. Watson, 1995; Wei & Lin, 2015).

Second, the environment facilitates the natural selection process. Different environmental constructs, factions, and competition, precipitate *natural selection*. Natural selection, decides who among the communities and populations of organizations benefit from and have access to resources provided by the environment (Aldrich & Pfeffer, 1976; Carroll, 1984; Hannan, 2005; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013; Heine & Rindfleisch, 2013; Pfeffer, 2003; T. Watson, 1995; Wei & Lin, 2015). Ultimately, only the most competitive organizations survive (Aldrich & Pfeffer, 1976; Carroll, 1984; Hannan, 2005; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013; Heine & Rindfleisch, 2013; Pfeffer, 2003; T. Watson, 1995; Wei & Lin, 2015).

Organizational adaptation provides the third reason for exploring environment from an ecological perspective. The environment is rarely stable nor does it remain the same. Competitive advantage strengthens when organizations adapt to fluctuating pressures and demands of the environment (Carroll, 1984; Chakravorty, 2012; Hannan & Freeman, 1977; Heine & Rindfleisch, 2013; Pfeffer, 2003; T. Watson, 1995).

Incorporating organizations as open systems, an ecological paradigm provides a framework for understanding how organizations interact, adapt, and compete in response to varying environmental pressures and constructs (Aldrich, 1979; Carroll, 1984; Hannan, 2005; T. Watson, 1995). The remainder of this section outlines the three levels of organizational ecology (organizational demography, population ecology, community ecology) with an emphasis on Hannan and Freeman's (1977) interpretation of population ecology.

Organizational Ecology

Described as a decedent of human ecology, organizational ecology adapts biological evolutionary models as a means for interpreting, assessing, and evaluating organization interaction (success and decline) with the environment (Carroll, 1984; Hannan, 2005; Heine & Rindfleisch, 2013). The organizational ecology framework culminates in three concentric circles of ecology nested within each other. The smallest circle is organizational demography, population ecology is the next largest circle followed by the largest circle labeled community ecology (Carroll, 1984; Freeman & Audia, 2006; Hannan & Freeman, 1977).

Organizational demography

Organizational demography, also referred to as the organizational level (Carroll, 1984; Faulkner & Campbell, 2002), is the lowest level (in terms of scale, not relevance) of organizational ecology analysis (Carroll, 1984). Metaphorically, the organization level is the embryotic level of organizational ecology (Carroll, 1984). Assessment of organization-environment interaction occurs at the singular organization level from a developmental perspective (Carroll, 1984). Developmental attributes include the organization's life-cycle progression and demographic events (Carroll, 1984). Organizational change is the result of "structural pressures and constraints" (Carroll, 1984, p. 73). External environment and internal environment coexist as sources of pressure and constraint (Carroll, 1984; Faulkner & Campbell, 2002; Hannan & Freeman, 1977). Organizational demography's development approach closely resembles traditional methods of assessing and developing organizations on an individual basis.

Hannan and Freeman's (1977) interpretation of population ecology challenges this approach (Carroll, 1984).

Population ecology

Population ecology assesses organization-environment interaction from an isomorphic perspective (Carroll, 1984; Faulkner & Campbell, 2002; Hannan & Freeman, 1977). An aggregate of organizations (populations of organizations), with similarities in resource needs, structure, or industry, share a population ecology (Carroll, 1984; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013). Populations of organizations display a semblance of similarity; some unifying characteristics. One unifying characteristic is a shared environmental vulnerability (Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013). Blueprints or structure further defines similarities of how each member of the population processes inputs into outputs (products, services).

Populations of organizations resemble similar blueprints. Blueprints depict the organization's formal structure, how tasks are accomplished and by whom (Aldrich & Ruef, 2006; Hannan & Freeman, 1977). In addition, blueprints reflect methods of organizing as agreed upon by population members and segments (Aldrich & Ruef, 2006; Hannan & Freeman, 1977). Systems boundaries (i.e., geography, politics, and industry conditions) further refine populations of organizations (Hannan & Freeman, 1977; Hatch & Cunliffe, 2013). Eventually the population level resembles organizations sharing a common blueprint within a specific system boundary (Aldrich & Ruef, 2006; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013).

Central to population ecology are isomorphism and selection or natural selection (Carroll, 1984; Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Luhman &

Cunliffe, 2014; T. Watson, 1995). Over time, populations of organizations become similar in structure and processes (isomorphism). As a result, organizations look for a competitive advantage by separating themselves from the rest of the population (Carroll, 1984; DiMaggio & Powell, 1983; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014; T. Watson, 1995). Developing a competitive advantage primes organizations to compete for limited resources and survive. Selection approach (essentially survival of fittest or evolutionary theory) is the method for which an organization will either grow competitively or cease to exist (Carroll, 1984; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014).

Niche theory advances social organizations, in equilibrium, display structures in response to the stability or instability of the environment (Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013). Hannan and Freeman (1977) offer a *generalist* structure as optimal for an array of environmental configurations (Faulkner & Campbell, 2002; Hatch & Cunliffe, 2013). Generalist structures evolve out of niche theory. Organizations should posit *specialized* structures only when the environment is stable and certain (Faulkner & Campbell, 2002; Hannan & Freeman, 1977). Each population reflects its own, distinct niche based on the condition of the environment, providing a critical component of population ecology. Success within a population of organizations hinges on an organization capitalizing on a generalist or specialist structure in response to what the environment projects (Faulkner & Campbell, 2002; Hannan & Freeman, 1977; Nemati et al., 2010).

Criticism of population ecology and research implications. Criticism of Hannan and Freeman (1977) include their emphasis on natural selection as the predominant

determinant of an organization's survival (Carroll, 1984). However, population ecology still serves to predict "net mortality (deaths over births)" from a collective perspective as opposed to survival of an individual organization (Carroll, 1984, p. 75).

Hatch and Cunliffe (2013) observe population ecology's boundaries extend beyond a single organization's boundary. This difference in boundaries makes population ecology difficult for assessing factors outside the organizations sphere of management. However, population ecology purposefully avoids single organizational analysis (Carroll, 1984; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013).

Organizational demography provides an ecological perspective of assessment at the organizational level (Carroll, 1984).

Other criticisms center around Hannan and Freeman's (1977) assertion that organizations of all sizes provide value when studying organizations within a population ecology. Some critics argue selection only applies to smaller organizations given large organizations have greater control and rarely fail (Carroll, 1984). Hannan and Freeman (1977) refute these criticisms by pointing to research supporting significant failure rates of large and older organizations.

Natural selection is criticized for its limited applicability to "competitive, market-based industries" (Carroll, 1984, p. 75); not all organizations place emphasis on competition (Hatch & Cunliffe, 2013). Hatch and Cunliffe (2013) suggest institutional theoretical foundations for populations comprised of a small number of large organizations; populations with high barriers to entry and establishment costs; or populations heavily regulated. However, the population paradigm applies to various organizational forms and sizes irrespective of industry or market (Carroll, 1984). This

includes learning institutions. As with other organizations, learning institutions with similar resource needs (students, educators), structure (large, small, rural, urban) form and compete within their respective population ecology (Carroll, 1984).

Other perspectives of organization-environment interaction include viewing organizations through limited historical contexts (Carroll, 1984). Carroll (1984) advances selection as well suited to explain how a population of organizations or industry evolves over time. Explanations include why one segment of an industry grows or fails in comparison to its similarly situated counterparts (population ecology). In addition, selection provides the conditions (environment, competition) under which growth and failure occur (Carroll, 1984). Carroll (1984) uses the automobile industry as an example. Between 1903 and 1924, 180 automobile manufacturers existed (Carroll, 1984). Yet in 1910 alone, over 200 automobile manufacturers were in business (Carroll, 1984). Population ecology would argue how the manufacturers responded to external constraints, competition within the population ecology, and selection determined why some manufacturers succeeded and why others failed over the same time period (Carroll, 1984; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014; T. Watson, 1995).

Population boundaries are another area of disagreement, even among those subscribing to organizational ecology. Hannan and Freeman (1977) advocate ecological theoretical perspectives permitting and encouraging a study's research questions to determine the boundaries of the population under study (Carroll, 1984). The research question determines the shape, form, and description of the population ecology under study (Carroll, 1984). Hannan and Freeman (1977) limit any given population ecology boundaries to "a specific substantive or theoretical research problem" (Carroll, 1984, p.

78). Shared environmental vulnerability (Carroll, 1984) and blueprint (Hannan & Freeman, 1977) further classify organizations selected for the population ecology. Hannan and Freeman (1977) argue no need to predetermine and limit what may serve and define the blueprint for the given population ecology under study (Carroll, 1984).

Alternative views suggest organizational ecology first require a classification and empirical taxonomy for determining populations of organizations (Carroll, 1984). The argument accurately challenges the generalizability of research conducted under Hannan and Freeman's (1977) model of population ecology (Carroll, 1984). Carroll (1984) challenges Hannan and Freeman (1984) through an example in which Hannan and Freeman (1984) assert results of a complex model for restaurants as applicable to a variety of organizations including non-restaurants. Carroll (1984) observes such assertions increase skepticism of Hannan and Freeman's (1977) population ecology model. Furthermore, research lacking generalizability impedes theory building (Carroll, 1984).

Ontologically, Hannan and Freeman (1984) tend to equate organizational form with organizational strategy, under the guise that with each distinct organizational form comes a distinct organizational strategy (Carroll, 1984). Carroll (1984) argues Hannan and Freeman's (1984) ontology "assumes a tighter coupling between form and strategy than is justifiable" (p. 79). Hannan and Freeman's (1984) ontology fails to clearly distinguish organizational form from organizational strategy. Forms serve as "specific blueprints for organizational action" (Carroll, 1984, p. 79). Strategy as blueprint occurs "at a higher level of abstraction; blueprints encompass concepts such as specialists and generalists, each of which normally includes a number of disparate forms" (Carroll, 1984,

p. 79). However, restrictive classification and taxonomy limit what makes for an organizational form and presumes all organizations as easily assigned to a predetermined form (Carroll, 1984).

Reconciling the two ecological theoretical perspectives, Carroll (1984) suggests a pragmatic approach. Rather than exclusive subscription to either perspective for determining population boundaries, identify and attempt to explain anomalies in the findings as they occur. Researchers should decide if critical differences exist between the sample and the comparison group yielding different results. This does not discount the value of classifying organizations. However a taxonomy of organizations does not provide the same value to organizational research as taxonomy provides bioecology research (Carroll, 1984). Taxonomy provides biological studies a way to identify species unfamiliar to the researcher; taxonomy provides context for species external to experiences. Studying organizations are different. Researchers routinely work, live, and participate in organizations and thus conduct research within a personal frame of reference (Carroll, 1984). Additional time describing organizational data furthers understanding of anomalies and increases the generalizability of organizational ecology based research (Carroll, 1984).

Community ecology

Community ecology encompasses all populations, within a given region, living together. Assessment at this level is concerned with the “emergence and disappearance of organizational forms” (Carroll, 1984, p. 72). Community ecology enlists what Carroll (1984) describes as macroevolutionary. Population ecology advances the rise and fall of organizations which results from natural selection. Whereas macroevolutionary assesses

largescale changes within communities of organizations to include describing the “rise and fall of organizational forms” (Carroll, 1984, p. 77). Selection at the community level is the result of organizational forms emerging and surviving against form elimination (Carroll, 1984).

The preceding section outlined an ecological paradigm dependent upon organizational ecology’s three levels of analysis—organization, population, and community with emphasis placed on population ecology. Despite efforts to increase research on community and organizational ecological levels, population level prevails among organizational ecology research (Carroll, 1984; Freeman & Audia, 2006). The next section provides perspectives, dimensions of environment in addition to who and what constitutes environment and its subsequent influence on the environment’s relationship with organizational forms.

Environment

The complexity of relationships and interactions between environment and organizational forms increases the need to understand how organizational forms and boundaries interpret and respond to pressures, needs, and demands of the environment (Luhman & Cunliffe, 2014). Environmental boundaries, interpretation and response differ depending on the discipline. Cummings and Worley’s (2009) organizational development perspective specifies general environment as “all external forces and elements that can influence an organization and affect its effectiveness” (p. 94).

Other organizational development perspectives describe environment as a major external input and power (cultural, political, and economic) that affects achieving strategic goals, resources, customers, and competitors (Cummings & Worley, 2009;

Swanson & Holton, 2009). Organizational culture literature defines environment as all things outside the boundary of the organization for which the organizations need to adapt towards (Dauber et al., 2012). A population ecology's environment includes social and regulatory pressure points, for example affirmative actions, minimum wage, occupational safety, and licensing laws. Pressure points heighten an environment's instability (Hannan & Freeman, 1977).

Within the boundaries of human capital, performance, and population ecology, Wei and Lin (2015) define environmental pressure as all external factors effecting an organization's life and survival. When viewed across multiple boundaries and disciplines, environmental pressure exists as a microcosm of the environment's efforts to influence and place demands on organizations and industries. These efforts come in varying forms and sources of social pressure, turbulence, resources, and competition (Aldrich, 1979; Aldrich & Pfeffer, 1976; Carroll, 1984; Cummings & Worley, 2009; Dauber et al., 2012; Frączkiewicz-Wronka & Szymaniec, 2012; Hannan & Freeman, 1977; Hatch & Cunliffe, 2013; Heine & Rindfleisch, 2013; Lawrence & Lorsch, 1967; Luhman & Cunliffe, 2014; Mullins, 2005; Pfeffer, 2003; Rothwell, 2005; Van Tiem et al., 2012; T. Watson, 1995; Wei & Lin, 2015). Theoretical foundations and aspects of environmental turbulence, institutional theory, competition theory, and resource dependence theory provide structure for parsing sources of environmental pressure.

Environmental turbulence

Operationally, environmental turbulence describes an increasingly complex, threatening, dynamic, heterogeneous and hostile, continually changing, and dramatic external environment (Morris & Jones, 1995; Zaidi & Othman, 2015). Turbulence places

systems in a permanent and continuous state of transition (Baburoglu, 1988). Sources of turbulence include an increase in organizations seeking short-term goals with limited resources in support of research and development (Trist, 1978).

Aldrich (1979) and Emery and Trist (1965) further describe environmental turbulence as the degree and rate of the environment's interconnectedness. Interconnectedness becomes the premise of early theoretical conceptions of environmental turbulence. Emery and Trist's (1965) causal texture model of environments is often attributed as the basis for future models and interpretations of environmental turbulence (Aldrich, 1979; Aldrich & Pfeffer, 1976; Azem, 2015; Baburoglu, 1988; Boyne & Meier, 2009; White, Crino, & Kedia, 1984).

Returning to biological influences in organizational development, Emery and Trist's (1965) observe that survival of living organisms requires the organism to ingest part of its environment. Once ingested, environmental materials transform based on the organism's internal characteristics. Transformed materials export back out to the environment. This import/export process provides the organism with energy, viability, and stability, which reflect the organism's level of adaptability to environmental variance and turbulence (Emery & Trist, 1965).

Emery and Trist's (1965) model is a four level taxonomy of an organizational environment with each level increasing in complexity. Each level reflects an organization's level of ingestion and in turn adaptably to each type of external environment. Emery and Trist's (1965) four levels are explored further with reference to Aldrich's (1979) adaptation Emery and Trist's (1965) model.

Emery and Trist's (1965) first environmental type is *placid, randomized environment*. Negative and positive attributes of the environment are evenly distributed. Placid environments call for a simple, local organizational response without deference to the response as strategic or tactical. This low response level eventually becomes uncondusive as Emery and Trist's (1965) levels of environment increase. Similar to Emery and Trist (1965), Aldrich's (1979) *stable, dispersed environments* is stagnant. Aldrich (1979) observes stable environments, with a lack of casual connections, are of little informational value to organizations.

Emery and Trist's (1965) second environment, *clustered environments*, remains placid but with negative and positive attributes of the environment clustered. Organizational responses becomes strategic or tactical. No longer are strategy and tactic interchangeable. Organizations decide between facing or ignoring turbulence. Either option has potential reward for the organization (Emery & Trist, 1965).

Aldrich (1979) terms his second level *stable, concentrated environments*. Recourses cluster. Living organisms, that recall where resources cluster, gain an advantage. The same advantage applies to organizations with knowledge of where desired resources exist. The advantage lies in not spending time in search of needed resources (Aldrich, 1979).

The third level, *distributed-reactive environment*, describes environments that reflect organizations with similar characteristics. These characteristics become the environment's identity. Organizations within the environment know and share each other's strengths and weaknesses. Strategic responses help the organization achieve

long-term objectives whereas tactics provide for an immediate response to the environment (Emery & Trist, 1965).

When *distributed-reactive environments* emerge, organizational planning should become *proactive*. Proactive modes convey organizations as future oriented; the future holds greater promise than the past or present (Trist, 1978). Strategy is one of predicting and preparing for when opportunities may occur and capitalizing on them (Trist, 1978).

As populations of organizations increase, *stable, concentrated environments* morph into Aldrich's (1979) third level—*unstable, concentrated environments*. Increased competition equals increased instability. Strategies devised during placid environments become ineffective. The connection between strategy and desired performance disrupts. Successful responses include tactics, reactions, and counteractions dissimilar to an organization's competitors (Aldrich, 1979).

Emery and Trist's (1965) *turbulent fields* is the fourth and most complex environment. Turbulent fields are dynamic. Turbulence occurs on two fronts—interactions within the field and the field's interaction with the organization. Three factors determine turbulent fields—increase in organizations within a distributed-reactive environment, increasing interdependence between social and economic factors, and dependence on research and development to gain a competitive advantage (Emery & Trist, 1965).

Unstable, concentrated, and turbulent environments, is Aldrich's (1979) fourth and final level. All organizations are in flux and increased uncertainty in the rules dictate environmental changes (Aldrich, 1979). Methods of combating this environment include

consensus within the environment and effective “environmental monitoring, screening, and information-processing systems” (Aldrich, 1979, p. 73).

Some research suggests Emery and Trist’s (1965) early work eludes to a fifth level (Azem, 2015; Baburoglu, 1988; McCann & Selsky, 1984). The fifth level, *vortical environment*, occurs when the environment becomes extremely complex, persistently turbulent, and the organization’s response to turbulence becoming maladaptive (Azem, 2015). Baburoglu (1988) suggests a vortical environment for organizations who purposely select maladaptation as a response to turbulence. In essence, the organization or system seals “itself off through the processes of stalemate, polarization, and dogmatism from environmental influences and impacts” (Baburoglu, 1988, p. 207).

Building on Emery and Trist (1965), Selsky, Goes, and Baburoglu (2007) suggest a *socioecological* or *social ecology* perspective of turbulence and an organization’s subsequent response. The variable under analysis “is a shared field of interorganizational action” (Selsky et al., 2007, p. 73). The *field* or point of social intersection is a shared interest in a policy or social issue. At the apex of the field, social actors (members) engage in complex interactions with other social members affiliated with the social issue (Selsky et al., 2007). External influences on social member and social member interactions within the field, generates Emery and Trist’s (1965) causal texture. Causal texture affects the behavior of each system within the field (Selsky et al., 2007).

As field interactions evolve, so does turbulence, competition, and ultimately a distributed-reactive environment. The extent and nature of social member interactions depends on the type of shared field. Institutional theory provides a theoretical foundation for understanding types of social fields and the types of fields they share.

Institutional theory

Institutional theory posits the environment places both social and cultural pressure and demands on organizations (Luhman & Cunliffe, 2014). Institutional theory perspectives include analysis of social and cultural pressures at the organizational level and at the institutional level (DiMaggio & Powell, 1983; Luhman & Cunliffe, 2014; Najeeb, 2014). The institutional level or organizational field comprise an aggregate of organizations with a shared “institutional life” of “key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio & Powell, 1983, p. 148). The organizational field emphasizes *structural equivalence* and *connectedness* among its institutions (DiMaggio & Powell, 1983).

Similar to Hannan and Freeman’s (1977) shared boundaries and blueprints for determining populations of organizations, DiMaggio and Powell’s (1983) *structural equivalence* refers to similarities in organizational structures, domains, and coalitions among institutions. Exchanges and transactions within the organizational field determine levels of connectedness. Exchanges and transactions occur formally and informally for example, agreed upon contractual activities between organizations, individuals sharing membership and participation within a professional organization, or personnel sharing and moving within the same organizational space (DiMaggio & Powell, 1983). Institutional theory also emphasizes isomorphism from a cultural perspective; the more the environment penetrates organizations, the more organizations become alike (Alvesson, 2002).

Defining types of institutions and their influence on member behavior, decision-making, and outcomes, is the first step to suggesting a specific group, organization, community, or profession constitute an organizational field. Behavioral perspectives of institutional theory reflect three views of thought —historical institutionalism, rational choice institutionalism, and sociological institutionalism (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005). Each of these perspectives of a unique influence on member behavior.

Historical institutionalism. Historical institutionalism also known as path dependency (Oliver & Mossialos, 2005) explores the distribution of power (formal or informal processes, norms, routines) and power relationships embedded within an institution's structure (Mischke, 2014). Historical institutionalism presumes uneven power in decision making among the institution's social groups (Mischke, 2014). Informal procedures and norms, inherent to the organizational structure of the political economy, favor some social groups while disenfranchising others (Hall & Taylor, 1996; Oliver & Mossialos, 2005). Power inequities promote social group rivalries (Mischke, 2014). Institutional power becomes path dependent and member behavior becomes calculated and culturally motivated (Mischke, 2014). Criticism of historical institutionalism includes a lack of a clear theoretical framework giving rise to rational choice institutionalism (Oliver & Mossialos, 2005).

Rational choice institutionalism. Rational choice institutionalism's theoretical foundations include modern welfare economics and game theory (Oliver & Mossialos, 2005). Rational choice institutionalism originally derives from behavior exhibited by political actors who view "politics as a series of collective-action dilemmas" (Hall &

Taylor, 1996; Mischke, 2014, p. 27; Oliver & Mossialos, 2005). Individual actors have a fixed and predetermined set of preferences and gains (Mischke, 2014; Oliver & Mossialos, 2005). Institutions devise information streams and institution enforcement mechanisms to regulate member behavior and reduce collective action dilemmas among members (Mischke, 2014; Oliver & Mossialos, 2005). Member behavior becomes strategic and calculated as a means for achieving predetermined preferences (Mischke, 2014; Oliver & Mossialos, 2005). Member behavior and preferences serve as the basis for forming a rational institution and the institution realizing its desired gains (Mischke, 2014).

Sociological institutionalism. Sociological institutionalism is the third view of institutional theory. Sociological institutionalism's theoretical foundation relies heavily on cultural embeddedness (Oliver & Mossialos, 2005). Cultural embeddedness views institutions as a set of "culturally specific practices" (Oliver & Mossialos, 2005, p. 19). Sociological institutionalism provides cultural perspectives for identifying and describing institutional forms and procedures (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005). Sociological institutionalism suggests how culturally based institutions influence individual member behavior (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005).

What constitutes a sociological institution is rather broad (Hall & Taylor, 1996; Mischke, 2014). Hall and Taylor (1996) outline three distinct tenants of a sociological institution. First, sociological institutions reflect more than a set of procedures, norms, or formal rules. Sociological institutions include moral guidance, cognitive scripts and symbol systems providing the "frames of meaning guiding human action" (Hall &

Taylor, 1996, p. 947). Culture becomes an institution with a network of symbols, scripts, and routines providing models for member behavior (Hall & Taylor, 1996).

The second tenant of sociological institution provides two viewpoints for interpreting the relationship between institution and individual member behavior. The first and more traditional view is *normative dimension* (Hall & Taylor, 1996). Individual member behavior is the result of internalizing institutional roles and norms of behavior (Hall & Taylor, 1996). The second view includes the more contemporary *cognitive dimension* (Hall & Taylor, 1996). Institutions provide cognitive scripts and models to guide individual member behavior, help members visualize what they should do within a given circumstance, and provide guidance for interpreting the behavior and actions of others (Hall & Taylor, 1996). Neither normative dimension nor cognitive dimension preclude institutional members establishing their own goals or consciousness (Hall & Taylor, 1996). But, sociological institutionalist argue individually formed “rational action” is “socially constituted” (Hall & Taylor, 1996, p. 949).

The third and final tenant of sociological institutions suggests how an institution’s practices originate and change. Sociological institutions predicate practices, forms, and change on constructs that enhance the social legitimacy of the institution or its members (Hall & Taylor, 1996). Cultural environments value social legitimacy (Hall & Taylor, 1996). Legitimacy becomes a competitive advantage when populations of organizations interact with and respond to social and cultural environmental pressures (Dauber et al., 2012; DiMaggio & Powell, 1983; Hannan, 2005; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014; Pfeffer, 2003). Institutional theory has its detractors.

Alvesson (2002) argues “so-called institutional theory” marginalizes “local meaning creation” given that organizations are exposed to the same environment, receiving the same influences, and as a result deriving similar meaning and interpretation of those influences (p. 156). Institutional theory advances a simplistic paradigm of meaning; not allowing for a unique organizational level interpretation of external influences (Alvesson, 2002). In addition, institutional theory emphasizes standard, structural aspects of organizations (policies, techniques, forms) as opposed to subtle and “specific meaning-creating process and symbolism” (Alvesson, 2002, pp. 155–156). Institutional theory’s lack of interpretation and cultural depth may advance organizational culture as homogenous (Alvesson, 2002). However, Alvesson (2002) capitulates institutional theory’s value in affirming macro perspectives of meaning creation. Alvesson (2002) also affirms institutional theory brings value to research that recognizes the need to go beyond organizational boundaries in order to understand macro reflections of culture on organization operations.

The environment’s influence extends beyond the pressures and demands of social institutions. The environment has the power to moderate competition for finite resources to include human capital. Competition for resources held by the environment becomes a central organizational activity. Further understanding of this activity requires a review of competition theory.

Competition theory

Competition theory supports both organizational ecology (Aldrich, 1979; Carroll, 1984; Hannan & Freeman, 1977) and the paradigm of environment-organization interaction (Frączkiewicz-Wronka & Szymaniec, 2012; Luhman & Cunliffe, 2014;

Pfeffer, 2003; Wei & Lin, 2015). Multiple environments impose inconsistent demands on organizations giving way to competition theory and Hannan and Freeman's (1977) ecological model of competition.

Hannan and Freeman (1977) assume resources available to an organization are "finite and fixed" (p.941). Resources include community prosperity and a variety of occupation skills (Hannan & Freeman, 1977). When identical environmental resources serve two populations of organizations with similar recourse needs, population members with characteristics that align with environmental contingencies likely face elimination (Hannan & Freeman, 1977).

Population members, without a competitive advantage, remain isomorphic in how they respond to the environment (Abatecola, 2012; Carroll, 1984; Hannan & Freeman, 1977; Heine & Rindfleisch, 2013). This becomes problematic when the environment turns turbulent or unstable (Aldrich, 1979; Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015 limited). Isomorphism also becomes problematic when the population ecology grows (births) and external resources (human capital) become limited (Aldrich, 1979; Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015). Organizations unable to successfully compete for resources, become dependent upon the environment to select them among similar firms or eventually incur the ecological equivalence to death (Aldrich & Pfeffer, 1976; Carroll, 1984; Hannan & Freeman, 1984; Wei & Lin, 2015).

Within populations, competition can occur based on organization size. Hannan and Freeman (1977) advance small organizations compete with other small organizations. This does not preclude small organization and medium organization competition within the same population. In the end, large organizations generally dominate the populations

of organizations. However, dominance within one population or in response to a specific environment condition does not affirm this level of performance continues (Hannan & Freeman, 1984). Eventually, even large organizations fail. Hannan and Freeman (1977) make these observations in support of studying small organizations as part of a population ecology.

The addition of organizations to populations of organizations depends upon the availability and amount of remaining resources. Greater resource capacity equates to faster growing populations of organizations. Resource dependence theory and resource based view provide greater understanding for how organization's depend on the environment for human capital resources while simultaneously trying to maintain and cultivate existing human capital resources.

Resource dependence theory

Historical interpretations and definitions of resource dependence theory and resource based view make clear distinctions between these two constructs. Although different, the two complement each other depending on the theoretical framework (Frączkiewicz-Wronka & Szymaniec, 2012; Yamakawa et al., 2011). Theoretical frameworks that include both, find it prudent to compare and contrast them as a means for understanding their uniqueness (Frączkiewicz-Wronka & Szymaniec, 2012). Research including both continues to grow (Yamakawa et al., 2011). These reasons provide the basis for beginning this section comparatively defining both resource dependence theory and resource based view with the remainder of the section focused on resource dependence theory. This chapter's discussion of human capital, ecological foundations, and performance further reviews resource based view.

Resource dependence theory versus resource based view. Frączkiewicz-Wronka and Szymaniec (2012) offer two perspectives on why some organizations succeed while other's fail. The first perspective puts great emphasis on an organization's environment. The organization's competitive stance, within a given industry, guide organizational performance strategies. Within the structure-conduct-performance paradigm, organizational strategy begins outside of the organization and works its way in. The environment is a source of and in possession of resources, the organization wants; giving rise to resource dependence theory (Frączkiewicz-Wronka & Szymaniec, 2012).

Frączkiewicz-Wronka & Szymaniec (2012) second perspective is resource based view. Resource based view seeks a competitive advantage from resources already within the organization (Frączkiewicz-Wronka & Szymaniec, 2012; Nemati et al., 2010; Newbert, 2007). Under the guise of resource based view, organizations assess existing resources for valuable skills and capabilities difficult for competitors to replicate or obtain (Frączkiewicz-Wronka & Szymaniec, 2012; Wei & Lin, 2015). Valuable recourses include human capital (Gnyawali & Offstein, 2008; Wei & Lin, 2015). Performance strategy development begins within the organization and works its way out. In other words, resource based view focuses on interorganisational relationships whereas resource dependence theory centers on intraorganisational relationships (Frączkiewicz-Wronka & Szymaniec, 2012).

Yamakawa et al. (2011) observe several movements in resource based view research. The prescriptive nature of limiting resource based view to the internal confines of an organization verge on viewing organizations as closed systems. Research is beginning to acknowledge the complexity in trying to compartmentalize resource based

view and resource dependence theory within non-static open systems. There is greater recognition of the expanding social and economic relationship between organization and environment. There are also calls to bridge traditional resource based view with relational perspectives (Yamakawa et al., 2011).

Resource dependence theory. As a theoretical foundation of the organization-environment relationship, resource dependence theory aligns with the organizational ecology perspective that organizations rely heavily on their environment for resources (Hatch & Cunliffe, 2013; Luhman & Cunliffe, 2014). Resources provide a competitive advantage by neutralizing threats and creating opportunities to outperform competitors (Frączkiewicz-Wronka & Szymaniec, 2012). Opportunity resources build competencies in support of co-optation (Frączkiewicz-Wronka & Szymaniec, 2012). Frączkiewicz-Wronka and Szymaniec (2012) define co-optation as “an attempt to acquire power by minimizing the organization’s dependence on external factors and/or institutions and maximizing the dependence of an environment on a particular organization” (p. 18).

Often efforts are placed on maximizing existing resources with little attention on the issue of obtaining resources from the environment (Frączkiewicz-Wronka & Szymaniec, 2012). Subscribing organizations as open systems, as the case with organizations subjected to changing and complex environments (Cummings & Worley, 2009; Swanson & Holton, 2009) and population ecology (Swanson & Holton, 2009; T. Watson, 1995), also requires subscribing to organizations as non-self-sufficient and continuously engaging with the environment (Frączkiewicz-Wronka & Szymaniec, 2012; Pfeffer, 2003). The environment as a source for resources is not problematic but rather the disruptive nature of the environment for instance social pressures, new and existing

industry members, and competition for similar human capital (Frączkiewicz-Wronka & Szymaniec, 2012). Disruption comes in many forms including succumbing to the influences of social sectors and pressures (Frączkiewicz-Wronka & Szymaniec, 2012; Hatch & Cunliffe, 2013; Pfeffer, 2003).

The environment's social sector consists of social movements, educational systems, lifestyles, and professions (Hatch & Cunliffe, 2013). Social pressures results from social sectors with access to resources critical to the organization (Frączkiewicz-Wronka & Szymaniec, 2012; Pfeffer, 2003). Linking back to resource dependence theory, it behooves organizations to build strong, working relationships with external groups that either control or have influence over needed resources (Frączkiewicz-Wronka & Szymaniec, 2012). The greater the resource, the greater the influence of the external social construct (Frączkiewicz-Wronka & Szymaniec, 2012). Influence includes refusing access to any resources (Frączkiewicz-Wronka & Szymaniec, 2012). Organizational survival hinges on a balanced response to environmental demands (Pfeffer, 2003).

The occupational community precipitates occupational culture as a sociological institution, influence on individual behavior, and a source of social pressure on populations of organizations. The occupational community becomes a nest for incubating the community's occupational culture. Providing how occupational culture translates into a sociological institution, establishes occupational culture as a valid source of external social pressure on populations of organizations. Occupational culture's influence on individual behavior and decision making is further established. The preceding argument continues below with an introduction to occupational community and occupational culture followed by establishing occupational culture as a sociological

institution, and conceptions of occupational culture's influence on individuals. The section concludes with research supporting occupational culture as a construct for researching industries with high human capital risks.

Occupational Culture

Van Maanen and Barely's (1982) observe organizational research rarely accounts for individuals as other than another domain within the organizational structure. Early literature regards individuals as an "employee" or defines individuals by the nature of their work as opposed to their occupation (Van Maanen & Barley, 1982, p. 2). Searching for a model providing greater depth for understanding why people behave the way they do at work, Van Maanen and Barely's (1982) offer the construct of occupational community. Watson (1995) defines occupational communities as "a form of local social organization in which people's work and non-working lives are both closely identified with members of the occupation in which they work" (p. 229). Schein (2010) offers occupational communities forming based on commonalties within an industry. Occupational communities form within or cut across organizations (Schein, 2010).

Similar to other communities, occupational communities have their own boundaries, social relations, social identity, and reference group (Van Maanen & Barley, 1982). The reference group conveys the occupational community's shared values, beliefs, norms, and interpretations (Van Maanen & Barley, 1982). In essence, occupational communities form their own cultures (Schein, 2010). Trice (1993) describes occupational culture as formed by individuals with specialized or mastered skills. Others describe occupational culture as simply formed based on occupation or

profession (Dauber et al., 2012; Guzman, 2006; Guzman et al., 2004; Karahanna et al., 2005; Van Maanen & Barley, 1982; Walsh & Kefi, 2008).

Opinions differ on where occupational culture exists. Some literature describes occupational culture as an internal, organizational subculture (Guzman et al., 2004; G. Hofstede, Neuijen, Ohayv, & Sanders, 1990; Trice, 1993; Van Maanen & Barley, 1982). Literature also supports culture as multilayered to include an occupational/professional layer external to the organization (Gallivan & Srite, 2005; Jacks, 2012; Karahanna et al., 2005; Van Maanen & Barley, 1982; Walsh & Kefi, 2008).

Karahanna et al. (2005) fold Hofstede's (1991) regional, ethnic, religious, and linguistic layers of culture into a *supranational* model of interrelated levels of culture. Karahanna et al.'s (2005) model (Figure 4) includes *supranational*, *national*, *professional*, *organizational*, and *group* levels of culture. The *individual* ellipse is not a layer of culture but rather how individual culture comprises the totality of all layers of culture (Karahanna et al., 2005). Karahanna et al.'s (2005) model emphasizes layers of culture as "both hierarchically and laterally related" (p. 4).

Gallivan and Srite's (2005) Virtual Onion model depicts interrelated levels of culture stem from an individual identity built from complex nested layers of cultures (Figure 5). Each ellipse represents a cultural layer contributing to the formation of individual beliefs, values, and culture. Gallivan and Srite's (2005) model's dotted ellipses signifies additional layers that interact and feed into the formation of individual beliefs, values, and ultimately culture. Walsh and Kefi's (2008) Spinning Top model identifies national, religious, professional, organization, and ethnic group as "embedded

cylinders rotating around their innate core cylindrical axis” with the cylindrical axis serves as the “innate part of the individual” (p. 11).

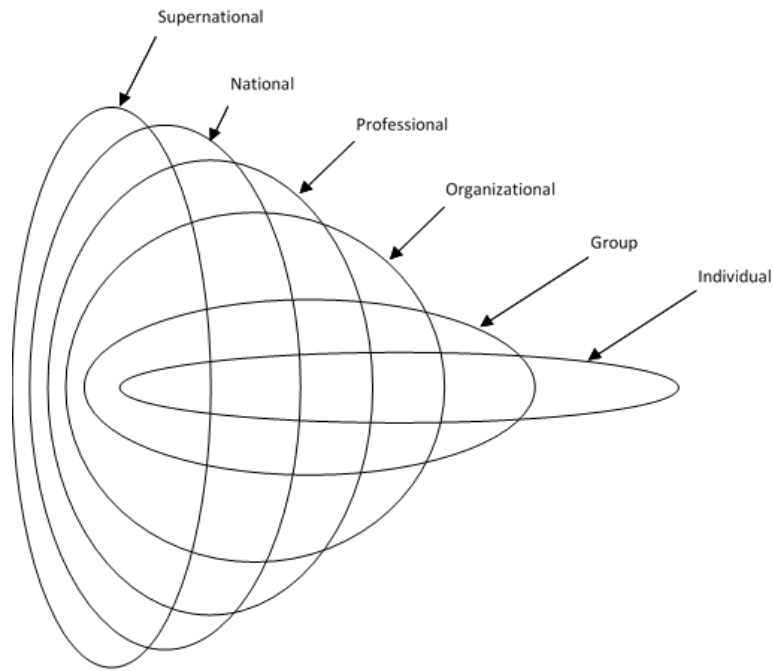


Figure 4. Interrelated levels of culture. Reprinted from “Levels of Culture and Individual Behavior”, by E. Karahanna, E. J. Roberto, and M. Srite, 2005, *Journal of Global Information Management*, 13, p. 6. Copyright 2005 by Idea Group, Inc. Reprinted with permission.

Figure 5. The Virtual Onion Model. Reprinted from “Information Technology and Culture: Identifying Fragmentary and Holistic Perspectives of Culture”, by M. Gallivan and M. Srite, 2005, *Information and Organization*, 15, p. 301. Copyright by Elsevier. Reprinted with permission.

Occupational culture as a sociological institution

Sociological intuitionism’s tenants and cultural embeddedness, explicitly include “culture as an institution” and assume such institutions “affect not only preferences, but also individual identity and self-image” (Oliver & Mossialos, 2005, pp. 19–20). Spencer and Ricciardelli’s (2016) definition of occupational culture aligns with institutional theory (culture as an institution) and the construct of social institutions (social reality, cognitive dimension). Spencer and Ricciardelli (2016) define occupational culture as “values, beliefs, material objects, and tacit knowledge linked with a full-time occupational role that allows its practitioners to learn from the past what to

expect in the future, and drives taken for granted modes of thinking and feeling within an institution” (p. 382).

Occupational culture meets the first tenant of sociological institutions by providing its members with shared beliefs, values, rituals, and norms (Greenwood, 1957; Jacks, 2012; Schein, 2010; Trice, 1993). The second tenant of sociological institutions provides the relationship between sociological institution and member (Hall & Taylor, 1996). Occupational culture influences work and other individual behaviors and decision making (Cooper, Giousmpasoglou, & Marinakou, 2017; Gallivan & Srite, 2005; Karahanna et al., 2005; Lee-Ross, 2008; Ovidiu-Iliuta, 2013; Palmer, Cooper, & Burns, 2010; Robinson & Beesley, 2010; Schein, 2010; Van Maanen & Barley, 1982). The third tenant of sociological institutions occurs among occupational culture as the group evolves and their assumptions about “external adaptation and internal integration” deepen (Schein, 2010, p. 115).

Sociological institutions change in ways that continually reinforce social legitimacy (Hall & Taylor, 1996). Legitimacy occurs when it is perceived that the action and behaviors of an entity are desired or appropriate within a socially constructed system of values, beliefs, norms and definitions (Dauber et al., 2012). Group sustainment requires continual consensus on general issues (Schein, 2010), procedures, and adjustments that influence social legitimacy (Hall & Taylor, 1996).

Occupational culture’s influence on behavior

Multilayered models of culture include an independent layer of professional or occupational culture external to organizational structures (Gallivan & Srite, 2005; G. Hofstede et al., 2010; Karahanna et al., 2005; Walsh & Kefi, 2008). Occupational

cultures, existing alongside organizational structures, compete with organizational plans by providing members with alternative goals (Van Maanen & Barley, 1982). The extent at which each layer of culture influences behavior and actions differ depending on circumstances and individual membership (Gallivan & Srite, 2005; Karahanna et al., 2005).

Gallivan and Srite (2005) observe individual identifiers (i.e., occupation or profession) have greater influence on individual beliefs and behavior as opposed to national culture or organizational culture. Karahanna et al. (2005) argue behavior determines how much influence each level of culture has on an individual's actions. National culture and supranational culture have greater influence on behavioral decisions heavily predicated on values (Karahanna et al., 2005). Alternatively, professional culture has greater influence on practice driven behaviors (Karahanna et al., 2005).

Organizational culture relies heavily on shared perceptions of the organization's practices with less reliance on the organization's values (Karahanna et al., 2005). Conversely, occupational culture implies receipt of both values and practices (Karahanna et al., 2005). This distinction differentiates behavior derived and influenced by the practices of an occupational culture. Karahanna et al. (2005) assert occupational culture primarily influences behaviors that include practices. In addition, occupational cultural values and norms influence individual work behavior (Karahanna et al., 2005).

The previous section argues occupational culture meets the tenants of a sociological institution. At minimum, sociological institutionalism includes culture as an institution (Oliver & Mossialos, 2005). Accepting this premise furthers the potential influence of occupational culture on behavior and action. In addition to the previously

discussed influences of occupation culture, the next session explores influences of occupational culture as a sociological institution. As a cultural layer external to organizations and populations of organization, occupational culture becomes part of the environment (Dauber et al., 2012; Gallivan & Srite, 2005; G. Hofstede et al., 2010; Karahanna et al., 2005; Walsh & Kefi, 2008).

Occupational culture's influence as a sociological institution

The society for which we live in shapes human behavior, decision making, and perceptions of reality (Luhman & Cunliffe, 2014). Societal influences become *institutionalized* and thus entrenched; not only do our actions become influenced but also our *social reality* (Luhman & Cunliffe, 2014; Scott, 1987). The significance of societal influences becoming institutionalized and social realities altered is twofold.

First, societal influences include social institutions (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005) in the form of occupational culture within the environment (Gallivan & Srite, 2005; Jacks, 2012; Karahanna et al., 2005; Van Maanen & Barley, 1982; Walsh & Kefi, 2008). Second, if culture becomes an institution (Oliver & Mossialos, 2005), there is consideration for not only occupational culture as a social institution but the level of influence social institutions have on their members in the forms of institutionalism and social reality. A review of research within industries facing human capital risks, similar to the trucking industry, further support occupational culture's influence on individual behavior.

Occupational culture research

Research in healthcare and leisure and hospitality (hospitality) add credence to occupational community, occupational culture, and occupational ideology as constructs

advancing research within industries and professions laden by turnover, shortages, and low retention. However, trucking industry and professional truck driver research lacks salient identification and exploration of these same construct. The following reviews human capital risk similarities between healthcare, hospitality, and the trucking industry. The review provides the foundation for advancing a trucking industry human capital and cultural based research stream similar to that of healthcare and hospitality.

Nurses are the largest workforce in healthcare (Herakova, 2012) and similar to the trucking industry (Willis, Muslin, & Timko, 2016), continually face shortages (Herakova, 2012; Willis et al., 2016). In 2002, nursing shortages reached upwards of 125,000 (Willis et al., 2016). In 2006, there were 118,000 registered nurse vacancies in hospitals across the United States (Willis et al., 2016). And again similar to the trucking industry (Willis et al., 2016), nursing shortages relate to retention and recruitment (Herakova, 2012; Willis et al., 2016).

Both the trucking industry and healthcare struggle with gender based recruitment. Whereas the trucking industry struggles to recruit female drivers (Costello & Suarez, 2015), the healthcare industry struggles to recruit male nurses (Herakova, 2012). Historically, women account for 4.5% to 6% of professional truck drivers in the United States (Costello, 2017) and only 6% of nurses working in North America are male (Herakova, 2012).

Willis et al. (2016) links the trucking industry's driver shortages to healthcare's nursing shortages. Similar to trucking executives' view of driver recruitment, hospital CEOs find recruiting nurses difficult (Willis et al., 2016). Estimates suggest a nursing shortage in all 50 states by 2015 (Willis et al., 2016). Willis et al. (2016) make the

comparison of driver shortages to nursing shortages, by attributing nursing shortages to within industry competition, recruitment, and retention.

In 2016, the travel, tourism, and hospitality industry contributed 2.7% to the U.S. GDP (U.S. Department of Commerce, International Trade Administration, n.d.). The hospitality sector reflects the fifth largest employer in the United States (U.S. Department of Commerce, International Trade Administration & U.S. Department of Interior, 2012). Hospitality includes careers in food service, culinary arts, lodging, recreation, tourism, and entertainment (Crick & Spencer, 2011; Lee-Ross, 2008; Robinson & Beesley, 2010; U.S. Department of Commerce, International Trade Administration & U.S. Department of Interior, 2012).

Hospitality labor needs continue to grow (Deloitte Center for Industry Insights, 2017; U.S. Department of Commerce, International Trade Administration & U.S. Department of Interior, 2012) while at the same time combating high turnover rates and shortages (Cooper et al., 2017; Crick & Spencer, 2011; Lee-Ross, 2008; Robinson & Beesley, 2010). Industry wide hospitality turnover rates in the United States range from 117% to 240% (Robinson & Barron, 2007). United Kingdom lodging turnover rates range from 58% to 112% (Robinson & Barron, 2007).

Skill shortages emerge in the professional culinary professions (Robinson & Barron, 2007; Robinson & Beesley, 2010). Recruitment for culinary professions is not the challenge but rather attrition during training (Robinson & Barron, 2007; Robinson & Beesley, 2010). In Australia, up to 50% of trainees fail to complete culinary training; an additional 40% leave culinary positions within eight years; and by year 10 up to a 65% net loss of culinary professionals exists (Robinson & Barron, 2007). The next section

summarizes Willis et al.'s (2016) comparison of trucking industry and healthcare shortages followed by healthcare research in occupational culture.

Healthcare. Predicated on game theory, Willis et al. (2016) conceptually propose the healthcare industry and the trucking industry engage in a cooperative versus competitive recruitment for industries with labor shortages. Competitive recruitment includes “poaching” —one healthcare provider taking nurses from another healthcare provider (Willis et al., 2016, p. 256). Poaching is nursing’s version of driver churn.

Willis et al. (2016) observe both trucking industry and nursing research supports “unknown or inaccurate conceptions” of truck driving and nursing professions (p. 255). The professional nature of both professions becomes lost in recruitment. Industries experiencing labor shortages should consider realistic job previews. Based on game theory, realistic job previews provide the employer and candidate a positive win environment (Willis et al., 2016).

Borrowing from DiMaggio and Powell’s (1983) model of institutional theory, Willis et al. (2016) assert populations of organizations become isomorphic. This includes similarities in recruiting practices (Willis et al., 2016). Struggling labor markets operate in zero sum environment or negative sum environment (Willis et al., 2016). A review of trucking firm annual reports and industry reports (American Transportation Research Institute, 2013, 2014, 2015, 2016b; Saia, Inc., 2016; Swift Transportation Company, 2016; Werner Enterprises, Inc., 2016; YRC Worldwide Inc., 2016), affirm populations of trucking firms becoming similar not only in shared human capital risks but also industry induced churn resulting in a zero sum retention practices. Zero sum practices facilitate

competitive as opposed to cooperative responses to attaining human capital from the environment (Willis et al., 2016).

If a trucking firm exchanges ineffective retention practices for effective retention practices, other members of the population may view this as a competitive advantage and give rise to *mimetic isomorphism* (Willis et al., 2016). Willis et al. (2016) propose *normative isomorphism* and *cooperative strategies* within industries with labor shortages. Willis et al. (2016) suggest cooperative recruitment to include promoting growth within industries with labor shortfalls, realistic job previews, and discontinuing practices that induce poaching or churn. Willis et al. (2016) suggest applying their propositions to other nations or cultures.

European countries also face increasing healthcare turnover rates among doctors, nurses, and auxiliary staff. Ovidiu-Iliuta (2013) hypothesizes culture constructs contribute to private and public hospital turnover in Romania. Ovidiu-Iliuta (2013) compares the strength of public hospital occupational culture with the strength of private hospital occupational culture. Medical personnel completed sixty-three questionnaires.

Survey results confirm differences in organizational culture between private hospitals and public hospitals. However, Ovidiu-Iliuta (2013) concludes the strength of occupational culture among medical personnel transcends whether personnel work at a public hospital or a private hospital. Medical personnel values and missions are occupation driven as opposed to organization driven. These values and missions develop because of shared education experiences and norms (Ovidiu-Iliuta, 2013). A review of hospitality research in the areas of institutional theory, occupational community, occupational culture, and occupational ideology concludes this section.

Leisure and hospitality. Hospitably research supports occupational identity, occupational culture, and occupational communities among various hospitality professions (Cooper et al., 2017; Lee-Ross, 2008; Palmer et al., 2010; Robinson & Barron, 2007; Yamashita & Uenoyama, 2006). Other research supports the existence of an actual hospitality culture and offers instruments for measuring such culture (Giffen, 2015). Some argue despite concerns over turnover and shortages, the hospitality industry's ambivalence results in an industry wide turnover culture (Iverson & Deery, 1997; Robinson & Barron, 2007; Robinson & Beesley, 2010). Strong occupational identity, occupational culture, and occupational community exists among professional chefs (Cooper et al., 2017; Palmer et al., 2010; Robinson & Beesley, 2010).

Cooper et al. (2017) argue perhaps current interpretations of the occupational culture of professional chefs are too loosely applied to all chef related occupations. Occupational identity and occupational culture deepen among haute cuisine (high end professional cooking) chefs (Cooper et al., 2017). Celebrity and critically acclaimed (Michelin-starred) chefs are the leaders in haute cuisine (Cooper et al., 2017; Palmer et al., 2010). Although responsible for less than .5% of the restaurant industry, haute cuisine determines trends, images, and standards for the restaurant industry as a whole (Cooper et al., 2017; Palmer et al., 2010). Given this, it is possible for niche occupational cultures to influence industries as a whole.

Applying an interpretivist paradigm, Cooper et al. (2017) conducted semi structured in-depth interviews with 54 Michelin-starred chefs in Great Britain and Ireland. Cooper et al. (2017) describe the occupational identity and occupational culture of Michelin-starred chefs as deep member loyalty and commitment, professional

language, predominate within cultural friendships and socializing, strict rules and discipline, militaristic member socialization, closed to nonmembers, and rituals and practices reflecting tribalism (Cooper et al., 2017). Cooper et al. (2017) interview statements include examples of violence and aggression in forming and sustaining Michelin-starred chefs' occupational culture. New members encounter bullying, violence, high standards, and regimented discipline. Failing to "survive" indoctrination results in "defeat" accompanied by exclusion, marginalization, and demotion (Cooper et al., 2017, p. 1375). Other non-survivors leave their current job or quit the profession altogether (Cooper et al., 2017).

Human capital implications of Cooper et al.'s (2017) research include finding ways to manage niche yet influential industry occupational cultures that conflict with organizational culture or other occupational cultures. Differences between organizational culture and occupational culture of professional chefs (to include Michele-starred) are not uncommon (Cooper et al., 2017; Robinson & Beesley, 2010). Serious conflicts also erupt between competing occupational cultures for example, head chefs and hotel management (Cooper et al., 2017).

Lee-Ross (2008) affirmed strong occupational communities and occupational cultures among hospitality cruise workers. Occupational communities likely form among employees who perceive themselves as different, isolated from mainstream society, working unsecure short-term contracts, working long hours, and unsupported by management (Lee-Ross, 2008, p. 474). Research on truck driver satisfaction and perceptions yield similar results. Professional truck drivers perceive themselves as not

always respected by society, independent, working in solitary, in a mobile profession, and working long hours (Johnson et al., 2011; A. J. Williams & George, 2013).

Occupational communities provide a place, particularly for dangerous and isolated professions, for occupational members to gain support (Lee-Ross, 2008). Lee-Ross (2008) suggests managers must understand what enables occupational communities and determine if managers can influence occupational communities. Counter to adaptation, legitimization, or aligning with occupational communities and their subsequent occupational culture, Lee-Ross (2008) recommends interventions that disrupt the development and control of occupational communities. Interventions should reinforce organizational culture attributes and behavior. Lee-Ross (2008) also suggests weakening occupational communities by identifying shared attributes (pay, tenure, hours) among members and find ways to control these attributes. Adaptation provides an alternative response to Lee-Ross (2008) with emphasis on overall organizational strategy as opposed to strategies solely focused on turbulent occupational communities and cultures.

Environmental Alignment as Adaptation

Two perspectives describe how an organization responds to its environment—adaptation and inertia (Carroll, 1984; Chakravarthy, 1982; Hannan & Freeman, 1977; Heine & Rindfleisch, 2013; Lawrence & Lorsch, 1967; Wei & Lin, 2015). Adaptation suggests a strategic response to environmental pressures (Heine & Rindfleisch, 2013). Whereas, inertia suggests a measured, methodical response to environmental pressures (Heine & Rindfleisch, 2013). Strategist perspectives advance adaptation for a successful organizational response to environmental demands (Heine & Rindfleisch, 2013). In

biological ecological terms, adaptation characterizes an organism's state of survival (Chakravarthy, 1982).

Adaption, in response to environmental turbulence (social pressures, instability, finite resources, competition), increases an organization's viability and staves organizational decline (Chakravarthy, 1982; Heine & Rindfleisch, 2013; Lawrence & Lorsch, 1967; T. Watson, 1995; Wei & Lin, 2015). Organizational decline includes maladaptation (Heine & Rindfleisch, 2013; Wei & Lin, 2015). Maladaptation occurs when organizations fail at successfully adapting to environmental pressures, competition, and response to the environment does more harm than good (Heine & Rindfleisch, 2013).

Detractors suggest adaptation not only changes an organization's structure but its identity (Hannan, 2005). An organization's identity determines an organization's favorability and legitimation among actors within an environment (Hannan, 2005; Hannan & Freeman, 1984). Dauber (2012) describes these actors as employees, customers, and suppliers. Changing an organization's core structure, which is tied to its identity, reduces the ability to establish legitimacy among environment actors (Hannan, 2005). Lack of legitimization reduces the organization's competitive advantage (Hannan, 2005; Hannan & Freeman, 1977). When inertia occurs among populations of organizations, inertia continues to increase over time (Hannan, 2005). Hannan and Freeman (1977) acknowledge adaptation, however argue successful organizations are primarily inert (Carroll, 1984).

Inert responses to environmental pressures are a laborious exercise (Heine & Rindfleisch, 2013). Organizations build a stable competitive capacity by increasing core resources over time (Heine & Rindfleisch, 2013). Stable organizations exhibit reliable,

consistent performance (Heine & Rindfleisch, 2013). Continually building upon resources and core features of the organization eventually translates into a competitive advantage (Heine & Rindfleisch, 2013). Competitive advantage providing a means to successfully compete within and acquire resources from environment (Heine & Rindfleisch, 2013). Heine and Rindfleisch (2013) describe organizational inertia as “ambiguous” (p. 12). Although inertia provides stability, it also stifles organizations from adapting to environmental (Heine & Rindfleisch, 2013). Heine and Rindfleisch (2013) argue, in the long run, inertia initiates organizational decline. Hannan (1998) provides context for Heine and Rindfleisch’s (2013) argument.

Hannan (1998) acknowledges that over time inertia could result in an organization’s mortality depending on the organization and stability of environment. As organizations age and continually gain accountability and reliable performance, organizational structures and processes could become stagnant and obsolescent. Stagnation becomes problematic for organizations improving in the same areas of performance, particularly organizations operating in an unstable environment. Lack of diversification could lead to improved performance in areas that become less and less valuable to an organization’s survival. In stable environments, consistency of performance and continually improving at the same thing contributes to an organization’s survival (Hannan, 1998).

This is not the case for turbulent, unstable environments. Hannan (1998) suggests “volatile environments” require a response opposite a response for a stable environment (p. 160). Hannan (1998) does not specify a response to unstable environments but that there are a variety of responses not limited to inertia. Research developing these

responses contributes to closing theoretical gaps and moves towards building organizational theory (Hannan, 1998). This opens the door for adaptation in the form of environmental alignment when responding to turbulent environments.

Alignment is the extent to which fit exists between strategy, competitive situation, leadership style, and organizational culture (Chorn, 1991). The literature further describes alignment as a bridge, fit, integration, linkage, and fusion (Alagaraja & Shuck, 2015; Chorn, 1991). Alignment is linked to an organization's performance and efficiency (Chorn, 1991; Quiros, 2009). Organizational alignment impacts individual performance and behavior (Alagaraja & Shuck, 2015; Chorn, 1991; Quiros, 2009; Semler, 1997).

A factor of organizational success and survival are the forces operating external to the organization (Alagaraja et al., 2015). An attribute of organizational alignment is environmental alignment (Alagaraja et al., 2015; Quiros, 2009; Semler, 1997). Environmental alignment occurs when the requirements of the environment synergize with the organization's internal environment to include organizational goals, vision, and tactics (Alagaraja et al., 2015; Semler, 1997). Semler (1997) describes this as *strategic fit*. Semler (1997) argues that if the organization makes poor strategic decisions and thus does not achieve environmental alignment, other aspects of alignment rapidly fail to include performance alignment. Performance alignment occurs when an individual's behavior and the organization's processes equal behavior desired by the organization (Semler, 1997). Ideal behavior is precipitated by applied human resource development (HRD) strategies (Semler, 1997).

Capitalizing on human capital's ability to sustain performance and provide a competitive advantage requires organizations to realize they do not own human capital

(S. J. Miles & Van Clieaf, 2017). Organizations can access and try to influence human capital to maximize its knowledge, influence, and capacity in a method advantageous to the organization (S. J. Miles & Van Clieaf, 2017). The extent of organizational influence on human capital behavior and willingness to perform is determined by the level of fit and alignment between organizations and sources of human capital (S. J. Miles & Van Clieaf, 2017). Organizations and populations of organizations achieve adaptation when they employ environmental alignment in response to turbulent environments. Wei and Lin (2015) advance adaptation as a core organizational competency “acquired through the transformation of its intangible assets” (p. 756). Intangible assets include human capital and the employee’s competencies and experiences that accompany human capital (Wei & Lin, 2015).

Once an organization obtains resources, resources shift from environment controlled (resource dependence theory) to organizational controlled (resource based view). Resource based view shifts organizations towards devising ways to gain a competitive advantage with existing resources specifically resources deemed as limited and valuable (Barney & Clark, 2007; Frączkiewicz-Wronka & Szymaniec, 2012; Wei & Lin, 2015). The next section explores the value and performance implications of this organizational shift, specifically when organizations look towards human capital as a competitive performance advantage. The section explores these implications from an ecological perspective.

Human Capital and Performance

Knowledge derived from human capital is “perhaps the most universally valuable and imperfectly imitable resource” (Crook et al., 2011, p. 443). Resource based view

exists when “superior human capital” provides as “sustainable performance” advantage and is in short supply (Crook et al., 2011, p. 444). Resource based view posits the heterogeneous distribution of resources, to include human capital, explains differences in performance among organizations (Crook et al., 2011; Nemati et al., 2010; Newbert, 2007). Simply, organizations in possession of valuable, limited, and irreplaceable resources outperform organizations not in possession of such resources (Crook et al., 2011). However, there still remains speculation as to human capital’s actual value when assessing organizational performance (Crook et al., 2011). Despite the prominence of a resource based view in organizational and performance literature, little empirical evidence actually explains the relationship between human capital and performance (Crook et al., 2011; Newbert, 2007).

Human capital, resource based view, and performance

Newbert’s (2007) review of resource based view literature reports scant empirical evidence to support a significant relationship between human capital and organizational performance. Crook et al. (2011) suggest three reasons why Newbert’s (2007) findings conflict with literature supporting human capital as directly linked to an organization’s performance. First, human capital increases in value as specialized skills develop. Over time, earlier investments in human capital become realized and may increase performance (Crook et al., 2011). Cross sectional studies, may not capture latent and continual investments in human capital and subsequent changes in performance as a result of these investments (Crook et al., 2011).

Second, Crook et al. (2011) observe the difficulty of capturing human capital’s variability—*strategic factor market* (Crook et al., 2011). This includes increased

efficiency as a result of experienced labor (Crook et al., 2011). General skills, as opposed to firm specific skills, provide greater transferability among organizations with similar human capital needs (Becker, 1962; Teixeira, 2014). “People with valuable but general (e.g., industry experience) human capital can move among the highest bidding competitors until their costs roughly equal the value that they add” (Crook et al., 2011, p. 444).

Appropriability condition is the third reason Newbert’s (2007) results may conflict with resource based view, human capital, and performance literature (Crook et al., 2011). The appropriability condition alludes to competitive advantage (Crook et al., 2011). Organizations compete for profits including those resulting from human capital (Crook et al., 2011). Individuals, that are or comprise profit generating human capital, leverage their skill for higher pay (Crook et al., 2011). These individuals may not necessarily appropriate profits but the organizations they work for do (Crook et al., 2011).

An organization’s leveraging ability (dynamic capability) significantly relates to an organization’s performance (Newbert, 2007). Newbert (2007) hypothesizes dynamic capability as a construct of competitive advantage and in turn performance. Crook et al. (2011) observe a research trajectory towards developing a resource based theory of competitive advantage, with emphasis on human capital as a significant factor in explaining why some organizations outperform others. However, Crook et al. (2011) still question the true relationship between human capital and performance.

Moderating for path dependence, strategic market factors, and appropriability as prescribed by resource based view, Crook et al. (2011) reviewed 66 studies examining

human capital-organizational performance relationships. Crook et al. (2011) found human capital positively relates to performance. The human capital-performance relationship becomes strongest when specific (operational) versus general (global) measures of human capital apply. Global performance measures include returns on assets or returns on sales (Crook et al., 2011).

Crook et al. (2011) argue general measures of human capital lack capturing differentiation among resources. True organizational performance occurs within operational performance measures that include innovation or customer satisfaction. Specific performance measures avoid appropriability and reflect an organization's competitive advantage as the result of superior human capital.

Crook et al.'s (2011) research results further support their argument. Crook et al. (2011) purport a stronger positive relationship between human capital and operational oriented performance measures than the relationship between human capital and global performance measures. However, Crook et al. (2011) did not substantiate a stronger human capital-performance relationship when studies accounted for lagged (path dependence) performance as opposed to studies applying cross-sectional data.

Crook et al.'s (2011) review includes Van Iddekinge et al.'s (2009) research on the relationship between performance, job-related selection, and training within a fast-food organization. With fast-food turnover rates exceeding 100% annually, Van Iddekinge et al. (2009) posit increased retention interventions could serve as a competitive advantage for fast-food organizations. Crook et al.'s (2011) meta-analysis includes retention, by way of human resources, as an operational performance measure. Retention becomes an operational performance indicator when overlapping

organizational domains (human resources, HRD, human resources management, and human performance) contribute to the development, implementation, and management of retention interventions (Crook et al., 2011; Cummings & Worley, 2009; Gosser, 2011; Van Iddekinge et al., 2009; Van Tiem et al., 2012).

Crook et al. (2011) question if human capital directly proceeds performance or if performance allows organizations to secure and retain human capital. Either proposition supports resource based view predicated on sustained performance and competitive advantages (Crook et al., 2011). Strategic human resource management would further argue sustaining the value of human capital is the result of training and organizational practices in support of high performance (Crook et al., 2011; Van Iddekinge et al., 2009). Van Iddekinge et al.'s (2009) and Crook et al.'s (2011) research supports retention as a specific human capital performance measure applicable to organizations with high turnover. Improved retention performance increases competitive advantage (Van Iddekinge et al., 2009); an advantage organizations leverage within their environment and their population ecology (Carroll, 1984; Hannan & Freeman, 1977).

Human capital, retention performance, and population ecology

Applying the population ecology construct of competition, Wei and Lin (2015) study the impact of human capital, environmental pressure, and social capital on organizational decline and organizational effectiveness (future and risk adjusted capital-market performance). Wei and Lin (2015) also sought the moderating effect of human capital and social capital on the relationship between environmental pressure and organizational decline and organizational effectiveness.

Wei and Lin's (2015) human capital variables include market value of human resources, employee tenure, CEO age and education. Wei and Lin (2015) apply four indicators for social capital—number of affiliated enterprises, number of financial institutions invested, CEO's network, and president's network. Affiliated enterprises include entities and relationships that increase an organization's ability to obtain (directly and indirectly) critical market information and access to external resources (Wei & Lin, 2015). Environmental pressure encompasses both task (industry competition) and general (per capita GDP) pressures. Organizational decline reduces organizational performance (Wei & Lin, 2015).

Wei and Lin (2015) gathered longitudinal data across 398 public companies. Data sources includes private and public sector sources. Filtered data consists of 1,553 observations, from 15 industries, across a four year period (Wei & Lin, 2015). A two year lag time was applied; matching first year independent variable data with second year dependent variable data (Wei & Lin, 2015).

Consistent with previous research (Wei & Lin, 2015), Wei and Lin's (2015) results support task environmental pressure and general environmental pressure effect an organization's effectiveness and decline. This includes industry density (entrants, births) and predicts organizational decline. From an ecological perspective, dense population levels contribute to unfavorable task environment. This further supports resource dependence theory, perpetuating growth centers on availability, access, and obtaining resources (often limited) embedded in and controlled by the environment. Wei and Lin (2015) also observe that initially, dense populations prevent declining performance. However, eventually populations exceed available resources (Wei & Lin, 2015).

Wei and Lin (2015) further suggest employee retention increases the value of human capital value. Employee competencies and experience increase over time. Organizations able to retain employees gain the benefit of the increased human capital value.

Wei and Lin's (2015) were unable to support human capital and social capital improve effectiveness. Wei and Lin (2015) were also unable to support human capital and social capital accelerate decline. Similar to Crook et al.'s (2011) speculations of Newbert's (2007) research, Wei and Lin's (2015) suspect it takes longer for human capital and social capital to impact organizational effectiveness. Wei and Lin (2015) further speculate their measurements of human capital and social capital may lack some latent indicators. Finally, perhaps human capital is a situational factor as opposed to a predictor of an organization's effectiveness and decline (Wei & Lin, 2015).

Wei and Lin's (2015) research supports that human capital moderates the relationship between organizational effectiveness and environmental pressure. This further supports resource based view; transforming resources into capacity (Wei & Lin, 2015). Given resource based view, Wei and Lin (2015) conclude an increase in quality resources improve how organizations respond to a fluctuating environment. Quality resources extend to human capital as a moderator of environmental threats (Wei & Lin, 2015).

Human capital, ecology, environment, institutional theory, occupational culture, and environmental alignment provide the study's theoretical foundations. How these foundations apply to the trucking industry, requires a historical primer of environmental pressures (i.e. regulatory, competition) contributing to the trucking industry's human

capital challenges. This chapter concludes with the primer and the trucking industry's retention response to environmental pressures (i.e. competition for truck drivers).

Trucking and Deregulation—Historical Primer

During the 1920s, the perceived monopolies and regulation of the railroad industry provided an avenue for trucking as an alternative, competitive form of freight transportation. Although motor carriers only competed for short haul routes, the railroad industry pushed for state regulation of trucks and buses. In 1925, Supreme Court rulings prohibited states from controlling interstate trucking and busing. Motor carriers became virtually exempt from any regulatory control (Moore, 1986).

The 1935 Motor Carrier Act (1935 Act) restricted rates and constricted the number of motor carrier entrants as a method of helping the railroad industry (Moore, 1983, 1986; Rose, 1987). At the time of the 1935 Act, approximately 89,000 motor carriers requested “grandfather” operating licenses (Moore, 1986, p. 16). Only a third of the applications were approved (Moore, 1986). Some research supports regulating the competitive nature of motor transportation hinders the industry and those the regulations protect (Moore, 1986). Moore (1983, 1986) concluded the 1935 Act actually led to overcharged shippers, consumers resulting in increased profits for motor carrier owners and drivers.

In the mid 1970s, deregulation began unraveling the 1935 Act (Moore, 1983). The Teamster Union opposed deregulation believing it sharply reduced driver earnings (Moore, 1983; Rose, 1987). Deregulation of the 1970s culminated into the Motor Carrier Act of 1980 (1980 Act). The 1980 Act significantly reduced barriers to entering the trucking industry.

The number of trucking licensing applications increased from 6,746 in 1976 to 22,235 in 1980 and continued with another 14,096 within the first six months of 1981 (Moore, 1986). Nearly 100% of applications were fully or partially approved (Moore, 1986). Not only did the 1980 Act increase the number of carriers, but allowed existing carriers to expand territories and raise rates above competitive levels (Berwick et al., 1998; Griffin et al., 2000; Moore, 1983, 1986; Rose, 1987).

Although the recession increased the unemployment rate of truck drivers in 1982, the unemployment rate totaled still less than other blue collar professions (Moore, 1983). The 1980 Act is often cited as the origin of driver shortages and turnover (Berwick et al., 1998; Casavant et al., 2010; Corsi & Martin, 1982; Faulkner, 2015; LeMay et al., 2013; Short, 2014). However, driver turnover concerns began prior to 1980, specifically among owner operators (Adam, 1979; Corsi & Martin, 1982).

Driver retention

Pay, delays, personal and professional relationships, career advancement, recruitment, satisfaction, organizational support, regulations, and safety suggest some of the causes of driver turnover. Extensive research supports answering the causes of driver turnover and shortages (Beilock & Capelle Jr., 1990; Costello, 2017; Costello & Suarez, 2015; Dobie et al., 1998; Faulkner, 2015; G. C. Griffin, Rodriguez, & Lantz, 1993; G. Griffin et al., 2000; Johnson et al., 2011; LeMay et al., 2013; LeMay & Taylor, 1989; Mansfield, 2014; McElroy et al., 1993; Min & Emam, 2003; Min & Lambert, 2002; Schulz et al., 2014, 2014; Sersland & Natarajan, 2015; Short, 2014; Southern, Rakowski, & Godwin, 1989; Staplin et al., 2003; Suzuki, 2007; The Gallup Organization, 1997; Whitaker, 2010; D. F. Williams et al., 2017). Whereas, retention centric research

remains scant or receives periphery mentions in relation to varying turnover and shortage research streams. However, turnover research still serves as a source for extracting some of the trucking industry's attempts to retain drivers.

The 1990s found the trucking industry increasing driver pay (LeMay et al., 1993; The Gallup Organization, 1997). Approaching 20 years of industry growth, increased competition, and driver shortages, the trucking industry commissioned The Gallup Organization (1997) to conduct a study. Study outcomes include a retention model with the purpose of advancing job satisfaction among drivers with a tenure of five or more years with their current employer (The Gallup Organization, 1997). The model consists of developing a positive corporate culture; treating drivers as valued members of the organization; continual review of the driver needs and progress; competitive pay and benefits; viable career advancement; longevity, loyalty, and safety rewards; and consistent routes and time at home (The Gallup Organization, 1997). Literature supports improved job satisfaction leads to improved performance and retention across a number of professions (Belias & Koustelios, 2014; Kanyurhi & Bugandwa Mungu Akonkwa, 2016; Marsh & Mannari, 1977; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001; Muliawan, Green, & Robb, 2009; Peng & Mao, 2015; Robinson & Beesley, 2010) to include professional truck drivers (G. C. Griffin et al., 1993; Min, 2002; Taylor, Garver, & Williams, 2010).

In 1997 and 1998, 80% of the top 100 trucking firms increased pay by 10% as a retention strategy (Min & Emam, 2003). Other late 1990 efforts include rewarding drivers for longevity, safety bonuses, replacing older equipment sooner, training, signing bonuses, profit sharing, career advancement, reduction in non-driving, and flexible

schedules (Min & Emam, 2003). Min and Emam (2003) observe these recruitment efforts occurring with little research in support of their effectiveness. Despite the trucking industry's late 1990s efforts, the U. S. Bureau of Labor Statistics reported large firm driver turnover ranging from 80% to 100% and 60% to 80% in small firms (Engel, 1998).

At the start of the millennium, carriers of varying size and type implemented a range of formal and informal retention strategies. Formal strategies differing from the past included a personal approach to retention as opposed to an organizational wide strategy. One carrier implemented contacting drivers individually to ascertain the driver's needs, concerns, and ideas. Initial calls required a mandatory follow up call. Other formal strategies included employee surveys, achievement and recognition awards, bonuses for promoting safety, and driver training for spouses, rider programs for spouses, children and pets. These strategies were implemented in addition to pay, route, equipment, career strategies observed in the late 1990s. Informal strategies include employee social functions, open door management policies, and drivers regarded as an individual as opposed to an employee (Staplin et al., 2003). As the millennium progressed, so did turnover rates for large carriers (130% in 2005 and 117% in 2006) and small carriers (96% in 2005 and 109% in 2006) respectively (McNally, 2014).

Since 2012, the American Transportation Research Institute (2016b) identifies both driver shortage and driver retention among the top 10 critical issues facing the trucking industry. From 2005 to 2011, either driver shortage or driver retention ranked among the top 10 issues challenging the trucking industry (American Transportation Research Institute, 2016b). American Transportation Research Institute (2012a, 2014)

retention recommendations include programs aimed at improving a driver's work/life balance, health, and personal relationships. In recent years, the American Transportation Research Institute (2015, 2016b) added more time at home, increased pay, and newer equipment.

Notwithstanding the trucking industry's efforts and research recommendations, research on the effectiveness of specific retention strategies remains unknown. Also unknown are driver's perceptions of the trucking industry's retention efforts and if driver's perceive trucking industry retention strategies align with a driver's occupational needs promulgated by the occupational culture of professional truck drivers.

Summary

Research supports exploration of human capital at multiple levels to include industry specific human capital and occupational human capital (Lagoa & Suleman, 2016; Mayer et al., 2012; Nawakitphaitoon, 2014; Sullivan, 2010). Industry specific human capital represents skills and knowledge applicable and valuable across organizations that occupy a shared industry space (Mayer et al., 2012). Occupational human capital reflects the knowledge and skills necessary to perform a specific profession or function (Mayer et al., 2012). Organizational ecology provides an ecological form for the exploration of human capital at an industry level (Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015) and institutional theory provides a theoretical basis for the exploration of human capital at an occupational level (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005).

Ecological perspectives of organizations support an organization-environment relationship at three levels (organization, population, and community). The population

level reflects the culmination of small and large organizations (populations) with similarities in how they operate or what they produce or generate as a business. Similarities extend to industry specific human capital resources needed to meet each organization's desired performance goals and outcomes within the industry (Carroll, 1984; Hannan & Freeman, 1977; Wei & Lin, 2015). Populations of organizations not only compete within the population (resource based view) for human capital but also within their shared external environment (resource dependence view; Frączkiewicz-Wronka & Szymaniec, 2012).

Populations of organizations depend on their external environment as a provider of human capital (Hannan & Freeman, 1977). The environment's sourcing of human capital stems from institutions within the environment. Institutions stimulate environmental turbulence (Aldrich, 1979; Azem, 2015; Emery & Trist, 1965). Environmental turbulence conveys the demands and pressures (e.g. economic, cultural, social, political, regulatory) of the environment's institutions (Hannan & Freeman, 1977; Morris & Jones, 1995; Zaidi & Othman, 2015).

Institutional theory supports culture as a sociological institution and sociological institutions as influencing individual behavior (Hall & Taylor, 1996; Oliver & Mossialos, 2005). Spencer and Ricciardelli's (2016) definition of occupational culture supports occupational culture as a sociological institution. As a sociological institution (Hall & Taylor, 1996; Oliver & Mossialos, 2005), occupational culture has the potential to influence its member's behavior, values, and beliefs (Spencer & Ricciardelli, 2016).

How an organization or industry responds to environmental pressures impacts performance (Aldrich, 1979; Carroll, 1984; Chakravarthy, 1982; Emery & Trist, 1965;

Hannan & Freeman, 1977; Heine & Rindfleisch, 2013; Lawrence & Lorsch, 1967; Wei & Lin, 2015). Ineffective responses to environmental demands reduce an organization's ability to source resources from the environment. The inability to maintain needed resources diminishes an organization's competitive advantage. Organizations able to adapt to the demands of the environment, gain a competitive advantage in obtaining resources over organizations unable to adapt (Abatecola, 2012; Aldrich, 1979; Carroll, 1984; Frączkiewicz-Wronka & Szymaniec, 2012; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014; Wei & Lin, 2015).

Environmental alignment, as a form of adaptation, aligns the values, beliefs, and occupational needs of the sociological institution (occupational culture) and the organizational strategies and goals of the organization (Alagaraja et al., 2015; Semler, 1997). The ability to environmentally align organizational strategies with the needs of the external environment, improves organizational performance and individual behavior and performance (Alagaraja, 2013b; Alagaraja et al., 2015; Alagaraja & Shuck, 2015; Chorn, 1991; Miterev et al., 2017; Quiros, 2009; Semler, 1997; Yamakawa et al., 2011).

CHAPTER III – METHODOLOGY

The study explored the occupational needs and culture among professional truck drivers. In addition, the study sought professional truck driver experiences with the phenomenon of churn and their perceptions of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. The exploration of these constructs required combining qualitative methodologies of ethnography and phenomenology. Ethnography supported the cultural objectives of the study, whereas phenomenology advanced understanding of driver churn. Prior to data collection, The University of Southern Mississippi Institutional Review Board reviewed and approved the study (Appendix C). This chapter reaffirms the study's research objectives followed by methodological considerations. Subsequent sections include research design, researcher's role, site selection, sampling procedures, data sources and collection, data analysis, and limitations.

One overarching question guided the study: Do trucking industry retention strategies environmentally align with professional truck driver occupational needs and culture as perceived by professional truck drivers? Subsequent research objectives explore the ethnographic construct of occupational culture and the phenomenon of driver churn as perceived by professional truck drivers.

RO1: Describe participant demographics in terms of years of driving experience, driver type, tenure with current employer, employer size, gender, and age.

RO2: Describe trucking industry strategies to retain professional truck drivers.

RO3: Explore professional truck driver occupational needs and culture (shared

beliefs, values norms, collective perceptions, cultural forms, and practices) as perceived by professional truck drivers.

RO4: Explore environmental alignment between trucking industry retention strategies and professional truck driver occupational needs and culture as perceived by professional truck drivers.

RO5: Explore professional truck driver perceptions of churn as perceived by professional truck drivers.

Methodological Considerations

The proliferation of philosophical stances and assumptions makes qualitative research difficult to define. However, exploring the foundational elements of research reveals characteristics and assumptions binding qualitative research. The following summarizes characteristics of qualitative research and philosophical assumptions.

Characteristics of qualitative research

Qualitative research encompasses a number of methodologies. Characteristics of qualitative research exist within these methodologies. Qualitative research supports multiple data types and multiple methods of data collection. Research generally takes place in a natural field setting with the researcher serving as a data collection instrument. The researcher engages with participants in an effort to gather and advance participant experiences, interpretations, and perceptions. Qualitative research has the ability to uncover and further understand complex experiences and problems as described or lived by individuals or groups. Qualitative data is rich, holistic, and descriptive. Data analysis includes developing themes to make sense of the observed. Research designs are

emergent; allowing for adjustments based on emerging data (Creswell, 2013; M. B. Miles, Huberman, & Saldaña, 2014; Patten, 2004; Saldana, 2011).

Philosophical assumptions

Philosophical assumptions provide a window into the history, training, and reflectiveness of the researcher. Philosophical assumptions support and help operationalize the study's interpretive framework or theoretical perspective (Creswell, 2013; Crotty, 1998; Duberly, Johnson, & Cassell, 2012; Plano Clark & Creswell, 2008). Crotty (1998) places emphasis on epistemology as the primary influencer of theoretical perspective. Whereas Creswell (2013) advances four philosophical assumptions (ontological, epistemological, axiological, methodological) embedded within each interpretive framework.

Crotty (1998) acknowledges ontology, however finds the literature unsuccessful in distinguishing between epistemology and ontology. Crotty (1998) further suggests literature addresses matters of ontology without putting ontology on the same parity as epistemology. Irrespective of the debate, researchers must continue to explore philosophical assumptions, defend them, and report implications (Duberly et al., 2012). This perspective guides the study to include the interpretive framework informing the research design, methodology, and methods.

Research Design

Methodology or research design is the strategy for conducting the study (Creswell, 2013; Crotty, 1998). The study's research design reflects combining ethnography and phenomenology. Figure 6 provides a visual interpretation of the study's design. The following section outlines the study's interpretive framework and

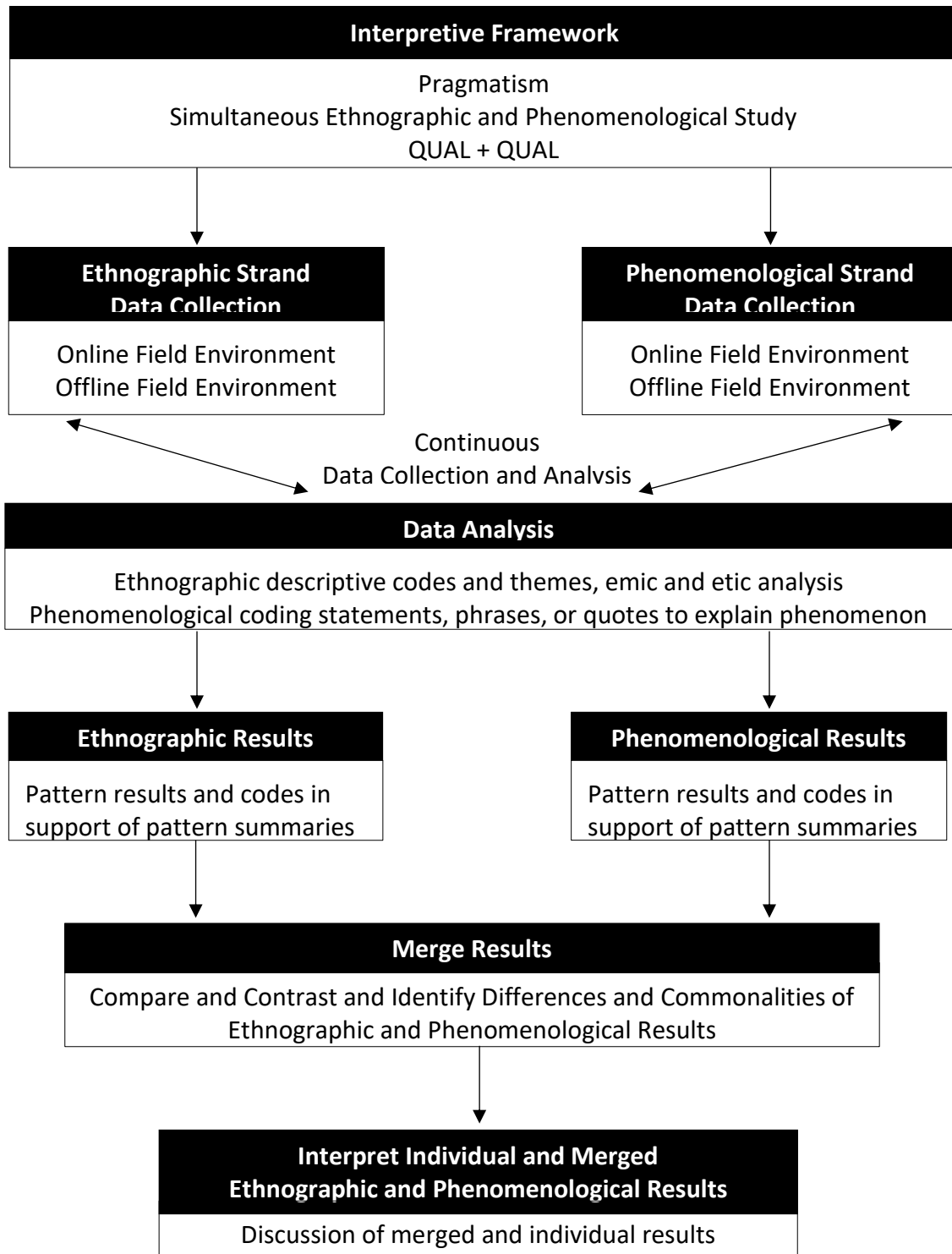


Figure 6. Simultaneous ethnographic and phenomenological research design. The figure describes the study's research design.

philosophical assumptions, perspectives on combining qualitative methodologies, ethnographic research, and phenomenological research.

Interpretive framework—pragmatism

Emerging from the paradigm wars, pragmatism focuses a theoretical lens on outcomes as opposed to antecedent conditions (Creswell, 2013). Although often linked to mixed methods research (Morgan, 2014; Plano Clark & Creswell, 2008), pragmatism is not exclusive to mixed methods research (Creswell, 2013; Goldkuhl, 2012; Morgan, 2014). Pragmatism pledges no allegiance to specific methods but rather the research problem and its impeding questions (Creswell, 2013). Pragmatism serves to find solutions to problems that are sometimes part of a “messy world” (Korte & Mercurio, 2017, p. 61). Pragmatism accounts for the “single real world” and individual interpretations of the world (Morgan, 2007, p. 72). The practicality of pragmatism helps resolve research design issues (Morgan, 2014).

Korte and Mercurio (2017) argue, at its core, pragmatism focuses on practical outcomes for practice. Korte and Mercurio (2017) further argue practice based theories and pragmatism complement each other and provide greater understanding of one’s environment. Pragmatism is a paradigm that could close the gap between theory and practice. Korte and Mercurio (2017) specifically provide a path for an HRD agenda underscored by pragmatism and emerging theories of practice. Practice theories explain and frame activities that continually perform, produce, and reproduce through a dynamic entanglement of action, politics, communities, discourse, materials, tools, and agents (Korte & Mercurio, 2017). This in turn provides a human capital path. HRD practices operationalize an organization’s emphasis on human capital (Mohamed, Ragab, &

Arisha, 2016; Nafukho, Hairston, & Brooks, 2004; Stiles & Kulvisaechana, 2003; Wei & Lin, 2015).

Pragmatism has its critics. Its ebb and flow in philosophy spans more than 100 years (Korte & Mercurio, 2017). The procedural nature of pragmatism minimizes its ability to connect to social justice based research agendas (Morgan, 2014). Morgan (2014) observes pragmatism suffers from its pigeonhole to mixed methods research. Advancing pragmatism requires resolving its exclusivity to mixed methods research (Morgan, 2014). The study's research design, philosophical assumptions, and interpretations advance pragmatism as a paradigm compatible to qualitative research.

The study's philosophical assumptions and interpretations of pragmatism include reality equates to practicality and usefulness. Multiple research methods yield objective and subjective evidence. Abductive reasoning allows fluctuation between deduction and induction. Both researcher and participant views have value. In addition, methodological beliefs include the potential for qualitative and quantitative methods of data collection and data analysis (Creswell, 2013; Morgan, 2007). These interpretations align with the study's purpose and objectives.

Research on driver turnover is nearing four decades, yet the turnover phenomenon continues (Adam, 1979; Corsi & Martin, 1982; Costello, 2017; Costello & Suarez, 2015; Schulz et al., 2014; Sersland & Natarajan, 2015; D. F. Williams et al., 2017). Driver turnover traditionally relies on quantitative research methods, especially surveys (D. F. Williams et al., 2017). Most surveys explore management and dispatcher opinions as opposed to actual driver opinions of turnover (D. F. Williams et al., 2017). Missing from

research are the descriptive voices of truck driver experiences (D. F. Williams et al., 2017).

However, adherence to singular interpretations of knowledge, qualitative (inductive) or quantitative (deductive), narrows complex organizational problems to a single approach (Maggs-Rapport, 2000). Whereas the mixing of methods provides fluidity and flexibility (Hesse-Biber, 2010). Hesse-Biber (2010) describe mixed methods research as both “old” and “emergent” (p. 415). The next section explores the old and emergent in support of combining ethnographic and phenomenological research into a single research study.

Combining qualitative methodologies

Combining research methodologies invariably leads to a discussion of mixed methods research. Since the 1960s, particularly in social science, the discussion almost exclusively reflects definitions and characteristics of combining quantitative and qualitative methods (Creswell & Plano Clark, 2011; Morse, 2010; Plano Clark & Creswell, 2008; Pritchard, 2012). Yet the evolution of mixed method designs includes within paradigm methodologies and multiple methods within a paradigm (Greene, 2007; Morse, 2010; Tashakkori & Teddlie, 2008).

Greene (2007) reminds mixed methods is a way of thinking and this line of thinking should precede the design elements of mixed methods research. Mixed methods thinking does not specify the integration of qualitative and quantitative methods but rather open mindedness for a greater understanding of our complex social world (Greene, 2007). Greene (2007) defines mixed methods as actively inviting researchers to engage in dialogue on multiple ways of seeing and hearing, multiple ways of making sense of the

world, and multiple stances on what is important and what should be valued and cherished. Greene's (2007) definition accounts for early and emerging perspectives of mixed methods research and avoids limiting mixed methods to a quantitative-qualitative interaction.

Tashakkori and Teddlie (2008) describe the evolution of mixed methods research as occurring in three stages. The *Monomethod or Purist Era* (circa nineteenth century through 1950s) began the transition from singular methods (QUAN or QUAL) to a variety of methods within a single paradigm (e.g., sequential QUAL → QUAN or parallel/simultaneous QUAL + QUAL). The *Emergence of Mixed Methods* (circa 1960s to 1980s) stage initiated sequential and parallel mixing of quantitative and qualitative designs (QUAL → QUAN, QUAN + QUAL). Dominant and less dominant designs also emerged (QUAN + qual, QUAL → quan). Stage three, *Emergence of Mixed Models* (circa 1990s), generated multilevel designs. Different qualitative and/or quantitative methods occur at different stages of the study. Tashakkori and Teddlie (2008) point to mono and pure methods as “increasingly rare” in social and behavioral sciences (p. 21). Perhaps the idiom of *what is old is new again* is appropriate to explore the reemergence of combining qualitative approaches.

The evolution of mixed methods research affirms multiple qualitative-qualitative designs and methods are relatively ignored (Hesse-Biber, 2010; Morse, 2010; Pritchard, 2012). However, emerging perspectives on simultaneous and sequential mixed qualitative designs and the combining of qualitative methodological approaches and methods exist (Hesse-Biber, 2010; Maggs-Rapport, 2000; Morse, 2010; Pritchard, 2012).

Morse's (2010) definition of mixed methods specifies that the design includes a single, core component plus one or more supplemental components. The supplemental component is one that "cannot be published alone, within a single study" (Morse, 2010, pp. 483–484). The supplemental component is a strategy for further explanation of the core component. The core component is a qualitative approach (e.g., discourse analysis). The supplemental strategy (e.g., focus groups) reflects a data collection method divergent of the core method. Core and supplemental designs are either sequential (QUAL → qual) or simultaneous (Qual + qual). Morse's (2010) designs include several methodological considerations.

When a single participant group warrants, the researcher pools data within a single data set. Case study designs require data collection and analysis for each individual participant. When comparing groups, data is gathered from each group respectively and each data set analyzed, compared, and contrasted by group (Morse, 2010).

Simultaneous qualitative designs generally include two participant groups, two data sets, and differing methods of analysis. Core component data is grouped for all participants and analyzed thematically or by content analysis. Data from the less dominant method receives its own grouping. Depending on availability and questions, participants from the core component may or may not be the same participants for the supplemental component. However, participants generally derive from the same population. The data converges at the point of results (Morse, 2010).

Morse's (2010) designs bring qualitative, within one paradigm, designs back to the forefront. But Morse's (2010) mixed methods definition and design do not allow for

multiple, evenly weighted qualitative approaches. An alternative to Morse (2010) is Maggs-Reppert's (2000) conception of combining two qualitative approaches, without deference to a dominant or lesser approach.

Events, interventions, issues, actions, and problems are best understood when viewed in totality. Maggs-Rapport (2000) conceptualizes the combining of ethnography and phenomenology as a means for achieving "wholism" in qualitative research (p. 223). Phenomenological research is associated with learning a group's shared meaning of a lived experience or event (Creswell, 2013; Maggs-Rapport, 2000). The culmination of lived experiences may be the phenomenon but the phenomenon also has consequences and meaning for the non-group. Maggs-Rapport (2000) illustrates this point with a nursing example.

Nursing is about caring which manifests itself empirically (the actual work of nursing) and metaphysically (the caring nature of nursing extending beyond actual work). The empirical and metaphysical make nursing multilayered and multifaceted. As a group, nurses experience the phenomenon in question, but the nature of nursing precludes phenomenon occurring in a vacuum. Research needs to include understanding the phenomenon for the non-group (e.g., community, patients, hospital, and researcher). The coexistence of the group and non-group requires a multilayered and multifaceted approach to understanding the phenomenon. This multifaceted approach includes combining ethnographic and phenomenological approaches (Maggs-Rapport, 2000).

Maggs-Rapport (2000) argues a single ethnographic approach requires data to "speak for itself" and places interpretation on the reader (p. 223). However, interpretation of ethnographic data is a design choice. Ethnographic data analysis can

include the triangulation of description, analysis, and interpretation of the culture-sharing group (Creswell, 2013). But Maggs-Rapport's (2000) concern does not diminish the argument for combining ethnographic and phenomenological research. Triangulation of ethnographic and phenomenological data allows interpretation of the phenomenon, while simultaneously considering the phenomenon within the context of the participant group, their cultural background, and daily experiences (Maggs-Rapport, 2000).

Ethnographic research

Perspectives of ethnographic research include describing it as a research approach, methodology, set of methods, research strategy, field work, study of social behaviors, discovery of cultural meanings, and an outcome of research (Creswell, 2013; Maggs-Rapport, 2000; O'Byrne, 2007; Sorrell & Redmond, 1995; Symon & Cassell, 2012b; T. J. Watson, 2011; Yanow, Ybema, & Van Hulst, 2012). In research describing the characteristics of the occupational culture of physiotherapy, Viitanen (2000) describes ethnographic research as "practical" and a "multimethod and multimatierial approach" (p. 84). Korte and Mercurios (2017), coupled with T. J. Watson (2011), extend ethnography to organizational research.

Drawing from Korte and Mercurio's (2017) perspective of pragmatism and adapting T. J. Watson's (2011) pragmatic interpretation of organizational ethnography, the question is not *what is ethnography* but rather *how can ethnography enable worthwhile research within organizational studies and human capital development?* Pragmatic principles of ethnographic research include reality, truth, relevance to practice, and how things work within organizations (T. J. Watson, 2011).

Organizational ethnography has an extensive history beginning with the Hawthorne studies during the 1920s and 1930s and then progressing to in-depth descriptions of organizational life during the 1960s. The late 1970s and 1980s experienced a “methodological renewal” of ethnography in organizational studies. John Van Mannen’s work is credited for theorizing and demonstrating *organizational* ethnography (Yanow et al., 2012). Renewed interests in organizational ethnography taps not only its early roots in organizational symbolism and culture, but varying disciplines and theoretical contexts. These contexts include workplace practices, leadership, organizational design, normative behavior, ethics, and cross-cultural communication (Yanow et al., 2012).

Ethnographic research is appropriate when describing the attributes of a cultural group (Creswell, 2013). Attributes include how the group functions as a culture, beliefs, behaviors, power, rituals, artifacts, resistance, dominance, language, and norms (Creswell, 2013; Yanow et al., 2012). T. J. Watson (2011) argues participative, close observational research is central to ethnographic research and thus the only way to truly learn about the interworking of an organization. In addition, organizations continually change. Organizational ethnography allows organizations to keep pace with shifts in organizational life (Rouleau, de Rond, & Musca, 2014).

Organizational ethnography further explains “actor-context relations” and “hidden dimensions” (Yanow et al., 2012, p. 335). Organizational ethnography allows the researcher to describe the actor within varying contexts (social, historical) and varying perspectives (up close, afar). Hidden dimensions include known or concealed aspects of

how actors process, understand, or make sense of organizational relationships, events, and meanings (Yanow et al., 2012).

Qualitative ontological debates often center around subjective and objective assumptions (Duberly et al., 2012). These perspectives extend to ethnographic research. Ethnographic research includes constructivist-interpretivist and realist-objectivist approaches (Creswell, 2013; Yanow et al., 2012). Subjective ontology views the researcher, along with participants, as constructor or interpreter of events and the meaning of those events. This differs from autoethnography (a narrative qualitative approach) which has the actual participants of the study recording and data collecting their own accounts (Creswell, 2013). Realist-objectivist ethnography positions the researcher as an objective observer; discovering and making sense of “how things are really done” and objectively reporting “what really happened” within an organizational setting (Yanow et al., 2012, p. 332).

The study’s philosophical assumptions include knowledge stemming from objective and subjective evidence, value placed on researcher and participant views, and abductive reasoning. These assumptions allow the study to meet the emerging nature of qualitative research and adjust, thus assuring ethnography as a worthwhile approach for exploring the occupational culture of professional truck drivers, its interplay with driver perceptions of environmental alignment, and the phenomenon of driver churn.

Phenomenological research

Creswell (2013) describes phenomenological research as discovering and describing the shared meaning of lived experiences among several individuals. Within the context of organizational research, Von Krogh, Rossi-Lamastra, and Haefliger (2012)

define phenomena as unexpected, yet with regularities that challenge current knowledge and existing theory. Phenomenology has a prevalent history in organizational research (Von Krogh et al., 2012). Practice focused pragmatism and phenomenon based research are critical to social sciences (Korte & Mercurio, 2017; Von Krogh et al., 2012).

Within social science, new phenomena frequently occur and need explanation (Von Krogh et al., 2012). Phenomena can be broad and not limited to how long the phenomena lasts (Swanson & Holton, 2009). The nearly 40 years of truck driver turnover continues often exhibiting itself in different forms. This includes churn between trucking firms when there is little difference in compensation and benefits (Mansfield, 2014).

Phenomenological research is applicable when no clear theory or no cause and effect relationship is associated with the phenomenon (Von Krogh et al., 2012). Swanson and Holton (2009) caution against limiting phenomena to a narrow set of events or occurrences. Combining phenomenological research, with ethnographic research, contributes *wholism* in exploring the phenomenon of churn and environmental alignment as perceived by members of the occupational culture of professional truck drivers.

Site selection

Ethnographic work requires a setting (Creswell, 2013; Zilber, 2014). Ethnographic settings generally reflect where the participant group lives or works (Creswell, 2013). The occupational culture of professional truck drivers may exist within a trucking firm. However, the study assumes the occupational culture of professional truck drivers transcends a specific firm by spanning the trucking industry as a whole. This assumption derives from Van Maanen and Barley's (1982) research on occupational

communities and occupational cultures. Recognizing organizations are open systems (Cummings & Worley, 2009; Luhman & Cunliffe, 2014; Mullins, 2005; Zilber, 2014), trucks serve as the *office* of professional truck drivers. Further, for some the truck also serves as their home (Marshall, 2013). The actual trucking firm's location does not accurately reflect the occupational setting of truck drivers nor does it reflect the independent and solitary nature of a truck driver's occupational domain.

Ethnography provides for exploring organizations within a larger setting. Social science expands the meaning of organization (T. J. Watson, 2012). The term organization makes reference to the society-level, cross-societal "social organization" that formal organizations are a member (T. J. Watson, 2012, p. 17). The study assumed organizations as more than a formal, traditional, bureaucratic system of domains. These assumptions made way for a multi-sited ethnography.

Multi-sited organizational ethnography is not unusual (Tunçalp & Lê, 2014; Yanow et al., 2012). Multiple sites allow the researcher to "follow actors, actions, artifacts and the ideas they embody and reflect" (Yanow et al., 2012, p. 342). Ethnographic frameworks include multiple organizations as well as occupations that transcend a single organization (Bailey & Barley, 2011; Barley, 1996; Kellogg, 2009; Michel, 2011; Nelsen & Barley, 1997; Zilber, 2014). The multi-site framework does not hinder phenomenological research in that access to participants and data collection can take place at multiple sites (Creswell, 2013).

Population and Sample

The study targeted 20 participants with the final number determined by saturation. Ultimately, the study interviewed 21 participants. The target population was professional

company truckload or less than truckload drivers. The target population reflects the demographic currently and historically prone to turnover and shortages within the trucking industry (American Transportation Research Institute, 2016b, 2017b; Costello, 2017; Costello & Suarez, 2015; Dobie et al., 1998; G. Griffin et al., 2000; Hawes, 2016; Josephs, 2016; LeMay et al., 2013; McNally, 2014, 2017a; Mele, 1989; Schulz et al., 2014; Sersland & Natarajan, 2015; Short, 2014). In addition, the target population reflects drivers that work within the population level boundaries and structures illustrated within the study's conceptual framework (Figure 3). The following outlines the study's considerations for an optimal sample size when executing a simultaneous ethnographic and phenomenological study and the study's purposeful sampling strategies.

General qualitative recommendations suggest smaller sample sizes (Saunders, 2012; Wilmot, 2005). Recommendations for general qualitative inquiry include a minimum of fifteen participants (Guest, Bunce, & Johnson, 2006; Mason, 2010; Saunders, 2012). Homogeneous samples likely reach saturation with four to 12 participants (Saunders, 2012) and interview investigations generally reach saturation with 20 to 50 participants (Wilmot, 2005).

Some texts include sample size determined inductively by collecting data until saturation—when no new themes or information are observed (Creswell, 2013; Guest et al., 2006; Malterud, Siersma, & Guassora, 2016; Mason, 2010; Saldana, 2011; Saunders, 2012). The problem with saturation includes researcher access, rapport with participants, and the requirement of most research proposals to include a sample range (Creswell, 2013; Guest et al., 2006; Saunders, 2012). Saunders (2012) recommends qualitative research include a target sample size.

Phenomenological research encompasses engaging multiple participants who share experiences with the phenomena (Creswell, 2013). Recommended sample size for phenomenology include a minimum of six, five to twenty-five, and three to ten participants (Creswell, 2013; Guest et al., 2006; Mason, 2010; Saunders, 2012).

Considering the difference in purpose, ethnographic recommended sample sizes increase.

Ethnography explores a culture-sharing group. Creswell (2013) prefers multiple observations, interviews, and artifacts until the workings of a single culture-sharing group are understood (saturation). Recommended sample size for ethnography include 35 to 36, 30 to 50, and 30 to 60 participants (Guest et al., 2006; Mason, 2010; Saunders, 2012).

Ultimately sample methods and size must meet the needs of the research (Saunders, 2012). The needs for this study included a sample in support of a simultaneous ethnographic and phenomenological study. Combined qualitative design decisions include the same population and sample answering both ethnographic and phenomenological aspects of the study (Morse, 2010). The study's final sample of 21 participants served as one sample for both ethnographic and phenomenological research objectives. The study's sample size also accounts for saturation, research objectives, access to participants, and feasibility as suggested by qualitative research (Fusch & Ness, 2015; Saunders, 2012; Wilmot, 2005). The study employed two purposeful sampling methods to reach its target sample size—criterion sampling and snowball sampling. Combining and mixing sampling methods stimulates triangulation which increases validity (Creswell, 2013).

Participant criterion

Criterion sampling requires participants to meet predetermined requirements (Creswell, 2013). Participants were required to be a company driver for a truckload or less than truckload carrier. Participants were licensed to drive a truck with three or more axels. This requirement aligns with past research (Chen et al., 2015) and vehicles driven by truckload and less than truckload drivers (Costello & Suarez, 2015). The sample excluded owner-operators.

Drawing from past research, other demographics that did not preclude participation include age, gender, tenure, union membership, small and large trucking firms, safety record, driver location, firm location or distribution (national or regional), and time away from home (Johnson, Bristow, McClure, & Schneider, 2009; Johnson et al., 2011; Min & Emam, 2003; D. F. Williams et al., 2017). Diversification in drivers provides greater representation of the population and improves generalizability to a greater driver population (Johnson et al., 2011; LeMay et al., 2013; Min & Emam, 2003).

In addition, the application of population ecology supports participants from large and small firms (Carroll, 1984; Hannan & Freeman, 1977). Applying an ecological paradigm does not require a predetermined number of small or large firms (Hannan & Freeman, 1977). Instead, researchers should explore results for anomalies attributable to the population boundaries and blueprints prescribed by the study (Carroll, 1984).

Participant recruitment

The competitive nature of the trucking could inhibit access to the target population (Harrison & Pierce, 2009). The study utilized gatekeepers to facilitate snowball sampling to gain access to the target population. Gatekeepers included former

drivers, freight customers (shipping and receiving), members of driver associations, and others with supply chain relationships within the trucking industry and professional truck driver community.

Gatekeepers received a recruitment email (Appendix D). Snowball sampling resulted in gatekeepers either forwarding the researcher's contact information and recruitment flyer (Appendix E) to potential participants or providing the researcher with potential participant contact information. Participant referrals occurred in the same manner—forwarding potential participant contact information to the researcher or providing the researcher's contact information to potential participants. The study's designated recruitment phone number provided direct access to the researcher and allowed potential participants to leave voice messages.

Snowball sampling still required verifying potential participants met the study's sample criterion. The researcher's initial contact with potential participants initiated verification of eligibility. Appendix F provides the protocol for initial potential participant or researcher initiated telephonic contact. The protocol confirmed the potential participant was a TL or LTL company driver. The researcher read the *Oral Presentation of Research Procedures* (Appendix G) and an oral presentation of a *Consent to Participate in Research* as scripted in the interview protocol (Appendix H). The researcher also offered participants an information letter (Appendix I). The researcher scheduled an interview with potential participants who met the sample criterion and consented to continue with an interview.

Potential participants, who initiated contact by electronic mail, received an email reply (Appendix J) with the recruitment flyer and a request to send their telephone number or contact the researcher by telephone to confirm study participation. If the researcher initiated contact by email, potential participants received an email (Appendix K) stating the reason for the contact and who referred the potential participant to the researcher. The correspondence contained the recruitment flyer, an opportunity to request the information letter, and requested the potential participant provide a phone number or contact the researcher by telephone.

All potential participants received notification of a participation incentive. Notification occurred verbally during initial telephonic contact and noted in the recruitment flyer provided during initial email correspondence. Availability of an incentive occurred again during the interview preamble.

Participant incentive

Incentives increase response rates in survey research (Dillman, Smyth, & Christian, 2014) and participation in qualitative research (Krueger & Casey, 2000; Wilmot, 2005). Incentives are not a salary nor a reward for participation (Krueger & Casey, 2000). Krueger and Casey (2000) describe incentives as “stimulus”, participant reminder of a commitments, and a means of conveying the importance of the research (p. 91). Wilmot (2005) views incentives as a “thank you” for participation (p. 7).

Incentives offset not only financial burdens but emotional burdens often accompanying participation in qualitative research (Krueger & Casey, 2000; Wilmot, 2005). By nature, qualitative research is often intensive, intrusive, and personal (Creswell, 2013; Liamputtong, 2010; Saldana, 2011; Wilmot, 2005). As a result, Wilmot

(2005) recommends researchers consider incentives when recruiting for qualitative research.

When relevant to the participant and conveniently administered, successful incentives include compensation in the form of cash and gift cards (Dillman et al., 2014). Convenience includes participants receiving compensation quickly and without undue burden. Burdens include fees associated with electronic transfers of cash, gift cards requiring activation or usage fees, and delays in receiving compensation (Dillman et al., 2014). The study incorporated gift cards as a recruitment strategy and *thank you* for participation.

Truck drivers who met the sample criterion and participated in an interview received a \$30 gift card of their choice from Amazon, iTunes, Google Play, Walmart, or Visa. During the interview, participants selected a gift card and method of delivery. With the exception of Visa, participants elected to have the gift card sent electronically or by mail. Participants who selected a Visa gift card received their incentive by mail only. The researcher distributed the selected incentive within three to five business days of the interview.

Amazon and Walmart gift cards were selected based on the wide variety of items provided by these retailers. Visa allows flexibility in redeeming a gift card. Technology's relevance to truck driving continually increases specifically smartphone enabled technology and applications (Gilbert, 2017; Maddock, 2015; Ward, 2015; Whelan, 2015). A 2015 survey found over 95% of truck drivers have smartphones (Maddock, 2015). A 2017 survey found 87% of truck drivers use their smartphone daily for work (Gilbert, 2017). In addition, smartphones provide drivers with sources of

entertainment, overnight parking location apps, and video communication with family (TruckingTruth, n.d.). Gift cards to iTunes and Google Play complement a driver's professional and personal use of smartphones.

Several factors determine the optimal incentive amount; particularly incentives with a cash value (gift cards). Compensation set too low could insult the target population or be viewed as insignificant in comparison to the time and cost to participate (Krueger & Casey, 2000). Incentives set too high become too costly for the study or make participants feel awkward (Krueger & Casey, 2000). The incentive amount met the study's financial means and an amount commiserate with the range of purchases available among the selected retailers.

Field Environment and Data Collection Procedures

The field environment is where “the social processes under study take place” (Burrell, 2009, p. 182). The *field* now includes offline and online worlds and in some instances these worlds merge (Garcia, Standlee, Bechkoff, & Yan Cui, 2009), giving rise to emerging data collection and data analysis methods conducive to modern field environments. Methods refer to the varying sources, forms of data collection, and data analysis (Creswell, 2013; Crotty, 1998). Emerging collection methods include social media, web based focus groups and interviews, blogs, electronic mail, and computer-mediated communication (Creswell, 2013; Garcia et al., 2009; Tunçalp & Lê, 2014).

While acknowledging the growth of qualitative methods, Creswell (2013) asserts collection methods fit into the following taxonomy—interviews, documents, and audiovisual materials. Symon and Cassell (2012) warn the notion of “core” qualitative methods could imply other methods as “peripheral” (p. 7). Symon and Cassell (2012)

still posit core qualitative methods, when the core accounts for diverging worldviews and varying philosophical perspectives. Symon and Cassell's (2012) core qualitative organizational collection methods include interviews, focus groups, participatory visual methods, participant observation, autoethnography, and ethnography. Despite these differences, qualitative fields and data collection methods continually evolve (Creswell, 2013).

A characteristic of qualitative research includes employing multiple methods of collection and analysis (Creswell, 2013; Maggs-Rapport, 2000). Viitanen (2000) combines official organizational documents, interviews, videos, and field journals to describe the occupational culture of physiotherapy (Viitanen, 2000). D. F. Williams et al. (2017) combines interviews and blogs to explore psychological stresses contributing to professional truck driver dissatisfaction and the decision to leave their employer or the trucking industry all together. Incorporating multiple data sources and forms enhance validity (Creswell, 2013; Viitanen, 2000). The study incorporated three data collection methods—computer-mediated communication, interviews, and documents. The following supports the study's amalgamation of core and emerging data collection methods as they occur within the study's two integrated multimodal environments—online field (computer-mediated communication) and offline field (interviews, documents).

Online field environment

Online fields provide opportunities to collect and examine archival data and multimedia artifacts relevant to further describing and validating cultures and subcultures (Garcia et al., 2009; Tunçalp & Lê, 2014). Virtual fields make it possible to research

social phenomena that occurs “across vast distances and in unconventional spaces” (Burrell, 2009, p. 185). Qualitative social science research continually grows in its application of online environments (Hookway, 2008; Tunçalp & Lê, 2014).

The very nature of truck driving takes drivers to various locations. Long distance truck drivers have the highest turnover rates, many drive irregular routs, drive thousands of miles, and spend multiple days away from home (Johnson et al., 2011; LeMay et al., 2013; Schulz et al., 2014; Sersland & Natarajan, 2015; Short, 2014; Z. Williams et al., 2011). An online field, coupled with an offline field, expands data collection on the phenomenon of churn and the ethnographic *space* of professional truck drivers.

Garcia et al. (2009) argue for the inclusion of computer-mediated communication (CMC) observations when blending offline and online field environments. Observation is a method of data collection taking place in a field setting (Creswell, 2013). The study’s online field environment and data collection boundaries included the collection and observation of CMC.

Computer-mediated communication (CMC) observations

CMC are text-based messages exchanged using an electronic device or method (e.g. computer, phones, or website). Messages are synchronous or asynchronous. Generally, senders of CMC are in a location different from the receiver. The receiver of CMC is an individual or group. CMC messages originate in a number of forms—electronic mail, blogs, discussion groups, instant messaging and chats, and feedback comments. When other forms of communication are absent, the language of CMC becomes an important means for how individuals make contact, present themselves, and build relationships (Garcia et al., 2009; Meinel, 2014). Effectively furthering the tenets of

ethnographic research requires researchers to incorporate the internet and CMC (Garcia et al., 2009).

CMC, specifically derived from an online field, may require varying levels of observation (Meinl, 2014; Tunçalp & Lê, 2014). Levy's (2014) ethnography examined social constructs of electronic systems to monitor a driver's work activity. Levy's (2014) data collection included interviews and multiple truck driver focused media sources. Levy (2014) monitored YouTube channels and active internet bulletin board communities where drivers shared opinions, information, and complaints.

D. F. Williams et al. (2017) data collection included professional truck driver focused blogs and interviews with professional truck drivers. D. F. Williams et al. (2017) utilized online search engines to identify blogs centered on the life of professional truck drivers and then narrowed their focus to bloggers addressing topics relevant to the study. D. F. Williams et al. (2017) collected data from four blog websites representing 10 professional truck driver bloggers.

The flexibility and benefits of blogs include public availability, minimal data collection effort, optional author anonymity, archival, searchable, and access to exclusive populations (Hookway, 2008; D. F. Williams et al., 2017). In addition, blogs serve as cultural artifacts (Garcia et al., 2009). Hookway (2008) likens the application of blogs to offline qualitative diary research. Existing within the "blogosphere" of the internet, blogs are a mainstay of online culture (Hookway, 2008, p. 91). Hookway (2008) describes blogs as "naturalistic data in textual form" (p. 92). Blogs are textual communications housed on websites generally written by a single author that may allow for reader synchronous and asynchronous feedback and exchange (Hookway, 2008; Tunçalp & Lê,

2014; D. F. Williams et al., 2017). Blogs originate as electronic discourse with classification of blogs and other CMC still emerging (Meinl, 2014). The current study separated CMC from other forms of data which is in keeping with prior research (Meinl, 2014). Additional CMC considerations occur within Tunçalp and Lê's (2014) framework (space, time, boundary crossing) for defining an online field.

Defining the online field

Online fields in social science and ethnographic research are difficult to define given their virtual nature (Burrell, 2009; Garcia et al., 2009; Tunçalp & Lê, 2014). However, Tunçalp and Lê's (2014) review of management based online ethnographic research provides a framework for defining an online field environment. Drawing from Tunçalp and Lê (2014), the study's online field is defined by the researcher's prescribed boundaries (space, time, boundary crossing) and level of engagement.

Space boundaries reflect to what degree the online field occupies the study. The researcher sets boundaries as to what will and will not constitute the field setting (Tunçalp & Lê, 2014). Specifically, the researcher determines if the study's field is purely online, to what extent the online and offline fields integrate, and if the field is comprised of a single online site or multiple online sites (Tunçalp & Lê, 2014). The study's data collection boundaries incorporated an offline field and an online field. Online field boundaries included multiple, public websites that met the study's criterion for CMC in the form of blogs and, if available, asynchronous and synchronous feedback.

Time boundaries control when observation takes place—in real time or when the researcher reconstructs events through archival data (Tunçalp & Lê, 2014). The study included data collection of current and archival blogs in addition to current and archival

synchronous or asynchronous messages in response to selected blogs. Time boundaries depend on initiation of the messages, availability of the messages, and the researcher's availability to complete an observation. Availability includes permission to collect, interpret, and include blog and feedback posts as part of the study's data collection.

Some argue public web content is no different than any other public archival data and as such are free for collection and interpretation (Hookway, 2008). Others argue that despite public access, blogs and other written content occur with a semblance of privacy (Hookway, 2008) and collection of such content requires permission and the data collection purpose (Garcia et al., 2009). Adding to the debate is the observation that CMC and web interactions lack a clear delineation between private and public content (Hookway, 2008; Tunçalp & Lê, 2014). The study made no determination as to the public or private nature of blogs.

Researcher engagement is the final defining factor of an online field. Tunçalp and Lê (2014) consider three levels of researcher participation—no participation, full participation, and researcher built online field. Tunçalp and Lê (2014) conducted a systematic review of online ethnographies and found nonparticipant observations represent a high proportion of online ethnographic research within varying management disciplines.

Disclosure of researcher participation becomes an ethical issue when unobtrusiveness provides an advantage in online ethnography (Garcia et al., 2009; Hookway, 2008; Tunçalp & Lê, 2014). Tunçalp and Lê's (2014) review found 39% of researchers chose to remain undercover and 25% of researchers making no reference as to if they disclosed their presence. In this study, the researcher remained undercover as a

nonparticipating observer but with full disclosure of this decision within the study's proposal and final analysis. This position aligns with current research trends and adds validity by reducing observer bias (Tunçalp & Lê, 2014).

Tunçalp and Lê (2014) further report online ethnographers cease to utilize other methods of collection (physical observation or interviews). Solely relying on an online field environment may result in failing to recognize the eventual merger of online and offline life. The same hold true for conventional ethnographers. Tunçalp and Lê (2014) encourage combining traditional ethnographic interviews with online ethnographic collection methods in an effort to “apprehend a multifaceted reality” (Tunçalp & Lê, 2014, p. 73). As such, the study included an offline field environment.

Blog data collection

The study collected and analyzed 83 blog posts, across nine different bloggers. D. F. Williams et al. (2017) collected data from four blog websites representing nine professional truck driver bloggers. D. F. Williams et al. (2017) utilized online search engines to identify truck drivers and then narrowed their focus to bloggers addressing topics relevant to the study. D. F. Williams et al. (2017) gained permission of blog authors prior to collecting blog posts. With consideration of D. F. Williams et al. (2017), the study's selection and collection of the blogs occurred in five phases as follows.

Phase one of collection began with an initial online search of websites oriented towards the solicitation and collection of professional truck driver experiences in the form of blogs. Search terms included “truck driver blogs”, “trucking blogs”, and “truck bloggers”. The initial search was further facilitated by bloggers recommending, linking,

or tagging other bloggers or blog sites. Supply chain and trucking articles listing and recommending trucking blogs to follow also informed the initial search.

Phase two began with a cursory review of phase one websites to eliminate non-textual blogs (pod casts, video blogs, audio blogs), Facebook, Twitter, Instagram, YouTube, expired domains, articles, and unsecure websites. After the cursory review, 48 distinct websites remained. Forty-eight does not reflect the actual number of bloggers or blog posts within each site. The researcher recorded the names and links of the 48 websites on the study's data tracking log. A cursory review of the 48 sites intimated data collection from all 48 sites would result in collecting and analyzing several hundred blog posts, which was not feasible.

Phase three reduced the number of blog sites from 48 to 19 by removing sites without driver authored blogs. Eliminated blogs were oriented towards non driver members of the supply chain and logistics (recruiters, carrier executives) shippers, receivers, dispatchers, fleet managers, driving schools). The remaining 19 blog sites were recorded on the study's data tracking log in preparation for phase four just prior to final selection of blogs.

During phase four, the researcher conducted an in-depth observation and review of all 19 blog sites. The review began with first reaffirming the blogger was a driver and then determining what type of driver. When available, the researcher reviewed author profiles for their current work status. Blogs authored by an owner operator were removed. Also removed were non-qualifying blogs missed during phase three and blog posts confirming the author did not meet the criterion of a company truckload or less than truckload driver. This included blog authors who were former drivers although still

active in the driver community. During phase four, it was observed multiple bloggers chronicling CDL school and training. Unless subsequent entries supported eventually becoming a truckload or less than truckload driver, these blogs were also eliminated. Phase four concluded with 10 bloggers identified across two blog sites. The study's data collection log captured each blogger's user name with the name and a link to each of their posts. This facilitated collection using the study's computer-assisted qualitative data analysis software NVivo.

Phase five began by using NVivo. A source folder was created for each blogger. Using the direct links within the study's data collection log, each blogger's posts were accessed, captured using NCapture for NVivo, and then imported as a .pdf. Phase five concluded with 83 blog posts by nine bloggers across two websites. Each blogger received the pseudonym of *Blogger* with a numerical code. Table 1 lists the blogger pseudonym and the number of blogs collected for each pseudonym.

Table 1

Blogger Pseudonyms and Posts Collected

Blogger Pseudonym	Number of Blog Posts Collected
Blogger-1	1
Blogger-2	5
Blogger-3	14
Blogger-4	10
Blogger-5	7
Blogger-6	7
Blogger-7	12
Blogger-8	1
Blogger-9	26

Offline field environment

Data collection in the form of interviews and documents encompassed the study's offline field. This section begins with background in support of a participant driven interview environment and combining ethnographic and phenomenological interviews. Interview considerations of participant recruitment, incentives, and interview structure, protocol, and pilot pretesting follow. The section concludes with a review of the study's third data collection method of documentary data.

Marshall's (2013) autoethnography as a truck driver encompassed fieldwork taking place in her truck, truck stops, terminals, and a number of other places along her route as a truck driver. Keathley (2014) interviewed current and former truck drivers in various settings to include restaurants, drivers' homes, a truck's cab, and former places of employment. Levy's (2014) offline field included truck stops in two states, national truck trade shows, company break rooms, trucking supply stores, and other incidental sites. Observing truck drivers in their professional setting is a logistical challenge given the location (truck, road) and nature (driving) of their work. The study's offline field largely depended on when and where participants wanted to provide a telephonic interview with additional considerations outlined during the subsequent discussion of interview types, structure, and protocol.

Interviews

Interviews are common to phenomenological and ethnographic research (Creswell, 2013; Symon & Cassell, 2012b). In organizational research, interviews contribute "reliable gateways" for discovering actual occurrences within an organization (Alvesson & Ashcraft, 2012, p. 240). Qualitative interviews comprise of structural and

procedural characteristics (Alvesson & Ashcraft, 2012; Creswell, 2013). Lindlof and Taylor's (2010) typology of qualitative interviews include ethnographic (informal, casual, impromptu exchanges during other social actions); informant (repetitive conversations with individuals whose knowledge and expertise provide insight valuable to achieving research objectives); narrative (data captured through stories); and focus groups (multiple participants encouraged to engage, debate on a specific topic; Alvesson & Ashcraft, 2012).

As with other aspects of qualitative research designs, Alvesson and Ashcraft (2012) suggest the study's epistemology and ontology guide interview decisions. Pragmatic inquiry serves to unearth the truth and challenge and affirm beliefs (Korte & Mercurio, 2017). Truth is the collection and development of knowledge or evidence derived from careful collective inquiry (Korte & Mercurio, 2017). Pragmatic research should yield practical results for organizations and the people within them (Korte & Mercurio, 2017). The study included both ethnographic and phenomenological interview methods.

Ethnographic and phenomenological interviews share attributes to include the researcher as an instrument (Sorrell & Redmond, 1995). The researcher comports themselves as the collector of interview data and uses such data to determine additional lines of questioning or inquiry (Sorrell & Redmond, 1995). This does not preclude an interview protocol but rather the flexibility needed for the emergent nature of qualitative inquiry (Creswell, 2013; Sorrell & Redmond, 1995).

The target sample of 20 professional truck drivers served as the study's interview participants. Professional truck driver experiences makes them appropriate to answer

both ethnographic and phenomenological questions of the study. Ethnographic and phenomenology have different objectives but both embrace interviews. Question structure and data analysis provide the differences between the two methodologies.

Ethnographic and phenomenological interviews. Sorrell and Redmond (1995) describe interviews as critical to ethnographic research. Interviews serve as a method for describing or gaining cultural knowledge (Sorrell & Redmond, 1995). Ethnographic interviews search for categories of meanings in culture and comparison of meaning within a shared social construct (Creswell, 2013; Sorrell & Redmond, 1995; Yanow et al., 2012).

Ethnographic interviews typify informal and conversational interaction (Alvesson & Ashcraft, 2012; Lindlof & Taylor, 2010; Sorrell & Redmond, 1995). The informal nature of ethnographic interviews does not preclude semi-structured interviews. Emphasis rests on question development. Sorrell and Redmond (1995) describe three types of ethnographic questions—descriptive, structural, and contrast.

Descriptive or *grand tour* questions are generally open-ended and provide an overview of the participant's perspective on culture. Structural questions and descriptive questions often occur simultaneously. Structural questions help validate previously obtained data and map how the participant organizes cultural knowledge. Contrast questions provide meaning to participant language used to describe culture (Sorrell & Redmond, 1995).

Phenomenological interviews unveil information about a specific phenomenon. Phenomenological interviews remain focused on participant experiences of the phenomenon. The opening question invites a narrative or storytelling response.

Phenomenological questions reflect unstructured conversations and seek descriptions as opposed to interpretations. Questions are “how” instead of “why” oriented (Sorrell & Redmond, 1995, p. 1121). One sample of professional truck drivers serves to provide responses to both ethnographic and phenomenological interview questions.

Interview structure and protocol. The study implored semi-structured interviews for both ethnographic and phenomenological aspects of the study, with the flexibility of allowing participant responses to guide the interview. Ethnographic lines of questioning include descriptive, structural, and contrast questions. Although phenomenological questions are sometimes unstructured conversations, phenomenological lines of questioning will begin as semi structured and allow participant responses to guide the ultimate phenomenological structure of the interview. The interview protocol (Appendix H) scripts the entire interview. The interview preamble provides an overview of the study, solicits verbal consent, digitally recording the interview, and the availability and processing of incentives. The protocol identifies transitions between ethnographic and phenomenological questions. Table 2 maps interview questions to research objectives and question type.

Table 2

Interview Map Linking Questions to Research Objectives and Question Type

Question Number	Research Objective	Question Type
1	RO1	Demographic
2	RO3	Ethnographic—Grand Tour
3	RO3	Ethnographic—Grand Tour
4	RO3	Ethnographic—Grand Tour
5	RO3	Ethnographic—Grand Tour
6	RO3	Ethnographic—Grand Tour
7	RO2 RO3 RO4	Ethnographic—Structural
8	RO3 RO5	Ethnographic—Contrast
9	RO5	Phenomenological—semi structured
10	RO5	Phenomenological—semi structured
11	RO4 RO5	Phenomenological—semi structured
12	RO4 RO5	Phenomenological—semi structured

During interviews, the researcher encourages responses in the form of narrative stories and becomes an objective *traveler*. Stories provide a valuable window into the symbolic, emotional, and cultural aspects of organizations and individuals (Alvesson & Ashcraft, 2012; Gabriel, 1998; Georges, 1969; Wilkins, 1984). The researcher becomes a

“fellow traveler” by displaying empathy, interest, and pleasure in the story telling process (Gabriel, 1998, p. 136). All participant interviews occurred telephonically. Participants determined when the interview took place. Although telephonic, the study’s design still considered interview location as outlined in the next section.

Interview location. Interview location is critical to the interview process and data collection. Keathley’s (2014) truck driver interviews emphasize the need to balance participant preferences with researcher needs. Keathley (2014) conducted and recorded truck driver interviews in person and telephonically. Keathley (2014) allowed participants to determine interview location. This approach includes benefits and limitations. Restaurant settings allowed Keathley (2014) to purchase participant meals, however background noise interfered with the quality of the recordings and made transcription difficult. Interviews at a driver’s home increased participant comfort but hindered Keathley’s (2014) control over the setting.

Keathley (2014) further describes difficulties with workplace interviews and interviewing drivers in their truck. Unless salaried or staff driver, driver compensation is based on the number of miles driven (A. J. Williams & George, 2013). Delaying a truck driver could cut into driving time and potential earnings. Keathley (2014) interviewed a driver in his truck while the truck idled to maintain air conditioning. At the time, diesel fuel cost over five dollars a gallon. The interview took approximately two hours. Keathley (2014) describes this as an “expensive interview for the driver” (p.15). In addition, interviews within work settings are subject to distractions, participant multi-tasking, and time constraints (Keathley, 2014).

Traditional qualitative research leans towards and often advocates for in person, face-to-face interviews while discouraging telephonic only interviews (Farooq, 2015). Critics assert telephonic interviews as inferior collection methods and lack a “natural encounter” (Farooq, 2015, p. 3). Farooq (2015) argues these criticisms of telephonic interviews lack empirical evidence. After a review of telephonic interviews in qualitative research, Novick (2008) concludes an unsubstantiated bias against telephonic interviews in qualitative research. Telephonic only interviews include limitations—lack of feedback cues, social distance, and the potential for reduced rapport (Farooq, 2015; Novick, 2008). Farooq (2015) challenges these limitations as a direct result of telephonic interviews. Farooq (2015) posits that the interviewer, interview procedures, question structure, and listening skills determine levels of social distance, rapport, and feedback cues.

Confidentiality. The centrality of participants to qualitative research heightens ethical concerns over protecting participants while still empowering them to share rich descriptions of personal experiences and perceptions. Confidentiality is one method of protection (Kaiser, 2009; Paoletti, 2014; Petrova, Dewing, & Camilleri, 2016). There are different levels of confidentiality. Deductive disclosure (internal confidentiality) occurs when the disclosure of an attribute (employer and location) makes it possible to identify research participants (Kaiser, 2009). Deductive disclosures breach trust between research and participant (Petrova et al., 2016) and could bring personal harm to participants (Kaiser, 2009; Petrova et al., 2016).

The study applied a holistic approach to confidentiality by taking measures to ensure confidentiality throughout the research process. During initial contact and

recruitment, the researcher reviewed and assured confidentiality. As part of the interview protocol, participants again received a presentation of the study's procedures to include confidentiality.

Confidentiality continued during interview transcription and analysis. The researcher removed all personally identifiable information and assigned numerical codes, pseudonyms prior to third party transcription of recorded interviews. Numerical codes and pseudonyms remained when reporting data directly linked to participant responses. Post study confidentiality continued with restricted access to collected data. Table 3 outlines the confidentiality strategy as adapted from Petrova et al. (2016). The study's confidentiality strategy extended across all methods of data collection to include pilot testing. A pilot of the interview protocol and participant communications ensured feasibility of procedures, structure, and digital recording of telephonic interviews.

Table 3

Confidentiality Strategy

Stage	Activity
Participant Recruitment	<ul style="list-style-type: none"> • Researcher personally assures confidentiality • Confidentially affirmed during recruitment
Data Collection—Interviews	<ul style="list-style-type: none"> • Informed consent • Reaffirmed informed consent • Researcher personally reaffirms confidentiality • Password protected electronic data collection devices
Transcription and Analysis	<ul style="list-style-type: none"> • All personally identifiable information removed prior to third party transcription • Numerical codes and pseudonyms used to identify participants during third party transcription • Member checking • Restricted access to data with a password protected computer and hard drive
Publishing Results	<ul style="list-style-type: none"> • Prevented indirect disclosure—numeric codes and pseudonyms
Post Study	<ul style="list-style-type: none"> • Restricted access to data with a password protected computer and hard drive

Pilot. Validating the interview protocol helps ensure the interview questionnaire and process actually measures the study's internal constructs (Dikko, 2016; Van Teijlingen & Hundley, 2002) as reflected in the study's research objectives. In qualitative research, pilot testing advances validity and alerts researchers to potential procedural flaws (Dikko, 2016; Kim, 2011; Turner, 2010; Van Teijlingen & Hundley, 2002). Pilot study or pilot testing, in social research, has two areas of consideration. The first area is a test run of the full study but on a reduced scale (Dikko, 2016; Kim, 2011; Van Teijlingen & Hundley, 2002). The second, pretesting an instrument (Dikko, 2016; Kim, 2011; Van Teijlingen & Hundley, 2002).

After receiving IRB approval, the study pilot pretested all gatekeeper and potential participant communications in addition to the interview protocol. The pretest did not include the study's other methods of data collection (blogs and documents). The study's sample is not readily available through a targeted organization nor a population for which the researcher has direct access. Instead, the study relied on snowball and criterion sampling methods. In cases of small sample sizes or limited access to the population, the researcher can pilot test with subgroup participants or pilot participants can become study participants (Van Teijlingen & Hundley, 2002). Pilot participants should have characteristics and interests similar to the target sample (Turner, 2010).

The study's pilot subgroup participants consisted of a female former truckload driver who also held training and development positions within the trucking industry; one male former truckload and less than truckload driver, and one male enrolled in a corporate sponsored truckload training program. The former driver subgroup has knowledge of the profession, ethnographic construct under study (occupational needs and culture of professional truck drivers), and experiences relevant to the phenomenon under study (churn). Experience as a former driver also qualifies this segment of the subgroup to provide feedback on interview protocols and questionnaire vernacular, ambiguity, difficulty, and feasibility. At the recommendation of one of the former drivers, the student enrolled in the truck driving program was included. The student driver confirmed changes in occupational vernacular and provided feedback from the perspective of someone new to the industry. The subgroup's experience qualified them to provide feedback on gatekeeper and potential participant communication documents and protocols. In addition to protocol and instrument viability, pilot testing unveils potential

researcher biases (Kim, 2011). After pilot testing, gatekeepers began receiving their recruitment letters and data collection of interviews began.

Interview data collection. The study established a continuous data collection plan of 20 interviews or until saturation (See Table 5 for the complete data collection plan). Snowball sampling by gatekeepers and participants generated each of the study's participants. Referrals occurred in a number of ways. Upon receiving the researcher's contact information from gatekeepers or previous participants, potential participants contacted the researcher telephonically or by electronic mail. The researcher responded as outlined in the initial telephone protocol (Appendix F) and initial electronic mail protocols (Appendix J and Appendix K). The researcher confirmed eligibility as outlined in the respective protocols. Eligible participants, who confirmed willingness to participate, scheduled an interview at their convenience.

The transient nature of participant work and work environment precluded a safe, consistent, and prescribed interview setting. Snowball sampling generated participants in geographic locations different from the researcher. Participant criteria did not require a specific trucking firm affiliation or organization. Farooq (2015) acknowledges some ethnographic studies may dictate a participant's natural setting and thus not lend itself to telephonic interviews. Within this study, the truck served as the participant's predominant work environment. As a mobile environment, telephonic interviews served as an appropriate and viable method of collecting and recording interviews.

Although the truck serves as the participant's work environment, interviews took place when the participant confirmed they could safely participate in a one-hour telephonic interview. This included the researcher suggesting the interview take place

during a mandatory rest period as prescribed by the participant's employer or licensing requirements.

Contact with potential participants and interviews with participants took place at varying times and continuously throughout the study. The nature of the participant's work required flexibility in communication and interviews. Potential participants contacted the researcher as early as 4:00 am and requested interviews as late as 10:00 pm. The researcher accommodated each requested interview time.

The study's interview protocol (Appendix H) guided each interview to include recording permission. At the conclusion of each interview, the researcher offered the study's incentive of a \$30 gift card of their choice to Amazon, Google Play, iTunes, Walmart, or Visa). Participants accepting an incentive, provided their preference of delivery and received their gift card within three to five business days.

All participants consented to having their interview recorded. Each interview included two digital recording devices. Two recording methods helped resolve transcription errors due to background noise or equipment failure. The recording device's internal memory and a hard drive with real time backup provided two methods of collecting and storing interviews. Passwords protected unauthorized access to interview data. The researcher removed all personal identifiable information, assigned a pseudonym with a numeric code, resaved the recording and sent it for third party transcription in preparation for data analysis. The study's offline field environment continues with documents as part of its data collection plan.

Documentary data

Documentary evidence was the study's second offline collection method (interviews, documents) and third overall collection method (CMC, interviews, documents). Multiple collection methods provide an opportunity to converge and corroborate data and evidence (Bowen, 2009; Creswell, 2013). The proliferation of electronic repositories, with open access, increase the value documentary materials bring to qualitative research. The endurance of documents allow research questions and answers to extend over a longer period of time than other data collection methods (Lee, 2012). Bowen (2009) describes documents as words, images recorded without researcher interference. Hodder's (2000) description includes "mute evidence...with written texts and artifacts" (p. 703). Lee (2012) observes narrow descriptions of documents prevent researchers from fully appreciating that documents extend beyond written words and include visual and audio content.

It is impossible to list all documentary research materials but they include governmental reports, public records, newspaper articles, advertisements, manuals, books, brochures, letters, journals, diaries, event programs, maps, charts, press releases, photographs, CMC, survey data, scrapbooks, and various forms of multimedia (Bowen, 2009; Creswell, 2013; Lee, 2012; Prior, 2003). Prior (2003) argues staying away from the idea of documents as static, stable, and predefined artifacts but rather networks of action. Networks of action "involve creators (agents, writers, publishers, publicists and so on), users (readers, or receivers) and settings" (p. 2). Prior's (2003) argument advances the premise that a document's meaning and intention varies between creator, user, and setting (Lee, 2012).

The study's documentary data served to document the trucking industry's driver retention strategies. Trucking industry reports and analysis specific to the phenomenon of driver turnover and efforts to combat turnover were collected. Other sources included trucking firm organizational documents (annual reports, investor reports). Narrow profit margins and human capital costs result in some of the largest trucking firms identifying retention efforts and perspectives within annual reports (Saia, Inc., 2016; Swift Transportation Company, 2016; Werner Enterprises, Inc., 2016; YRC Worldwide Inc., 2016).

Data collection of documents. The study's research design (Figure 6) supports continuous data collection and analysis in support of the emergent nature of qualitative research and the study's interpretative framework and philosophical assumptions. Document sources derived from two sectors— public motor carrier corporate documents and research conducted by the American Transportation Research Institute and sponsored by the American Trucking Associations.

The American Trucking Associations represents over 35,000 motor carriers across 50 affiliate trucking associations, conferences, and councils (American Transportation Research Institute, 2012b; American Trucking Associations, n.d.-a). The American Transportation Research Institute serves as a research function of the American Trucking Associations (American Transportation Research Institute, 2012b). These two entities sponsor and conduct research and analysis on trucking industry topics to include driver retention.

There are a number of motor carrier configurations. The study collected American Transportation Research Institute and American Trucking Associations

documents specific to for-hire carries with truckload or less than truckload operations. This criterion further supported the study’s theoretical framework of exploring truckload and less than truckload carriers as a population. Corporate and American Transportation Research Institute documents were gathered until saturation.

Table 4 lists the documents collected. Column one describes the document source. Column two provides the document name and applicable years. American Transportation Research Institute documents include the research series for which the document was collected. For example, the American Transportation Research Institute completes an annual *Critical Issues* series.

Table 4

Documents Collected

Sources	Document Type and Year(s)
American Transportation Research Institute	<i>Annual Analysis of the Operational Costs of Trucking 2017</i> <i>Critical Issues in the Trucking Industry 2012, 2013, 2014, 2015, 2016, 2017</i>
Knight Transportation	<i>2016 Annual Report to Our Shareholders</i>
Swift Transportation	<i>2016 Annual Report; 2015 Annual Report</i>
Warner Enterprises	<i>2016 Annual Report</i>
YRC Worldwide Inc.	<i>2015 Annual Report</i>

Table 5 outlines the study’s complete data collection plan. The plan begins with pre study activities consisting of The University of Southern Mississippi Institutional Review Board approval letter and a pilot study. Weeks divide the remainder of the data collection plan by how the week corresponded to data collection outlined in the preceding

Population and Sample, Online Field Environment, and Offline Field Environment sections.

Week one initiated contact with gatekeepers and commenced CMC data collection procedures. The researcher contacted and responded to referred participants to schedule interviews. Week one also included the study's initial participant interviews. Personal identifiable information was removed from interview recordings and sent for transcription. Week two continued with gatekeeper contact and participant referrals from Week one. Collection of documentary data commenced as did identifying blogs conveying the constructs of turnover, churn, alignment, retention, and occupational culture among professional truck drivers. The researcher completed scheduled interviews. Personal identifiable information was removed from interview recordings and sent for transcription. Permissions to use blogs were received.

Week three began with 14 interviews completed. The collection of documentary evidence continued and conducting and scheduling interviews. The researcher processed participant incentive requests. At the beginning of week four, the researcher completed interviews 19 and 20. Mid week, interview 21 was completed. After initial reviews of interviews and blogs, the researcher determined saturation and no additional interviews sought. Gatekeepers were notified interviews were completed and the recruitment flyer QR code was deactivated. The recruitment voice mail was changed to include thanking participants for interest in the study and acceptance of requests for a post study summary report. The researcher continued with additional document reviews, and memoing of identified blogs. Interview transcripts were received and proofread.

Week five completed processing of all outstanding incentive requests, conclusion of documentary review, all remaining interviews were sent for transcription and received from transcription. The transcripts were reviewed for accuracy and the study's data analysis plan initiated. The full data analysis process immediately follows this section with Table 6 providing an overview of the data analysis plan.

Table 5

Data Collection Plan

Timeframe	Activity
Pre Study	<ul style="list-style-type: none"> • The University of Southern Mississippi Institutional Review Board approval letter • Complete pilot study • Confirm recruitment phone number and QR code accessibility
Week 1	<ul style="list-style-type: none"> • Contacted gatekeepers to confirm willingness to distribute recruitment flyer or provide researcher with potential participant contact information • Emailed Gatekeeper Recruitment Letter to confirmed gatekeepers • Scheduled and conducted initial interviews with potential participants • Conducted initial web search for CMC in the form of blogs orientated towards professional truck driver experiences • Removed personal identifiable information from recorded interviews and sent for transcription
Week 2	<ul style="list-style-type: none"> • Identified potential blogs and narrowed based on the study's topics of turnover, churn, alignment, retention, and occupational culture • Began collecting documentary data identifying driver retention strategies • Contacted gatekeepers to confirm receipt of Gatekeeper Recruitment Letter and availability of any potential participant contact information • Checked and responded to recruitment voice mail, email and scheduled interviews with potential participants • Conducted scheduled interviews

Table 5 (continued).

Timeframe	Activity
	<ul style="list-style-type: none"> • Removed personal identifiable information from recorded interviews and sent for transcription • Processed incentives • Received blog permissions
Week 3	<ul style="list-style-type: none"> • Process participant incentive requests • Begin reviewing and memoing identified blogs • Continued collecting documentary evidence • Follow up on participant referrals for interviews • Conducted scheduled interviews • Processed incentives • Removed personal identifiable information from recorded interviews and sent for transcription
Week 4	<ul style="list-style-type: none"> • Conducted interviews 19, 20, and 21 • Determined saturation reached • Notified Gatekeepers interviews completed • Deactivated recruitment flyer QR code • Processed participant incentive requests • Continued reviewing and memoing identified blogs • Continued reviewing and memoing documentary evidence • Removed personal identifiable information from recorded interviews and sent for transcription • Proofed interview transcripts
Week 5	<ul style="list-style-type: none"> • Processed remaining participant incentive requests • Concluded documentary review • Removed personal identifiable information from recorded interviews and sent for transcription • Received all outstanding transcripts • Proofed interview transcripts • Began data analysis plan
Weeks 6-8	<ul style="list-style-type: none"> • Completed data analysis plan

Note. See Table 6 for the complete data analysis plan.

Data Analysis

Multiple attributes of qualitative research factor into data analysis decisions—philosophical assumptions, methodology, data collection, validity, and fundamentals of qualitative data analysis (Creswell, 2013; Maggs-Rapport, 2000; M. B. Miles et al., 2014; Morse, 2010; Symon & Cassell, 2012b). The preceding attributes contributed to the study’s data analysis plan. The remainder of the chapter charts the study’s data analysis plan with consideration of pragmatism, computer-assisted qualitative data analysis software (CAQDAS), reliability and validity, and limitations.

Miles, Huberman, and Saldaña (2014) describe pragmatic realism as allowing for data analysis not bound by one philosophical approach or school of thought. In a similar pragmatic fashion, the study’s data analysis plan borrows from various data-analytic methods. These methods support concurrent data collection and analysis which facilitates valid and reliable findings (M. B. Miles et al., 2014).

Concurrent data collection and analysis allows the discovery of gaps in the data and a real-time opportunity to close the gaps (M. B. Miles et al., 2014). In addition, the researcher is able to “cycle” between reflecting on current data and reflecting on strategies for collecting new data (M. B. Miles et al., 2014, p. 70). Even with concurrent data collection and analysis, there is a systematic data collection process and a systematic data analysis process. The proceeding provides for the study’s data analysis process.

Computer-assisted qualitative data analysis software (CAQDAS)

Qualitative research tends to generate an overwhelming amount of data requiring meticulous review and analysis (Creswell, 2013; M. B. Miles et al., 2014; Saldana, 2011; Symon & Cassell, 2012b). Qualitative research is abstract, “messy” (Sinkovics &

Alfoldi, 2012, p. 109), and nonlinear (Saldana, 2011). CAQDAS, also known as qualitative data analysis software, refers to various brands and types of software designed to assist in the management and facilitation of qualitative research (Davidson, 2012; Humble, 2012; Lewins & Silver, 2009; M. B. Miles et al., 2014; Rodik & Primorac, 2015; Salmona & Kaczynski, 2016). Incorporating CAQDAS brings structure and rigor to a qualitative study's data collection and analysis plan (Sinkovics & Alfoldi, 2012).

CAQDAS first emerged during the 1980s with qualitative researchers taking notice in the 1990s (Cope, 2014; Humble, 2012; Rodik & Primorac, 2015; Salmona & Kaczynski, 2016, 2016). CAQDAS progressed from limited and slow in the 1980s to specialized and powerful in the 21st century (Cope, 2014; Davidson, 2012; Rodik & Primorac, 2015). Features, costs, access, and capabilities vary from free with minimal features to costly with sophisticated transcription of multimedia (Creswell, 2013; Humble, 2012; Lewins & Silver, 2009; M. B. Miles et al., 2014; Rodik & Primorac, 2015).

Arguments against CAQDAS include distancing the researcher from the data, data analysis driven by software as opposed to the researcher, software complexities not worth the return on investment, and limited research on the effectiveness of CAQDAS (Cope, 2014; Creswell, 2013; M. B. Miles et al., 2014; Saldana, 2011). Most arguments against CAQDAS reflect researcher delimitations. CAQDAS does not preclude the researcher from engaging directly with the data. Nor does CAQDAS automatically analyze data.

CAQDAS does not replace the researcher. CAQDAS relies on the researcher to assign codes and specific queries. Each researcher determines their own aptitude, time,

and patience to learn CAQDAS and the return on investment in doing so. Research on CAQDAS continues to grow and CAQDAS continues to evolve in response to qualitative researcher needs (Cope, 2014; M. B. Miles et al., 2014; Saldana, 2011; Salmons & Kaczynski, 2016). The study's CAQDAS was NVivo.

Throughout the study's data collection process, data was imported into NVivo for storing, managing, transcription, organizing, and immediate access to data (Cope, 2014; Creswell, 2013; Lewins & Silver, 2009; M. B. Miles et al., 2014). NVivo accepted all forms of the study's data to include observation notes, recorded interviews, CMC, multimedia, and documents (Cope, 2014; M. B. Miles et al., 2014; Sinkovics & Alfoldi, 2012).

Data analysis procedures

The study's data analysis plan began with organizing the data. Organizing the data allows the researcher to holistically appreciate all data sources (Creswell, 2013; M. B. Miles et al., 2014; Tesch, 1990). Organization of data began with transcribing interviews and field notes. A third party transcription service transcribed all interviews. To maintain confidentiality, the transcriber received digital audio files absent all personally identifiable information. Pseudonyms and numeric codes served as file identifiers. Further organization included separating data based on type, collection method, and its relation to ethnographic or phenomenological research objectives (Creswell, 2013; M. B. Miles et al., 2014; Tesch, 1990).

The second step was a systematic, cursory review of all data. Tesch (1990) suggests initially focusing on what the data relates to as opposed to what the data actually means. This further organizes the data and captures initial researcher thoughts by

memoing (Creswell, 2013). The third step was Creswell's (2013) suggestion of immersing one's self into the data. For example, repeatedly reading all transcripts in their entirety and continuing with memoing. Memorandums reflect ideas, concepts that stimulate the researcher (M. B. Miles et al., 2014). In this study, the researcher composed and stored initial and subsequent memorandums via a word processing software (Microsoft Word) with copies stored in NVivo. Two forms of note storage reduced lost time and work should a software malfunction have occurred.

The fourth step was to review the memos for opportunities to cluster similar subjects (Roberts, 2010; Tesch, 1990). Clustering occurred manually and by NVivo, with both methods compared. This helped to identify initial data entry or notetaking errors. NVivo or any CAQDAS must align with the researcher's needs early and throughout data analysis. The study employed NVivo to continually analyze multiple data types and maintain record of each analysis based on researcher determined and prescribed parameters.

The fifth step initiated coding which Creswell (2013) referred to as the "heart of qualitative data analysis" (p. 184). Codes are "labels that assign symbolic meaning" to descriptive or inferential information collected during the study (M. B. Miles et al., 2014, p. 71). Codes prompt or trigger greater reflection on the data's connotation (M. B. Miles et al., 2014). Drawing from the literature and their own views, the researcher builds in-depth descriptions and develops themes (Creswell, 2013). Coding serves as the actual analysis of the data (Creswell, 2013; M. B. Miles et al., 2014). All forms of data aggregate into smaller categories (Creswell, 2013).

Organization of data included its relation to ethnographic or phenomenological research objectives. Creswell (2013) suggests ethnographic data analysis result in descriptive codes and themes. Descriptions include actors, events, and settings. Data is further analyzed for regular patterns, themes, and “interpretation of the culture-sharing group” (Creswell, 2013, p. 197). The study’s epistemological and axiological assumptions guide an emic and etic analysis of ethnographic related data. An emic (insider) perspective relies on participant views and reports those views exactly as provided by the participants. The data is synthesized and passed through an etic (researcher) scientific perspective in an effort to develop a comprehensive cultural interpretation (Creswell, 2013).

Phenomenological data analysis should result in passages conveying the “essence” of participant shared experiences (Creswell, 2013, p. 79). Essence is not only what was experienced but “how” it was experienced (Creswell, 2013, p. 79). Achieving the essence of the phenomenon requires identifying and coding statements, phrases, or quotes that explain phenomenon as experienced by the participants (Creswell, 2013). Codes are converted into “clusters of meaning” (Creswell, 2013, p. 82).

The study’s methodologies, philosophical assumptions, and research objectives determined the selection of Miles et al.’s (2014) First Cycle and Second Cycle as the study’s codes and coding method. Researchers can mix and use multiple coding approaches (M. B. Miles et al., 2014). NVivo generated the following First Cycle codes for the study’s ethnography and phenomenological objectives (RO2, RO3, RO4, and RO5): process (conceptual and visible action); in vivo (culture or subculture terms); emotion (experienced or recalled emotion); values (values, beliefs, and attitudes);

evaluation (merit, significance of policies or programs); dramaturgical (participant objectives, tactics, conflicts attitudes, emotions, subtexts); causation (how and why outcomes occurred); attribute (basic descriptions); magnitude (frequency of existing code); subcoding (second level code for a primary code); and simultaneous (two or more codes for a single data; M. B. Miles et al., 2014).

Step six initiated Second Cycle coding and pattern codes. First Cycle coding provided an initial summary of the data. Whereas Second Cycle coding reduces First Cycle coding into smaller constructs, themes, or categories (M. B. Miles et al., 2014). Second Cycle codes are known as pattern codes. Inferential or explanatory pattern codes identify emerging structures, explanations, and themes (M. B. Miles et al., 2014). Final analysis began upon completion of step six.

The researcher conducted final analysis by reviewing and verifying NVivo pattern results, codes in support of the pattern, and pattern summaries. The researcher reviewed, verified, edited, and revised all First Cycle and Second Cycle codes as part of the study's continuous data collection and analysis process. The researcher assessed member check feedback against Second Cycle coding and pattern code results. The completed report includes visual displays of the findings. Post study's data analysis procedures concluded with a post study.

Post study activities included data retention and participants receiving a summary report. Interview data remained in the researcher's possession with no suspense date. Minimum data retention periods often depend on research funding sources and institution requirements (Coulehan & Wells, 2006; U.S. Department of Health and Human Services, Office of Research Integrity, n.d.). Absent institution or funding requirements for

maximum retention, the principle investigator determines how long to retain data (Coulehan & Wells, 2006). Table 6 captures the described data analysis, final analysis, and post study procedures.

Table 6

Data Analysis Procedures

Procedure	Action
Step 1—Organize Data	<ol style="list-style-type: none"> 1. Sort all raw data by type and collection method 2. Transcribe interview notes 3. Assign participants numeric codes and pseudonyms 4. Remove all personally identifiable information from recorded interviews and relabel with participant numeric code and pseudonym 5. Send relabeled interviews to 3rd party for transcription 6. Enter all collected data into NVivo 7. Preliminarily sort and categorize data in NVivo by type, collection method, research objective, and initial ethnographic or phenomenological connection
Step 2—Systematic Cursory Review	<ol style="list-style-type: none"> 8. Assess data relation to research objectives and avoid determining the data’s initial meaning 9. Memo initial researcher thoughts
Step 3—Full Immersion	<ol style="list-style-type: none"> 10. Repeatedly review all transcripts and notes 11. Memo full immersion observations
Step 4—Clustering	<ol style="list-style-type: none"> 12. Review memos for clustering opportunities 13. Begin clustering manually and within NVivo 14. Compare manual and NVivo clusters

Table 6 (continued).

Procedure	Action
Step 5—First Cycle Codes and Coding in NVivo	15. Assign initial labels to chunks of data 16. Assign labels from First Cycle code list by Miles et al. (2014) 17. Analyze the data 18. Analyze (emic and etic) ethnographic descriptive codes and themes 19. Analyze phenomenological coding statements, phrases, or quotes that explain phenomenon
Step 6—Second Cycle Coding and Pattern Codes	20. Reduce First Cycle coding into smaller constructs, themes, or categories 21. Send participants member check of synthesized interview data
Final Analysis	22. Assess member check feedback against Second Cycle Coding and Pattern Codes 23. Review and verify NVivo pattern results, codes in support of the pattern and pattern summaries 24. Complete report and displays of findings
Post Study	25. Prepare and distribute participant summary report 26. Restrict access to data with a password protected computer and hard drive

Note. Throughout data analysis, the researcher reviewed, verified, edited, and revised all First Cycle and Second Cycle codes as part of the study's continuous data collection and analysis plan. This includes assessing and interpreting any member check feedback.

Validity and reliability

Some argue the interpretive and subjective nature of qualitative research preclude it from quantitative burdens of reliability and validity (M. B. Miles et al., 2014; Symon & Cassell, 2012a). The nature and purpose of qualitative research is not to “prove” but rather explore issues, problems, and to empower (Creswell, 2013; Symon & Cassell,

2012a, p. 204). However, this study subscribed to validity and reliability equivalents in qualitative research.

Validity in qualitative research translates into credibility, accuracy, and trustworthiness in the results (Creswell, 2013; M. B. Miles et al., 2014). Trustworthiness includes disclosure of researcher bias (M. B. Miles et al., 2014). The study's theoretical perspective and philosophical assumptions reflect the researcher's views and inherent biases. Quality research openly describes how the researcher contextualizes the study's methods "within methodological and theoretical paradigms" (Birt, Scott, Cavers, Campbell, & Walter, 2016, p. 1803). Throughout the study, including data analysis, the researcher reflected upon and disclosed influences of the study's theoretical perspective and philosophical assumptions. Member checking, continuous and concurrent data collection and analysis, multiple methods of analysis, and CAQDAS further advance the study's attributes of validity.

Member checking (participant or respondent validation) helps validate the credibility of participant data or results (Birt et al., 2016). There are multiple methods of member checking but in general the researcher returns analyzed data or an interview transcript to the participant for review (Birt et al., 2016). More important than the member check method is transparency in what the researcher wants to achieve from member checking and how the member checking method delivers validity and credibility within the context of the study's epistemology (Birt et al., 2016). The study's epistemological assumptions include multiple research methods resulting in objective and subjective evidence with axiological considerations valuing both researcher and

participant views. As a result, the study enlisted a member check of synthesized and analyzed data.

Review of synthesized and analyzed data enables participants to contribute towards the trustworthiness of the researcher's analysis (Birt et al., 2016). The participant provides a subjective review of the researcher's objective synthesis of all interview transcripts. Sometimes member checking occurs months after full data collection (Birt et al., 2016). To facilitate member check participation, analyzed data should be assessable (Birt et al., 2016). Participants received an invitation to review and provide feedback on synthesized constructs and themes (Appendix M).

Multiple analysis methods and CAQDAS contribute to rigor (Pritchard, 2012; Sinkovics & Alfoldi, 2012). Valid and reliable qualitative research includes documenting iterations of analysis, accessibility to high quality data, and retention of data (M. B. Miles et al., 2014). CAQDAS data management, storage, and history of queries contributes to achieving valid and reliable research (Humble, 2012).

In qualitative research, reliability equates to "reasonable care" (M. B. Miles et al., 2014, p. 312). Inter-coder, intra-coder, and inter-rater reliability is agreement among multiple coders during the analysis process (Cornelissen, Gajewska-De Mattos, Piekkari, & Welch, 2012; Creswell, 2013; M. B. Miles et al., 2014). The study included only one researcher. CAQDAS served as a second coding source. CAQDAS results are compared to manual coding by the researcher as a method for determining inter-coder reliability between CAQDAS and the researcher (Woods, Macklin, & Lewis, 2016).

Summary

The study's methodology reflects a simultaneous ethnographic and phenomenological qualitative approach. The study's pragmatic interpretive framework and philosophical assumptions support qualitative inquiry in search of problem solving without deference to a specific methodology. Pragmatism further supports design and collection methods that further both theory and practice (Korte & Mercurio, 2017; Morgan, 2007). The study applied pragmatism for its flexibility and philosophical assumptions that recognize both participant and researcher bring value to the study (Creswell, 2013).

The study consisted of an online and offline field environment. A total of 83 blog sources were collected and analyzed as part of the online field. The study's offline field supported data collection in the form of documentary evidence and interviews. Documentary evidence included public documents identifying trucking industry retention efforts. The study applied snowball and criterion sampling to reach its target population and minimum sample size of 20 company truckload and less than truckload professional truck drivers. Ultimately, 21 participants provided semi-structured telephonic interviews.

All data sources received continuous data collection and analysis. Thematic coding occurred manually and electronically with NVivo. The researcher developed descriptive codes, themes, and emic and etic analysis of ethnographic data. The researcher coded phrases and text to further explain the phenomenon. The results of analysis occurred in two forms—individual and merged.

CHAPTER IV – RESULTS

This study explored professional truck driver experiences with the phenomenon of churn and their perceptions of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. A simultaneous ethnographic and phenomenological research design, guided by a pragmatic interpretive framework, provide the results of this chapter. The research design supports continuous data collection and analysis of multiple data forms to include documentary data, computer-mediated communication in the form of blogs, and participant interviews. The data was interpreted manually and by NVivo using Miles et al.'s (2014) First Cycle and Second Cycle coding methods as detailed in Chapter III.

This chapter presents the study's results. Miles et al. (2014) suggest multiple display types when presenting qualitative results. Multiple displays of the same qualitative data increases comprehension and assimilation of the findings (Bletzer, 2015). This chapter organizes results by the study's research objectives with results displayed in a combination of tables, matrices, networks, and narratives. The first research objective describes the participant's demographics.

Participant Demographics

Twenty-one professional truck drivers participated in semi-structured telephonic interviews. Participants were asked questions (Appendix H) mapped (Table 2) to the study's research objectives. Table 7 provides participant demographic data as defined by Research Objective One: *Describe participant demographics in terms of years of driving experience, driver type, tenure with current employer, employer size, gender, and age.*

All participants are company drivers working at a for-hire truckload or less than truckload trucking firm. Column one (Table 7) lists each participant's researcher assigned pseudonym and numeric code. Total participant age averaged 47 years with truckload drivers averaging 44 ($n = 14$) years in age and less than truck load drivers averaging 53 ($n = 7$) years of age. Overall, the study's average participant age is slightly less than the national average for professional truck drivers. The American Trucking Associations estimate 49 as the average age of for-hire truckload drivers and higher for less than truck load drivers (Costello, 2017).

Column two describes participant gender. Nineteen (90.5%) participants identified as male and two (9.5%) participants identified as female. The American Trucking Associations estimates female drivers account for 6% of all truck drivers (Costello, 2017).

Driver type column specifies if the driver is truckload ($n = 14$) or less than truckload ($n = 7$). Participants provided the number of years and months with their current employer. The average tenure with their current employer averaged 8.4 years. Employer fleet size (units or total number of trucks) reflects participant estimates of their employer's fleet size. Participants averaged 18 years of total professional driving experience.

Table 7

Participant Demographics

Participant	Age	Gender	Driver Type	Tenure with current employer	Employer Fleet Size	Total Driving Experience
Darren-1	44	Male	TL	10.5	550-600	16
Ronald-2	54	Male	TL	8	800	28
Garrett-3	64	Male	TL	7	100	20
Dalton-4	34	Male	TL	6 Months	1,300	9
Zane-5	28	Male	TL	5	800	7
Josh-6	46	Male	TL	5 Months	1,100	7
Amanda-7	42	Female	TL	13	750-1,000	20
Rodney-8	50	Male	LTL	10	10	30
Mitchell-9	46	Male	TL	13	1,500	25
Brandon-10	34	Male	TL	1.25	2,000	1.25
Jeff-11	55	Male	TL	4	300	23
Luis-12	38	Male	TL	1	2,500	1.5
Henry-13	45	Male	LTL	11	15,000-16,000	12
Sarah-14	56	Female	LTL	19	14,000-15,000	25
Joseph-15	66	Male	LTL	36	14,000-15,000	32
Stanley-16	72	Male	LTL	1.5	15	36
Sean-17	34	Male	LTL	2	20-25	11
Tony-18	49	Male	TL	7	6,000-7,000	20
William-19	51	Male	TL	2.15	5,000	25
Hayden-20	36	Male	TL	12	12	12
Charles-21	45	Male	LTL	13	14,000-15,000	18

Note. Participant identification reflects a researcher generated pseudonym and numeric code. Tenure with current employer and total driving experience reflect in years unless otherwise noted. Driver type categories are either less than truckload (LTL) or truckload (TL).

Additional demographics not displayed include three participants who are team drivers with the remaining 18 participants solo drivers. The majority of participants drive late model tractors with varying trailer types (flatbed, dry van, livestock). Participants haul a variety of goods and commodities (hay, livestock, frozen foods, rail commodities,

steel, building supplies, premium goods) with routes extending across the United States and Canada. The study's second research objective incorporates participant interviews and documentary data to describe trucking industry retention strategies.

Trucking Industry Retention Strategies

This section of the chapter discusses the main themes emerging after coding and clustering trucking industry retention strategies identified in public motor carrier corporate documents, American Transportation Research Institute research, and participant interview responses linked to identify trucking industry retention strategies. The culmination of documentary data and interviews answer Research Objective Two: *Describe trucking industry strategies to retain professional truck drivers.*

Interview questions 7 and 13 map to Research Objective Two in addition to other research objectives. As it relates to Research Objective Two, participant responses to question seven *Thinking about ways to keep professional truck drivers, can you think of any ideas, strategies, or incentives that you feel meet the needs and values of professional truck drivers?* were coded for retention strategies participants either experienced or observed as a professional truck driver. Participant responses were sometimes couched as "Our company..." or "We started doing it..."

A total of 12 documents were reviewed (Table 4). Second code cycling generated seven major themes to describe trucking industry retention strategies. However, only reporting themes does not allow clustering of explanatory data in support of each retention theme. Miles et al. (2014) suggest a summary table partitioning data to its respective clusters or themes. Table 8 partitions retention strategies into seven themes. Column one states the major theme and column two provides activities in support of the theme.

Table 8

Thematic Summary of Trucking Industry Retention Strategies

Major Retention Strategy Themes	Implemented Strategies and Activities
Base Compensation and Benefits	<ul style="list-style-type: none"> • Across the board pay increases • Pay structures based on driving experience, longevity, or seniority • Full medical, dental, and vision • 401(K) matching • Base mileage pay calculated using practical miles • Paid vacation
Financial Incentives in Addition to Base Pay	<ul style="list-style-type: none"> • Sign on bonus • Stay on/retention bonus • On time delivery bonus • Safety bonus • Fuel efficiency bonus • Detention pay • Annual miles • Performance and productivity pay based on a combination of safety, customer service, regulatory and organization compliance, additional functions not covered by mileage pay (loading and unloading freight), days worked per week, delivery times, or miles per week
Open Communication and Collaboration	<ul style="list-style-type: none"> • Self-select freight • Access to senior management • Recognition of achievements • Soliciting driver input and feedback • Fostering dispatcher or driver manager relationships

Table 8 (continued).

Major Retention Strategy Themes	Implemented Strategies and Activities
Operating Models and Practices	<ul style="list-style-type: none"> • Collection of detention from shippers and receivers • Regional and dedicated driver support (dispatcher, driver manager, planners) • Improved terminal productivity (driver assignments, load planning, scheduling, return times, reduced driver wait time)
Quality of Life	<ul style="list-style-type: none"> • Promoting healthier lifestyles • Increased home time for improved driver/family relationships
Training and Development Opportunities	<ul style="list-style-type: none"> • Productivity skills • Driving skills • Safety • Becoming a certified driver trainer
Work Environment	<ul style="list-style-type: none"> • Improved tractor comforts (auxiliary power unit, inverters, satellite radio, refrigerators) • Maintaining newer fleets (average tractor 2-3 years old) • Regular replacement and maintenance of tractors • No touch freight

Both *Financial Incentives in Addition to Base Pay* and *Operating Models and Practices* reference *detention*. Detention is a financial cost a trucking firm charges a shipper or receiver for delaying a driver beyond a reasonable time to load or unload freight (Beauchamp, 2016; Cassidy, 2016). Delays not only impact the trucking firm's planning of subsequent loads and deliveries but also a driver's compensation earned during hours of service (Beauchamp, 2016).

Professional truck drivers are subject to federal regulations that govern hours of service. Hours of service prescribe the number of hours a driver can work on a daily and weekly basis. Work includes driving and non driving functions. The regulations further

prescribe mandatory rest breaks. The regulations were devised to improve motor carrier safety and reduce truck involved accidents (U.S. Department of Transportation, Federal Motor Carrier Safety Administration, 2017). Hours of service continue to countdown even when a driver is delayed at no fault of the driver (Beauchamp, 2016).

Drivers paid by the mile, have only so many hours to earn those miles and in turn earn compensation for their work. When a driver is not driving, per mile drivers lose the opportunity to earn their base pay and subsequently any other incentives tied to mileage as listed under theme *Financial Incentives in Addition to Base Pay*. The next section presents the findings of Research Objective Three, which explores driver occupational needs and culture.

Occupational Needs and Culture of Professional Truck Drivers

Participant statements and blog posts provide an explanatory voice to the network of themes constructing the occupational culture of professional truck drivers. Results further provide the context in which the occupational culture informs occupational needs. This section begins with themes derived from collected blog posts and concludes with a context network demonstrating lateral links within and among the constructs found in Research Objective Three: *Explore professional truck driver occupational needs and culture (shared beliefs, values, norms, collective perceptions, cultural forms, and practices) as perceived by professional truck drivers.*

The study collected 83 blog posts, across nine individual bloggers, participating in two websites dedicated to the interests of professional truck drivers or those considering becoming a professional truck driver. Blogs were analyzed and coded for content and relation to the study's research objectives. Table 9 reports the percentage of blog sources

($n = 83$) coded to themes reflecting the study’s research objectives. Blog sources may support more than one theme.

Table 9 reflects all blog sources coded to the major theme of Occupational Needs and Culture. Some or all of the blog’s content referenced an occupational need or some attribute of occupational culture as ascribed by the study. Discussed further in the next section, the study ascribed the following as attributes of an occupational culture: include language, rituals, symbols values, norms, and cognitive, normative dimensions. When considering the purpose of the blog sites and cultural attributes, all blog sources coded to theme Occupational Needs and Culture becomes likely.

Table 9

Blog Source Distribution by Research Objective

Theme	Percentage of Blog Sources Coded to Theme
Driver Retention Strategies—RO: 2	0%
Occupational Needs and Culture—RO: 3	100% (83)
Environmental Alignment with Trucking Industry Retention Strategies—RO: 4	19% (16)
Perceptions of Churn—RO: 5	1% (1)

Blog sources included discussions and references to several of the retention strategies noted in Table 8 *Thematic Summary of Trucking Industry Retention Strategies*. However, bloggers did not discuss the strategies within the context of retention but rather as an observation. The observation may convey an occupational culture expectation of members as opposed to a retention strategy as reflected in Blogger-4’s statement below.

I always put the onus on the driver, and not the dispatcher... It usually takes them

only a few short statements to make you realize that they could change the whole dynamics of their relationship with their dispatcher if they would simply put away their attitude, and be willing to cooperate with their dispatcher so that they could work as a team toward the company's goals. Blogger-4

The study did not infer Blogger-4's suggestion to foster a driver-dispatcher relationship as within the context of identifying a trucking industry retention strategy. The study considered the entire context of each blog source to determine coding. This is why Driver Retention Strategies received no references. The study found several blog sources included topics listed under Implemented Strategies and Activities from Table 8, however bloggers did not discuss nor note the topics as retention strategies they experienced or observed.

It is important to note that *turnover* and *churn* are not the same thing. Churn is a type of turnover behavior and the phenomenon under study. The one blog source coded to Perceptions of Churn was the result of the researcher interpreting the blogger's description of her career as one that mimicked churn behavior. Research Objective Five further explores the phenomenon of churn. However, Table 9 results display a lack of reference to churn and begins to inform the results of driver perceptions of churn.

Blog distribution results highlight the dichotomy between driver occupational interests and needs and the human capital interests and needs of the trucking industry. These results do not conclude environmental alignment or environmental misalignment between drivers and the trucking industry. The results suggest that given the opportunity to express themselves, within an environment dedicated to their profession, drivers lean towards topics unrelated to the trucking industry's human capital risk of churn, shortages,

and retention. The volume of blog posts coded as Occupational Needs and Culture required additional analysis and coding. As qualitative diaries (Hookway, 2008) and cultural artifacts (Garcia, Standlee, Bechkoff, & Yan Cui, 2009), the study's blog results became another context for developing the context network of the occupational culture of professional truck drivers.

Context network of the occupational culture of professional truck drivers

Results displayed as context networks, help describe interrelationships within functions, positions, groups, or organizations that provide context for individual actions (M. B. Miles et al., 2014). Figure 7 presents the study's context network of the complicated interrelationships forming the occupational culture of professional truck drivers and the link between these relationships and the occupational needs of professional truck drivers. Early review of blog sources revealed that although bloggers were not interviewed, their blog posts spoke directly to some of the study's interview questions. As a result, Figure 7 is a network built upon both interview data and blog data. Subsequent tables further explore the network's major themes with explanatory statements from interview participants and blog authors for greater understanding and balance between emic and etic reporting of the results. The context network commences with a driver's individual identity and the story of becoming a professional truck driver.

The story of how I became a truck driver. Individual identity sits at the core of subsequent layers of culture an individual builds upon and migrates towards to include occupational or professional layers of culture (Gallivan & Srite, 2005; Karahanna, Evaristo, & Srite, 2005). The "story" of becoming a professional truck driver begins with a grand tour question—Tell me the story of how you became a truck driver (Figure 8).

Grand tour style questions delve into a participant's cultural views (*Sorrell & Redmond, 1995*). Bloggers also provided a grand tour of how they became a truck driver. Some bloggers described their path to becoming a truck driver when reflecting on early rituals in their careers (first solo run). Blogger reflections were often in the context of providing advice to "rookie" drivers or potential new drivers. Bloggers new to the profession, also detailed their journey and its relation to how and why they became a professional truck driver.

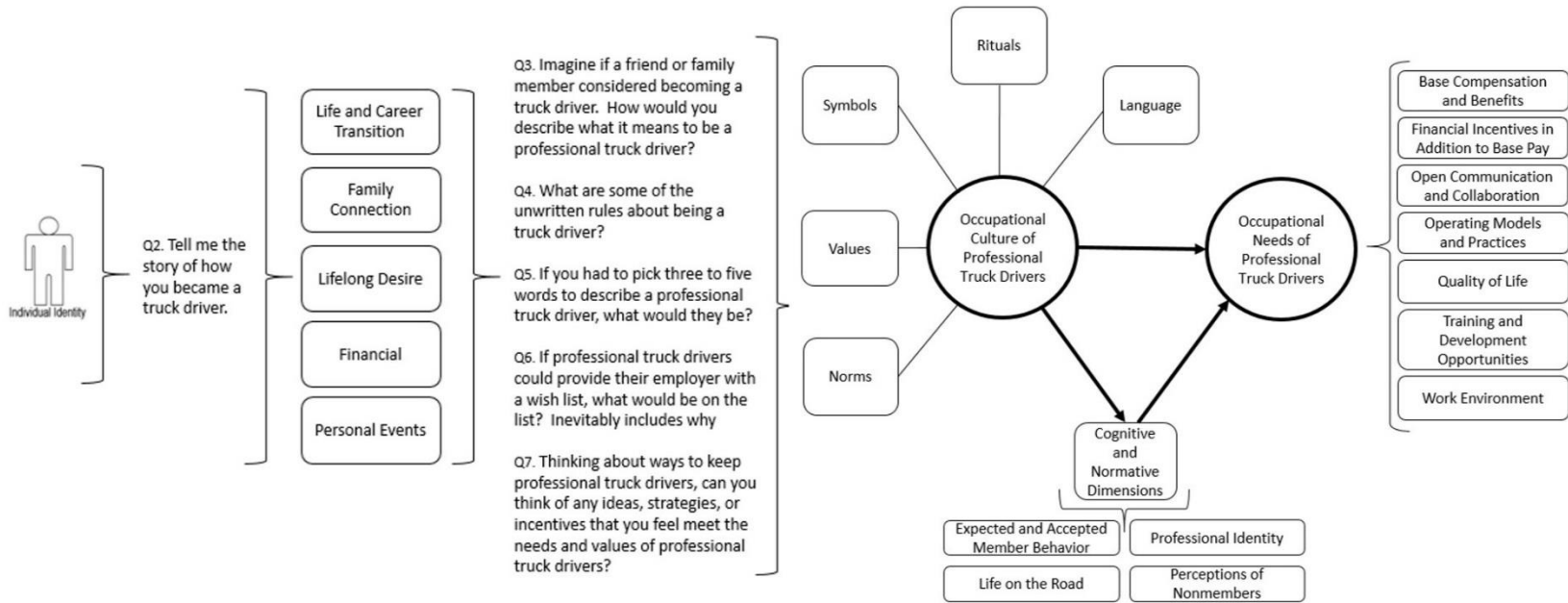


Figure 7. Context network of the occupational needs and culture of professional truck drivers.

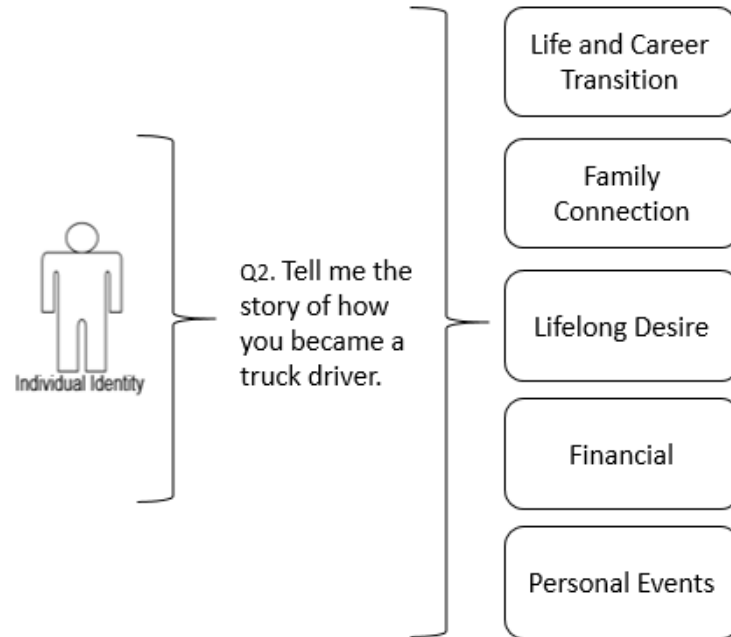


Figure 8. Individual driver identity informing the story of becoming a professional truck driver and the five major themes resulting from those stories.

Five themes surfaced from accounts of becoming a professional truck driver. Table 10 provides these themes with explanatory interview and blog statements. Data analysis included coding participant and blogger statements for emotion. Selected explanatory statements provide examples of interpersonal and intrapersonal conflicts and relationships that factored into becoming a professional truck driver.

The first theme, Life and Career Transition, emerges from participants and bloggers who became professional truck drivers while in search of change and new challenges. The second theme, Family Connection, reflects stories where a specific family member is credited for early formation of the participant’s desire to become a truck driver. Formation could be the family member introducing the participant to trucks

or truck driving early in the participant's life or the participant relied upon or turned to the family member once deciding to become a truck driver.

Theme three, Lifelong Desire, reflects participants who became enthusiastic, vivid in their reverence for semi-trucks as an iconic symbol in early childhood. The decision to become a truck driver was rooted in the opportunity to fulfill an early childhood desire for a career that included the participant's iconic symbol of a semi-truck. Amanda-7's connection to the truck she fell in love with as a child, continues as an adult (Table 10). Today, Amanda-7 drives a 2015 Peterbilt.

The undertone of pay crosses multiple themes of why participants and bloggers became professional truck drivers. Stories coded to the fourth theme, Financial, were prompted by participant's describing eminent financial needs, hardships, or an obligation to provide for their family as the reasons for becoming a truck driver. Truck driving's appeal was not only financial but the speed at which the participants could earn a commercial driver's license and earn money to remedy difficult financial circumstances.

Personal Events is the final theme for becoming a truck driver. A personal event or conflict triggered becoming a truck driver. Often stories centered on failed relationships, with truck driving providing an escape to a new life or career transition. Although sensitive in nature, the theme became prevalent for some participants. The study carefully considered participant privacy while still meeting the need to convey the participant's experiences in their own words.

Table 10

Themes of How I Became a Professional Truck driver

Theme	Explanatory Blog and Interview Statements
Life and Career	<i>A Teacher, A Writer, A Philosopher, Now A Truck Driver!</i> Blogger-6
Transition	<p><i>I had spent the past 20 years of my life working in television broadcasting in various roles... the years had eroded my role into a thankless and suffocating rut. I seriously needed a change...a new experience.</i> Blogger-7</p> <p><i>...got out of the Army...decided that I'd just drive a truck</i> Dalton-4</p> <p><i>I just came to a point in my life when I was trying to find something different that made good money that had interest to me or appealed to me. I always wanted to travel...and you get paid to do it. And I was looking for something as well where there was a short...training...into a new career. And it pays good, so with all that in mind it was just kind of like a perfect fit for me... I could step back and think about what I wanted to do...I actually tried to fit something for me, and this is what I chose.</i> Luis-12</p> <p><i>I graduated...in journalism...And I got into that a little bit and couldn't stand it. My close friend, his father worked at a truck driving school. And I was looking for a change. Seemed adventurous, so I jumped on it and I just never left.</i> William-19</p>
Family Connection	<p><i>My father was a truck driver...one day I decided to call him up and decided I wanted to see the United States. Told him he needs to come and pick me up and teach me the ropes and how to drive a truck; wasn't for my father I probably wouldn't have gotten into it but you never know.</i> Ronald-2</p> <p><i>...my uncle, he put me in a truck and put me on a tractor pulling a trailer at the age of six. I've been doing it ever since.</i> Stanley-16</p>

Table 10 (continued).

Theme	Explanatory Blog and Interview Statements
Lifelong Desire	<p><i>It was [a] truck stop and the big red 379 Peterbilt– I didn't know... what it was at the time... but that's what I saw... I didn't grow up around trucking...But I looked at my dad and I said I wanted one of those one day... here I am. Amanda-7</i></p> <p><i>...my daddy bought me a Tonka truck toy set when I was little. And I have always been intrigued by trucks. When they'd come down the street, this little town of 500 people I lived in, I'd always run out there and pump my arm up and down wanting them to honk the horn. When they did [honk the horn] it did something for me. But I've always loved to drive and I've loved operating heavy equipment. Joseph-15</i></p>
Financial	<p><i>...I'm not going to lie, I got into it for the money because I was rock bottom financially and needed steady income that was more than minimum wage and it's allowing me to get back on my feet. Brandon-10</i></p> <p><i>I was a manager at a hotel and I lost my job and this was a quick easy way to turn around. I had three kids to support... go to school for a month to make some quick cash basically to ...keep a roof over their heads; kids. Mitchell-9</i></p> <p><i>...work was scarce...and I was just trying to find another way to make good money...I put in an application [employer] ...and been a truck driver ever since. Zane-5</i></p> <p><i>I used to be a private investigator...once I lost that job I was just trying to find something to match that type of income I had. Charles-21</i></p>
Personal Events	<p><i>[Laughs] I've had a crazy life just to let you know right up front. I had a lousy career; I was a boiler operator in the Navy and then I worked at a hospital afterwards and so it was way after I got sober. It [truck driving] was a way to stay sober in the trucking industry because you're tested and all other stuff and I always wanted to do it. Jeff-11</i></p> <p><i>...my ex-wife got pregnant...I can't have kids...I went to [location] where I have a friend and found there was nothing that I was happy doing. Someone told me how you can be alone yet still make some money in a truck. So I signed up and haven't looked back, no regrets except the fact it's a small box to live in. Josh-6</i></p>

The second half of the network begins with the contributions of questions three, four, five, six, and seven exploring and building the occupational needs and culture of professional truck drivers (Figure 9). Five themes (language, rituals, symbols, values, and norms) serve as the spokes to the hub labeled the occupational culture of professional truck drivers. The hub becomes the epicenter of all constructs forming the occupational culture. The occupational culture informs cognitive and normative dimensions.

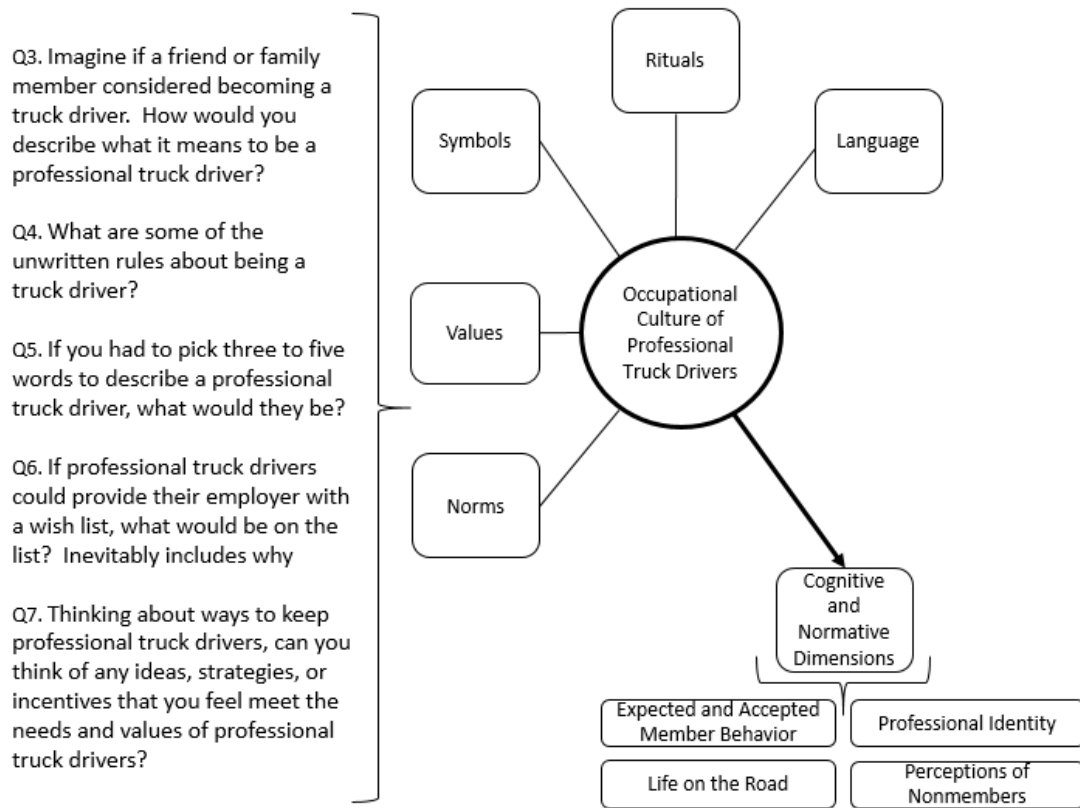


Figure 9. Occupational culture of professional truck drivers and the cognitive and normative dimensions produced by the occupational culture of professional truck drivers

The occupational culture of professional truck drivers. Questions three through seven explored and developed the occupational cultural and occupational needs of the context network (Figure 9). However, questions three, four, and five were primary

sources for describing the cultural themes of language, rituals, symbols, values, and norms of professional truck drivers. The themes correspond to cultural forms Trice (1993) identifies within occupational cultures and Schein and Scheiner (2016) identify as observable for conceptualizing occupational cultures. Table 11 lists each cultural theme, descriptive examples, and explanatory statements in support of the theme.

The first theme, Language, is a compilation of text analysis and in vivo coding of participant and blogger statements. In vivo coding topics extract terms, phrases, and words from participant statements specific to language used within the participant's culture or subculture (M. B. Miles et al., 2014). Occupational phrases and terms common to both participants and bloggers include "rookie", "HOS" (hours of service), "four wheeler" (used to identify drivers of standard vehicles and differentiate them from semi-truck drivers), and "Qualcomm" (satellite communication system within a driver's truck that allows monitoring of a truck, driver, location and the exchange of messages, logistics information between driver and trucking firm). Explanatory statements throughout Table 11 further support the examples of Language.

Rituals celebrate important events or accomplishments within a culture sharing group (Schein & Scheiner, 2016). Rituals may include a celebration of values, rite of passage, or milestones important to members of the group (Schein & Scheiner, 2016). A driver's first solo run and riding with their trainer are prominent passages. Reaching one million miles and the number of safe miles convey import values (safety, hard work, experience, professional identity) to professional truck drivers.

Symbols alert other occupational members of a member's role or standing (Trice, 1993). Symbols may reinforce identify (Hatch & Schultz, 2004) and relationships among

occupational members (Trice, 1993). Symbols take on a number of forms to include artifacts, objects, performers, and settings (Hatch & Schultz, 2004; Trice & Beyer, 1993). Drivers who achieve a high number of accident free miles and total professional miles are examples of performer symbols. The achievement becomes an object symbol when a driver displays a decal or ornament confirming employer or industry recognition of the achievement. A driver's truck and trailer represent a setting symbol.

Values express the occupational group's ideology (Trice, 1993) and what the group strives to attain as a representation of themselves (Schein & Scheiner, 2016). Question number five—*If you had to pick three to five words to describe a professional truck driver, what would they be?* answers not only how drivers view themselves but that drivers primarily view themselves as demonstrating positive attributes. Hardworking, courteous, dedicated, professional, and dependable are some of the most common responses to question five.

A content cloud provides is a holistic analysis of each participant's own words for an emic description of occupational members (Appendix N). The larger the words, the more frequently the word appeared in response to question five. The content cloud includes negative descriptions but without context. One context is Mitchell-9's differentiation between drivers based on their years of experience. When asked question five, Mitchell-9 described drivers with less than five years of experience as "selfish, unsafe, inattentive". Mitchell-9 described drivers with 10 plus years as "courteous, safety-conscious, knowledgeable". Tony-18's response to question five describes drivers he believes damage his occupation's reputation.

...one of the first thing[s] that comes to my mind is slob. But there are guys out here who don't shower for a week...all I can think is, "You are giving our industry a bad, bad, bad reputation in our job by the way you are acting. And the way you're...taking care of yourself. Tony-18

Tony-18 and Mitchell-9's statements demonstrate how the spokes of the Occupational Culture hub ultimately feed into the main theme of Cognitive and Normative Dimensions and the sub theme of Expected and Accepted Member Behavior (Figure 9).

Table 11's list of norms describe normalcy in the actual work of a professional truck driver as opposed to group and behavioral norms. Norms of the occupation emerged as participants and bloggers described the nature of their work to include aspects of the profession they liked, disliked, and areas of need. Some norms trigger other norms. Participants and bloggers describe their occupation as heavily regulated, which results in frustration and stress becoming an occupational norm. Other norms of long hours and isolation precipitate the additional occupational norm of lifestyle.

Table 11

Occupational Culture Themes of Professional Truck Drivers

Theme	Examples	Explanatory Blog and Interview Statements
Language	"rookie "professional truck driver" "HOS" "four wheeler" "miles" "Qualcomm"	<i>Let's leave the whacked-out exit ramp tactics to the 4-wheeler nut jobs, shall we?</i> Blogger-9 ...you can spot a rookie in about two seconds. Mitchell-9

Table 11 (continued).

Theme	Examples	Explanatory Blog and Interview Statements
Rituals	<ul style="list-style-type: none"> • First solo run • Reaching one million miles • Riding with your trainer 	<p><i>Nothing could be more exciting than climbing behind the wheel of a rig for your first run ever as a professional driver! Blogger-2</i></p> <p><i>One million mark is the big thing... Jeff-11</i></p> <p><i>I've had students come up to me...I didn't even remember and they were like, "Oh, remember we did this," I'm like "Really that was me, are you sure?" You know, I don't remember that (laughter) but okay you know. But it was an important time to them ... Mitchell-9</i></p>
Symbols	<ul style="list-style-type: none"> • Accident free miles • Truck and trailer type • Total professional miles 	<p><i>...drivers with those snazzy 3-million mile safety stickers on your trucks. Blogger-9</i></p> <p><i>I'm kind of old school, I'm a Peterbilt girl... Amanda-7</i></p>
Values	<ul style="list-style-type: none"> • Hard Work • Opinions • Courtesy • Respect • Independence • Responsibility • Accountability • Safety • Experience • Confidence • Flexibility • Time • Initiative • Humility • Reputation 	<p><i>...most of us are hardworking truck drivers... Ronald-2</i></p> <p><i>So if the guy can't make it there on time, and it's an easy run, why keep him? Garrett-3</i></p> <p><i>Afterwards, having never tarped steel beams before, I wasn't quite sure how to attack the problem. Fortunately, another company driver out of Savannah spotted my dilemma and was good enough to assist me. "I remember what it was like." he laughed. Blogger-7</i></p> <p><i>Still, it is rewarding to see a person who "gets it" go out there and start conducting themselves as a successful professional driver. Blogger-4</i></p>

Table 11 (continued).

Themes	Examples	Explanatory Blog and Interview Statements
		<p><i>I still consider myself a rookie, because I've had seven years, the professional driver knows his vehicle, knows what the vehicle will do in any situation, and attempts to be as courteous as traffic allows. Josh-6</i></p> <p><i>...you meet so many great guys out there...some people can make great friends, some of my best friends are truck drivers...and always respectful. You aren't going to find more respectful people on the highways than a truck driver...I really mean that... Darren-1</i></p>
Norms	<ul style="list-style-type: none"> • Regulations • Long Hours • Isolation • Lifestyle • Frustration • Stressful • Dangerous • Difficult • Fluctuates 	<p><i>I'm pretty much in my truck 24 hours a day. Brandon-10</i></p> <p><i>...it's hard. It's hard on your body. Amanda-7</i></p> <p><i>...most carriers make you log at least 15 minutes at both sides of your delivery. So if you're picking up a load and delivering [the] same day, there goes another 30 minutes. Now you're down to 2 hours. But wait, you have to take a 30-minute break after 8 hours of driving, so now you're down to 1.5 hours to workout. Plenty of time, right? Blogger-9</i></p> <p><i>... it's a dangerous job... Sarah-14</i></p> <p><i>...personal relationship, you are not going to have it, not over the road. Charles-21</i></p> <p><i>I live in the truck. Josh-6</i></p> <p><i>...very lonely industry... a lot of alone time Henry-13</i></p> <p><i>Somedays are 14-hour days. Joseph-15</i></p>

The results of cultural forms language, rituals, symbols, values, and norms describing the occupational culture of professional truck drivers. A review of Figure 9 demonstrates the foundational levels of culture (language, rituals, symbols, values, and norms) feed into the occupational culture hub, which then transpires into the major theme of Cognitive and Normative Dimensions. The next section reports the cognitive and normative dimensions resulting from the occupational culture of professional truck drivers.

Cognitive and normative dimensions. Observable, but with greater difficulty, are the culture group's cognitive and normative dimensions. These dimensions become a melding of other levels of culture, shared cognitions and meanings. Additional metaphors and symbols may emerge further describing how members view themselves. Observed cognitive and normative dimensions provide a window into the cultural group's ways of thinking, additional language, and socialization of new members (Schein & Scheiner, 2016). The results of Table 12 support the occupational culture of professional truck drivers includes the major theme of Cognitive and Normative Dimensions. Subthemes consist of Expected and Accepted Member Behavior, Professional Identity, Life on the Road, and Perceptions of Non Members.

Language, values, and norms reinforce the first subtheme—Expected and Accepted Member Behavior. Explanatory statements include the behavior and mindset necessary to succeed. Successful drivers are dedicated, adjust to change, and are not lazy. Members expect other members to demonstrated humility and resilience. Driver perspectives suggest an occupation that values experience that is only gained through longevity and continual on the job learning.

“A really good truck driver is a Super Hero...,” Blogger-4. Professional identity runs strong in participant statements and blog sources. The reported norms (Table 11) provide the nature of the work, but they do not convey whom drivers perceive as having the attributes to share in their professional identity as a professional truck driver. Participants and bloggers reinforced member beliefs that not everyone is equipped nor has the aptitude to become a successful professional truck driver. Blogger-4 estimates 95% of people fail within a year of “their attempt at Super Hero status”. Achieving a successful, sustainable career requires embodying the occupational culture’s values and cognitive and normative dimensions.

Life on the Road, embodies the occupational norms from Table 11. Examples from the explanatory statements demonstrate cognitive scripts and models for guiding other members on what to expect as a professional truck driver. Brandon-10’s statement provides drivers context that what they will experience is no different from what every other driver is facing and expected challenges. William-19’s statement expounds upon the occupational norm of *lifestyle* and its connection to the sub theme of Expect and Accepted Member Behavior.

Each cultural element (language, rituals, symbols, values, norms) prevailed in the explanatory statements of subtheme Perceptions of Nonmembers. Participants and bloggers expressed strong opinions of nonmembers of the occupation—dispatchers, trucking industry, and regulatory agencies. Participant and blogger sentiment include a lack of general understanding and appreciation by nonmembers of the skill required to be a professional truck driver. A lack of understanding by nonmembers makes it difficult to cultivate professional relationships with non-drivers of the supply chain members. In

addition, a lack of general understanding impedes drivers forming personal relationships with nonmembers of the occupation as observed by Tony-18.

Table 12

Subthemes of Cognitive and Normative Dimensions

Subthemes	Explanatory Statements
Expected and Accepted Member Behavior	<p><i>...you have to be dedicated to the lifestyle... William-19</i></p> <p><i>You're not gonna make it home or you're not gonna make your destination...you gotta adjust to the changing environment. Dalton-4</i></p>
Contributing Levels of Culture <ul style="list-style-type: none"> • Language • Values • Norms 	<p><i>...if you want to make money here, you can't be lazy....some guys get a load...they want [to] stop at five different stores, ten different stores and, go somewhere to eat and go to the bathroom. They wind up making it to their destinations late or wondering 'why didn't I get certain loads' because they're late all the time. Trucking company doesn't have any trust in them, so they give it to the guy they know is going to put the work in and get the work done. Zane-5</i></p> <p><i>...it takes a tough skin, a humble attitude, a willingness to learn from someone who may not be the best at teaching, and a tenacious attitude that looks forward to new challenges and learning experiences every day. Blogger-4</i></p> <p><i>I have noticed that the drivers who stay in the industry are the ones who have the social experience with the other drivers... Mitchell-9</i></p> <p><i>I use the golden rule when it comes to somebody new. If they're gonna treat me good, I'm gonna treat you good. If you're gonna be rough to me, I can be rougher. I mean that's all; that's been my philosophy with everybody. But they just need to try to keep everything clean and do a good job, drive good on the road. You know, don't be unsafe, don't cause other people problems...work hard and don't...leave stuff at the parking lots or whatever. Just simple stuff, common sense, then we're gonna be fine. Luis-12</i></p>

Table 12 (continued).

Subthemes	Explanatory Statements
	<p><i>...being respectful of things, places, people. If I go somewhere I don't come off as loud and boisterous. I just kind of stand there and I don't go to make my presence known. I fit in. Hayden-20</i></p> <p><i>...it has to be something you like to do. I mean, you can't do it for the money for a month...you have to train your body to stay up for different hours...a lot of people can't stay up and just drive... Rodney-8</i></p> <p><i>If I had a bad attitude, didn't deliver loads on time, and preferred hanging out in truck stops instead of driving, I am 100% certain that I would be looking for a new company to drive for today. Blogger-3</i></p>
<p>Professional Identity</p> <p>Contributing Levels of Culture</p> <ul style="list-style-type: none"> • Symbols • Values • Norms 	<p><i>...it takes special individuals to do the job that we do, everybody's not capable of doing it. Sean-17</i></p> <p><i>A really good trucker is a Super Hero in my estimation. They do things that most people are completely incapable of. Are you aware that approximately 95% of the people who attempt to make a career of trucking end up throwing in the towel and returning to their regular lives within one year of their attempt at Super Hero status? Blogger-4</i></p> <p><i>I don't think trucking is a menial job. I didn't have to have a college degree for it but I don't think its menial in anyway. I mean I'm responsible for so many people being safe on the road. I'm responsible for delivering freight and getting people all the things that they want to buy. Tony-18</i></p> <p><i>For the first time in my life, I felt like a professional driver. I felt a confidence in my driving ability that I have never felt before. It's a wonderful feeling. Blogger-5</i></p>

Table 12 (continued).

Subthemes	Explanatory Statements
	<p><i>There are 3 tiers of drivers. The third tier or bottom tier is those that have just come out of truck driving school. They are green as a gourd...the second tier would be like those that have two years. A minimum of two years over the road experience...they have better pay and they have a little bit better of home life but they only make about two-thirds of what I make, salary wise...they certainly don't have the home life that I have of being in my own bed a minimum of four days a week and have all my health insurance benefits paid for...In my company, I would be in the top tier. Joseph-15</i></p> <p><i>When we talk about folks being top-tier drivers, people always think we are just referring to their ability to endure long bouts at the wheel turning lots of miles each day, but there is really so much more to what it takes to be one of the top performers out here. Mastering your emotions, being self disciplined and focused are such critical factors to success out here. Blogger-4</i></p>
<p>Life on the Road</p> <p>Contributing Levels of Culture</p> <ul style="list-style-type: none"> • Values • Norms 	<p><i>...every driver out on the road is dealing with the same issues of you know, trying to make it from point A to point B while dealing with all the variables that we have...delays at a shipper or a receiver, traffic, not being able to find parking at the end of the day, everything being so federally regulated... Brandon-10</i></p> <p><i>We live in our trucks when we are on the road. It is a lifestyle. It goes beyond just driving a truck down the road. From the moment your day starts, pre tripping the truck, going through the day. At the end of the day you still have other things to do. You gotta keep on top of these things. You have showers, laundry, everything, housekeeping the truck. These trucks become pigsties if we're not careful.</i></p> <p><i>In order to successfully do this job and be able to survive in the industry you really need to plan ahead and keep on that. Don't let anything slack off because I've noticed if I let the truck get over messy, it affects everything about me. It's a 10 by 10-foot box basically. We are in a confined space. If I let things get out of hand in one area, it's going to affect everything. That in the end effects my job. So, you have to be dedicated to the lifestyle if that makes any sense. William-19</i></p>

Table 12 (continued).

Subthemes	Explanatory Statements
	<p><i>Sometimes it can be stressful because you know we live in a supply and demand and everything is about timing and you have to do everything in a safe manner...if you got to go pick up a load at 10:30...and they're rushing you to drop it off and then come back, a lot of things can play a factor you know, like the weather or the traffic, and that can cause stress as well because you have a deadline you're trying to meet. But also you've got all these obstacles in your way and there's a lot of DOT to follow as well...even though you have a deadline that you have to beat... [and] can only drive for a certain amount of hours... Sean-17</i></p> <p><i>...there's this thing called the eight hours sleeper burst. I said, "Well, if I take an eight-hour break I'm only going to be able to drive this far." ...one of the guys goes, "No you can't, you can drive this far." And I was like, "Oh that's right".</i></p> <p><i>...here I am 20 years; I should know this stuff. But it still, you know, sometimes is beyond you. You are like, "Oh okay I did that, completely wrong." You still make rookie mistakes even though you've been driving for 20 years. You'll forget that this part of Indiana is in a different time zone or sometimes you are like, "Man that's a rookie mistake," but you still do it. It's harder than it's made out to be that's for sure. Tony-18</i></p>
<p>Perceptions of Nonmembers</p> <p>Contributing Levels of Culture</p> <ul style="list-style-type: none"> • Language • Rituals • Symbols • Values • Norms 	<p><i>This industry is heavily regulated. Joseph-15</i></p> <p><i>I've heard dispatchers, the issues they express..."Well, if he can't do it we'll find someone who can," and then they'll let you sit there for a week without giving you any dispatches and you starve to death. Or if you go into California they don't want anybody buying fuel in California because it's so hideously expensive and so they'll cut your fuel card off. And you can't get fuel to get a shower. You get a free shower if you fill up the tank; otherwise you'll have to pay for your shower you know, at a truck stop which nowadays it's I don't know, 8 or 10 dollars now....it's like death by a thousand cuts...all these tiny injustices add up to a terrible stress load for truck drivers. Sarah-14</i></p>

Table 12 (continued).

Subthemes	Explanatory Statements
	<p><i>...they had that lady that did all that research [on hours of service]. And that's what she come out with this...11-14. In other words, drive 11 hours in a 14 hour day...she drove out to California and back and that's how she determined all that stuff. I guarantee you if her paycheck was behind the wheel it [hours of service] would have been a little bit different then what it is now. Because she really don't know what work it is. Garrett-3</i></p> <p><i>I had two pick ups in Nogales. The first was set for 10:00 AM and the second for 4:00 PM. You truckers can see the problem here. I hope whoever scheduled these loads have a couple of flat tires this weekend. And possibly an allergic reaction to something. For my non-trucking readers, these two stops are six hours apart. With the advent of the FMCSA's [Federal Motor Carrier Safety Administration] brilliant 14-hour workday, at least six of those working hours are probably gone. Thanks FMCSA! Blogger-9</i></p> <p><i>Trucking companies and truckers keep these truck stops alive and kicking. And to thank us for that, they take advantage of us when we least need to take their crap; after a long day of driving when we just need a warm meal, a hot shower, and a place to lay down and recharge so we can do it all again the next day. Is that so much to ask? Please don't get me wrong. I'm grateful that truck stops exist. Without them there'd be even fewer places to park and we'd probably start seeing truckers squatting behind bushes on the side of the highway. God, help us. But do they really need to charge us for the last few parking places when we're at our most desperate? I mean, they're already charging \$8 for a tiny bottle of Pepto-Bismol. Isn't that exploitation enough? Blogger-9</i></p> <p><i>...the government keeps Pelion on Ossa' when it comes to regulation and they keep putting all these mandates on all these various aspects of driver fatigue and so forth. We just recently implemented the electronic logging devices and you know it's a text book example of government overreach because it's very intrusive. Like the data that it gathers on me as a private citizen...this piece of equipment goes with me, it goes home with me and it's constantly with me because they were issued to us individually...for example my particular one was stuck on a 60 hour work week and so I was in constant violation because I work a 70-hour work week.</i></p>

Table 12 (continued).

Subthemes	Explanatory Statements
	<p><i>We're one of the most regulated industries and we've got one of the highest overheads and it all translates in higher costs for the consumer. And the consumer is sitting and going, "Well those mean old trucks, we ought to govern them down to 55 and we ought to make more rules for them." But they don't think about how that translates into higher prices because of the greater regulatory burden and the fines and stuff that trucking companies have to pay because of the burden from regulations. Sarah-14</i></p> <p><i>...as a trucker you'll realize how stupid people are in vehicles you know. And you do feel underappreciated pretty much all the time. Like in Europe they kind of look up at their truckers. You know like they did back in the 70s here. Back in the 70s they were like, "Oh trucking that's a great career. You know truckers are the backbone of America." And now we are just in the way. And that is hard, kind of hard to deal with because we realized, all truckers realized that we are the backbone of the economy. But we are not treated with such [regard].</i></p> <p><i>And it's almost when somebody asks you what you do for a living, some are loud and proud you know they are like, "I drive a truck". But some are more like me. I feel almost like I know I'm going to be looked down as soon as I say I drive a truck for a living.</i></p> <p><i>I think the big thing is just the way people react at us on the road... we see the frustration when they are stopped behind a truck you know on a two-lane road and there's nothing we can do about it. They are just – and they get pissed at us, we get the finger and it's like I've gotten the finger so many times and I'm not doing anything wrong....But it's not just them too, it's a lot of disrespect with the shippers and receivers...you walk up to a receiving window and they know you are standing there but they just don't even acknowledge that you are standing there. And this doesn't happen everywhere but it does happen more than it should.</i></p> <p>Tony-18</p>

The next section concludes this chapter's results for Research Objective Three.

The section begins with reporting the results of exploring the occupational needs of professional truck drivers. The occupational culture of professional truck drivers and the

cognitive and normative dimensions produced by the occupational culture of professional truck drivers, manifest into the occupational needs of professional truck drivers.

Occupational needs of professional truck drivers. The final section of the context network lists the occupational needs of professional truck drivers (Figure 10).

Occupational culture and cognitive and normative dimensions feed into the development of occupational needs. Participant responses to questions six and seven of the interview, further informed the findings of the occupational needs of professional truck drivers.

Question six asked, *If professional truck drivers could provide their employer with a wish list, what would be on the list?* Question seven asked, *Thinking about ways to keep professional truck drivers, can you think of any ideas, strategies, or incentives that you feel meet the needs and values of professional truck drivers?*

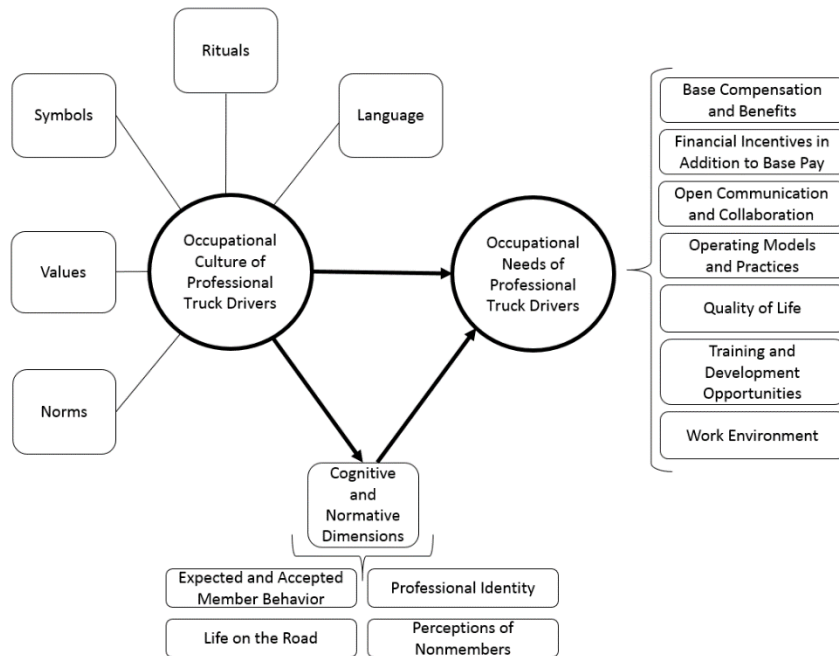


Figure 10. Occupational culture of professional truck drivers and the cognitive and normative dimensions merging to create the occupational needs of professional truck drivers

Table 13 reports the findings of the occupational needs of professional truck drivers. The study found the occupational needs of professional truck drivers match the same themes as trucking industry retention strategies reported under objective two. However, some differences exist between participant interpretations of the themes (Table 13, column *Driver Suggested Strategies and Activities*) and trucking industry interpretations of the same themes (Table 8 column *Implemented Strategies and Activities*). Several caveats warrant mention of Table 13's results.

First, the results of Table 13 are not retention specific. They may or may not influence a truck driver's retention behavior. Occupational needs were explored and reported within the context of what professional truck drivers perceive as an occupational need. This could be a need for improving performance, satisfaction, or engagement. The need could further convey a driver's perception of their employer, industry, or occupation.

Second, the results of Table 13 do not infer that if a trucking industry implementation strategy or activity is not reflected, that drivers consider the activity or strategy as ineffective or something that should be discontinued. Drivers may observe or experience retention strategies and activities that may not be considered a need if the strategy or activity is already occurring. Finally, the results of Table 13 do not infer environmental alignment or environmental misalignment. Research Objective Four reports the results of environmental alignment between trucking industry retention strategies and the occupational needs of professional truck drivers. Column one of the Table 13 lists the major themes of occupational needs, with column two providing additional descriptors of the theme.

Table 13

Thematic Summary of Occupational Needs of Professional Truck Drivers

Major Themes of Occupational Needs	Driver Suggested Strategies and Activities
Base Compensation and Benefits	<ul style="list-style-type: none"> • Increase in per mileage pay • Mileage pay structure • Affordable medical, dental, and vision • Improved health benefits (expanded coverage or options) • Base mileage pay calculated using practical miles • Increased paid vacation time
Financial Incentives in Addition to Base Pay	<ul style="list-style-type: none"> • Loyalty Bonus • Tenure Bonus • On time delivery bonus • Safety bonus • Fuel efficiency bonus • Detention pay • Performance and productivity pay for all work performed that is not covered by mileage pay (loading, unload, trip planning, sweeping out the truck)
Open Communication and Collaboration	<ul style="list-style-type: none"> • Self-select freight • Direct driver feedback and information • Tangible solicitation of driver input and feedback • Driver input and feedback in load selection • Fostering dispatcher, load manager, and driver manager relationships
Operating Models and Practices	<ul style="list-style-type: none"> • Collection of detention from shippers and receivers • Dedicated driver support when drivers call in • Improved operations and productivity (driver assignments, 24 load planning, scheduling, return times, reduced driver wait time, accuracy in addresses) • Improved freight lanes/longer routes • Reevaluate new driver recruitment and selection strategies
Quality of Life	<ul style="list-style-type: none"> • Promoting healthier lifestyles • Home time

Table 13 (continued).

Major Themes of Occupational Needs	Driver Suggested Strategies and Activities
Training and Development Opportunities	<ul style="list-style-type: none"> • New driver mentorship program • Dispatcher/Load Planner CDL training or ride along with drivers
Work Environment	<ul style="list-style-type: none"> • Improved tractor comforts (auxiliary power unit, inverters, satellite radio, refrigerators) • Maintaining newer fleets (average tractor 2-3 years old) • Tractor selection • Regular replacement and maintenance of tractors • Improved terminal facilities/driver waiting areas • Improved terminal facilities that promote driver health • Support in parking shortages • No touch freight

Theme Base Compensation and Benefits leads with increased pay. The need for increased pay emerged in multiple forms. Some participant responses of pay were in the context of *who would not want a pay raise* as expressed by Charles-21 “Of course, you always want more money, that's a given.” The structure of mileage pay was an important need to participants. Some drivers received mileage pay by zip code. However, the zip code does not always correspond to the actual location of the shipper or receiver but rather the zip code of where the driver enters the municipality. Jeff-11 described it with his previous employer as, “as the crow flies...let’s say you drove 1,200 miles...you might only get paid 1,050 so you’ve lost 150 miles.”

Occupational needs described under Financial Incentives in Addition to Base Pay were very similar to the strategies and activities employed by the trucking industry. Under Financial Incentives in Addition to Base Pay, one major need of participants is compensation for all work not covered by mileage pay.

Participants expressed mileage pay covers driving with an implication by the trucking industry that mileage pay covers all work. Drivers described multiple non-driving activities they feel mileage pay does not adequately compensate to include loading and unloading of freight. There are firms that pay an hourly wage for additional work but participants felt that even in those situations, the pay was minimal. Detention pay is the other major need under Financial Incentives in Addition to Base Pay.

...part of the problem is like some companies don't pay detention at all. And some companies do pay detention but they might as well not. Like for instance, my company pays me 12 dollars an hour. Well I can make a heck a lot of more money going down the road; not sitting... Tony-18

Detention pays also appears under needs associated with the theme of Operating Models and Practices.

Open Communication and Collaboration reflects participant perceptions of a lack of tangibility in the programs their organizations use to solicit driver feedback. Participants expressed lack of action once a driver communicates concerns. Participants want to feel engaged (direct driver feedback) by their employer. Some participants expressed feeling like a number as opposed to engaged.

It's all about perception...it's no different than when you go to your bank...and they go, "Oh hi," like they know who you are. They have no idea who you are; you've never been in that bank before. You do everything online. But it's that perception, *Oh I feel good about banking here.* Mitchell-9.

Under Operating Models and Practices, passion centers around reducing a driver's wait time. Time waiting for shippers, receivers, or dispatchers is time not spent on

driving but still lost under hours of service. Inaccuracy in addresses and paperwork also eat into a driver's time. Multiple bloggers note time lost due to poor planning by customers, dispatchers, and load planners. Blogger-8's post *Not Much Help for the Drivers*, recounts the frustration and delays as the result of an incorrect address.

...the address from the Qualcomm did not match the directions the Qualcomm was giving me, and the delivery address on the bill of lading didn't match either of them!...After explaining what my problem was, the dispatcher just gave me the same address from the Qualcomm...where was this load supposed to be? How am I supposed to get there?... I ask my DM [Driver Manager] why this stuff happens when not only is he aware of the problem, but so are the day and night dispatchers and the receivers?? They all know that bad info is being given to us!! I guess no one cares because they are not affected by it. Just the drivers! And it is just the drivers that get the hit on our record if we can't get it figured out. S[o] I am on time, with about 1 minute to spare, and now I'm siting [sic] at the dock waiting for my turn to get unloaded. For 3 1/3 hours. Glad I wasn't late! Blogger-8

Under Quality of Life home time, similar to pay, emerged under the context of *who would not want more home time*. Participant suggestions of home time was in the context of knowing this is a need among other drivers, if not themselves. Participants realize an increase in home time means a decrease in pay. Participants noted that becoming a professional truck driver includes accepting the condition of minimal home time.

In a three month period, Hayden-20 averages 10 days at home. When asked if home time was ever an issue or concern, Hayden-20 answered, "No because it's a balance

in the marriage. My wife hates me being gone but likes me being gone. Because if I'm home, I am not making any money. But if I'm gone we are making money.” However, how home time is scheduled and provided is a different area of concern and one that lends itself to further discussion under Research Objective Four.

Needs coded to Training and Development Opportunities focus on new and nonmembers of the occupational culture. Participants describe dispatchers as making considerably less than a truck driver. However, as evident from Sarah-14's statement (Table 12 Perceptions of Nonmembers) and Blogger-8's account above (*Not Much Help for the Drivers*); dispatchers play a pivotal role in a driver's success. Suggestions of CDL training or a ride along with drivers attempts to resolve participant and blogger views that unless someone was or is a truck driver, they have no idea of what it is like to be professional truck driver.

I think that, looking at it, the drivers appreciate the planners and the driver managers who are aware of how long it actually takes to get places and get loaded for the planning. So planners and driver managers who have experience of being in a truck, even just a little, are more respected than the ones who come out of school and jump on a board and try to make it work. Josh-6.

Participants identified new drivers not always aware of occupational norms to include long hours and the fluctuating nature of the work. Bloggers and participants observe a need to indoctrinate new or potential drivers into understanding the culture and values necessary to become a successful truck driver and assimilate to the cognitive and normative dimensions of the occupational culture of professional truck drivers. Bloggers dedicate a number of blogs to passing on the norms and values of the occupation, for

example: *How Having A Great Attitude Earned Me A Second Chance* Blogger-3; *The Hardest Part of Starting a Trucking Career, One Critical Piece To The Puzzle Of Success In Trucking, Prudence Seems To Be Lacking In Some Rookie Truck Drivers, The Natural Progression Of A Truck Driver's Career* Blogger-4; *Fighting Through The Challenges Of Life On The Road, Keeping Your Head Screwed On Straight In A Crisis* Blogger-7; and *Advice For New Truckers, How to Find a Great Truck Driving Job, Honor Among Truckers, The Fuel Bay Golden Rule, 4 Ways To Be An Awesome Trucker* Blogger-9.

Mithcell-9's suggestion of a formal mentorship program encapsulates the informal mentorship of the previously titled blogs.

...I used to always tell my students [as a trainer] the company probably has 7 to 10,000 dollars just to get you into this truck at this point...they don't want you to walk...They've got a lot of money invested in you. But sometimes they are lacking in their support and truthfully I think it starts in the office first and builds into the culture...when they take a new guy out of school they put him in a truck for anywhere from a week to 10 weeks, average is probably about six in the industry....he gets in a truck with somebody he does not know, never met, doesn't even know if they're socially compatible then they go out, they run... they [new driver] can adapt to that for a few weeks...But there is no apprenticeship afterwards, they're just going to throw them to the wolves after that and there's no, 'Hey, you can call me instead of calling some guy in an office you don't know and I will help you with the questions and the problems that you have'...As a trainer I always thought of myself as a financial consultant, a marriage consultant and a psychologist, which you got to be all three...I think then again that goes

back to mentorship...the railroad...those guys they will have an apprentice sometimes for 10 years [who will] follow them around. While this industry doesn't have any apprenticeship at all, they don't have anybody that's going to try to walk them through the trials and tribulations of doing this job, unfortunately.

Mitchell-9

The suggested Training and Development need, of a new driver mentorship program, reinforces the results of explanatory statements supporting the cognitive and normative dimensions of Expected and Accepted Member Behavior and Professional Identity reported under Table 12.

Several examples listed under Work Environment, participants acknowledged as already occurring but still mentioned to reinforce an ongoing need. Examples include improved tractor comforts, newer fleets, and regular replacement and maintenance of tractors.

I have noticed this during the last three or four years, our living quarters, our trucks are improving. I have a built-in refrigerator and then inverter so I can plug in regular things into outlets. Like my microwave. I have a microwave in there. Things like Bluetooth in the truck stereo now. Things like that. They could keep moving forward. If I could have some way to mount a TV in there. Little things like that would make our jobs a little bit, make our living situations nicer. I think that's probably the key. One of the big keys, like I said, it's a 10 by 10 foot box. Making that as comfortable and livable as possible I think is probably something that should be addressed. [*But you are seeing them make progress towards that?*] Absolutely. When I started in this industry, I would have never even dreamed of

a built-in refrigerator or regular inverters with regular outlets, things like that.

[Satellite radio] That would be another nice little convenient thing, installed and managed. I realize that's expensive, I get that. I don't know what they do on a corporate level but if they can get a bulk price or whatever, that would be an awesome added bonus as well. William-19

Drivers spend a lot of time in their trucks but also time at terminals. Improved terminals and facilities are important work environment needs that ease the burden of wait times, provide additional needs when coming off the road, and promote a healthier lifestyle.

The facilities or terminals, you always want better facilities...we go from terminal to terminal in the LTL business...we need a lounge area in the main facility.

Because we are there for hours waiting for our load. Lounge area would be big time. Charles-21

A refrigerator in the truck now that they are having more mandates for health and stuff...if the DOT said, any place that a company sets up a terminal or a yard, has to have a minimum [number] of a washing machines, workout room and one shower for every 15 or 20 trucks. Then you'd see an upswing in hygiene and healthiness because the opportunity would be there... Josh-6

The areas where drivers can park their trucks are limited. Participants accept the reasons why some shopping centers forbid overnight parking and participants realize the shortage is not fully within the trucking industry's control. However, it is a need that participants view the industry should address. The final section of Research Objective Three reviews question eight and its relationship to Research Objective Five.

Question eight, *Tell me what the term churn means to a professional truck driver*, is an ethnographic contrasting question mapped to answer Research Objective Three and Research Objective Five. Contrasting questions explore language used to describe culture (Sorrell & Redmond, 1995). The results of question eight are not reflected in the context network (Figure 7) nor included in this section. As the data emerged, it was determined that the results of question eight provide important context for the findings of Research Objective Five. How professional truck drivers perceive the meaning of churn, as an occupational culture, has greater meaning when viewed with the results of Research Objective Five: *Explore professional truck driver perceptions of churn as perceived by professional truck drivers*. The chapter next reports the findings of Research Objective Four, which builds upon the results of Research Objective Three in an effort to explore environmental alignment between retention strategies and the occupational needs and culture of professional truck drivers.

Environmental Alignment

Research Objective Two described trucking industry retention strategies. Research Objective Three explored both the occupational needs and occupational culture of professional truck drivers. This section of the chapter builds upon the findings of Research Objective Two and research objective three as it reports the results of Research Objective Four: *Explore environmental alignment between trucking industry retention strategies and professional truck driver occupational needs and culture as perceived by professional truck drivers*.

Table 14 provides a side by side comparison of trucking industry's retention strategies as reported under Research Objective Two and the occupational needs of

professional truck drivers as reported under Research Objective Three. Table 14 serves as a point of reference for subsequent data displays of environmental alignment and environmental misalignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers.

Table 14

Side by Side Comparison of the Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers

Major Themes	Trucking Industry Retention Strategies and Activities— Implemented Strategies and Activities	Occupational Needs of Professional Truck Drivers—Suggested Strategies and Activities
Base Compensation and Benefits	<ul style="list-style-type: none"> • Across the board pay increases • Pay structures based on driving experience, longevity, or seniority • Full medical, dental, and vision • 401(K) matching • Base mileage pay calculated using practical miles • Paid vacation 	<ul style="list-style-type: none"> • Increase in per mileage pay • Mileage pay structure • Affordable medical, dental, and vision • Improved health benefits (expanded coverage or options) • Base mileage pay calculated using practical miles • Increased paid vacation time
Financial Incentives in Addition to Base Pay	<ul style="list-style-type: none"> • Sign on bonus • Stay on/retention bonus • On time delivery bonus • Safety bonus • Fuel efficiency bonus • Detention pay • Annual miles • Performance and productivity pay based on a combination of safety, customer service, regulatory and organization 	<ul style="list-style-type: none"> • Loyalty Bonus • Tenure Bonus • On time delivery bonus • Safety bonus • Fuel efficiency bonus • Detention pay • Performance and productivity pay for all work performed that is not covered by mileage pay (loading, unload,

Table 14 (continued).

Major Themes	Trucking Industry Retention Strategies and Activities— Implemented Strategies and Activities	Occupational Needs of Professional Truck Drivers—Suggested Strategies and Activities
Open Communication and Collaboration	<ul style="list-style-type: none"> • compliance, additional functions not covered by mileage pay (loading and unloading freight), days worked per week, delivery times, or miles per week • Self-select freight • Access to senior management • Recognition of achievements • Soliciting driver input and feedback • Fostering dispatcher or driver manager relationships 	<ul style="list-style-type: none"> • trip planning, sweeping out the truck) • • Self-select freight • Direct driver feedback and information • Tangible solicitation of driver input and feedback • Driver input and feedback in load selection • Fostering dispatcher, load manager, and driver manager relationships
Operating Models and Practices	<ul style="list-style-type: none"> • Collection of detention from shippers and receivers • Regional and dedicated driver support (dispatcher, driver manager, planners) • Improved terminal productivity (driver assignments, load planning, scheduling, return times, reduced driver wait time) 	<ul style="list-style-type: none"> • Collection of detention from shippers and receivers • Dedicated driver support when drivers call in • Improved operations and productivity (driver assignments, 24 load planning, scheduling, return times, reduced driver wait time, accuracy in addresses) • Improved freight lanes/longer routes • Reevaluate new driver recruitment and selection strategies

Table 14 (continued).

Major Themes	Trucking Industry Retention Strategies and Activities— Implemented Strategies and Activities	Occupational Needs of Professional Truck Drivers—Suggested Strategies and Activities
Quality of Life	<ul style="list-style-type: none"> • Promoting healthier lifestyles • Increased home time for improved driver/family relationships 	<ul style="list-style-type: none"> • Promoting healthier lifestyles • Home time
Training and Development Opportunities	<ul style="list-style-type: none"> • Productivity skills • Driving skills • Safety • Becoming a certified driver trainer 	<ul style="list-style-type: none"> • New driver mentorship program • Dispatcher/Load Planner CDL training or ride along with drivers
Work Environment	<ul style="list-style-type: none"> • Improved tractor comforts (auxiliary power unit, inverters, satellite radio, refrigerators) • Maintaining newer fleets (average tractor 2-3 years old) • Regular replacement and maintenance of tractors • No touch freight 	<ul style="list-style-type: none"> • Improved tractor comforts (auxiliary power unit, inverters, satellite radio, refrigerators) • Maintaining newer fleets (average tractor 2-3 years old) • Tractor selection • Regular replacement and maintenance of tractors • Improved terminal facilities/driver waiting areas • Improved terminal facilities that promote driver health • Support in parking shortages • No touch freight

Exploration of environmental alignment yielded two results. First, points of environmental alignment (Table 15) and second points of environmental misalignment (Table 16). Analysis to distinguish between occurrences of environmental alignment and environmental misalignment extended beyond determining which trucking industry strategies and activities matched the occupational needs of professional truck drivers.

Environmental alignment and environmental misalignment were explored based on participant statements and blog sources not only coded for occupational needs and occupational culture, but to the extent these same statements and sources received the additional codes of in vivo, emotion, dramaturgical, values, evaluation, and causation (as described in the study's data analysis procedures). These results were examined for the supplemental code of magnitude (intensity, frequency of existing codes) towards the major themes of the occupational needs of professional truck drivers. The additional coding (in vivo, emotion, dramaturgical, values, evaluation, causation, magnitude) provided indicators for how strongly participants and bloggers felt about an occupational need or cultural construct. This allowed the researcher to narrow exploration of environmental alignment to major trucking industry retention themes and major themes of occupational needs and occupational culture with the greatest supplemental coding.

Points of environmental alignment

Table 15 is organized to first list the trucking industry retention strategy theme environmentally aligned with the occupational needs and culture of professional truck drivers. The next column lists the major driver occupational theme and driver suggested strategies and activities with strong environmental alignment with the corresponding major retention theme. The following discusses points of environmental alignment

between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. Points of misalignment are noted but not fully discussed until the next section.

Base Compensation and Benefits is the first trucking industry retention theme with strong points of environmental alignment with the corresponding theme of the occupational needs of professional truck drivers. Trucking industry strategies of across the board pay increases, full benefit packages, and practical miles meet and in some cases exceed participant identified needs. It is important to note that if an industry strategy is absent, it does not mean participants disagree with the strategy or that the strategy is not serving a need. The study did not ask participants to rate, rank, or select from a list of trucking industry retention strategies.

The trucking industry's Base Compensation and Benefits further aligned with the values and norms of professional truck drivers. Amanda-7 identifies the need for improved insurance because of the occupation's toll on the body. Amanda-7's statement provides a connection between the need for insurance and the occupation's cultural value of hard work and cultural norms that describe the work as difficult, stressful, and dangerous.

The trucking industry's multiple bonus structures fall under the major theme of Financial Incentives in Addition to Base Pay. The idea of bonuses aligned with a driver's need for additional financial incentives specifically those tied to performance in safety, fuel, delivery time, and total miles driven. Both the trucking industry and participants identified detention pay, with participants strongly identifying the need for the trucking industry to actively and consistently collect detention pay. Detention helps alleviate

hours of service lost to unreasonable shipper and receiver delays. However, there are points of environmental misalignment relating to the distribution of detention pay.

Performance and productivity pay appear as trucking industry retention strategies and suggested occupational need strategies. Performance and productivity pay differs from bonus payments. Performance and productivity pay compensates for additional duties and functions not covered by mileage pay. Drivers recognize the trucking industry's need for performance and productivity and appear to welcome the opportunity to perform in ways that add to their base pay. Blogger-4 describes performance as a "win-win situation". Alignment begins to wane when comparing the differences in the type of non-driving activities that should be compensated. Environmental alignment returns when the theme Financial Incentives in Addition to Base Pay recognizes the occupational symbols of accident free miles and total professional miles. Recognition of occupational symbols align with the occupational culture values of hard work, respect, accountability, safety, experience, time, and initiative.

Open Communication and Collaboration generated mixed results. Conceptually, a driver's need for open communication and collaboration environmentally aligns with trucking industry strategies to improve communication with drivers. Practically, drivers desire open communication with tangible results. Conceptually, if not practically, the theme of Open Communication and Collaboration environmentally aligns with driver occupational values of opinions, courtesy, respect, accountability, experience, and confidence. Open communication could environmentally align by addressing driver occupational norms of frustration and stress.

Under the theme Operating Models and Practices, the trucking industry identifies three strategies (Table 14). The first, collection of detention from shippers and receivers appears on both sides of Table 14. At minimum, it would appear the trucking industry and drivers conceptually environmentally align with driver frustration with shipper and receiver delays and detention pay to compensate for delays. However, participant frustrations over the lack of detention pay and a perceived lack of effort to collect detention, excluded identifying the collection of detention as a point of environmental alignment under Operating Models and Practices.

Second, under Operating Models and Practices, the trucking industry attempts to provide regional and dedicated driver support. Regional and dedicated driver support was not identified as a driver need. However, driver accounts of trying to resolve incomplete shipping information does indicate that some form of immediate driver support may alleviate some driver frustration.

The last trucking industry strategy, for the theme Operating Models and Practices, is improved terminal productivity. This strategy did environmentally align with the needs of professional truck drivers. Driver occupational culture attributes of language (Qualcomm), values (respect, accountability, responsibility, flexibility, time), and norms (isolation, frustration, stressful, difficult, fluctuates) environmentally align with the retention theme of Operating Models and Practices.

Promoting healthier lifestyles and increased home time are the trucking industry activities in support of the retention theme Quality of Life. Promoting a healthier lifestyle environmentally aligns with the needs of professional truck drivers. Blog sources and participants noted increased regulatory attention to driver health and its

relation to driver safety. Drivers find it challenging to find ways to maintain regular exercise.

Now it is true that a driver can usually decide where to stop for the night, but honestly you've got a better chance of accidentally swallowing a bowling ball than being close to a 24-hour fitness club on a regular basis. Blogger-9

Through the addition of refrigerators in trucks, the trucking industry's Work Environment retention strategies bolster environmental alignment within the theme Quality of Life.

Professional truck drivers describe their profession as a *lifestyle* with their work environment of a truck often serving as their home. This resulted in an intra connection between Quality of Life and Work Environment in achieving environmental alignment between retention strategies and the occupational needs of professional truck drivers. This resulted in environmental alignment with occupational values of hard work and time. Norms environmentally aligned with Quality of Life include lifestyle, stressful, dangerous, and difficulty.

As previously observed, the driver need of home time resulted from participants describing occupational needs of professional drivers as a collective and thus was identified as a need. However, the described data analysis protocol for how the study explored environmental alignment, resulted in only one participant with an emphasis on wanting more home time. "I feel a little different in that...I like home time. I have three kids at home so I like being home more often to see my kids...grow up." Dalton-4.

No other participants or blog sources were coded to suggest home time as a point of alignment with the trucking industry's attempt to increase home time. Again,

participants emphasized that with home time comes the sacrifice of not earning money and being away from home is part of the occupation.

...my weekends are very short; not a lot of time to do the things that I want to do. And by no means am I down playing the industry. It's just...I guess the common term would be 'it's part of the game'...You have to have a certain mentality to do this day in and day out. Brandon-6.

Drivers accept that home time is limited, the flux of logistics can interfere with the day, and time a driver makes it home. However, with this acceptance, drivers still expect the trucking industry to demonstrate a concerted effort to get drivers home in a timely manner. The perception of effort and timelines is where the trucking industry's Quality of Life efforts become environmentally misaligned from the occupational needs of professional truck drivers.

The study found no points of environmental alignment under the theme Training and Development Opportunities. The trucking industry's Training and Development Opportunities are driver focused whereas participant Training and Development Opportunities are new driver and non driver focused. Driver perceptions of nonmembers (Table12) coincide with driver perceptions that non drivers could benefit from understanding the role, work, and lifestyle of a professional truck driver. The same applies to new drivers or "rookies" who are perceived by experienced drivers as unaware or still learning the role, work, and lifestyle of a professional truck driver. The occupational need of a mentorship program meets the occupational culture's cognitive dimension of expected and accepted member behavior and promotes the occupational culture's values of experience, hard work, respect, responsibility, accountability, safety,

confidence, initiative, and humility. The occupational need to provide mentorship also exposes new members to the norms of the occupation. Blogger-9 reinforces member responsibility to guide new members.

There are approximately 3.5 million truckers in the US, so naturally that means we can't all be seasoned veterans. We drivers probably encounter at least one trucker per week doing something that would only be done by a rookie. We shake our head in disgust, but what do we do about it?...So here's the thing, drivers. You have experience. Great. But let me take a second here to remind you that there was a time when you were a rookie too. We all were. Not one of us had a grip on the air-powered umbilical cord as we floated from 4th to 6th gear into this world....So what say we remember that the next time we're confronted with a rookie who is having a really crappy day? The last thing they need is some irate driver screaming at them or belittling them. Nor do they need to hear your snide remarks on the CB. What they need is tolerance. What they need is a helping hand. What they need is an extra set of eyes. What they need is a driver who's willing to offer some friendly advice. Blogger-9

With participants describing their profession as *lifestyle* and trucks often serving as a driver's home, results include a high emphasis of environmental alignment within the theme Work Environment. As noted under the discussion of occupational needs, drivers see great advancement in the trucking industry's efforts to continually modernize and refresh their fleets. Points of environmental alignment, within the theme Work Environment, support occupational culture symbols (truck and trailer), values (hard work,

respect, independence), and norms (isolation, lifestyle, stressful, difficult, and fluctuates) of professional truck drivers.

Worth noting are drivers that expressed concern when improvement in the work environment becomes a burden or perceived as forced upon. Ronald-2 is tall and although the trucks are a lot nicer than when he started, very few can accommodate his long legs. This not only impacts comfort but Ronald-2's ability to use cruise control which improves performance.

I'm a tall person and have long legs, and very few of them [trucks] will accommodate my legs. My left leg is fine, but my right leg there is no room...I like using the cruise control because that's what they want you to use because you can get the best fuel mileage...my truck I have right now is good for leg room, but the trucks they are getting...They are making everything nicer in the truck except for where you sit, and the leg room. Ronald-2

The study reported a driver's truck and trailer as an occupational symbol. Amanda-7, who describes herself as a "Peterbilt girl" has strong opinions on the idea of having to get a new truck, especially an automatic (auto shift) as opposed to manual transmission.

...it's all automatic, there's no special equipment, there's no nothing. There's nothing to anchor a driver's loyalty anymore...they want us to take an automatic. I am dead set against it...this is what I said, 'You know what, I've been here for 13 years. I love what I do. I have given up having children because I love what I do. And now you want to put me in a truck that I absolutely do not want, I do not want, and I refuse to take an automatic. I'm a truck driver. I'm not a 'steering wheel holder'. I am a trucker. And you want to put me in an automatic? But yet,

I have stayed loyal to this company. Up and down, when we took a cut in pay and we've done this and we've done that. I have earned, I have earned my Peterbilt with a frickin' manual transmission. I am not taking that [automatic]. I have to at least like what I'm driving. I don't have to love what I drive, although I prefer to but I have to at least like it, and you want to put me in a truck I'm absolutely gonna hate. I'm done; I'm out of here. Why am I staying loyal to the company that cannot recognize my loyalty? You know, why?' And so I-I kind of threw a temper tantrum right away but then I unloaded it all out in an email and sent it to them. I'm kind of in a wait and see pattern but basically the owner, he's was like "okay", let's get her what she wants. Because I was that passionate about it.

Amanda-7

Amanda-7 provides the importance of the occupational culture's symbols to her personally and her professional identity. In addition, Amanda-7 reaffirms the occupational culture values reported by the study.

Table 15

Trucking Industry Retention Strategies Environmentally Aligned with the Occupational Needs and Culture of Professional Truck Drivers

Trucking Industry Retention Strategy Theme	Strong Points of Environmental Alignment with Corresponding Occupational Need Occupational Culture	Explanatory Statements
Base Compensation and Benefits	<ul style="list-style-type: none"> • Increase in per mileage pay • Affordable medical, dental, and vision • Base mileage pay calculated using practical miles 	<p><i>...health insurance is such a big item now, it's so expensive that there is the biggest one. Somehow...they gotta figure out how to help us out better, you know? And still have a good insurance package. Ronald-2</i></p> <p><i>...a lot of them don't have a good insurance... insurance is a huge thing....it goes back to the same thing like I said, this industry is hard on your body. Amanda-7</i></p>
	<ul style="list-style-type: none"> • Values • Norms 	<p><i>...practical miles...it's the most direct route no matter what your truck can do. Most of the time, I'll be paid say...1800 miles. Almost every time the actual miles we run will be, I am going to say 1900 or maybe 1850. Rarely is it under 1800 miles...It's always, we've always driven more. William-19</i></p>
Financial Incentives in Addition to Base Pay	<ul style="list-style-type: none"> • Bonuses • Detention pay • Performance and productivity pay 	<p><i>...my company gives us bonuses every quarter for mileage...and for fuel bonus...and for safety... Then I get a bonus check at my anniversary date for all the miles I drove the year before. Jeff-11</i></p>
	<ul style="list-style-type: none"> • Symbols • Values • Norms 	<p><i>...some bonus or thank you for a good job or you know, just show them a bit more appreciation. Rodney-8</i></p>

Table 15 (continued.)

Trucking Industry Retention Strategy Theme	Strong Points of Environmental Alignment with Corresponding Occupational Need	Occupational Culture	Explanatory Statements
			<p><i>...[bonus for] how many miles you've driven throughout the week....say, you get 1,500 miles, some other guy will get 2,500 miles, and a guy got 3,000 miles, but a lot of that depends on the loads they give you. Where some guy can make it work and get 3,000 miles every week versus another guy with the same load he will get 1,500 or 2,000... He's not a go-getter, you know?...You should get paid for on time deliveries. So many people are late; guys who are use to busting their butts are always on time because what they are doing is they are working harder than the other guys...</i></p> <p>Ronald-2</p> <p><i>Yes. Yes, yes now see part of the problem is like some companies don't pay detention at all. Tony-18</i></p> <p><i>The whole reason a business pays a person performance based pay is so that the wage earner himself will develop ways to become more productive. The more you can accomplish, the more money you can earn. It is a win win situation because the more you get done, the more revenues the company will be producing. Blogger-4</i></p>

Table 15 (continued).

Trucking Industry Retention Strategy Theme	Strong Points of Environmental Alignment with Corresponding Occupational Need Occupational Culture	Explanatory Statements
Open Communication and Collaboration	<ul style="list-style-type: none"> • Direct driver feedback and information • Fostering dispatcher, load manager, and driver manager relationships 	<p><i>...that's one thing I don't like to be is lied to or screwed over....if you got a compliant, let's say if your my dispatcher, my team leader, and you got something, that I did wrong and you knew about it but then you went over to personnel...I don't like that, I would rather hear it come out of your mouth. Garrett-3</i></p>
	<ul style="list-style-type: none"> • Values • Norms 	<p><i>...some companies kind of have this attitude of like always, "Go go go!" attitude and everybody is always on edge ... "You got to do this, we got to beat this time, you've got to make sure you come back at this time, you've got to stop for this," ...instead of being peaceful and not a hostile environment, it makes everything so stressful and frustrating...learn how to you know, talk to your employees. Sean-17</i></p>
Operating Models and Practices	<ul style="list-style-type: none"> • Improved terminal productivity (driver assignments, load planning, scheduling, return times, reduced driver wait time) 	<p><i>24-hour ahead planning for loads, accurate addresses, and truck legal routing would be nice. Josh-6</i></p> <p><i>... I get a load sometimes, the dispatcher just doesn't give you all the information you need on a load. Something like that and that gets you tied up at the shipper sometimes. You don't have all of the information you need.</i></p>

Table 15 (continued).

Trucking Industry Retention Strategy Theme	Strong Points of Environmental Alignment with Corresponding Occupational Need Occupational Culture	Explanatory Statements
	<ul style="list-style-type: none"> • Language • Values • Norms 	<p><i>I think sometimes they get the load without doing the proper research to make sure they have everything, they just get the load in...and sometimes they'll just go right ahead and just send it out without even looking thoroughly into the information they received from the broker or the next dispatcher they got it from. So their just lazy and say hey, there's a load go ahead and take care of it. When you still need to know if this place is open at a certain time or they're closed at a certain time. Um, like what am I picking up? Sometimes you can get your load and they don't even tell you what you're getting or you don't have a load number.</i></p> <p><i>Sometimes you gotta call your dispatching and gotta wait for them to answer the phone. If a [dispatcher] got more than twenty other drivers to deal with, their lines are tied up. So now you sit and wait for the other dispatchers to contact you back when...he could have just easily put you on hold or sent it to you on your Qualcomm. Zane-5</i></p>
Quality of Life	<ul style="list-style-type: none"> • Promoting healthier lifestyles • Values • Norms 	<p><i>I heard one of the big reasons the trucking industry has such a high turnover rate is not just because of a lack of home time but also because people are concerned about their health and what's to become of their health over their trucking career. [Excerpt from potential new driver request for Blogger-9 to address health related issuers]</i></p>

Table 15 (continued).

Trucking Industry Retention Strategy Theme	Strong Points of Environmental Alignment with Corresponding Occupational Need	Explanatory Statements
	Occupational Culture	
		<p><i>...a good 60% of the drivers out here are overweight... It's just smart to have us healthy. There are enough drivers that have heart attacks and other issues on the road that cause accidents that if they had been able to live a healthier lifestyle in the truck they may not have died where they did. Josh-6</i></p>
Training and Development Opportunities	No points of alignment	
Work Environment	<ul style="list-style-type: none"> • Maintaining newer fleets (average tractor 2-3 years old) • Improved tractor comforts (auxiliary power unit, inverters, satellite radio, refrigerators) 	<p><i>My truck is 2015. It's got 343,000 miles on it now. It's worn out. The doors don't seal up as well as they did when it was new so wind comes through a little bit. Gets a little cold. It's a lot noisier...in fact, my truck's due to be turned back in about 7,000 miles. Hopefully, I do get another truck. That is, yeah, something I think is important is to keep it reliable and newer equipment out there. William-19</i></p>
	<ul style="list-style-type: none"> • Symbols • Values • Norms 	<p><i>I think that's one of the things trucking companies are learning is that a big thing for drivers is comfort. You know we, this is our home...I sleep in this truck way more than I sleep at home. I sleep better in this truck than I sleep at home because it's where I'm used to. So those feature comforts for truckers is just a huge thing...the APU is probably the biggest one right now. Tony-18</i></p>

Points of environmental misalignment

Environmental misalignment emerged upon identifying points of environmental alignment between the major themes of trucking industry retention strategies and the corresponding major themes of the occupational needs and culture of professional drivers. As detailed in the previous section, data analysis and patterns of misalignment were the result of participant statements and blog sources not only coded for occupational needs and occupational culture, but to the extent these same statements and sources received the additional codes of in vivo, emotion, dramaturgical, values, evaluation, and causation. The researcher reviewed these results for surface level discord with between trucking industry major retention themes and the strategies and activities in support of the theme. Second cycle coding searched for patterns of sentiment within the discord.

Results support points of environmental misalignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. Results further support three themes of driver discord (Lack of Tangibility, Diverging Interpretations, and Flawed Execution) towards points of environmental misalignment. In addition, points of environmental misalignment include strategies and activities not identified by the trucking industry, however suggested by the occupational needs of professional truck drivers.

Column one of Table 16 lists the points of environmental misalignment as they correspond to the major themes shared by trucking industry retention strategies and the occupational needs of professional truck drivers. Column two lists themes of driver discord contributing to environmental misalignment of column one. Column three provides statements in support of driver discord.

Table 16

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs and Culture of Professional Drivers

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
Financial Incentives in Addition to Base Pay <ul style="list-style-type: none"> • Detention Pay • Performance and Productivity pay • Bonus structure 	Diverging Interpretations Flawed Execution	<p><i>With this company they will attempt to collect detention pay...but the way they track loads you can never tell where it's coming to, hopefully it's coming in your paycheck. Josh-6</i></p> <p><i>Detention pay, my company makes you wait 2 hours, before that kicks in. Two hours, if that happens every day, that's 14 hours a week I've lost. William-19</i></p> <p><i>There's a lot of things we don't get paid for that we're more or less forced to do. Simple things like sweeping out trailers. It only takes 10 minutes but when you're doing it all the time and you are not being paid. Things like that. If you want to get really down to it we should be paid for pre tripping our trucks if we are working. These are the sort of things the industry needs to do something about... William-19</i></p>

Table 16 (continued).

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
Open Communication and Collaboration <ul style="list-style-type: none"> • Soliciting driver input and feedback 	Lack of Tangibility	<p><i>...at my employer, we all get treated the same as far as bonuses. The same amount of bonus for the guy that's really working hard, towing the company line. You got the lazy truck driver, that just hasn't gotten any accidents, skating through not really working hard, he's getting the same bonuses as what I get. I don't think that's fair. Ronald-2</i></p> <p><i>You shouldn't have to fight to get your sign-on bonus or you shouldn't have to remind them, "Hey, I've been here three months you know, I don't see the bonus"...six months passed and they told you it was 90 days, you shouldn't have to remind them of that sign-on bonus. Sean-17</i></p> <p><i>...talk to your drivers...we got these APU units... in the summer time, you turn the truck off and it keeps it cool, it charges the batteries, in the winter time it runs the heat and so forth...the bunk is set up to lay your head down on the driver side in the back, they put the APUs on the driver side so they are loud, I mean, talk to your drivers...It's the simplest thing, keep your driver in tune, see what they think about something...that's my biggest thing, if they did that I would have zero complaints. Zero. Darren-1</i></p>

Table 16 (continued).

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
<p>Operating Models and Practices</p> <ul style="list-style-type: none"> Improved operations and productivity (driver assignments, 24 load planning, scheduling, return times, reduced driver wait time, accuracy in addresses) Reevaluate new driver recruitment and selection strategies 	<p>Flawed Execution</p>	<p><i>...we have a voice and our opinion matters which is what they tell us. But at the end of the day it really doesn't (laughter)... there is no tangible proof that our voice is being heard and that our opinion matters. I mean I can sit here and talk to this wall and have about as much acknowledgement as talking to the higher ups in the office about these issues.</i> Brandon-10</p> <hr/> <p><i>In my nicest tone, I explained to them that I had just taken a 15-hour break and I wanted to go home. To their credit, they hadn't realized I just been on break and they sent me to a location where we might have empty trailers. I just love this. They "might" have empty trailers there. Mini rant! How can a company not know where their trailers are? Why do we truckers have to drive all over God's green earth looking for empty trailers? I mean, they don't lose their loaded trailers. They always know where they are. What's so different about an empty trailer?</i> Blogger-9</p> <p><i>I've got 2 million plus safe miles. I'm good at what I do and not to pat myself on the back but that encompasses what I do and I become aware of everything that's around me. But Joe Schmoe can come off the street and he's been out here for barely two years and can make the same</i></p>

Table 16 (continued).

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
Quality of Life • Home time	Diverging Interpretations	<p data-bbox="872 598 1419 701"><i>amount of money as I do. And that's quite honestly, I think it's below me...He hasn't earned his stripes.</i></p> <p data-bbox="872 743 1419 1066"><i>They just want warm bodies in the seats. That's all they want...I understand with this industry so desperate for drivers, that they were doing whatever they had to do. But what they're really doing is screwing themselves. This whole industry is actually screwing themselves out of good quality drivers...But yeah, they don't value experience, exactly. Amanda-7</i></p> <p data-bbox="872 1108 1419 1398"><i>I would soon discover, however, that the company's idea of a "weekend" was often displayed by getting the driver home late on Friday evening and then, dispatching him on a load that required him to leave early on Sunday morning. The "trucker's weekend" was not something I'd been prepared for. Blogger-7</i></p> <p data-bbox="872 1440 1419 1797"><i>... I say "perceived" because the company will say, "Well you had two days at home, you were home Friday and you didn't have to leave till Sunday so you had two days." And the driver is going "No I only had one day. I didn't get in until Friday night and I had to leave Sunday morning so I only had one day and that's not enough time to do laundry, see my family and to do everything that needs to be done</i></p>

Table 16 (continued).

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
<p>Training and Development</p> <ul style="list-style-type: none"> • Productivity skills • Driving skills • Safety • Becoming a certified driver trainer • New driver mentorship program • Dispatcher/Load Planner CDL training or ride along with drivers 	<p>Diverging Interpretations</p>	<p><i>considering I've been out for two weeks or three weeks or whatever," Mitchell-9</i></p> <hr/> <p><i>More understanding to the driver's view of the business. You know a lot of dispatchers have never been in a truck. They've seen a truck but they've never been in a truck and they don't understand how our hours work. I mean they do but they don't. They don't...they just don't understand how it is to be out here on the road. It's a stressful life...just the understanding to how it is being a driver...Maybe go a couple weeks, [see] what the driver does, see how it actually is out here or talk to them more and actually understand his [driver's] feelings and...his experiences being out here. Dalton-4</i></p> <p><i>...a lot of these dispatchers they hire, they have no idea what they're doing because they never drove a truck a day in their life. And all of the sudden they think they're an expert because they got the job title of "dispatcher". And they need to be willing work with a person that is actually out here in the field and actually knows what's going on, a day-to-day basis. And if they don't, then they need to understand that. I think it should be a requirement if you're a dispatcher, that you should ride with the trucker for a while. Or maybe drive a truck, if you have a CDL or you can get a CDL. That would be the best type of</i></p>

Table 16 (continued).

Points of Environmental Misalignment between Trucking Industry Retention Strategies and the Occupational Needs of Professional Truck Drivers	Themes of Driver Sentiment Contributing to Environmental Misalignment	Explanatory Statements
Work Environment <ul style="list-style-type: none"> • Support in parking shortages 	Lack of Tangibility	<p><i>company to have dispatchers in there that actually drove. But that will never happen in a perfect world. Louis-12</i></p> <hr/> <p><i>I go down the road in the truck and if I can't park at a truck stop where I am out of the way, I have to park somewhere, somebody ends up parking on the ramp....they are putting in these truck stops and they are not building a parking lot big enough. They're screaming for more drivers but they are not complying to help the driver out as far as building a parking lot. Garrett-3</i></p> <p><i>...it's really hard to get a parking place at a truck stop if you need to take a nap. And if we can't stop ...we would like not to be harassed by the police if we pull off on a ramp because our heads are nodding over the wheel. I've gotten a \$96 ticket from a Virginia State trooper because I was trying to comply with my satellite pings... I couldn't find a parking place at the truck stop where I was going to initially stop when I was out of time and so down the road to a rest area and the rest area was full and so I was desperate and I pulled over on the ramp...a Virginia State trooper came and woke me up, gave me a ticket and made me leave you know, and that was the closest I've ever come to murder in my life... if a little more attention was paid to giving truck drivers a place to park you know when they're tired, without harassment; that would be lovely. Sarah-14</i></p>

Lack of tangibility

Participants expressed a lack of tangibility in solicitation of driver input and feedback and support in addressing parking shortages. Open Communication and Collaboration appeared as a major trucking industry retention theme and an occupational need of professional truck drivers. However, it became evident that participants either experienced or perceived the industry's attempt at improving communication as previously tried with no results or something in place but not acted upon as expressed by Brandon-10 in Table 16.

Darren-1 is an example of where a driver perceives an issue that could have been avoided had driver feedback been solicited. Darren-1's example (Table 16) provides an example of where an attempt at environmental alignment in one area (Work Environment), may have resulted in heightened environmental misalignment in another (Open Communication and Collaboration). Participants emphasized open communication needs to extend beyond the pretense of soliciting driver feedback. As stated by Brandon-6 (Table 17), drivers want "tangible proof that our voice is being heard and that our opinion matters". The study's results include lack of tangibility environmentally misaligns not only with the occupational needs but also the occupational culture of professional truck driver values of opinions, experience.

Participants further perceived a lack of tangibility in addressing the parking shortage under the theme of Work Environment. Participants did not express the trucking industry causing the shortage but rather lacking a tangible effort in trying to find ways to remedy the shortage. This included working with truck stops that charge for parking or as Sarah-14 suggests finding ways to for shippers and receivers to allow drivers to park

overnight between 9:00 PM to 6:00 AM (Table 16). Not responding to driver concerns over parking resulted in environmental misalignment with driver values of opinions, respect, safety, and time. In addition, environmental misalignment occurs with occupational cultural norms of regulations, long hours, frustration, stressful, dangerous, and difficulty.

Diverging interpretations

The trucking industry's interpretation of performance and productivity pay diverges from participant interpretations of performance and productivity pay. Falling under the theme Financial Incentives in Addition to Base Pay, the trucking industry describes performance and productivity pay as a combination of safety, customer service, regulatory and organization compliance, additional functions not covered by mileage pay (loading and unloading freight), days worked per week, delivery times, or miles per week. The study reported drivers described performance and productivity pay as compensation for all work performed that is not covered by mileage pay (loading, unloading, trip planning, sweeping out the truck). Environmental misalignment was not the result of drivers disagreeing with the trucking industry but rather the perception that the trucking industry fails to recognize and adequately compensate drivers for work not covered by mileage pay. Drivers value time. Drivers accept their occupation requires task other than driving. However, perceptions of lost time in favor of doing work perceived as unfairly compensated, results in environmental misalignment with the occupational needs and culture of professional truck drivers.

Driver occupational needs around home time are less about the amount of home time and more about diverging interpretations of the efforts made to get a driver home on

time and what truly constitutes a weekend at home. Blogger-7 captures the environmental misalignment with the phrase “trucker’s weekend” (Table 16).

Participants acknowledge the occupational norm of flux in the work and that sometimes logistics prevents getting drivers home at a set time. The expectation of getting home on time is rooted in driver experiences that they know it “can be done”. And a lack of getting a driver home translates into a lack of effort on behalf of the industry.

William-19 provides the crux of participant expectations of getting home on time.

So, getting home on time was a big thing back then and it is today. And some companies are really good at it....I think it comes down to the driver manager and how hard that person is willing to work with the load planners because we have a lot of freight...It's a matter of how much effort they are going to put into it.

[With] the load planner or the driver manager I had before...I was home on time or a day early every time without exception. So, I know it could be done...why isn't everybody doing it? William-19

The study reported no areas of environmental alignment within the theme of Training and Development Opportunities. Participants expressed a strong need for training to focus on dispatchers/load planners and new drivers as opposed to existing drivers as suggested by trucking industry retention strategies. There is clear divergence between who could benefit most from training and development. Although participants suggested dispatchers and new drivers in need of training and development, it was perceived that a mentorship program for new drivers and dispatchers riding along with drivers, would ultimately meet drivers’ needs. New drivers could improve their assimilation into professional truck driving. Dispatchers could gain a greater

understanding of driver experiences, which would mitigate driver perceptions that dispatchers lack experience and understanding of truck driving. The amount of divergence between trucking industry training and develop strategies and the training and development needs identified by professional truck drivers, resulted in environmental misalignment.

Flawed execution

Data analysis found the most passion around perceptions of flawed efforts to collect and distribute detention pay. Drivers realize the collection of detention could make their firm less competitive but as Ronald-2 expresses, the trucking firm should then pay drivers out of the firm's earnings. Tony-18's feelings are even stronger.

...after so many hours the company is suppose to charge but they never do cause it's competitive and they don't want [other] carriers to get the loads...but I've always told them they should pay us after so long, out of their pockets so much an hour, for waiting. Ronald-2

You know what they need, what they need to do is, they need to charge these companies, the shippers and receivers enough to where it hurts. Because if they did that then the shipper and receiver wouldn't be delaying the drivers like they are. Tony-18

Other perceived flaws include lack of clarity in how much of a driver's pay is actually detention and the amount of detention time the driver is being compensated for as the case expressed by Josh-6 (Table 16). Flawed execution in the collection and distribution of detention pay cuts against not only the occupational need for detention pay but occupational culture values of hard work, courtesy, respect, accountability, and time.

Flawed execution continues with the administration of bonuses. Some drivers experienced bonuses distributed in equal amounts irrespective of the performance measure or work necessary to achieve the bonus. Sean-17 describes flaws in the distribution of sign on bonuses (Table 16). Environmental misalignment in perceived inequities cuts against driver occupational culture values of hard work, courtesy, respect, accountability, experience, and initiative.

Two final areas of flawed execution developed, both falling under the theme of Operating Models and Practices. The first is improving operations and productivity. The point of environmental misalignment is with driver perceptions of efforts to improve operations, as supported by Bogger-9's account of a trucking firm's ability to manage loaded trailers but an inability to manage empty trailers (Table 16). Again, delays cut into a driver's time and result in environmental misalignment with occupational culture values (hard work, courtesy, respect, accountability, time, and initiative).

New driver recruitment is the second and final point of flawed execution. Although not a trucking industry retention topic, the study did find drivers perceive reevaluating new driver recruitment and selection strategies as an occupational need. Amanda-7's statement of "warm bodies in the seats" and new drivers within a couple of years making the same amount as her, begins to express areas of environmental misalignment with the occupational values of professional truck drivers (Table 16). Trucking industry recruitment practices become environmentally misaligned with driver occupational culture values of hard work, respect, responsibility, accountability, safety, experiences, and reputation.

Sean-17 provides an additional perception of flawed recruitment efforts.

Let's just say for example they say, 'Hey, you can make \$100,000 a year by driving' but they don't really tell you the ins and outs on how to make that \$100,000... And then you do meet their expectations, they don't commit; they don't fulfill their end of the bargain. Sean-17

Sean-17's example supports environmental misalignment with driver occupational culture values of hard work respect, accountability, and reputation. This section reported the study's results of environmental alignment between trucking industry retention strategies and the occupational culture of professional truck drivers. The next section reports perceptions of the phenomenon of churn.

Perceptions of Churn

This chapter began with describing the study's participants and then described trucking industry retention strategies. Next, the chapter explored the occupational needs and culture of professional truck drivers. The study then reported the results of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. The chapter concludes by reporting the results of Research Objective Five: *Explore professional truck driver perceptions of churn as perceived by professional truck drivers.*

The results of Research Objective Five explore professional truck driver perceptions of churn as a phenomenon. As previously described, churn is a specific type of turnover behavior. Although perceptions of turnover and related topics of retention and shortages emerged, the results of Research Objective Five focus solely on perceptions as they relate to churn. Reporting of other related topics of shortages,

retention, and other forms of turnover are only reported upon if they provide context for a driver's perception of churn.

Research Objective Three reported the occupational needs and culture of professional truck drivers. The results include distribution of blog sources coded to the main constructs of the study. Only one blog source identified as having met the study's definition of churn (see Operationalized Definitions). The lack of reference by bloggers to the term *churn* and only one reference interpreted as churn, is one result of Research Objective Five.

Since 1995 I work[ed] as a truck driver and have had many jobs. The Grass was always greener somewhere else so I thought. In some cases it was, other cases ... don't ask me about it. I think trucking [wherever] on this globe is a special branch. And a lot is wrong in this industry, we all know it. It is something special ... not good in many ways but it seems to be the way it is... Blogger-1

Blogger-1's statement does not specify the word *churn* but does describe multiple positions and syncs with participant perceptions of why some truck drivers engage in churn. There are different perceptions and reasons why a driver may engage in churn. However, participant perceptions reveal some drivers engaging in churn with the idea the next trucking firm would be different simply because it was not their current trucking firm.

The study mapped interview questions 8, 9, 10, 11, 12 to Research Objective Five with probes for questions eight and nine. Question 13 closed the interview by allowing participants to ask questions or provide any final comments. Participant responses to question 13, as they relate to churn, are included in the results of Research Objective

Five. During the interview, if a participant expressed unfamiliarity with the term churn, the researcher provided the study's definition of churn.

Interview responses support participants, if not familiar with the term, are familiar with the behavior described as churn. The extent of familiarity and perceptions of churn behavior varied and manifest in the results reported in the next sections. The first question mapped to Research Objective Five asked—*Q8: Tell me what the term churn means to a professional truck driver.*

The results of question eight support the majority of participants required a prompt to include the meaning of churn and even then, the majority were not familiar with the churn as it relates to driver turnover. Mitchell-9 and Tony-18 were the only participants expressing familiarity with the term and confidence in what the term meant. Jeff-11 and William-19 provided definitions but did not do so with the same familiarity as Mitchell-9 and Tony-18. The remainder of participants initially responded with having not heard of the term but did acknowledge familiarity with churn behavior once the definition was provided. Some participants provided alternate terms (bouncers, hoppers, sidestepping).

The full results of question eight are located at Appendix O. Full responses reinforce the extent at which participants were unfamiliar with the term churn. However, responses to question nine support some level of experience with drivers demonstrating churn behavior and perceptions of those drivers. This was especially the case with responses to question nine's probe *What are your feelings about drivers that move from one trucking firm to another?*

Data analysis of responses included not only reviewing written transcripts but also multiple listening sessions of interview audio. Participant responses to their feelings about drivers, that move from one trucking firm to another, sometimes began with a tone of indifference and not something participants spend time considering. A driver's work history or decision to leave one job for another is personal and that driver's choice. Mitchell-9 provides a context for why the behavior of churn is not part of a driver's everyday concern.

To some of them it's their own personal business because more often than not those guys won't – I mean you won't hear too often that a driver told another driver, 'Well, I worked for 10 companies in two years.' They're not ostracized because of it because most of the time we're unaware of it. All we know is that, that driver just came here recently or I've never seen that guy before. And you know of course the bigger the company the easier to blend in...other drivers won't know or have any idea. Mitchell-9

Although participants began with a sense of indifference and may not know if another driver has engaged in churn, participants have strong feelings about drivers that engage in behavior described as churn. The more participants discussed their feelings, the tone changed from indifference to one of negative about drivers that regularly change trucking firms. "That's something that some people do...some people are just stupid, are never going to be happy no matter where they are..." Sarah-14.

I don't like it I don't trust them ...when I started with [current employer] four years ago, there was two other guys filling out the paper work... and this is the big part of the industry that's wrong...the industry should not allow this to happen

but they do because again the shortage like you said and they need drivers. One guy had been with eight companies in two years. The other guy had been with four companies in three years. I went there I had been with the last company for eight years and the company before that 10 years. Jeff-11

Well, I really don't have much to say about them. You know, they're not trying to prove themselves to any one company... if you stay long enough with the place, you will receive the money whether it's in bonuses or raises or whatever you will, you'll get there. You don't need to bounce. Stanley-16

Participants acknowledge the trucking industry's hiring practices play a role but put most of the burden on the driver engaging in churn. Question nine's probe of *What are your feelings about drivers that move from one trucking firm to another?* also elicited participant perceptions of why drivers engage in churn behavior.

I don't know I can't even think or imagine to get into someone's psyche. But it just seems like they are looking for a perfect fit possibly or they are indecisive or they are just a cry baby or (laughter)...And I'm just not that person... Henry-13
...those kind of guys there's always something greener you know, they always get their eyes filled with something better and any little thing that pisses them off about their current company, they will jump and run and the grass is greener over there, I'm going to go over there. Tony-18

Other reasons for churn include pay, benefits, temperament, and a "grass is greener" prospective. The majority of participants described themselves as having not engaged in churn behavior. The reasons for why a driver may churn and perceptions of churn are primarily provided by non-churning drivers. The next section focuses on the story of

churn as described by participants that do or have engaged in churn.

The story of churn

Of the 21 participants, two drivers described a work history that the study considered churn behavior. Josh-6 tells the first story of churn. Josh-6 is with his fifth trucking firm in seven years as a professional truck driver and plans to switch to another trucking firm. Josh-6 was not familiar with the term churn.

At his first employer, Josh-6 was required to team drive. Neither Josh-6 nor the other driver wanted to continue driving as a team, the company would not let them go solo, their vehicle broke down for a significant amount of time causing a loss in pay, and other drivers were making more than Josh-6 and his team driver. After eight months of employment, Josh-6 left his first employer. He spent approximately eight months at his second employer before leaving.

At his third employer, Josh-6 had an accident. Josh-6 stated that had it not been for the accident, he would not have left the third employer. Josh-6 worked a non trucking job for about three months after his third employer. Eventually Josh-6 found his fourth trucking firm.

I found a company out of [location] that would hire me back on but they were paying 38 cents a mile, and it was okay money but most of the truck drivers were making 42 to 45. And because of my points, I couldn't ask for a raise. So, after one year when I lost a third of my points from the accident, I shopped around and this company said yeah, we'll pay you 42. Josh-6

Josh-6 is now with his fifth trucking employer. He stated he would still be at his third employer if it were not for the accident and that he plans to return once his license is clear

of points. "...2019 July I can go back to [third employer] and ask for my 50 cent a mile again.", Josh-6. In the interim, Josh-6 still plans to look for other trucking companies. Josh-6's story continues with researcher probes for greater understanding of Josh-6's experiences with the phenomena of churn.

Is there anything that any of these other firms could have done to keep you, you think?

Well, [third employer] if they wanted to, but the accident made them decide that I didn't fit right. The exact words from the VP of safety was he didn't feel comfortable with me driving one of their trucks, come back after three years, after the points are gone and we'll reaccept you. Josh-6

What does your current employer need to do to keep you with them?

Well, since I've applied to four other different companies they either need to give me a really big raise or be more consistent in their planning. Josh-6

How will you know these other companies that you applied for will be consistent in planning?

They may not, but as long as I'm making above 45 cents a mile I can live with a little more frustration. Josh-6

Are these other places you're looking at paying more than you are making now?

Yes. Josh-6

It is unclear if Josh-6 will return to his third employer as he plans. It is also unclear if Josh-6 would have stayed with his third employer had it not been for the accident. The result of Josh-6's story illustrates driver churn is complex. Another result of Josh-6's story is the timing of churn in a driver's career. A conclusion is not being drawn but

reported that Josh-6's churn behavior began within the first eight months of his trucking career, yet he has years of professional truck driving experience. The result of timing also emerged in William-19's story.

William-19 has 25 years of driving experience and is familiar with the term churn. In William-19's experience, churn has a negative connotation. The following is what churn means to William-19 and his experience with churn. The narrative includes researcher probes for greater understanding of William-19's experiences with the phenomena of churn.

Have you ever heard churn, C H U R N referred to when describing truck driver turnover?

I have and it was not in a very positive comment. I don't remember exactly, it's been a while but...it's complicated. I don't even know where to start with that.

Yes, I have heard it, yes. William-19

If I were to ask you what truck driver churn was, how would you describe it?

Um, wow. Drivers tend to switch companies a lot and I have, especially early on in my driving career, I probably went through, I'd have to look it up but I am going to say, probably four or five companies in under that many years. This is the mid-90s. I will say things are a lot better for us now compared to then. It's still not great. Driver churn to me—I think this ties back to what I said earlier about spending so much time alone, you have too much time to think way too much and overthink things. And drivers tend to make assumptions about what's going on with their bosses or whatever. And they get mad and they just think the grass has got to be greener on the other side. The world's coming to an end and

they bail. And they get over to company B. And 6 months, year, 2 years, whatever it is down the road, they are feeling the same way again. So, they do it again. And it's just a vicious cycle. William-19

Tell me about those early years. What were you feeling when you were changing companies? What was going on as to why you wanted to move that many times early on?

I am sure it's very common. I was not used to being away from home weeks at a time...back when I started, a new driver usually had to team with another driver for a year before they would switch out....I am in this 10 by 10 box with basically a stranger isolated from family. Back then in the mid-90s I didn't have a cell phone. So, I had really no communication other than prepaid phone cards at a truck stop calling back home once a week just checking in. And you become very isolated, lonely. My first job, I had less than a month. It was quite an awakening for me because when I first got into this I just didn't think it would be that big of a deal but it really was. And it took me some time to adjust to this lifestyle. Then, of course, we started having computers and emails and cell phones. So, communication is no big deal today but back then it affected me. And I jumped; like I said the first job I was at less than a month. I was one trip out when I think I bailed. It may have been two; I don't remember. Obviously, I have to work and needed a job so I went at it again. I just slowly kind of adjusted to this lifestyle...It's kind of an adjustment to this lifestyle, is what it was those first few years. William-19

What are your feelings about drivers who you see now going from one firm to another? Do you have any particular feelings about that considering you went through that a little bit?

Though I understand it and I don't think, especially new drivers, I don't think there's a whole lot of, not much that can be done to curb it significantly. Like I said, a new guy is trying to find his way, trying to figure out the industry and what he's comfortable with and who he is comfortable working with....a new guy doesn't have that knowledge yet. So, retaining new drivers, I don't even know, people make a lot of fun of seeing all these new drivers going through these company truck schools and that but I think we all forget how hard it was when we started. And I have perspective on it, I understand it.

When you went to those other companies that early on, was it because you thought you would get more home time?

I am not sure about more home time but more being home on time. To be gone two or three weeks at a time, I needed that time off. I scheduled with my friends....Hey dude, I'm going to be home this weekend, do you want to go fishing one of these two days. So, I do that in advance. But if I don't get home till Monday. Now, he's on his job because he's got a Monday to Friday job and I'm just staring at the sky for a few days. So, getting home on time was a big thing back then and it is today.

William-19's story of churn early in his career provides an alternative experience with churn. Willam-19's story differs from Josh-6 who has and plans to continue churn. And William-19's story differs from drivers who have not engaged in churn. William-19

suggests one cause of churn could be a driver finding their way as they enter a new profession and industry.

Preventing churn

Question 8 explored participant's knowledge of the word churn. Question 9 and its prompts were devised to identify participants who engaged in churn and why.

Participants that have not engaged in churn provided their feelings about drivers that do churn and the reasons why. The last question about the phenomenon, centers on preventing churn.

Participants engaging in churn were asked *Thinking back, do you feel there is anything that could have prevented you from leaving one trucking firm for another?* As Josh-16 answered, he felt the employer he wants to return to could have found a way to keep him. With his current employer, he is willing to accept things that frustrate him if he is paid enough. For William-19, the days of churn were early in his career and a matter of acclimating himself to the profession. Initially there was not anything his employer could do because he took about 1 ½ years off from trucking but returned for financial reasons and has remained ever since.

Non participants of churn were asked *Thinking of drivers that have churned, do you feel there is anything that could have prevented them from churning?* As a probe from question nine. The consensus among non-churning participants was little to nothing could have prevented a driver from churning. However, it was not always clear if a participant was thinking of a specific personal instance of a driver they knew who had churned or the general idea of drivers who churn. The study further asked non-churning drivers *Tell me about why you have not engaged in churn* as another probe for question

nine. Participant responses to why they would not engage in churn, provides an additional source for what may prevent other drivers from engaging in churn.

...My boss, I would follow him to the end of the world. I think my boss is awesome. He fights for me. I'm not really loyal to the company. I'm loyal to my boss, if that makes sense.... I would say, it's-it's pay definitely pay is the bottom line for a lot of drivers. Amanda--7

I get along with my dispatcher. I know the terminal manager very well. The money is good. I also can come home, take off whenever I want without a problem. Just tell them, 'Hey, I need to take off today' without any issue... You get six weeks of paid vacation after four years, so I can't beat that. The benefits is alright they not all that good, it's okay... I have a good route; you know, going from one place and come right back home and versus being on the road for three weeks at a time, two weeks at a time, four weeks at a time. Zane-5

Appendix P provides a comparison of some non-churning participant perceptions of why drivers churn and non-churning participant reasons for why they do not engage in churn. Research Objective Five resulted in four major themes of professional truck driver perceptions of churn—Language, Churn Behavior, Why Drivers Engage in Churn, and Why Drivers Avoid Churn. The next sections report and discuss these themes and additional considerations of Research Objective Five results.

Language

The first major theme of Research Objective Five is Language (Table 18). Participant statements reflect familiarity with turnover behavior described as churn but not the use of churn to describe the behavior. Participants reasoned why the behavior is

described as churn but churn is not the language used by participants to describe driver turnover. Instead, participants described churn behavior as bouncing, sidestepping, and simply turnover. Participants describe drivers engaging in churn as “bouncers” and “hoppers”. Additional descriptions include drivers engaging in churn as having a predilection for believing “the grass is always greener” at another trucking firm.

Churn behavior

Drivers are aware of turnover and specifically churn turnover within the trucking industry. However, drivers do not consume themselves with ruminating over churn turnover, why churn occurs, or who has or has not engaged in churn. Truck driving is generally a solitary profession. Truck drivers spend a lot of time alone in their trucks. Interactions with other drivers and members of the organization are generally from a distance. When drivers are together, drivers may notice someone new but there lacks a need to consider or determine if the new driver has engaged in churn. Conversely, churn behavior is not something a driver engaged in churn makes a point of disclosing. However, if asked about their feelings of churn, non-churn drivers have a negative connotation of the behavior of churn and drivers who engage in churn. Despite negative perceptions, drivers regard who you work a personal decision. In addition, the decision to engage in churn behavior is a personal decision.

Why drivers engage in churn

The reasons why drivers engage in churn relies heavily on the perceptions of non-churning drivers. Only two participants described a work history that lends itself to churn. One driver used churn to acclimate himself to the profession; noting it takes time to find your way in the industry. The other driver with a churn history engages in churn

for a number of reasons. His reasons include trying to find a firm that meets his financial expectations and biding time until he can return to the firm he was forced to leave because of an accident.

Non-churning participants also acknowledge pay as a cause of churn but also factors that differ from drivers that have actually engaged in churn. Non-churning drivers point to the industry as one cause. There is little to no consequences for having a work history that reflects churn. Participants acknowledge the industry's shortages and turnover but consider some of the industry's practices as exasperating the problem. Non-churning participants put a lot of responsibility on the driver. Drivers who churn sometimes have an expectation of the profession and industry that are not met—some reasonable and some unreasonable. Drivers who churn have personalities and beliefs that may not be conducive to professional truck driving. Non-churning drivers regard churn drivers as “never satisfied”, “mad about something”, or looking for greater pay. Although, non-churning drivers perceive minimal differences in how trucking firms operate and pay. “...most companies I hear are going to basically pay drivers almost the same...” Zane-5.

Why drivers avoid churn

Non-churning participants describe three major factors that keep them from engaging in churn—pay and benefits, work environment, risk reward factor, and driver personality. The first is pay and benefits. There are participants that after a long tenure feel they are making what the industry would consider top pay. The combination of available benefits keep most participants from engaging in churn. For example, an average benefit (health plan) can be offset by the combination of favorable benefits

(retirement plan and vacation time). For some drivers, a single benefit is enough.

Work environment is the second reason drivers avoid churn. Work environment includes the physical and not physical. Physical factors include not only the equipment the employer provides but also the effort and care put into maintaining the equipment. Non physical factors include relationships that provide tangibility to the driver. This could be a driver-manager relationship where the manager demonstrates tangibility by removing obstacles that impeded a driver's success.

The decision to stay or leave an employer includes a risk reward factor and is the third reason drivers avoid churn. The risks of changing employers, especially for drivers with a long tenure with their current employer, is not worth it. This does not mean the driver is completely happy with their employer but what the driver is unwilling to risk leaving the environment they are comfortable with for a benefit that is likely pay. There are likely other rewards stated—more home time, new trucks, bonuses but until a driver joins the new employer and receives the rewards, they cannot fully determine if the risk was worth it. And despite participant perceptions that most trucking firms generally operate the same, there are nuances and a learning curve when joining a new employer.

The last reason drivers avoid churn, harkens back to one of the reasons why drivers engage in churn and that is the driver's personality. Just as non-churn drivers believe there are driver personalities and traits that lend themselves to churn behavior, there are driver personalities and traits that lend themselves to avoiding churn behavior. Drivers avoid churn when they believe their individual and professional needs are being met. And their employer's expectations align with those needs. The results of why drivers avoid churn are not the same as retention. Considerations for why this is the case

follow Table 18. Table 18 summarizes the preceding discussion of the major themes of professional truck driver perceptions of churn. Column one lists the major theme, column two the subtheme, column three descriptions, and column four additional results.

Table 17

Major Themes of Professional Truck Driver Perceptions of Churn

Major Themes	Subthemes	Descriptions	Additional Results
Language	Churn is not a term drivers associate with or use to describe turnover	Alternative driver language	“bouncing” “bouncers” “bounce” “grass is greener” “grass was greener” “hoppers” “hopper” “sidestepping” “turnover”
Churn Behavior	Drivers are aware of it but not consumed with thinking about it	Although aware of churn, it is not always evident to drivers as to who has and has not engaged in churning	Churn behavior is not something non-churn drivers inquire about and not something churn drivers share
	Negative connotation	Non-churn drivers lean towards a negative view of the behavior, why a driver would engage in churn, and the driver who engages in churn	Despite a negative connotation, drivers consider the decision to churn is a personal, individual decision

Table 17 (continued).

Major Themes	Subthemes	Descriptions	Additional Results
Why Drivers Engage in Churn	Acclimating to the lifestyle	Searching for the right driving and company fit	It takes time to find your way
	Pay	Less pay prompts a search for more pay	Work history that results in less per mile than the average driver
	Industry	Shortages and turnover	Hiring practices that do not always penalize churn behavior
	Driver	Personality	A range of individual characteristics and beliefs that may not align with the driver's expectations of the employer or the employer's expectations of the driver
Why Drivers Avoid Churn	Pay and Benefits	Commiserate to a driver's perception of their individual worth or financial needs	Individual driver perceptions of fair treatment in the combination of personal, professional, and employer values and attributes most import to the individual driver
	Work Environment	Facilities and equipment Meaningful relationships with other drivers or management that facilitate other	Driver experiences tangibility in both animate and inanimate aspects of the work environment

Table 17 (continued).

Major Themes	Subthemes	Descriptions	Additional Results
		personal, professional needs or mitigate needs not met	
	Risk Reward Factor	Risks of a new work environment (losing seniority, new systems, starting over, relationships) do not outweigh the potential reward (work environment, pay, benefits)	Reward factor has to overcome perceptions of risks
	Driver	Personality	A range of individual characteristics and beliefs that align with the driver's expectations of the employer or the employer's expectations of the driver

Considerations

The results of Research Objective Five do not include a retention theme. As noted, participants that have not engaged in churn generally negatively view drivers that do churn to include lazy, stupid, hotheads, untrustworthy, and someone they could not relate to. Non-churn participants generally agreed that it was unlikely that there was anything an employer could do to prevent drivers that churn. Non-churning participant statements indicated a predisposition as someone who would not churn because of the negative connotation of the behavior and that drivers that churn are never satisfied and

thus there is likely nothing an employer can do to retain them. The study determined that non-churning driver views of why they do not engage in churn provides greater value than presuming why non-churning drivers avoid churn are the same strategies that would retain churn drivers.

Summary

The chapter began with the results of Research Objective One by describing participant demographics. Twenty-one professional truck drivers participated in semi-structured interviews. Participants varied in age, gender, and professional experience. All participants work as company truckload or less than truckload professional as professional truck driver. The study next reported seven major themes to describe trucking industry retention strategies in response to Research Objective Three. Research Objective Three further reported the occupational needs and culture of professional truck drivers as a context network with occupational needs driven by occupational culture and cognitive and normative dimensions. The study described the occupational needs of professional truck drivers as clustered to the same themes as trucking industry retention strategies. Research Objective Four reported two major findings to describe professional truck driver perceptions of environmental alignment. Results support professional truck drivers perceive points of environmental alignment and points of environmental misalignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. The chapter concluded Research Objective Five yielding five major themes to describe professional truck driver perceptions of churn.

CHAPTER V – SUMMARY

The evolution of the trucking industry's human capital risks trace back to the 1970s. Deregulation culminating in the Motor Carrier Act of 1980, spawned nearly 40 years of high driver turnover with the additional human capital risk of high driver shortages. Research exploring driver turnover and shortages generally occur within logistics and supply chain based disciplines and quantitative in nature. Despite the contributions of logistics and supply chain research, the trucking industry's human capital risks continue. The continuation of these risks provided an opportunity for the current study to lend a human capital ontology by exploring professional truck driver experiences with the phenomenon of churn and their perceptions of environmental alignment between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. This chapter presents the study's findings, limitations, recommendations for future research, and discussion,

Findings, Conclusions, and Recommendations

The study's results support three significant findings. The following discusses each finding with a corresponding conclusion and recommended course of action. The first finding establishes the constructs forming the occupational culture, cognitive and normative dimensions of professional truck drivers and how they contribute to forming the occupational needs of professional truck drivers.

Finding 1: The occupational culture, cognitive and normative dimensions of professional truck drivers inform the occupational needs of professional truck drivers.

Language, rituals, symbols, values, norms, and shared beliefs provide observable constructs for conceptualizing macro cultures (Schein & Scheiner, 2016). Occupational

culture is a macro culture (Schein & Scheiner, 2016). Drawing from institutional theory, as a sociological institution, an occupational culture harbors its members culturally based practices (Oliver & Mossialos, 2005) that extend beyond the occupational culture's norms and procedures. Sociological institutions counsel members on the social institution's cognitive and normative dimensions (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005). Cognitive and normative dimensions suggest how members should behave among other members, respond to certain situations that members may incur, and how to perceive nonmembers (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005).

The study reported seven major themes to describe the occupational needs of professional truck drivers. Each occupational need carries the undertone of the occupational culture's shared language, rituals, symbols, values, and norms. In addition, the occupational needs carry the undertones of the cognitive and normative subthemes (expected and accepted member behavior, professional identity, life on the road, perceptions of nonmembers). The power of sociological institutions to influence member behavior and beliefs, along with the cultural, cognitive, and normative undertones of the reported occupational needs, support the study's finding that the occupational culture and cognitive, normative dimensions of professional truck drivers inform the occupational needs of professional truck drivers.

Conclusion. The study's description of the occupational culture of professional truck drivers resulted from data collected across multiple sources to include participant interviews and blogs. The shared language, rituals, symbols, values, norms, beliefs, cognitive and normative dimensions, and occupational needs cut across professional

truck drivers of differing ages, driver type, employer size, gender, and professional tenure. Prior research suggests occupational cultures as multilayered, simultaneously spanning across multiple organizations, and part of an organization's external environment (Gallivan & Srite, 2005; Jacks, 2012; Karahanna et al., 2005; Van Maanen & Barley, 1982; Walsh & Kefi, 2008). The occupational culture described in this study reaffirms this prior research. As such, the occupational culture of professional truck drivers serves as a sociological institution with the ability to influence the occupational needs of professional truck drivers as a collective.

Recommendation. Knowledge of an occupational culture's level of influence on member behavior and occupational needs serve as resources during the environmental analysis phase of performance improvement. Rothwell's (2005) environments of human performance, depicts the environments in which performance occurs and the interdependent nature of these environments. Environmental analysis includes external and internal environments with influence on organizational and individual performance. Environmental analysis guides human capital practitioners in identifying and prioritizing environmental influences of performance (Van Tiem et al., 2012).

Human capital practitioners should gather external cultural data to include the occupational culture of workforces practitioners try to recruit and retain. Analyzing environments external to an individual organization benefits current and future sustainably across a number of human capital dimensions to include recruitment and retention (Van Tiem et al., 2012). Internal environments include individual worker motivation and expectations (Van Tiem et al., 2012).

Individual workers, who subscribe to a professional identity, are subject to the occupational culture's cognitive scripts providing expected and accepted behavior in given situations. These situations include work environments. Human capital practitioners should explore what motivates the worker and to what extent the occupational culture influences levels of motivation given various work environments.

Environmental analysis further explores if individual worker expectations align with an organization's performance expectations (Van Tien et al., 2012). When worker expectations no longer align with an organization's performance expectations, human capital practitioners should explore the occupational culture's level of influence on individual worker expectations. Knowledge gained through environmental analysis guides human capital practitioners in understanding the *why* behind individual behavior (Van Tien et al., 2012).

Finding 2: Environmental alignment and environmental misalignment exists between trucking industry retention strategies and the occupational needs and culture of professional truck drivers.

The study's second finding supports environmental alignment and environmental misalignment exists between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. Seven major themes describe trucking industry retention strategies. The same seven themes describe the occupational needs of professional truck drivers. However, agreement in themes does not equate to environmental alignment. The study determined environmental alignment and environmental misalignment through analysis of the trucking industry's Implemented

Strategies and Activities for each retention theme and Driver Suggested Strategies and Activities for the corresponding occupational need theme.

Conclusion. Research supports increased forms of alignment, including environmental alignment, improve individual and organizational performance (Alagaraja, 2013b; Alagaraja et al., 2015; Alagaraja & Shuck, 2015; Chorn, 1991; Miterev et al., 2017; Quiros, 2009; Semler, 1997; Yamakawa et al., 2011). Emerging perspectives suggest employee engagement as a bridge between alignment and performance.

Empirical research supports a positive relation between employee engagement and various performance measures including customer service, turnover, safety, productivity, and profitability (Alagaraja & Shuck, 2015). Psychological accord between individual and organizational goals elicits engagement (Alagaraja & Shuck, 2015). Perceptions and feelings of commitment and engagement represent alignment between individual and organizational goals and objectives. Employees gain a “shared sense of ‘ownership’ in outcomes” with employee and employer “on the same page” (Macey, Schneider, Barbera, & Young, 2011, p. 90).

The potential for improved performance increases when drivers perceive environmental alignment between their needs and trucking industry retention strategies. Participant statements support environmental alignment between driver needs and the trucking industry’s efforts to keep their fleets modern and comfortable. Participant statements support improvements in the comfort and maintenance of their trucks contributes to positive driver performance. Participants perceive and experience positive results from the trucking industry’s efforts to improve what is essentially a driver’s home

away from home. Tractor modifications improving sleeping, health, and safety improve performance by mitigating some of the challenges that impede a driver's performance.

Conversely, points of misalignment have the potential to hinder driver performance and unravel or strain existing points of environmental alignment. Despite the trucking industry's best intentions, failing to fully engage drivers as to how best to improve a driver's truck, heightens opportunities for environmental misalignment with a driver's occupational need for open, tangible communication. Some attempts to improve the comfort of a driver's work environment results in discomfort and could ultimately turn environmental alignment with a need (work environment) to environmental misalignment due to failure to engage drivers in how best to improve their work environment. Drivers spend an inordinate amount of time working and in essence living in their trucks. Improving the comfort level of their work environment is no different than improving the ergonomic work environment in a traditional office setting.

Points of environmental misalignment include misalignment between trucking industry retention strategies and the occupational culture of professional truck drivers. Participant and blogger sentiment on points of environmental misalignment often reflects deep levels of frustration. Frustration often centers on not understanding trucking industry practices and operating models that driver's perceive as evident in hindering driver performance. Perceptions of a lack of effort by the trucking industry to collect detention pay environmentally misaligns with driver occupational culture values of hard work, courtesy, respect, accountability, and time. Perceptions of environmental misalignment influences the cognitive dimension of how drivers view nonmembers of their professional identity to include the trucking industry. Negative cognitions reinforce

driver and industry are not *on the same page*, with drivers lacking a sense of *ownership* in the trucking industry's desired performance outcomes.

Recommendation. Finding number two provides practice implications for the trucking industry and practitioners designing and implementing human capital strategies for improved organizational performance and individual behavior and performance. Points of environmental alignment and points of environmental misalignment should be viewed in totality. Points of environmental alignment require further examination at the individual trucking firm level. Trucking firms should evaluate to what extent their respective practices contribute to this study's points of environmental alignment and then determine strategies for improving and sustaining points of environmental alignment.

Sustaining and improving environmental alignment provides a competitive advantage (Gallear et al., 2014; Semler, 1997) by differentiating the individual trucking firm from the population level of trucking firms. Population ecology argues establishing a niche increases an organization's ability to compete for limited resources (Carroll, 1984; DiMaggio & Powell, 1983; Hannan & Freeman, 1977; Luhman & Cunliffe, 2014; T. Watson, 1995) to include human capital. This is further supported by the resource dependence theory which advances competitive advantages are gained when organizations initiate opportunities to surpass competitors (Frączkiewicz-Wronka & Szymaniec, 2012). Individual trucking firms can initiate competitive opportunities not only through sustainment of environmental alignment but also through development of interventions that diminish points of environmental misalignment.

Environmental alignment and differentiation, for a competitive advantage and improved performance, transcend the trucking industry. In devising interventions that

propel environmental alignment and mitigate environmental misalignment, practitioners of human capital interventions and strategies should consider engagement. Increasing engagement can increase alignment between individual and organization performance goals, which can initiate a feeling of employee *ownership*, which can then precipitate employee behavior that advances as opposed to impedes individual and organization performance.

Finding 3: The phenomenon of churn is not an attribute of, nor promulgated by, the occupational culture of professional truck drivers.

The study's third and final major finding concludes the phenomenon of churn is not an attribute of, nor promulgated by, the occupational culture of professional truck drivers. Lived, shared experiences with the phenomenon of churn is a personal one for truck drivers. Perceptions of the phenomenon differ between drivers who do not engage in churn and drivers who do or have engaged in churn.

Conclusion. The study enlists institutional theory to identify the occupational needs and culture of professional truck drivers as a social institution within the external environment of the trucking industry. Human capital risks are also part of the trucking industry's external environment. The occupational needs and culture of professional truck drivers, coupled with human capital risks, generate environmental turbulence in the form of churn.

Social institutions guide members by providing cognitive and normative dimensions which inform members on the institution's behavioral expectations and appropriate responses in given situations (Hall & Taylor, 1996; Mischke, 2014; Oliver & Mossialos, 2005). The study's results do not support churn as part of the cultural

language, rituals, symbols, values, or norms comprising the occupational culture of professional truck drivers. Furthermore, the results fail to support churn behavior or the decision to churn as a cognitive dimension or normative dimension of the occupational culture of professional truck drivers. Perceptions and experiences of the phenomenon exist on an individual and subgroup basis and not as an occupational collective. The subgroups are *drivers who do not engage in churn* and *drivers who have or do engage in churn*.

Drivers who do not engage in churn have different experiences with the phenomenon than drivers who have or do engage in churn. However, there is a perception and experience with the phenomenon that both of these subgroups share. The decision to churn or not churn is a personal one made by each individual driver without expectation of consultation with or approval from members of the occupational culture. Individualism is further reinforced by member behavior that excludes discussing and sharing one's experiences with churn or turnover behavior in general.

Recommendation. The study's results support non-churning drivers often perceive there is little to nothing the trucking industry can or should do to curtail churn behavior. It is recommended that the trucking industry make a concerted effort to validate these results through exit surveys and interviews with drivers who have left or express leaving their respective trucking firm. In addition, individual trucking firms have the same opportunity not only with exit interventions but also with entry interventions.

A driver's work history identifies a driver's propensity to churn. As part of the hiring process, trucking firms should consider an entry interview specifically exploring why a driver's work history reflects churn. Trucking firms should further inquire what

the driver perceives as factors likely to retain the driver and what factors will likely initiate the driver to look for another position. This information serves twofold. First, it provides data directly from those that engage in churn. Second, trucking firms can determine from an economic perspective the likelihood of gaining more value from the driver's human capital than what the trucking firm spent on recruitment and will spend on orienting the driver to the organization. This may not prevent the driver from ultimately churning, but it does allow the trucking firm to reflect upon its practices and determine if they meet the driver's needs. Purely from an economic and resource perspective, the trucking firm can assign risk as to the likelihood that the driver will churn given the driver's needs and trucking firm's ability to meet those needs. Ideally, an organization's human capital should produce greater value than what the organization spent obtaining and developing its human capital (Chakravorty, 2012).

Limitations of the Study

Limitations represent factors and considerations that may have impeded the study or the study's results (Connelly, 2013; Lunenburg & Irby, 2008). Some limitations exist as unique to a particular study and not within the control of the researcher, while other limitations result from a researcher's attempt to weigh rigor with practicality (Connelly, 2013). When identifying limitations, researchers should also describe efforts to mitigate limitations.

One of the study's limitations stems from its sampling methods. Qualitative research often relies on nonrandom, purposeful sampling (Creswell, 2013; Symon & Cassell, 2012b). In addition, qualitative research is often vague and inconsistent in recommending optimal sample sizes for a given qualitative approach (Mason, 2010;

Saunders, 2012). This study's simultaneous ethnographic and phenomenological research design contributed to the dilemma of determining sample size. To mitigate challenges in determining the sample size, the study accounted for saturation, research objectives, access to participants, and feasibility to establish a target sample size of 20 participants with the final number of participants equaling 21.

The study employed two purposeful sampling methods to reach its target sample size—criterion sampling and snowball sampling. Criteria for participation aligned with previous criteria applied to professional truck driver research. Combining and mixing sampling methods stimulates triangulation which increases validity (Creswell, 2013). Snowball sampling could encourage gatekeepers and participants to recruit likeminded participants or participants working for the same trucking firm. To mitigate this limitation, the study enlisted a variety of distinct gatekeepers with differing access and relationships to the target population. In addition, demographic responses, researcher field notes, and degrees of separation between gatekeeper and participant reduced the potential for likeminded sampling. In most instances, there were two or three degrees of separation between the participant and gatekeeper or participant initiating the snowball. In instances of minimal degrees of separation, participant interviews were compared for patterns in responses. The results of this additional analysis, the distinct variety in gatekeepers, and monitoring degrees of separation, did not suggest an abundance of in-group recruitment nor over-sampling as is sometimes the case with snowball methods.

All participant interviews occurred telephonically and subject to the participant's schedule. Truck driving does not take place in a traditional office nor during specific business hours. Number of miles logged generally determines a driver's pay. Reduced

driving equals reduced pay. The study was limited to participants willing to commit their personal time to participate in a potentially extensive telephonic interview. Although literature supports telephonic interviews as conducive to qualitative inquiry and not necessarily inferior to in person interviews (Farooq, 2015; Novick, 2008), the study acknowledges telephonic only interviews limit the researcher's observation of nonverbal cues.

Telephonic interviews create a physical distance between researcher and participant. However, physical proximity does not necessarily equate to increased participant observation. The extent of participant observation relies on the strength of the interview protocol and researcher's rapport with participants (Farooq, 2015). To build rapport, the study incorporated multiple points of contact with participants. Contact between participant and researcher initiated prior to the actual interview, provided the opportunity to build researcher-participant rapport.

Recommendations for Future Research

Recommendations for future research address the study's sampling limitations, expand finding recommendations, and the potential for this study as a catalyst for exploring human capital constructs beyond the organizational level in favor of occupation and industry collectives at the population and community levels. The study's sampling criteria did not account for a driver's work history. Subsequent research of trucking industry human capital risks should include sampling criterion that attempts to balance the number of participants that have and have not engaged in churn behavior. Research objectives should explore or attempt to validate this study's findings of professional truck

driver perceptions of churn. These results could contribute to the next recommended course of research which questions churn as a professional truck driver phenomenon.

The word *churn* has become its own language, ritual, and symbol to describe the trucking industry's human capital risk of a specific driver turnover behavior. The literature supports the term originating as early as the late 1990s (The Gallup Organization, 1997) and continues to appear in academic and trucking industry research (American Transportation Research Institute, 2015; Costello, 2017; Costello & Suarez, 2015; Lilly, 2015; Mansfield, 2014; Min, 2002; Rodriguez et al., 2000; Schulz et al., 2014; Short, 2014; Staplin et al., 2003; The Gallup Organization, 1997; Z. Williams et al., 2011). Yet, all but four participants in the current study were unfamiliar with *churn* used to describe drivers that continually move from one trucking firm to another.

Participants were familiar with the behavior of churn but did not ascribe *churn* as the occupational symbol to describe drivers that continually move from one trucking firm to another. The trucking industry has identified, symbolized, and named churn as a phenomenon. This brings into question if churn qualifies as a phenomenon among professional truck drivers and if churn is actually an industry phenomenon as opposed to a driver phenomenon. Phenomenological research seeks to describe participants' shared experiences with a phenomenon (Creswell, 2013). The trucking industry, as a population, shares in the phenomenon of churn and could be argued as having lived experiences with the phenomenon of churn.

Future research should first explore churn behavior to determine in what context, if any, that it meets the definition of a phenomenon among professional truck drivers. The current study finds drivers aware of churn behavior and churn is not an attribute of

the occupational culture of professional truck drivers. However, the study could not conclude if drivers actually experience and perceive churn or the behavior of churn as a phenomenon. Second, subsequent research should consider the trucking industry's shared experiences, beliefs, and attitudes of churn to answer if churn is indeed a trucking industry phenomenon as opposed to or in addition to a professional truck driver phenomenon. The final recommendation for future research suggests expanding the domain in which human capital research occurs.

The trucking industry is just one of many domains facing labor turnover and shortages. Comparable industries include healthcare (Herakova, 2012; Willis et al., 2016), leisure and hospitality (Cooper et al., 2017; Crick & Spencer, 2011; Lee-Ross, 2008; Robinson & Beesley, 2010), and information technology (Bussin, Nicholls, & Nienaber, 2016; Guzman, 2006; Jacks, 2012). The findings of this study support the capability to research observable human capital risks across collectives and populations of an industry or occupation as opposed to a single organization.

A human capital research agenda should include identifying human capital phenomenon that transcends individual organizations and explores these topics at the population and community levels of the organizational ecology. This line of research serves two key purposes for advancing human capital as a research doctrine. First, exploring human capital at levels other than at the organization or individual level, allows human capital research to keep pace with emerging human capital typologies. Second, exploring human capital beyond the organizational level differentiates human capital research from the host of human capital centric areas of study that although complementary with human capital research, are more conducive organization levels of

research. Human capital research and foundational human capital theory, support broader scale research in deriving the economic value of human capital knowledge, skills, and capabilities across industries and occupations as collectives.

Discussion

The current study introduces human capital based research to expand the boundaries of previous research on professional truck driver turnover and shortages. As a result, the study provides an opportunity to expand the boundaries of human capital based research. Borrowing from population ecology, human capital research needs its own niche and differentiation from other human centric based disciplines (e.g. human resources management, organizational development, human resources development). Differentiation facilitates human capital theory building. A potential differentiating niche, stemming from this study, is human capital based research exploring occupational culture at each level of the organizational ecology. Organizational ecology provides a structure for contextualization of industry specific and occupation specific human capital at each level of the organizational ecology.

Emerging human capital typologies include industry specific human capital and occupation specific human capital. Also emerging are industries and occupations facing similar human capital risks of turnover and shortages. Healthcare, tourism, and information technology are three industries facing the same human capital risks at the trucking industry.

Synthesization of occupational culture results from healthcare, tourism, information technology, and trucking industry research, begins the potential for investigating commonalities across industries with not only similar human capital risks

but with strong occupational cultures. The overarching question is, are there industries or occupations predisposed to strong occupational cultures and to what extent can the strength of occupational culture be used to leverage reducing human capital risks of shortages and turnover across an industry, occupation, or even a community? The answer begins with synthetization of human capital based occupational culture research across multiple industries and occupations with the results having implications for each level of the organizational ecology—organization, population, and community.

At the organizational level, individual organizations become aware of human capital risks predicated on industry or human capital resources specific to the organization. Awareness provides organizations an early warning of human capital turbulence occurring within the organization's external environment. In addition, organizations become aware of the need to adapt to the turbulence in order to compete for the same limited human capital as its competitors.

At the population level, industries realize the need to differentiate themselves as a collective from other industries competing for the same human capital as is the case with the trucking industry. The trucking industry competes with the military and construction for similar human capital resources. The trucking industry has the added challenge of adaptation strategies that account for regulatory and insurance challenges not faced by its competitors.

At the community level, synthetization of human capital based occupational culture research has workforce development implications. Similar to the organizational and population levels of the organizational ecology, the community level competes with other communities to recruit and develop human capital as part of workforce and

economic development. There is a direct relationship between human capital and economic success at each level of the organizational ecology. Successful community workforce and economic development relies on a community's ability to compete with other communities vying to recruit and develop the same human capital. Successful communities improve economic opportunities by meeting the human capital needs of industries facing human capital turnover and shortages. Meeting these human capital needs attracts industries to communities and precipitates a workforce and economic multiplier effect.

Each level of the organizational ecology (organizational, population, and community) gains a competitive advantage when they appreciate and access the influence of occupational culture as a means for adapting to environmental turbulence in the form of human capital turnover and shortages. The influence of occupational culture on its members is not necessarily negative. The findings of the present study fail to suggest churn turnover results from the occupational culture of professional truck drivers. However, the findings support an occupational culture's influence on its member's collective perceptions of occupational needs. In addition, occupational culture influences its member's collective perceptions of the occupation and the occupation's industry. That influence is a powerful resource for each level of the organizational ecology. Each level of the organizational ecology has the opportunity to improve its human capital performance when it aligns human capital efforts with the occupational needs and culture of the very human capital it seeks to obtain.

The forgoing argument challenges the status quo of human capital research. Challenges to the status quo advance both theory and practice. Theory building explains

how and why a phenomenon is occurring. Theory building requires reoccurring cycles of research. The next cycle is synthetization of occupational culture research across populations of industries with human capital turnover and shortages. Human capital based occupational culture research, across multiple occupations and industries with similar human capital challenges, initiates human capital's responsibility as a discipline to identify, describe, and explain observed human capital phenomena.

Summary

This chapter solidified the results of the study by providing three major findings with supporting conclusions and practitioner recommendations for each finding. The first finding established the occupational culture, cognitive and normative dimensions of professional truck drivers inform the occupational needs of professional truck drivers. The second finding affirmed environmental alignment and environmental misalignment exists between trucking industry retention strategies and the occupational needs and culture of professional truck drivers. The third finding concluded the phenomenon of churn is not an attribute of, nor promulgated by, the occupational culture of professional truck drivers.

The chapter recommend future human capital based trucking industry research and future research forwarding a human capital research agenda. The chapter concluded with a discussion surmising the value of the study's revitalization of organizational ecology to advance a human capital exploration of trucking industry human capital risks. Research across and within populations of industries and occupations provides exploration of human capital risks with economic and labor implications at each level of

the organizational ecology. The chapter concludes with recommendations ranging from future trucking industry research to forwarding a human capital research agenda.

This study offers a new lens for exploring and expanding knowledge of the trucking industry's human capital risks of high driver turnover and shortages. The study also pushes the boundaries of human capital research beyond the organizational level. The study's simultaneous ethnographic and phenomenological design advocates for the return of multiple qualitative approaches within a single qualitative paradigm.

The researcher desires that this study's results, findings, and implications attract the interest of occupations, industries, and practitioners beyond the trucking industry. Environmental alignment as a performance element exceeds the trucking industry and professional truck drivers as does the behavioral influences of an occupational culture on its member's behavior, perceptions, and needs. Finally, the researcher desires scholars and practitioners derive that an industry's success and sustainability requires consideration of environmental alignment between industry human capital strategies and the constellation of the occupational needs, occupational culture, and cognitive, normative dimensions of human capital resources.

My dissertation includes exploring the constructs of environmental alignment and professional and occupational culture. Below is a screen capture of how the figure would appear within my dissertation.

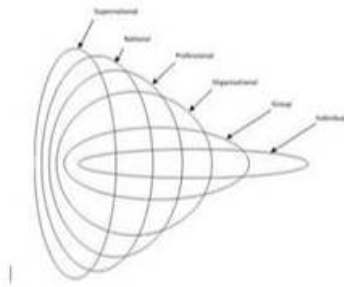


Figure 2. Karahanna et al.'s (2005) interrelated levels of culture (p.6).

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Catherine M. Cole
PhD Candidate
Department of Human Capital Development
University of Southern Mississippi



APPENDIX B – Virtual Onion Model Permission

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Title of your thesis/dissertation	Exploring Retention and Environmental Alignment as Perceived by Professional Truck Drivers
Expected completion date	Dec 2018
Estimated size (number of pages)	200

INTRODUCTION

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APPENDIX C – IRB Approval Letter



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 17120702

PROJECT TITLE: Exploring Retention and Environmental Alignment as Perceived by Professional Truck Drivers

PROJECT TYPE: Doctoral Dissertation

RESEARCHER(S): Catherine Cole

COLLEGE/DIVISION: College of Science and Technology

DEPARTMENT: Human Capital Development

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Exempt Review Approval

PERIOD OF APPROVAL: 01/02/2018 to 01/01/2019

Lawrence A. Hosman, Ph.D.

Institutional Review Board

APPENDIX D – Gatekeeper Recruitment Email

Dear [Mr. / Ms. LAST NAME],

Thank you for your offer to help me recruit professional truck drivers to interview! I have attached a flyer describing the study. Please forward my contact information, the enclosed flyer, or the flyer's QR code to drivers who want to participate. Alternatively, feel free to email me contact information of drivers expressing interest.

Thank you for your time and consideration.

Sincerely,

Catherine Cole
catherine.cole@usm.edu
601-336-2161

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

What do You Need as a Professional Truck Driver?



What do You Need as a Professional Truck Driver?



STUDY

If you are a company driver for an OTR Carrier or LTL Carrier, please consider giving **your voice** to a research study exploring your needs and successful strategies **to keep you as a professional truck driver**.

INTERVIEW

Telephone interviews will last approximately one hour and **scheduled at your convenience**. Your personal information remains **confidential**.

GIFT CARD

You will receive **your choice of a \$30 gift card** from Amazon, iTunes, Google Play, Walmart, or Visa.

CONTACT

My name is Catherine Cole and I am a human capital development doctoral student at The University of Southern Mississippi. If you are interested in helping or want more information, call or text **601-336-2161** or send a message to **catherine.cole@usm.edu**.

Thank you for your time!

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

APPENDIX F – Potential Participant Initial Telephonic Contact Protocol

Potential Participant Initial Telephonic Contact Protocol

Potential Participant Name:

Date:

Time:

Participant initiated: Yes No

Script—Participant Initiated Telephonic Contact

Researcher: Thank you for contacting me about my research study. My name is Catherine Cole. I am a doctoral student at The University of Southern Mississippi. Before going into additional details about the study, do you mind telling me how you found out about the study? **[Note Response]**

Researcher: Thank you, please confirm your name and if you are an owner operator or company driver.

[Owner operator response: I am sorry but I am currently only interviewing company drivers. Thank you for contacting me but you do not meet the eligibility requirements. Do you know anyone else who might want to participate?]

Researcher: Please confirm if you are an OTR or less than truckload driver **[note if OTR or LTL]**.

Researcher: Great, if you are still interested in helping, we can schedule a time for an interview, but first I would like to make sure I provide you information on the benefits of participating, confidentiality, informed consent, and incentives for your participation. Please feel free to ask any questions.

[Recite content of *Oral Presentation of Research Procedures*].

Researcher: Do you have any questions so far? I can also send you an information letter. Participation in this study is at no cost to you. However, each participant that completes an interview will receive their choice of a \$30 gift card from Amazon, iTunes, Google Play, Walmart, or Visa. You will receive your gift card electronically or by mail within 3 to 5 business days after the interview.

Researcher: Do you have any questions?

Researcher: Are you still interested in participating? Yes No **[Circle response]**

Researcher: [No response to participate] Thank you for your time. Please feel free to contact me if you have any questions about the study, if later you decide to participate, or you would like to refer someone to participate.

Researcher: [Yes response to participate.] Thank you so much for your help. I would like to confirm that you understand your participation and interview are completely voluntary. All of your personal information is strictly confidential and your name will not be disclosed. If you have any questions, you may contact me anytime during or after the study. You may also request a written informational letter. This project and consent procedures have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406-0001, 601-266-5997, irb@usm.edu.

Researcher: Do I have your consent to schedule an interview?
Yes No **[circle response]**

Researcher: [Yes response to schedule interview] Great! When would you like to schedule an interview? **[Schedule interview to include confirming telephone number.]**

Researcher: [No response to schedule interview] Thank you for your time. Please feel free to contact me if you have any questions about the study, if later you decide to participate, or you would like to refer someone to participate.

Script—Researcher Initiated Telephonic Contact

Researcher: [Salutation with potential participant's name] My name is Catherine Cole. I received your telephone number from _____.

_____ thought you would be able to help me with finding information on driver turnover and retention. I am a doctoral student at The University of Southern Mississippi. Do you have a moment for me to tell you how you can help?

Researcher: [No response to participate] Thank you for your time. Please feel free to contact me if you have any questions about the study, if later you decide you would like to hear more about the study, or you would like to refer someone to participate.

Researcher: [**Yes response**] Before going into additional details about the study, please confirm that I have your name correct and if you are an owner operator or company driver.

[Owner operator response: I am sorry but I am currently only interviewing company drivers. Thank you for contacting me but you do not meet the eligibility requirements].

Researcher: Please confirm if you are an OTR or less than truckload driver [**note if OTR or LTL**].

Interviewer: Great, if you are still interested in helping, we can schedule a time for an interview, but first I would like to make sure I provide you information on the benefits of participating, confidentiality, informed consent, and incentives for your participation. Please feel free to ask any questions. [**Recite content of Oral Presentation of Research Procedures**].

Do you have any questions so far?

Researcher: Participation in this study is at no cost to you. However, each participant that completes an interview will receive their choice of a \$30 gift card from Amazon, iTunes, Google Play, Walmart, or Visa. You will receive your gift card electronically or by mail within 3 to 5 business days after the interview.

Researcher: Do you have any questions?

Researcher: Are you still interested in participating? Yes No [**circle response**]

Researcher: [**No response to participate**] Thank you for your time. Please feel free to contact me if you have any questions about the study, if later you decide you would like to hear more about the study, or you would like to refer someone to participate.

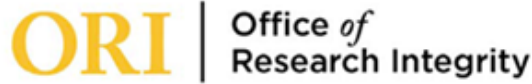
Researcher: [**Yes response to participate**] Great! I would like to confirm that you understand your participation and interview are completely voluntary. All of your personal information is strictly confidential and your name will not be disclosed. If you have any questions, you may contact me anytime during or after the study. You may also request a written informational letter. This project and consent procedures have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406-0001, 601-266-5997, irb@usm.edu.

Researcher: Do I have your consent to schedule an interview? Yes No
[circle response]

Researcher: [Yes response to schedule interview] Great! When would you like to schedule an interview? **[Schedule interview to include confirming telephone number.]**

Researcher: [No response to schedule interview] Thank you for your time. Please feel free to contact me if you have any questions about the study, if later you decide to participate, or you would like to refer someone to participate.

APPENDIX G – Oral Presentation of Research Procedures



INSTITUTIONAL REVIEW BOARD
ORAL PRESENTATION OF RESEARCH PROCEDURES

ORAL PRESENTATION OF RESEARCH PROCEDURES
<p>This document is to be used in conjunction with the signed consent form when written description of research procedures would not be useful.</p> <ul style="list-style-type: none"> • A completed version of this oral presentation template must be submitted to the IRB for approval. • Copies of the oral presentation should be provided to all participants. <p style="text-align: right;"><small>Last Edited February 28th, 2017</small></p>

Today's date: November 30, 2017		
PROJECT INFORMATION		
Project Title: Exploring Retention and Environmental Alignment as Perceived by Professional Truck Drivers		
Principal Investigator: Catherine M. Cole	Phone: 816-517-4895	USM Email: catherine.cole@usm.edu
College: Science and Technology	Department: Human Capital Development	
ORAL PRESENTATION PROCEDURES		
<p>1. Purpose:</p> <p>This study explores professional truck driver perceptions and experiences with driver turnover and retention. The results further the trucking industry's understanding of retention strategies that align with the occupational needs and culture of professional truck drivers.</p> <p>2. Description of Study:</p> <p>Approximately 20 professional Truck Load (TL) and Less than Truck Load (LTL) company drivers will be interviewed to explore their perceptions of the trucking industries retention strategies, their experiences as a professional truck driver, and their perceptions of churn.</p> <p>3. Benefits:</p> <p>Benefits of the study include providing drivers a voice in helping understand successful retention strategies of professional truck drivers. In addition, participants receive a summary report of the study's results.</p> <p>4. Risks:</p> <p>There are no known or anticipated risks.</p>		

5. Confidentiality:

Your confidentiality remains throughout the study with all personally identifiable information protected.

6. Alternative Procedures:

There are no alternative procedures.

7. Participant's Assurance:

This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations.

Any questions or concerns about rights as a research participant should be directed to the Chair of the IRB at 601-266-5997, irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

Any questions about the research should be directed to the Principal Investigator using the contact information provided in Project Information Section above.

APPENDIX H – Interview Protocol

Interview Protocol

*Exploring Retention and Environmental Alignment as
Perceived by Professional Truck Drivers*

Date:

Time of Interview:

Duration:

Method:

Interviewer:

Interviewee:

Interview Preamble Script

1. **Interviewer:** I would like to again thank you for agreeing to help me with my study. Your knowledge and experience will help me further understand what it means to be a professional truck driver and your perspectives on driver turnover and retention. Before we begin, I would like you to confirm your name.
2. **Interviewer:** I would also like to confirm your permission to record this call.
3. **Interviewer:** Do I have your permission to record and proceed to the pre interview information? Yes No [circle response]
4. **Interviewer:** [No response to record] May I ask why you do not want the interview recorded? [Based on response, provide confidentiality strategy. If refusal remains, take written notes.]
5. **Interviewer:** [Yes response to participate—begin recording] Thank you for your permission to record your interview. Before we begin the actual interview, I would like to provide an overview of the study, confidentiality, informed consent, the benefits of participation, and the incentive for your participation. Please feel free to ask any questions. [Recite content of attached *Oral Presentation of Research Procedures*].
6. **Interviewer:** Do you have any questions so far?

7. **Interviewer:** Participation in this study is at no cost to you. However, after the interview you will receive your choice of a \$30 gift card from Amazon, iTunes, Google Play, Walmart, or Visa. You will receive your gift card electronically or by mail within 3 to 5 business days after the interview. Do you have any questions?
8. **Interviewer:** [*Consent to Participate in Research* script] I would like to confirm that you understand your participation and interview are completely voluntary. All of your personal information is strictly confidential and your name will not be disclosed. If you have any questions, you may contact me anytime during or after the study. You may also request a written informational letter. This project and consent procedures have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406-0001, 601-266-5997, irb@usm.edu.
9. **Interviewer:** Do I have your consent that you would like to participate in the study and proceed to the interview? Yes No **[circle response]**
10. **Interviewer:** [*No response to participate*] Thank you for your time. Please contact me if you have any questions about the study, if later you decide to participate, or you would like to refer someone to participate.

[Yes response—proceed to interview questionnaire]

Interview Questionnaire

Demographics

1. I would like to begin with some background information.
- What kind of truck and trailer do you generally drive?
 - What do you typically haul?
 - Describe the route your generally drive?
 - Do you drive solo or team?
 - How many years have you been a professional truck driver?
 - Are you currently an OTR or LTL driver?
 - Are you currently a company driver?
 - How many years and months have you been driving for your current employer?
 - Without revealing your actual employer, would you describe your employer as similar in size and revenue to YRC, Swift, or Prime? [**Probe:** How many total trucks or units does our employer have?]
 - What is your gender?
 - What is your age?

Ethnographic—Grand Tour (Sorrell & Redmond, 1995)

Thank you for that information. I now need your help understanding what it means to be a professional truck driver.

2. Tell me the story of how you became a truck driver.
3. Imagine if a friend or family member considered becoming a truck driver. How would you describe what it means to be a professional truck driver?

[Probe: What advice would you give them for fitting in and getting along with other drivers?]

[Probe: Are there terms or slang they would need to know?]
4. What are some of the unwritten rules about being a truck driver?
5. If you had to pick three to five words to describe a professional truck driver, what would they be?
6. If professional truck drivers could provide their employer with a wish list, what would be on the list?

Ethnographic—Structural (Sorrell & Redmond, 1995)

Now that I know more about your profession, I am interested in your perceptions of industry efforts to keep drivers and reduce driver turnover.

7. Thinking about ways to keep professional truck drivers, can you think of any ideas, strategies, or incentives that you feel meet the needs and values of professional truck drivers?

[Probe: For example, some firms encourage team driving with a spouse or allow pets to accompany drivers.]

Ethnographic—Contrast (Sorrell & Redmond, 1995)

Thank you for your candidness. I would like to know more about a term used when describing driver turnover—churn.

8. Tell me what the term *churn* means to a professional truck driver.

[Probe if driver is unfamiliar with the term: Have you heard the word *churn* used to describe driver turnover? *Churn* is sometimes used to describe the way some drivers continually move between one trucking firm to another.]

Phenomenological—semi structured (Sorrell & Redmond, 1995)

We've spent some time describing different aspects of being a professional truck driver. I now want to focus on your personal experiences with driver churn.

9. Thinking about how you just described churn, was there a time when you engaged in churn? Yes response, proceed to questions 10, 11, and 12. No response, proceed to the following probes].

[Probe for drivers that indicate they have not engaged in churn: Tell me about why you have not engaged in churn (or insert description provided in question 8)].

[Probe for drivers that indicate they have not engaged in churn: What are your feelings about drivers that move from one trucking firm to another?].

[Probe for drivers that indicate they have not engaged in churn: Thinking of drivers that have churned, do you feel there is anything that could have prevented them from churning?]

10. Please tell me about a time when you engaged in churn.

11. Describe your feelings when you made the decision to churn from one trucking firm for another.

12. Thinking back, do you feel there is anything that could have prevented you from leaving one trucking firm for another?

13. Thank you so much for your time. I have one last question. Do you have any comments or questions for me? **[Probe:** Is there anything you would like to tell me that I did not ask?]

As an incentive for your participation, please select one of the following \$30 gift cards. How would like to receive your incentive—electronically or by U.S. Postal Mail?

- | | |
|----------------|--------------------------------|
| A. Amazon | Electronic or U.S. Postal Mail |
| B. iTunes | Electronic or U.S. Postal Mail |
| C. Google Play | Electronic or U.S. Postal Mail |
| D. Walmart | Electronic or U.S. Postal Mail |
| E. Visa | U.S. Postal Mail Only |

[Circle selection and preferred delivery method.]

14. Please provide the [email or mailing] address you would like the gift card sent to. Expect to receive the card within 3 to 5 business days.
15. As the study progresses, you will receive my preliminary analysis of all interviews. You will have the opportunity to review and provide feedback on this analysis.
16. Thank you again for your help! This study is not possible without your insights and experiences.

[If interviews still needed: I would be very grateful if you could help me recruit additional drivers to interview. Please feel free to send me contact information of drivers I should contact or I can provide you with a flyer to provide to drivers who many want to participate. You are under no obligation to help with recruitment.

[Capture any referral information.]

Thank you again for your time.

APPENDIX I – Participant Information Letter

Dear [Participant's Name]:

This letter is in response to your request for written information on participation in a study I am conducting as a human capital development doctoral student at The University of Southern Mississippi. Company employed Truckload (TL) or Less than Truckload (LTL) truck drivers are eligible for participation. The following outlines additional information about the study, your role if selected for participation, and additional considerations.

This study explores professional truck driver perceptions and experiences with driver turnover and retention. The results further the trucking industry's understanding of retention strategies that align with the occupational needs and culture of professional truck drivers. The study will interview approximately 20 professional TL and LTL company drivers to explore their perceptions of the trucking industries retention strategies, their experiences as a professional truck driver, and their perceptions of churn. You benefit by providing a driver's voice towards successful strategies to retain professional truck drivers. In addition, you will receive a summary report of the study's results.

If selected, you will participate in a telephone interview. The interview lasts approximately one hour and scheduled at your convenience. As a thank you for your time, you will receive your choice of a \$30 gift card from Amazon, iTunes, Google Play, Walmart, or Visa.

All statements and personally identifiable information remains confidential throughout the study. Your name will not appear in any results or reports. Only I, as the Principal Investigator, will have access to data collected. Although there are no expected risks associated with this study, a potential inconvenience or discomfort may exist due to the one hour length of the telephone survey.

If you have any questions or would like to participate in the study, please contact me at Catherine.cole@usm.edu or 601-336-2161. In addition, if you know anyone who may want to provide an interview, please feel free to forward my information.

Thank you for your time and consideration,

Catherine Cole
Catherine.cole@usm.edu
601-336-2161

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a

research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu.
Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

APPENDIX J – Email Response to Potential Participant Email Inquiries

Email Response to Potential Participant Email Inquiries

Dear _____

Thank you for your message and interest in my research study! I would like to talk with you directly about the study and confirm your participation. **Please reply with your phone number and a good time to reach you or feel free to call me directly at 601-336-2161.**

I have attached a flyer (or use the QR code below) to help with any questions before we speak. I can also send you an information letter. I look forward to talking with you—Catherine.

Catherine Cole
catherine.cole@usm.edu
601-336-2161

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

[What do You Need as a Professional Truck Driver?](#)



APPENDIX K – Initial Email to Participant Referrals with an Email Address

Initial Email to Participant Referrals with an Email Address

Dear _____

_____ sent me your name because of your expertise as a professional truck driver.

My name is Catherine Cole and I am a doctoral student at The University of Southern Mississippi. I would like to give professional truck drivers a voice to express their needs as drivers and successful strategies to maintain professional truck drivers.

I could really use your help by setting aside some time for an interview. I have attached a flyer that provides additional information about the study and the \$30 gift card for participating. The QR code below will also link you to the flyer.

If you would like to talk more, please call me directly at 601-336-2161 or reply with your phone number and a good time to reach you.

I look forward to speaking with you—Catherine.

Catherine Cole
catherine.cole@usm.edu
601-336-2161

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

[What do You Need as a Professional Truck Driver?](#)



APPENDIX L – Blog Permissions

Catherine Cole

From: Brett [REDACTED]
Sent: Thursday, January 18, 2018 4:45 AM
To: Catherine Cole
Subject: Re: Permission to Reference Blogs

Hi Catherine. You're free to use any of our blogs any way you like. I have no concerns about that. I'm not one of those "copyright hawks" or anything of the sort. Do whatever you like with them.

I would *love* to read your finished work and I'd love to see a copy of the flyer. I'm sure there are people on our website that would be happy to provide an interview for you. We have some of the highest level experienced professionals you'll find anywhere and they're really nice people. I could certainly put the word out and see what they say.

Thanks.

Regards,
Brett [REDACTED]
owner/founder of [REDACTED]

We have a ton of fantastic information and study materials available, including:

[Free Online CDL Training Program](#) to prepare you for the written CDL exams and the beginning of training

[Guide To Becoming A Truck Driver](#) to help you understand the trucking industry and prepare for the start of your career

[The High Road Series](#) - an information series with our best help and advice delivered free to your inbox

On Wed, Jan 17, 2018 at 7:51 AM, Catherine Cole <Catherine.Cole@usm.edu> wrote:

Dear Brett,

My name is Catherine Cole and I am a human capital development doctoral student at The University of Southern Mississippi. I am interviewing professional truck drivers and collecting blogs as part of my research in exploring driver culture, professional needs, and successful strategies to maintain professional truck drivers.

I would like permission to include blogs from your website— [REDACTED] This includes reviewing blogs and the possibility of quoting or referencing excerpts of blogs in my final analysis. I will assign a pseudonym and numerical code if I use any part of the blogs in my data analysis. I will also send you a summary report of the study's results.

I can provide a list of the blogs I am considering. Please reply if I have your consent or your blog policy if you are not able to provide consent. If you have any questions or want more information about the study, please contact me at catherine.cole@usm.edu or [601-336-2161](tel:601-336-2161). In addition, if you know anyone who may want to provide an interview, please feel free to forward my information or QR code below for a copy of the information flyer. I can also send the flyer.

Thank you for your time and consideration,

Catherine Cole

Catherine.cole@usm.edu

[601-336-2161](tel:601-336-2161)



[What do You Need as a Professional Truck Driver?](#)

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at [\(601\) 266-5997](tel:601-266-5997) or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

Catherine Cole

From: Todd [REDACTED]
Sent: Monday, January 15, 2018 2:22 PM
To: Catherine Cole
Subject: Re: Permission to Reference Blogs

Hello Catherine,

You have my permission to quote and reference my blog however you feel best.

I have a whole group of guys in the [REDACTED] group and in the [REDACTED] Facebook Group. If you want me to reach out that widespread, I'd be happy to put up a posy asking anyone if they would be interested in doing an interview with you. [REDACTED]. Just let me know.

Good luck with your project!

Todd [REDACTED]

On Fri, Jan 12, 2018 at 6:26 PM Catherine Cole <Catherine.Cole@usm.edu> wrote:

Dear Todd,

My name is Catherine Cole and I am a human capital development doctoral student at The University of Southern Mississippi. I am interviewing professional truck drivers and collecting blogs as part of my research in exploring driver culture, professional needs, and successful strategies to maintain professional truck drivers.

I would like permission to include your blog as part of my data collection. This includes reviewing your blogs and the possibility of quoting or referencing excerpts of your blog in my final analysis. I will assign a pseudonym and numerical code if I use any part of your blog in my data analysis. I will also send you a summary report of the study's results.

Please reply if I have your consent. If you have any questions or want more information about the study, please contact me at catherine.cole@usm.edu or 601-336-2161. In addition, if you know anyone who may want to provide an interview, please feel free to forward my information including the attached flyer or QR code below.

Thank you for your time and consideration.

1

Sincerely,

Catherine Cole

catherine.cole@usm.edu

601-336-2161

[What do You Need as a Professional Truck Driver?](#)

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

APPENDIX M – Member Checking Email

Dear _____

Thank you again for providing an interview for my study. During your interview, I mentioned providing you an opportunity to provide feedback on my preliminary results.

Please review the attached information and let me know if anything seems unclear, missing, or inaccurate. You are also welcome to provide general feedback. That will help me as I continue to review the data.

If you would like to provide comments, feedback, or have any questions, please reply by March 3, 2018. If I do not receive a reply, I will continue with my analysis as accurate.

The attached are not the final results. You will still receive a final report once the study has concluded.

Thank you,

Catherine Cole
catherine.cole@usm.edu
601-336-2161

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project, which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdrawal from this study at any time without penalty, prejudice, or loss of benefits.

APPENDIX N – Content Cloud Describing the Professional Truck Driver



APPENDIX O – Matrix 1: Participant Responses to Interview Question 8

Matrix 1: Participant Responses to Interview Question 8	
Participant	Q8. Tell me what the term <i>churn</i> means to a professional truck driver. P: Have you heard the word <i>churn</i> used to describe driver turnover? <i>Churn</i> is sometimes used to describe the way some drivers continually move between one trucking firm to another.
Darren-1	I mean I've never really heard that; I've heard it here and there. I mean, I know for a fact some of these companies be churning out driver after driver. I don't want to use a company but I'm going to use [trucking firm name] as an example. They, churn out so many drivers, their turnover gotta be high. It has to be. A lot of these drivers come in, you know they're fresh, you know you gotta start somewhere, I understand that. But your turnover rate is such, a lot of these guys keep hiring them. These guys barely still know how to, you know, drive the trucks, and we are putting them out here having accidents, they are not ready. They are not fully ready to be out here on their own, you know, so a lot of them come like that. And that's what I've heard it used as. They churn out more drivers, they're churning them and they're leaving. You know, they're losing their drivers faster than they are getting them, you know? That's the way I look at it.
Ronald-2	P: No, I haven't.
Garrett-3	No, I don't even what – no, I haven't heard of that. P: Uh, yeah, that's...yeah, I know what you are talking about now, but I never heard it that way. Turnover.
Dalton-4	I don't think I've ever heard that. P: Oh, yeah. I've had drivers like that. They'll go there for six months and grab their bonus and they'll leave another go grab their sign-up bonus and leave and go to a different company.
Zane-5	P: I've never heard of it.
Josh-6	P: No
Amanda-7	P: No Oh okay, okay, I know what you're talking about, yeah. The drivers are how to say, it's kind of like a stairwell. You come in, they go out.
Rodney-8	P: Hmm...no..., I've never heard of churn.
Mitchell-9	Yes, absolutely. Oh yes absolutely... so our main office has huge churn but we don't you know, out of our office.
Brandon-10	P: No
Jeff-11	It is like combination of company and a driver who doesn't have the patience to do the job and to understand that pretty much all the companies are the same. Problems are all the same for all the companies and they just don't have the patience to do it. And a lot of companies, more the company churn is I mean let's be honest – you're not going to pay me the same you're going to

pay a guy who's been driving six months, until they churn because they can make more money. They will exist even though they get accidents this big time. Because most of them are selfish too. So they'll churn. It's like you pay a guy, I'll just throw a number out there, 25 cents a mile for the same amount of miles they're paying me 41 cents a mile, their going to churn.

Luis-12 P: No.

But I know what it means... basically it means out with the old, in with the new or... Swap kind of the same thing or, you know.

Henry-13 P: No, I have not.

Sarah-14 P: No, but I can totally you know, that's a very good term for it.

Joseph-15 P: I know that there's a lot of turnover.

Stanley-16 P: No I haven't. Bouncers.

Sean-17 P: I've – no I haven't heard of churn. No I haven't.

Tony-18 Well, I know it, sure yeah but it's basically the same thing with turnover isn't it?

P: Oh okay yeah. Yeah we just usually call them, I just usually heard those guys call them job hoppers you know.

William-19 I have and it was not in a very positive comment. I don't remember exactly, it's been a while but...it's complicated. I don't even know where to start with that. Yes, I have heard it, yes.

Hayden-20 P: No, I haven't.

Charles-21 I've never heard of churn.

P: Oh yeah. One thing about truck drivers, you can do that. Now a day you can because there's always a job that's hiring and there's really not an interview process. If you just walk in, Y'all need some drivers? Yeah; fill this out. Start in two weeks. So, it's not hard. You could switch jobs like it doesn't hurt you. Because my brother in law, he's a truck driver. He does that. He never stays in one place too long. He bouncing around company to company. As long as you have got a clean driving record, anybody will take you.

APPENDIX P – Matrix 2: Participant Responses to Question 9 Probes

Matrix 2: Participant Responses to Question 9 Probes Preventing Churn and Why Drivers Do Not Engage in Churn			
Participant	Q9. Probe: Thinking of drivers that have churned, do you feel there is anything that could have prevented them from churning?	Q9. Probe Tell me about why you have not engaged in churn.	Participant
Darren-1	... I would say, it's-it's pay definitely pay is the bottom line for a lot of drivers.	...the yard is only an hour and a quarter from where I live at...Park my pickup, get into the truck and hit the road. [Employer] has good equipment, he gives out a safety bonus every quarter...he also gives out a fuel bonus...If you walked into his office...and he ain't seen you for two months...he knows who you are. Can-can you do that?	Garrett-3
Ronald-2	...my boss is very, very open door policy...he's a straight shooter, he'll tell you what's going on...I know the guys that have quit, he's given them every chance in the world and told them this that and another.	...My boss, I would follow him to the end of the world. I think my boss is awesome. He fights for me. I'm not really loyal to the company. I'm loyal to my boss, if that makes sense.	Amanda-7
Zane-5	I think they would've just moved because they want to move, you know. Like I said, just because they know they can get a job within a week or um divided the next day in most cases, with some companies. Just because they can do it.	...if you stay long enough with the place, you will receive the money whether its in bonuses or raises or whatever you will, you'll get there. You don't need to bounce.	Stanley-16
Mitchell-9	Yeah absolutely. Some of it the companies can't control. Their feelings got to hurt over something that the company couldn't control or could but it was so minor the guy shouldn't have quit. So those people you just kind of write off as whatever. Some of it is – I mean more often than not, guys I think quit and when job hopping it's not so much about the money it's	There's a lot of variables as to why I'm still here. The first of which is money...And the second of which being my company is a "training company"... A lot of my other options their insurance, since they are smaller companies, will not hire me because I do not have 18 months of experience. (Laughter) and I'm also you know playing the	Brandon-10

	about their perceived home-time...Mitchell-9	adult game of I stick it out here... I have my 401K, I have my medical, I have my dental, I have my vision, I have my life insurance. I have a retirement set up already if I decide to stick it out. Whereas if I jump ship and go somewhere else, I will lose certain things...	
Sanley-16	No.	I like my environment. I like the people, the atmosphere, it's not stressful and you kind of move at your own pace you know, but at a steady pace. But I have looked at different companies...everything really boils down to the insurance and the money you know. But also I understand that all money ain't good money... The environment, the money...	Sean-17
Tony-18	No. Honestly because...those people like that they are usually hotheads and no matter what, in trucking you are going to get pissed now and then. You are going to have some miscommunication with the company, they are going to treat you in a way you don't think you should be treated, it's going to happen....it's not only the truckers have bad days but dispatchers have bad days too. You can't base your career and your job on having a spat with somebody you know. Like think about it if you did that with your wife (laughter)...You know every time you get in a spat you just went on with somebody else. Man you'd be in a crap load of marriages, that ain't good and that's what these people are doing...they are being a hothead, they are thinking of being disrespected and then they leave	I get along with my dispatcher. I know the terminal manager very well. The money is good. I also can come home, take off whenever I want without a problem. Just tell them, "Hey, I need to take off today" without any issue...You get six weeks of paid vacation after four years, so I can't beat that. The benefits is alright they not all that good, it's okay...I get paid good and I can spend time with my family more often. I have a good route; you know, going from one place and come right back home and versus being on the road for three weeks at a time, two weeks at a time, four weeks at a time.	Zane-5

and then they go somewhere else.
And it doesn't help them either
because these companies know
that these guys do that, they know
who is doing it because of all the
different reports that they have
access to and stuff. They know
how long drivers stay at places.

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