

2023

Riders' Lived Experiences About Ride-Sharing on the Concept of Customer Trust in the Choice of Rides in Dallas, Texas

Winston Randolph John
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Business Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Management and Human Potential

This is to certify that the doctoral dissertation by

Winston Randolph John

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Stephanie Hoon, Committee Chairperson, Management Faculty

Dr. Hyuk Kim, Committee Member, Management Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2023

Abstract

Riders' Lived Experiences About Ride-Sharing on the Concept of Customer Trust in the
Choice of Rides in Dallas, Texas

by

Winston Randolph John

MPM, DeVry University, 2008

MBA, DeVry University, 2008

BA Hons, University of Sierra Leone, 1978

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

September 2023

Abstract

A business's long-term success is dependent on the ability to build and maintain customer trust. Failed projects within the sharing economy, which ride-sharing is part of, suggest distrust of the services and products of sharing economy companies. The purpose of this qualitative phenomenological study was to explore the lived experiences of riders using ride-sharing regarding the concept of customer trust in Dallas, Texas. The conceptual framework for this study was the theory of planned behavior. Interview data were gathered from 15 participants who met the inclusion requirements of being a rider with Uber or Lyft with ride experiences before, during, and after the COVID-19 epidemic. Data from the transcripts were inductively analyzed. Main themes were motivation to use ride-sharing, satisfaction with ride-sharing, and trust in ride-sharing. Key results included that the participants all had trust in ride-sharing and would continue to use ride-sharing. One of the main conclusions was that ride-sharing management may find reliability concerns with the service that can be addressed in a timely manner to increase revenue. Positive social change may be achieved because the participants in this study ranged from 21 to 60-plus years of age, and every age group commended the ride-share app's user-friendliness. User-friendly technology, especially for users age 50 and above, may lead to individual, community, regional, and universal positive social change in the ride-sharing sector of the transportation industry.

Riders' Lived Experiences About Ride-Sharing on the Concept of Customer Trust

in the Choice of Rides in Dallas, Texas

by

Winston Randolph John

MPM, DeVry University, 2008

MBA, DeVry University, 2008

BA Hons, University of Sierra Leone, 1978

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

September 2023

Dedication

This dissertation is dedicated to the following people: first and foremost, my parents, Willie and Juliette. Dad (Papa Willie), I did not get to know you very well because God took you when it was yet morning and you were putting in the work to build your family. The whole family did not have time to say thank you. I always wanted to complete your efforts and say thank you. Now on behalf of the whole family, I say thank you! Mom, your strength has never failed us as you took us from where Dad left us, and as kids, we are all grateful to you. Mom and Dad, may you both rest in perfect peace. I cannot forget my grandparents (especially aunty Jane), uncles, aunts, and other family members as you were all pivotal in my upbringing and support.

Next, to my loving wife, Omokpe; son; and daughter for always being by my side and reminding me to sleep so that I have enough strength to keep fighting. Finally, the anchor of everything is my large family: maternal, paternal, and all my in-laws. You all make me strong, and I hope I do the same for you!

Acknowledgments

First, I would like to acknowledge my dissertation chair, Dr. Stephanie Hoon.

This would not be possible without your guidance and exceptional mentorship. Above all, you gave me the courage and strength to continue to the finish line. I did. Thank you, Dr. S! To my committee members, thank you for contributing to my safe landing.

Secondly, I would like to thank my wife, son, daughter, brothers, sister, in-laws, and friends for always reminding me that I can do this. Yes, I did it! Thank you!

Table of Contents

List of Tables	v
List of Figures	vi
Chapter 1: Introduction to the Study.....	1
Background of the Study	3
Problem Statement	8
Purpose of the Study	9
Research Question	10
Conceptual Framework.....	10
Nature of the Study	12
Definitions.....	14
Assumptions.....	16
Scope and Delimitations	17
Limitations	18
Significance of the Study	19
Significance to Practice.....	19
Significance to Theory	20
Significance to Social Change	22
Summary and Transition.....	23
Chapter 2: Literature Review	25
Literature Search Strategy.....	27
Conceptual Framework.....	28

Literature Review.....	32
Sharing Economy.....	32
Customer Trust and Its Implications for Ride-Sharing Companies.....	36
Ride-Sharing Operations in the Ride-Sharing Economy.....	43
Mitigating the Problem of Trust in Ride-Sharing Companies.....	50
Mitigating the Problem of Customer Trust During the COVID-19 Pandemic.....	54
Summary and Conclusion.....	60
Chapter 3: Research Method.....	63
Research Design and Rationale.....	63
Role of the Researcher.....	67
Methodology.....	69
Participant Selection Logic.....	69
Instrumentation.....	71
Procedures for Recruitment, Participation, and Data Collection.....	73
Data Analysis Plan.....	76
Issues of Trustworthiness.....	78
Credibility.....	78
Transferability.....	79
Dependability.....	79
Confirmability.....	80
Ethical Procedures.....	80

Summary	81
Chapter 4: Results	82
Pilot Study.....	82
Research Setting.....	82
Demographics	84
Data Collection	85
Data Analysis	87
Emergent Theme 1: Motivation to Use Ride-Sharing	89
Emergent Theme 2: Customer Service Lived Experience With Ride- Sharing	89
Emergent Theme 3: Satisfaction With Ride-Sharing.....	90
Emergent Theme 4: Likelihood of Continuing With Ride-Sharing.....	91
Emergent Theme 5: Safety of Ride-Sharing.....	91
Emergent Theme 6: Trust in Ride-Sharing.....	92
Evidence of Trustworthiness.....	93
Credibility	93
Transferability.....	94
Dependability	94
Confirmability.....	95
Study Results	95
Summary	102
Chapter 5: Discussion, Conclusions, and Recommendations.....	104

Interpretation of Findings	105
Confirmation of Knowledge in the Discipline.....	106
Extension of Knowledge in the Discipline	109
Limitations of the Study.....	110
Recommendations.....	111
Implications.....	112
Conclusions.....	114
References.....	116

List of Tables

Table 1. Demographics 84

List of Figures

Figure 1. Word Cloud of the Top 70 Words in Interview Transcripts	88
Figure 2. Word Tree of the Subtheme Surge	97
Figure 3. Word Tree of the COVID-19 Epidemic	99
Figure 4. Word Tree of Airport Pickup and Drop-Off.....	100

Chapter 1: Introduction to the Study

In the past few years, new technology has enabled humans to be more innovative. As a result of these innovations, there has been a radical change in how services and goods are traded in business environments. In essence, new varieties of business models have emerged. These new business models require people to use the internet, smartphones, and software technologies in an online marketplace for buyers and sellers. These innovative businesses have been collectively referred to as the “sharing economy” (SE) by the Federal Trade Commission (2016). Based on the current literature, there is still a search for a specific definition of the SE. Hawlitchek et al. (2017) suggested that the SE can be viewed as an all-embracing concept making underutilized assets available to an online community. In the SE, the focus is on product use and not product ownership, thus saving on the cost of ownership and reducing transaction costs (Hawapi et al., 2017). Hall and Royles (2018) viewed the SE as the intention of buyers to have temporary access to private goods and services without changing ownership. The SE marketplace functions with three essential components:

- the buyers
- the sellers
- the platform where the buyers and the sellers meet online to successfully perform their transactions

There can be several platforms within individual economic sectors to enable competition between sellers/providers of goods and services.

The SE has continued to grow, creating a different type of competition among multiple industries. Among the most notable in this growth is the transportation industry through ride-sharing companies such as Uber and Lyft in the United States and around the world. An SE platform enables competition between other platforms within the same economic sector and also competition between the traditional suppliers of goods and services in the same sector. For example, Uber and Lyft compete with each other for drivers and riders and also compete with existing taxi drivers for riders (Mittendorf, 2017a). All businesses have to build and manage customer trust to have long-term success, especially in a competitive industry such as ride-sharing (Mittendorf, 2017b). Trust heavily influences the usage of ride-sharing systems such as Uber and Lyft; however, research in this area is limited (Zhou et al., 2017).

Through this study, I aimed to explore the lived experiences and perceptions of riders in ride-sharing on the concept of customer trust in the ride-sharing companies in Dallas using a qualitative phenomenological research design. The management of ride-sharing companies may find the results useful in addressing riders' emergent trust concerns about ride-sharing and making needed management solutions for passengers' safety, comfort, transportation efficiency, and reliability concerns. This research may contribute to positive social change by providing valuable, real-time, informative knowledge in an interactive setting, empowering drivers and riders to act on the information as needed.

This chapter continues with the background of the study, problem statement, purpose of the study, research questions, conceptual framework, and nature of the study.

Next are the study's definitions, assumptions, scope and delimitations, limitations, and significance to practice, theory, and social change. This chapter closes with a summary of the chapter's main points and a transition to Chapter 2.

Background of the Study

The SE is a recent phenomenon. SE is an umbrella term that has received much attention and scrutiny from scholars, individuals, practitioners, and policymakers. Koopman et al. (2015) suggested the need to define SE to understand the impact this type of economy has been having on business competition, business innovation, and consumer choice. As a result, there have been multiple definitions of SE. In making progress on the definition, Koopman et al. proposed that, in general terms, the SE is an internet marketplace that brings together a network of individuals and companies with the intention to share or exchange underutilized assets for financial or nonfinancial gain. The economic sectors that have experienced remarkable growth include transportation, hospitality, dining, finance, and personal goods and services. They identified various ways that the SE is creating value for consumers and producers, ranging from the opportunity for people to put their underutilized assets into more productive uses to loosening the regulatory protection of existing producers who have been inefficient and unresponsive to consumers' desire for better customer service. Koopman et al. added that these various ways contribute to improving customer welfare by offering new innovations through technology, more choices, more service differentiation, better prices, and higher quality services that all contribute to a substantial amount of economic value. As a result, this SE phenomenon has been generating enormous value in recent years for

the U.S. and global economies, with projections for further increases in the years to come. The majority of this value in the SE flows to individuals who would otherwise be unable to compete in the traditional incumbent economy.

Munoz and Cohen (2017) also introduced a contribution to the definition of SE. Munoz and Cohen defined SE as “a socio-economic system enabling an intermediated set of exchanges of goods and services between individuals and organizations which aim to increase efficiency and optimization of sub-utilized resources in society” (p. 21). This definition gave a balanced and objective framework and paved the way to building a business model. A business model is a firm’s plan for how to generate revenue. The SE business model is an innovative model in which the participants share unused resources via peer-to-peer services. Sharing has four driving forces: social, economic, environmental, and practical. Regardless of which of these forces initiate the sharing, trust is the key to sustaining the SE company’s growth and success Kamal et al. The SE model, though innovative, can be disruptive and challenging to mainstream traditional business models to gain a competitive advantage over these incumbents. The traditional business model, which flourished for decades, had a clear distinction between companies and customers. Firms and intermediaries enabled and facilitated buying goods and services in the traditional model. The most significant change and difference that the SE has brought into the business world is disregarding the need for firms and intermediaries by directly connecting the consumers with the producers of goods and services via direct internet communications. According to Calo and Rosenblat (2017), in the traditional economy, only those with access to the capital necessary to build hotels or buy taxi

medallions could offer rooms or taxis as short-term rentals benefiting only themselves. Now, with the use of the internet and information technology, firms such as Airbnb, Uber, Lyft, and a host of others can enter these markets and enable individuals with underutilized assets such as houses, office space, cars, and a host of other goods and services to enter and participate in the SE as well. In much the same way, from modern customers' point of view, instead of hailing taxis or booking hotel rooms, all it takes is downloading an app or visiting a website to connect with individuals willing to provide access to their private cars or homes (Calo & Rosenblat, 2017). In addition, SE business models can be highly dynamic, as evidenced by ride-sharing companies such as Uber and Lyft (Leighton, 2016).

The revenue generated by the SE globally is over \$15 billion and is estimated to be up by another \$300 billion within the next 10 years (PwC, 2015). However, 89% of respondents in this PricewaterhouseCoopers report attributed the success of their sharing transactions to their trust in each other (PwC, 2015). In the e-commerce context, transactions are conducted in the virtual world, and a breach of trust can be catastrophic, leading to financial loss, reputation damage, physical harm, and even loss of life, depending on the type of business. In a car-sharing business such as Uber, deliverability and integrity are more desired compared to credibility, which is what is desired in a room-sharing business such as Airbnb (Kamal et al., 2016). Kamal's conclusion in this study is that the significant hindrance to SE leaned toward a lack of trust in sharing members. The top three risk factors cited are the risk of loss of life, theft, and loss of property, and all of these must be mitigated.

The concept of trust in business must first be defined; second, the implications of trust in traditional business must be understood; and third, the implication of trust in an online environment must be understood to comprehend the entire background of this study. Together, all these make it possible to understand the significance of trust in a ride-sharing business that involves financial and physical risks.

Over many decades, trust has been discussed widely in every field. Morgan and Hunt (1994) consider trust as a willingness to depend on an interrelation with a partner who has confidence, is reliable, and has integrity. Molm et al. (2000) agree that trust somehow overcomes uncertainty when one is making a decision in the face of risk. Trust is considered an impulsive decision based on the assessed level of risk. In the online environment of the SE, there are risk elements, thus making the trust factor vital to success.

Liang et al. (2018) considered the perspective of customers. Liang et al. investigated the perceived risk and trust in customers' intention to use in an empirical analysis of DiDi car-sharing services in China. Liang et al. took the view that trust was a complexity-reduction mechanism that is significant to initiate trust, retain trust, and that trust is particularly influential in an online environment, where products are sold and purchased on platforms with known counterparts online and unknown counterparts offline, as in ride-sharing. Liang et al. also recognized that studies on the implication of trust in the SE are lacking, especially in ride-sharing. Liang et al. offered practical implications for the management of ride-sharing platforms, ranging from the customers'

financial security to trust in the driver, suggesting that a consumer who perceives high trust in the platform is more likely to trust offline service providers such as drivers.

Mittendorf (2017) addressed the concept of trust when customers use a user-friendly app. The study focused on Uber, which is a well-known representative example of the SE. Mittendorf took the concept of trust and assessed whether “trust in Uber” and “trust in drivers” influenced the customers’ intentions to use the ride-sharing service. This effort was an attempt to close the research gap on trust and customers’ decision-making in the SE. The study concluded that if the ride-sharing app encourages familiarity, then there is a high probability that the rider will translate that learned behavior into trust in the ride-sharing company and also the drivers. The implication of this study is for the management of ride-sharing companies to increase trust in their platforms, for example, by using adequate security measures, as well as integrating a reliable support system in case of any challenges that might occur when using the mobile app, and that ride-sharing companies must pay attention to continuous improvement of a user-friendly app.

Hawlitchek et al. (2016) stated that trust is more complex than it sounds. In this context, they suggested that platforms of ride-sharing companies should not only have the appearance of trustworthiness to generate business but must also take into account and manage the mutual perceptions of the users on the platform. Mazzella et al. (2016) described the SE as turning trust into an abundant resource. Mazzella et al. termed this process the *digitization of trust* and signaled this as the path forward for successful business within the SE.

There is a notable gap in knowledge in the available literature on how perceived risk influences riders' trust and the eventual choice of a ride. There has been research into trust issues in e-commerce, but very little on the specific problem of trust in ride-sharing. A number of the studies highlighted in the background of this study reference this gap. Additional research, such as this study, could contribute to understanding trust and help ride-sharing companies mitigate trust issues to improve customer satisfaction and increase revenue. Green (2015) considers a majority of business failures to the inability of those businesses to comprehend and mitigate trust issues in a timely way.

Problem Statement

The problem is that there is not enough research on riders' trust in ride-sharing. Mittendorf (2017b) emphasizes that for a company's long-term success, it is vital to build and maintain customer trust, and that research on the implication of trust in the SE needs to be more extensive, especially in the growing ride-sharing industry. Cherry & Pidgeon (2018) draws attention to failed projects within the SE and highlights that the distrust of SE companies along with their services or products hampers growth and may even lead to failures. Trust heavily influences the usage of ride-sharing systems such as Uber and Lyft. However, research in this area is limited (Zhou et al., 2017).

The general problem is that Uber and Lyft's successful operations can be negatively impacted by any lack of trust riders have for the service. The higher the riders' trust, the more riders there are and the more successful the ride-sharing operations. The lower the riders' trust, the fewer the riders and the less successful the ride-sharing operations. Uber and Lyft leaders expect that pairing passengers with drivers and other

passengers will meet riders' trust and approval and get them to use and pay for the services.

Passengers of ride-sharing have a high perceived risk that can cause them to change their intention to use ride-sharing services. There is a lack of research on how this perceived risk influences the riders' trust and eventual choice. There has been research into trust issues in e-commerce, with little on the specific research problem of trust in ride-sharing (Mittendorf, 2017a). Research about this topic may contribute to social change by providing interactive, informative knowledge empowering drivers, riders, and the management of ride-sharing companies to act on the information as needed.

In addition, when there is the pairing of riders, as in some cities, the rider needs more information about their ride-share partner and cannot approve or disapprove of a riding partner. Consequently, risks and social discomfort arise due to a lack of trust among copassengers. Green (2015) suggest that a majority of business failures to the inability of that business to comprehend and mitigate trust issues. Dheepan (2015) proposed that broader participation and ultimate business success in on-demand ride-sharing will be solely dictated by the trustworthiness of a stranger.

Purpose of the Study

The purpose of this transcendental phenomenological study was to research the lived experiences of riders in ride-sharing on the concept of customer trust in Dallas, Texas. Customer trust is negatively influenced by perceived risk, thus making trust crucial and worthy of evaluation and mitigation in any business environment (Liang et

al., 2018). In order to examine the impact of trust on riders of ride-sharing, this research used a qualitative phenomenological research design.

The participants in the study were planned as a sample totaling 12 to 15 riders, with participants recruited until saturation was reached, of Uber and Lyft ride-sharing companies in Dallas, Texas. Uber and Lyft are the most common ride-sharing companies in Dallas, sharing a majority of the market share (Certify, 2019). The data collection process included in-depth interviews and observations to determine the experiences and perceptions contributing to the riders making a “use” or “not-to-use” decision for a ride. The information will help shed light on the level of trust the riders have in the ride-sharing companies of Uber and Lyft in Dallas, Texas, and in addition, inform and guide the ride-sharing companies as they mitigate trust issues to improve customer satisfaction and business. Above all, the study may contribute to research into customer trust and customer ratings as this phenomenon of ride-sharing continues to grow.

Research Question

RQ1: What are the riders’ lived experiences about ride-sharing on the concept of customer trust in the choice of rides in Dallas, Texas?

Conceptual Framework

The theory of planned behavior (TPB), which was proposed by Icek Ajzen (1991) to improve on the predictive value of the theory of reasoned action (TRA; Fishbein & Ajzen, 1967) by including the concept of perceived behavioral control, grounded this study. The TPB states that behavioral achievement depends on motivation and behavioral control and purports to predict an individual’s intention to engage in a behavior at a

specific time and place (Ajzen, 1991). The theory addresses intentions for a specific behavior and how attitudes and experiences have a relationship to the eventual behavior (Ajzen, 2011). In effect, the TPB helps foster the understanding of human behavior and how that behavior can be planned, deliberate, and predictive.

For the purpose of this study, the research investigated how trust impacts the decision of the rider-sharers to participate in ride-sharing through the constructs of the TPB. Ride-sharing companies such as Uber and Lyft present an innovative approach that is changing the transportation industry. It does not just stop there because of riders' perceived risk of participating in ride-sharing. Kim et al. (2008) defined perceived risk as the consumer's thought and belief in the possibility of having an adverse effect in electronic trading. Perceived risk is regarded as a strong motivating factor in consumer behavior and is verified by the TRA (Fishbein & Ajzen, 1967). The higher the perceived risk, the higher the negative expectations, which produces an unfavorable attitude that ultimately negatively influences the intentions of the transactions (Pavlou & Gefen, 2004). In online sharing platforms such as Uber and Lyft, there is no face-to-face communication, customers cannot examine the service before their purchase, and usage perceived risk becomes a critical issue. For example, while it is possible for the ride-share driver to accept or not accept a ride, it is not possible for the customer to evaluate available drivers or choose a specific driver in advance. The long-term success of these ride-sharing companies may hinge on the understanding and effective use of the TPB predictive value to mitigate the rider's perceived risk and replace that risk with positive

rider behavior and, ultimately, rider trust. This positive rider behavior and trust could translate into increased and sustainable revenue for ride-sharing companies.

Nature of the Study

The nature of this study was a qualitative transcendental phenomenological design. The modified Stevic-Colaizzi method of analysis developed by Moustakas (1994) was used. This method employs a clear description of steps to be followed for analysis. The purpose of the phenomenological approach is to attain the essence of the phenomenon being studied by exploring the lived experiences of individuals. This qualitative nature aligns with the purpose of the study and provides the data for the research question by removing any preconceptions of the researcher. Through this research design, I sought to understand and explain the lived experiences and perceptions of riders concerning the issue of customer trust in the ride-sharing providers (Uber and Lyft) in the business of on-demand ride-sharing. This study could offer a renewed perception and improved understanding of how Uber and Lyft ride-sharing passengers' experiences influenced their trust in Uber and Lyft. In this study, the subjectivity of the phenomenological approach is emphasized, as Patton (2015) suggested.

The qualitative phenomenological design involved interviewing a sample group of on-demand ride-share riders about their lived experiences and perceptions of the ride-sharing phenomenon. Polkinghorne (1989) suggests interviews of between five and 25 individuals who have all experienced the phenomenon. The anticipated sample for this study was 12 to 15 participants or until data saturation was reached. The target population was on-demand ride-sharing users of both Uber and Lyft who had experienced the

phenomenon of ride-sharing. The interviews were on Zoom and backed up by other forms of data collection such as recorded telephone conversations, written responses, and accounts of experiences by the study participants. All these interviews were done through meaningful associations with the well-chosen sample as prescribed by Giorgi (2009).

In addition, Moustakas's (1994) phenomenological approach centered on Husserl's (2003) concept of "epoche" or "bracketing," which allows the researcher to voluntarily "stay away from or abstain." Moustakas noted that epoche is a conscious process of identification and subsequent quarantine of naturally occurring thought patterns. Moustakas notes the process's difficulty and the necessity of the process in order that "we may see with new eyes and suspend everything that interferes with fresh vision" (p. 86).

Stevik-Colaizzi's method of analysis was utilized (Moustakas, 1994), with the following seven outlined steps. First, the researcher must read, reread, and transcribe all the participants' verbatim transcripts of the phenomenon to acquire a feeling for it. Second, the researcher extracts significant statements or phrases from participants' transcripts pertaining directly to the research phenomenon. Third, formulated meanings are constructed from the significant statements and arranged into themes. Fourth, the results are incorporated into a rich and exhaustive description of the lived experience. Fifth, there is validation of the exhaustive description from the participants involved in the research to identify the fundamental structure of the phenomenon. Sixth, themes and similar subthemes are organized in larger clusters to make larger main themes. Seventh, the researcher reaches out to ensure the accuracy of any participants' data and to obtain

and incorporate new or pertinent data obtained from participants' validation. All of these steps were adapted to attain congruence with the lived experience of the participants studied.

Definitions

Airbnb: An American vacation rental online marketplace company based in San Francisco, California, which started in 2008. Airbnb offers arrangements for lodging, primarily homestays, or tourism experiences. The company does not own any of the real estate listings, nor does it host events; it acts as a broker, receiving commissions from each booking. It can be anything from a house, to a single room, to a boat, or even to a treehouse (Duckworth, 2019).

Lyft: Lyft, Inc. develops, markets, and operates a mobile app, offering vehicles for hire, motorized scooters, a bicycle-sharing system, and food delivery. The company is based in San Francisco, California, and operates in 644 cities in the United States and 12 cities in Canada. Lyft has a 30% market share and is the second-largest ride-sharing company in the United States after Uber (Lyft, 2022).

Perceived risk: The original concept of perceived risk is an extension of psychology (Bauer, 1960). According to Bauer, there is a risk for consumers' behavior in that their purchasing actions will lead to consequences that cannot be anticipated with anything approximating certainty, some of which at least are likely to be unpleasant. According to this concept, the consumer's choices are divided into risk-increasing or risk-decreasing behavior. Consumers try to reduce perceived risk by searching for

information that enables them to gain more confidence and avoid uncertainty (Bauer, 1960).

Peer-to-peer (P2P): A P2P network is a network of interconnected nodes (called *peers*) that share resources between each other without the use of a third party. This type of network has emerged because of social networking enabled by internet technologies (Rudiger, 2002).

Phenomenological approach: The phenomenological approach is a form of qualitative enquiry that highlights the experienced and lived aspects of a particular phenomenon. Essentially, an in-depth look is taken at how the phenomenon is experienced at the time that it occurs, rather than how the experience is thought about or the meaning ascribed to it subsequently (Patton, 2015).

PwC: The PricewaterhouseCoopers name was formed by the combination of the names of Price Waterhouse and Coopers & Lybrand following their merger in 1998. On September 20, 2010, PricewaterhouseCoopers rebranded as PwC, although the legal name of the firm remained PricewaterhouseCoopers (PwC, n.d.).

Ride-sharing: An arrangement in which a passenger travels in a private vehicle driven by its owner for a fee as arranged by means of a website or app (Merriam-Webster.com, 2023).

Sharing economy (SE): The SE is “a socio-economic system enabling an intermediate set of exchanges of goods and services between individuals and organizations which aim to increase efficiency and optimization of sub-utilized resources in society” (Munoz & Cohen, 2016, p. 21). The SE is an internet marketplace that brings

together a network of individuals and companies with the intention to share or exchange underutilized assets for financial or nonfinancial gain (Koopman et al., 2015).

Stevik-Colaizzi's method of analysis: This method of data analysis is often used in the social sciences. It involves identifying meaningful information and then organizing it into themes and categories. The analysis involves seven steps that range from seeking and gaining acceptance of persons participating in the study to finally integrating the results and then returning to each participant for verification of the results (Moustakas, 1994).

Theory of planned behavior (TPB): The TPB is a theory used to understand and predict behaviors. It postulates that that behaviors are immediately determined by behavioral intentions and under certain circumstances, perceived behavioral control. Behavioral intentions are determined by a combination of three factors: attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991).

Uber: Uber Technologies, Inc., commonly known as Uber, offers vehicles for hire, food delivery, package delivery, couriers, freight transportation, and, through a partnership with Lime, electric bikes and motorized scooter rental. The company is based in San Francisco and has operations in over 785 metropolitan areas worldwide. It is one of the largest providers in the gig economy and is also a pioneer in the development of self-driving cars (Uber Technologies, 2023).

Assumptions

Assumptions for a study are aspects that are believed and cannot be demonstrated to be true. The first assumption that I made was that the sample population of Uber and Lyft customers all had the pertinent information to answer all the survey questions

honesty. Because validating each participant's answers would have been time consuming, I assumed that honest answers were provided. To manage this, I gave assurances of the concealment of participants' identities and preserved the confidentiality of all the potential survey participants. The second assumption that I made was that the number of accurate survey responses met the sample size that represented the population of Uber and Lyft riders and thus gave validity to the research. Third, I assumed that bracketing all personal experiences and predispositions about trust in Uber and Lyft in the study area would reduce researcher bias. Finally, I assumed that the findings of this study would contribute to potential social change.

Scope and Delimitations

Uber and Lyft use location-based smartphones to connect drivers and potential riders with apps as online sharing platforms. When the customer requests a ride, the app channels the initial request to drivers within a set radius and picks up one driver for a pickup at the customer's pickup location. The potential rider or driver then has a choice to accept or not to accept the ride. Whereas it is possible in other sharing platforms such as Airbnb for the potential customer to evaluate the specific information about the service before ordering the accommodation, it is not the same for the potential rider or driver in the ride-sharing platform. The driver in ride-sharing does not have that much time to make that informed choice. This scenario increases the uncertainty for Uber and Lyft riders and drivers. As a result, the perceived risk is higher than on the typical sharing platform (Mittendorf, 2017a). The scope of this study included viewing this perceived

risk through the lens of the TPB to mitigate the risk and allow the rider to make a favorable decision for the ride.

Limitations

The limitations of this study were things that, I as a researcher, could not control but that may affect the validity of the research (Simon, 2011). In effect, the limitations were the weak points of the research study. One main limitation of this study was that knowledge and perceived risk may not always be reliable predictors of behavior (Ajzen, 2011). Perceived risk refers to the customers' perception of the risks of purchasing a good or service. In this case, the service is a ride between two locations with Uber or Lyft. A potential rider may have a perceived risk but may need to use a ride no matter what the circumstances are. Control of certain scenarios was limited in this research.

A second limitation was that this study was only in Dallas, Texas. As a result, the study only captured the lived experiences of riders using ride-sharing who lived in a major city. I do not know how different the study would have looked if the participants had lived in the suburbs or the rural parts of Texas. In addition, Dallas is a part of the Dallas-Fort Worth (DFW) metroplex. I focused explicitly on the experiences of ride-share riders in Dallas, and not on experiences in other cities in the DFW metroplex. A third limitation of this study was that the demographics were not based on ethnicity and race. Information on race and ethnicity should be considered for a longitudinal study if needed.

Significance of the Study

The significance of this study is described in terms of (a) how this study will/may fill a gap in the literature, (b) professional application, and (c) positive social change (e.g., improvement of human or social conditions by promoting the worth, dignity, and development of individuals, communities, organizations, institutions, cultures, or societies).

Significance to Practice

According to Mittendorf (2017), there is not enough research on riders' trust in ride-sharing. This study adds to research in this needed area. Cherry et al. (2018) referred to failed projects within the SE, suggested that distrust of SE companies along with their services or products hampers growth and may even lead to failures, and suggested the need for more research. Trust heavily influences the usage of ride-sharing systems such as Uber and Lyft. However, research in this area is limited (Zhou et al., 2017). This study helps fill a gap in the literature.

The management of ride-sharing companies may use the results of this study to address the emergent trust concerns that riders have about ride-sharing and make some needed management solutions for passengers' safety, comfort, transportation efficiency, and reliability concerns. The importance of this research is that the management of ride-sharing companies may use the results to address the emergent trust concerns that riders have about ride-sharing and make some needed management solutions for passengers' safety, comfort, transportation efficiency, and reliability concerns.

The results of this study may also inform consumers that using internet and information technology offers more information about ride-sharing services. This usage may empower them to act on that information and make better choices. The online feedback mechanisms, which are now already integrated fully into ride-sharing activity, will help riders be more informed when making choices (Koopman et al., 2015).

Significance to Theory

The most significant change and difference that the SE has brought into a theory about the business world is disregarding the need for firms and intermediaries by directly connecting the consumers with the producers of goods and services via direct internet communications. The SE business model is an innovative model in which the participants share unused resources via P2P services such as Uber and Lyft. Sharing has four driving forces: social, economic, environmental, and practical. Regardless of which of these forces initiate the sharing, trust is the key to sustaining the SE company's growth and success (Kamal et al., 2016). The SE model, though innovative, can be disruptive and challenging to mainstream traditional business models to gain a competitive advantage over these incumbents. The traditional business model, flourishing for decades, had a clear distinction between companies and customers. Buying goods and services in the traditional model was enabled and facilitated by firms and intermediaries. Another significant change and difference that the SE has brought into the business world involves disregarding the need for firms and intermediaries by directly connecting the consumers with the producers of goods and services via direct internet communications.

According to Calo and Rosenblat (2017), in the traditional economy, only those with access to the capital necessary to build hotels or buy taxi medallions could offer rooms or taxis as short-term rentals benefiting only themselves. Now, with the use of the internet and information technology, firms such as Airbnb, Uber, Lyft, and a host of others can enter these markets and enable individuals with underutilized assets such as houses, office space, cars, and a host of other goods and services to enter and participate in the SE as well. In much the same way, from the modern customers' point of view, instead of hailing taxis or booking hotel rooms, all it takes is downloading an app or visiting a website to connect with individuals willing to provide access to their private cars or homes (Calo & Rosenblat, 2017).

Another significance of this research to theory is maybe brought to light by numerous studies that indicate that for long-term success, a company has to build and maintain strong customer trust. Mittendorf (2017a) showed that perceived risk and trust are the main drivers of customers' intention to use a ride-sharing service. However, perceived risk negatively influences customer trust (Liang et al., 2018). Trust is then crucial and needs to be evaluated and mitigated in any business environment, including traditional e-commerce. Ride-sharing is different from the traditional e-commerce platform because ride-sharing service providers such as Uber and Lyft interact with passengers online and offline and this scenario poses potential financial and physical harm and even loss of life for the ride-sharing customer. Trust thus plays a key role in decision-making for the rider and for the ride-sharing provider concerning management policy.

Significance to Social Change

This research may contribute to positive social change in the following ways: by providing valuable, real-time, informative knowledge in an interactive setting, which will then empower drivers and riders to act on the real-time information as needed (Thierer et al., 2015). With the P2P models of Uber and Lyft, the distinction between customers and service providers is not so distinct anymore as people share their assets.

P2P services are also breaking new grounds on the social aspect of consumerization because P2P services have simplicity, convenience, and speed, which give consumer appeal to modern customers and consumers. With the growing popularity of Uber and Lyft, there may be evidence that simplicity and personalization of the ride-sharing app make it user-friendly, thus offering some aspects of social change. Ride-sharing is an integral part of the SE, which has created markets out of things that would not have been considered assets of value in the past and thus providing people with a new opportunity to monetize their free time and underused assets such as cars and other types of vehicles. This study may also increase the awareness of working part time with flexible time.

Also, understanding the factors that influence perceptions of trust among strangers has important implications for research to reduce urban gridlock, thereby contributing to positive social change (Zhou et al., 2017). Ride-sharing has excellent potential to increase carpooling and reduce urban congestion, but only if the users trust the potential rideshare partner and do not feel that they are not entering a risky situation. On-demand ride-sharing will be around in the near future (Curtis, 2015). This research

will likely catalyze even more growth as this phenomenon continues along the path of positive social change in transportation.

Summary and Transition

The main points of this chapter were that with the development of the internet and modern technologies, the SE has snowballed and will continue to grow. There has yet to be a universal definition of SE, but there is an agreeable expectation of what it is and its potential. Ride-sharing platforms of Uber and Lyft have the majority of the market share of ride-sharing in the United States. Trust is becoming an issue because of the perceived risk involved in ride-sharing. Research has shown that the key to long-term business success is building customer trust. However, there is a gap in the literature on the issue of trust in the ride-sharing industry. Through this study, I attempted to help close that gap in the literature.

The purpose of this transcendental phenomenological study was to research the lived experiences and perceptions of riders in ride-sharing on the concept of customer trust in Dallas, Texas. Customer trust is negatively influenced by perceived risk, thus making trust crucial and worthy of evaluation and mitigation in any business environment (Liang et al., 2018). In order to examine the impact of trust on riders of ride-sharing, this research used a qualitative phenomenological research design.

In Chapter 2, I provide a review of the recent theoretical and empirical literature on ride-sharing and customer trust. In the past few years since ride-sharing by Uber, Lyft, and other ride-sharing platforms in the United States and worldwide entered the transportation sector, the growth of ride-sharing has been phenomenal. However,

research in ride-sharing in the area of trust has not caught up with this growth in ride-sharing (Mittendorf, 2017). In the literature review, I will first take a look at the growth of ride-sharing, then examine trust in rider-sharing, and finally consider trust in ride-sharing during and after the COVID-19 pandemic.

Chapter 2: Literature Review

The problem that this study addressed was that even though researchers agree that for the long-term success of a company, it is vital to build and maintain customer trust, research on the implications of trust in the SE is lacking, especially in the ride-sharing industry (Mittendorf, 2017b). Trust influences the use of ride-sharing systems such as Uber and Lyft. However, research in this area is limited (Zhou et al., 2017). Hawlitsche et al. (2016) agreed that more research is needed to understand the role of trust because this is a rapidly developing area within the industry. Mittendorf (2017a) acknowledged that there has been research into trust issues in e-commerce. However, little is known about the research problem of trust in ride-sharing. Halls and Royles (2018) demonstrated that ride-sharing companies such as Uber and Lyft are here to stay and that it is incumbent on the management of these companies to employ ways to mitigate the risks that customers take on if these companies want to stay competitive and profitable. Dheepan (2015) also acknowledged that the broader participation and business success of ride-sharing will be dictated by the trustworthiness of a stranger.

The purpose of the current study was to research the lived experiences of riders in ride-sharing regarding the concept of customer trust in Dallas, Texas. Customer trust is negatively influenced by perceived risk, thereby making trust crucial and worthy of evaluation in any business environment (Liang et al., 2018). Liang et al. (2018) noted that if customers think a product or service is risky to use, customer trust goes down, and consequently, sales of the product or service go down. Therefore, customer trust should be monitored, evaluated, and increased (if consumer trust goes down) to keep a business

successful. I used a qualitative phenomenological design to explore the impact of customer trust on riders of ride-sharing. Findings of the study may add to the body of literature on consumer trust in the SE, particularly in ride-sharing. Findings may also inform the ride-sharing companies regarding how to reduce the perceived risk in the ride-sharing industry, which could promote trust and satisfaction among riders, resulting in a corresponding and sustainable business boom for these ride-sharing companies. Findings could also help policymakers design strategies and offer decision-making recommendations for ride-sharing companies to facilitate sustainable user behavior in ride-sharing in the United States and worldwide.

Chapter 2 focuses on relevant literature on the experiences of customers using ride-sharing services offered in the SE, and on consumer trust in the phenomenon of ride-sharing. Ride-sharing is part of the SE. The recent literature about the SE revealed the relevance of the problem being researched in the current study. Currently, there is no universal definition of the SE (Liang et al., 2018). However, Hawlitschek et al. (2016) regarded the SE as an umbrella term covering a large online community's access and use of underutilized assets. These underutilized assets cover a range of goods and services, among which is the service of ride-sharing.

Uber and Lyft are the two most prominent ride-sharing companies in the United States (Gessner, 2019). Ride-sharing companies use smartphone applications to connect drivers who are willing to make their vehicles available to potential riders for a fee. These transactions are complex because they involve uncertainty, perceived risk, and trust on the consumer side. Consumer trust influences the use of ride-sharing. As a result, the

ride-sharing companies of Uber and Lyft must identify and mitigate trust problems to stay profitable in business. Little research has been done on trust and ride-sharing (Hall & Royles, 2018). I looked at the problem of rider trust in the ride-sharing companies of Uber and Lyft in Dallas to add to the body of research on trust and ride-sharing. The major sections of Chapter 2 address the literature review strategy, the conceptual framework and its supporting theories, and the literature review. The chapter concludes with a summary that details the review of the recent literature.

Literature Search Strategy

A literature search is a crucial step in performing good, authentic research. The review of the literature on rider trust in ride-sharing companies yielded information on the trust of riders in ride-sharing companies worldwide. However, the body of research was less than expected, suggesting a need for much more research on rider trust in ride-sharing. I examined more than 130 peer-reviewed articles ranging in publication dates from 2016 to the present. The search terms included *sharing economy*, *ride-sharing*, *Uber* or *Lyft*, *trust*, *trusting*, *trustworthiness*, *trustworthy*, *confidence*, *credibility*, *mitigation of trust issues*, and *future of ride-sharing*. These search terms generated peer-reviewed journal articles from the following databases: Academic Search Complete, EBSCOHost, Business Source Complete, ProQuest Central, ResearchGate, SAGE Journals, and Google Scholar. DOI locators, homepage URLs, books, peer-reviewed articles, journals, and articles pertinent to ride-sharing, ride-sharing companies, trust in ride-sharing, trust in ride-sharing companies, trustworthiness in rider-sharing companies, and the future of ride-sharing were used to search. During the search, no doctoral

dissertations with close relevance to this study were located. However, other literature, such as scholarly books and professional writings on current and economic affairs, came in useful. Also, some materials with dates older than 2016 were cited when the work was considered seminal for reflection and direction with the discussion. These older sources also provide relevance to the topics, as they show realignment and changes in views on the topics included in the study. The older sources perform the role of seminal work on the topics, showing the extended period over which, the topics have been of interest to researchers. Finally, a Walden Writing Center template was used to help organize and easily access the chosen research articles for this literature review.

Conceptual Framework

The conceptual framework for this phenomenological study was the TPB (Ajzen 1985, 1987, 1991). This theory was proposed by Icek Ajzen to improve on the predictive value of the TRA (Fischbein & Ajzen, 1967). The TRA purports that behavior is the direct result of intent and that intent is determined by a person's attitude (ATT) and the subjective norm (SN; what others think). However, because of the problem of predicting with intent alone, Ajzen added the perceived behavioral control (PBC) construct as a predictor to form the TPB. The TPB not only indicates that an individual's ATT towards the PBC refers to past experiences, but also refers to anticipated obstacles and other factors obstructing the performance of the behavior (Ajzen, 1991). Ajzen further added that individuals who believe that they have a large amount of control over a behavior will develop subsequent intentions to perform the behavior. Together, an individual's ATT, SN, and PBC have an additive effect on the individual's intentions. The implication of

the behavior here is that it is possible for individuals to have high intentions even though one or two of the antecedents preceding their objectives might be low. PBC draws attention to the perceived convenience or difficulty of engaging in the individual's behavior. The individual's perceived convenience or difficulty is the main difference between the TRA and the TPB. Ajzen (1991) argued that intentions alone are sufficient in predicting behaviors when individuals have complete volitional control over their actions. However, Ajzen added that as volitional control over the behavior decreases, PBC becomes increasingly important in determining subsequent behavior. The TPB thus states that behavioral achievement depends on motivation and behavioral controls and purports to predict an individual's intention to engage in a behavior at a specific place and time.

Numerous scholars have used the TPB over several decades as a model to investigate and understand individuals' attitudes, willingness, and behaviors toward specific events and phenomena as a model to understand varieties of behaviors, including health-related behaviors (Albarracín et al., 2001), environmental psychology (Stern, 2005), voting behavior (Tung et al., 2012), waste management (Khan et al., 2019), and sustainable transportation usage (Cai et al., 2019, Donald et al., 2014). The TPB has also been used to understand online internet purchasing behavior from before the onset of ride-sharing by Uber (2009) and Lyft (2012) to the present. Before Uber and Lyft existed, George (2004) used the TPB to investigate relationships involving internet privacy and trustworthiness, along with beliefs between perceived behavioral control, expectations of others, and online purchasing behavior. George (2004) found out that online customers who believed in the trustworthiness of the internet and in their abilities to buy online

were more likely to make online purchases than those online customers without such beliefs. After Uber and Lyft came into the business, Lee et al. (2017) used the TPB to investigate users' perceptions of security, safety, and surcharge justification in relation to their actual usage of ride-sharing. Lu Huang et al. (2021) reported that 315 ride-sharing passengers used the TPB as a foundational framework and innovatively added the concept of social distance to the TPB to form a new and integrated model. The results have shown that behavioral ATT, SN, and PBC positively influence collaborative consumption intention and behavior. All three examples above show how the TPB has been used and is still being used in ways like the current study and provide the rationale for the choice of the TPB as the theory of the conceptual framework for this study.

This study investigated users' perception of rider trust in the ride-sharing companies of Uber and Lyft in Dallas to add to the research on trust and ride-sharing. The study investigated riders' use of ride-sharing; because the TPB links perceived risks with consumers' usage, the choice of this theory as the conceptual framework was perfect for this study. There were two significant advantages of using the TPB in this study. First, it was useful for making predictions by considering the variables influencing riders' decisions to go or not with ride-sharing. Second, before business investment in a technologically new method of transportation (in this case, from traditional transportation by personal car, bus, taxicab, or light rail to ride-sharing), the TPB can be used to gather data to help in understanding the significant barriers that prevent changing behavior from the traditional means of transportation to a new transportation behavior using ride-sharing. In addition, the predictive construct of the TPB sheds light and understanding of

the trust factor in ride-sharing as a key determinant in the prospective rider's intentions. For example, if the trust level for ride-sharing is low, the ride-sharing activity may not occur, and vice versa.

Furthermore, on the management side of ride-sharing, the TPB may help inform business strategy. This help from the TPB may happen in three ways: first, on specific consumers' perceived risk or convenience for using ride-sharing. Second, it may provide a path towards specific mitigation strategies for prospective consumers' perceived risk and increase their trust levels, starting and sustaining prospective consumers' ridership. Moreover, since 2019, SE research has shown that social distance is considered one of the most significant factors influencing the willingness to share. For instance, a close social distance has been shown to increase individuals' willingness to share their belongings (Schreiner et al., 2018), as well as willingness to share their information, experience, and word-of-mouth intentions through social media (Yang, 2019). Perceived risks such as those related to COVID-19 awareness, protection, and social distancing are a recent addition to the TPB. These perceived risks may give room to theorize the TPB for user behavior in ride-sharing services in the United States and worldwide and supply an answer to the possibility of the TPB being able to add more predictors of intention or behavior. Third, specific information can further guide the development of new business technology for the continued attraction and retention of riders (Mathieson, 1991).

Literature Review

Sharing Economy

The SE is a recent phenomenon. *Sharing economy* is an umbrella term that has received much attention and scrutiny from scholars, individuals, practitioners, and policymakers. Koopman et al. (2015) suggested the need to define SE to understand the impact this type of economy has on business competition, business innovation, and consumer choice. As a result, there have been multiple definitions of SE. In making progress on the definition, Koopman et al. suggested that, generally, the SE is an internet marketplace that brings together a network of individuals and companies to share or exchange underutilized assets for financial or nonfinancial gain. The economic sectors that have experienced remarkable growth include transportation, hospitality, dining, finance, and personal goods and services. Koopman et al. identified various ways that the SE is creating value for consumers and producers, ranging from the opportunity for people to put their underutilized assets into more productive uses to loosening the regulatory protection of existing producers who have been inefficient and unresponsive to consumers' desire for better customer service. In addition, Koopman et al. stated that these various ways contribute to improving customer welfare by offering innovations through technology, more choices, more service differentiation, better prices, and higher quality services that all contribute to a substantial amount of economic value. As a result, the SE phenomenon has been generating enormous value in recent years for the United States and global economies, with projections for further increases in the years to come.

The majority of this value in the SE flows to individuals who would otherwise be unable to compete in the traditional incumbent economy.

Munoz and Cohen (2016) also introduced a contribution to the definition of SE. Munoz and Cohen defined SE as “a socio-economic system enabling an intermediated set of exchanges of goods and services between individuals and organizations which aim to increase efficiency and optimization of sub-utilized resources in society” (p. 21). This definition gave a balanced and objective framework and a business model to build on. A business model is a firm’s plan for how to generate revenue. The SE business model is an innovative model in which the participants share unused resources via peer-to-peer services. Sharing has four driving forces: social, economic, environmental, and practical. Regardless of which forces initiate the sharing, trust is the key to sustaining the SE company’s growth and success (Kamal et al., 2016).

The SE model, though innovative, can be disruptive and challenging to mainstream traditional business models to gain a competitive advantage over incumbents. The traditional business model, which flourished for decades, had a clear distinction between companies and customers. Buying goods and services in the traditional model was enabled and facilitated by firms and intermediaries. The most significant change and difference that the SE has brought into the business world is disregarding the need for firms and intermediaries by directly connecting the consumers with the producers of goods and services via direct internet communications. Continuing with this trend of thought, Calo and Rosenblat (2017) pointed out that in the traditional economy, only those with access to the capital necessary to build hotels or buy taxi medallions could

offer rooms or taxis as short-term rentals, benefiting only themselves. Now, with the use of the internet and information technology, firms such as Airbnb, Uber, Lyft, and a host of others can enter these markets and enable individuals with underutilized assets such as houses, office space, cars, and a host of other goods and services to enter and participate in the SE as well. In much the same way, from the modern customers' point of view, instead of hailing taxis or booking hotel rooms, all it takes is downloading an app or visiting a website to connect with individuals willing to provide access to their private cars or homes (Calo & Rosenblat, 2017). In addition, SE business models can be highly dynamic, as evidenced by ride-sharing companies such as Uber and Lyft (Leighton, 2016).

The e-commerce industry and SE are interwoven, which suggests that perceived risk and trust, which are both influential in e-commerce, are also greatly influential in the collaborative sharing environment typical of the SE. Mittendorf (2017b) found some of the characteristics of the SE to be the fact that the majority of nonrecurring interactions are with strangers, temporary sharing of private property, and the mixing of digital and real-world situations. According to Mittendorf, these examples of the SE all imply the presence of perceived risk and trust but presently show little research and thus present a gap in the literature that needs to be filled.

Among the most notable industry for this competition within the SE is the car/transportation industry through the ride-sharing companies of Uber and Lyft in the United States. Worldwide, Uber and Lyft play a significant role with other local ride-sharing companies. The success of the SE companies relies on the online trust they start,

build, and keep with their customers. Existing literature shows that perceived risk and trust are significant influencing factors of user intentions in an online environment.

Pavlou and Gefen (2004) endorsed perceived risk and trust as influential in e-commerce industries. They found that a high degree of trust in sellers reduces the perceived risk of the buyers, and a high degree of perceived risk lowers the buyers' intentions to perform a transaction on an online platform. Kim et al. (2008) confirmed that a high degree of trust in online platforms and websites leads to a corresponding increase in buying intentions. On the other hand, a high degree of perceived risk in online platforms in e-commerce infers a corresponding decrease in purchase intentions.

Research studies have agreed that a company's long-term success, it is crucial to build and keep customer trust. Mittendorf (2017a) contends that perceived risk and trust drive riders' intentional use. However, perceived risk negatively influences customer trust (Liang et al., 2018). Consequently, trust is crucial and needs to be evaluated and mitigated in a business environment like ride-sharing. In ride-sharing, because the services like Uber and Lyft interact with passengers online and offline, there is not only a potential financial risk (Federal Trade Commission, 2016) but also physical harm and even loss of life for the rider (Kiplinger, 2016).

After a thorough review of the literature on ride-sharing, the following four themes appear:

- customer trust and its implications for ride-sharing companies
- ride-sharing operations in the ride-sharing economy
- mitigating the problem of consumer trust in ride-sharing companies

- mitigating the problem of customer trust during the COVID-19 pandemic

Customer Trust and Its Implications for Ride-Sharing Companies

Trust is a complex concept studied from different perceptions in multiple disciplines. (Lewis et al.1985) and (Lewis et al.1985) have found trust to be an attribute that originates through relationships among different parties making trust critical in interpersonal and commercial relationships. Three attributes of trust stand out. First, trust originates through relationships among different parties (Lewis et al.,1985). Second, trust is crucial in establishing successful interpersonal and commercial relationships that involve risk, uncertainty, or interdependencies (Morgan and Hunt, 1994). The need for trust then becomes particularly high in socially distant relationships, such as in an online environment, because of the increased complexity of the transaction. Third, trust is among the most effective complexity-reduction mechanisms because it eliminates the possibility of dealing with the negative outcome of possibilities (Gefen, 2000).

In business, trust is linked with the customer or consumer and referred to as customer-trust or consumer-trust with a good or service. Ostrum (2000) endorsed customer trust as crucial in initiating and maintaining customer-to-customer (C2C) relationships. There is a growing need, usage, and interdependency of the internet, and researchers argue that trust is a vital issue in the success of a ride-sharing business model. Cheng et al. (2019) go a step further and propose that psychological contracts should exist. According to the psychological contracts theory by Rousseau (1989), one party believes the other party has an obligation to perform certain behaviors. Therefore, the violation of a psychological contract has a high probability of having a negative impact

on trust. When a psychological contract violation (PCV) occurs, successful service recovery steps in to help build customer trust, enhancing customer satisfaction and preventing a customer from switching to a competitor (Sparks et al., 2016).

Mittendorf (2017b) could not find any significant literature to prove that customer trust had some significance in the SE. Mittendorf (2017b) chose Uber as the ride-sharing ceremony for his research study. He highlighted that Uber's mobile app connects strangers (potential drivers and potential riders) electronically and face-to-face on a short-term notice. The main objective of the study was to assess whether trust in Uber and trust in Uber drivers influenced the customers' intentions to use the ride-sharing service. Mittendorf's then set off to fill that gap in the literature by analyzing the implications of trust on the customers' intentions on the SE platform of Uber. The study reached the conclusion that trust in Uber influences the customers' intentions to request a ride, but the influence of trust in Uber drivers is insignificant. The study is commendable but has some limitations. Even though the sample size of 221 is acceptable, a larger sample size, a different and larger city, or comparing two ride-sharing platforms may have given a different result. However, there is evidence that trust does play a part in the consumers' choice of Uber for ride-sharing, and this study adds to the body of literature on the role of customer trust in ride-sharing.

Ride-sharing companies like Uber and Lyft expect that pairing passengers with drivers and co-passengers will meet the riders' trust and approval to use and pay for the services. As the SE grows, using something that belongs to someone else becomes inevitable, making trust crucial for today and the future. A ride-sharing company like

Uber provides an example of how trust is crucial for success in ride-sharing companies. For ride-sharing companies, they will have to use all the technology at their disposal to build and sustain customer trust if they want to stay in business.

Liang et al. (2018), in a case study of the DiDi ride-sharing platform in China, adopted the perspective of customers and investigated the implications of perceived risk and trust on customers' intention to use. According to the authors Liang et al., the overall results of research on the SE for different industries were inconsistent. This suggested a compelling need to continue research on trust in the SE. In this study, perceived risk is conceived as a multidimensional construct differentiating the trust in Didi from the trust in Didi's drivers. Perceived risk references the customer's thoughts and beliefs in the likelihood of having an adverse outcome and consequence in an online transaction. According to Liang et al. (2018), the relationship between perceived risk and user's intention has long been verified by the Theory of Reasoned Action (TRA) Ajzen (1991). Research by Pavlov and Gefen (2004) found that high degrees of perceived risk increase negative expectations, which generates an unfavorable attitude that untimely results in a negative influence on transactions. The research used 365 participants (mostly college students), structural equation modeling (SEM), and five features of perceived risk to represent the ride-sharing platform of DiDi. These five features of perceived risk as related to the and specifically ride-sharing: financial risk - riders may worry about being overcharged or their financial information falling into the wrong hands; security risk - riders may worry that the driver has not been adequately vetted by the ride-share company and is a wrong or irresponsible driver with a criminal record; performance risk -

riders may be concerned about that the car will experience mechanical problems or complete breakdown on the way to the destination; social risk - riders may worry about more than one passenger in the vehicle intruding on each other's social space or present a Coronavirus risk; psychological risk - riders may worry about being in a car with the someone they do not like for any reason.

The findings indicate that perceived security risk performance and social risks have a significant negative relationship to trust in the ride-share platform of DiDi, Liang et al., (2018). In the same way, the findings also indicate that security and psychological risks have a significant negative relationship to trust in the driver. The more significant findings are that perceived risk is the precursor of trust and that customer trust in the platform is essential for customers' intention to use the ride-sharing platform. The implication of this last finding is that it is essential for a ride-sharing company of any kind to build and maintain a good platform image to increase customers' trust and usage of the platform for future use.

Lee et al. (2017) did research concerning the use of Uber as an example of a ride-sharing service. The authors were concerned about the limited literature on why some individuals do not use ride-sharing services and their perceived beliefs on the barriers to ride-sharing. So, the focus of this research was why and how specific factors affect individual use of the Uber ride-share. The study applied human behavior theories, including the theory of planned behavior (TBD) (Ajzen, 1991). The findings of the research reveal that safety is a significant factor in the use of ride-sharing services. Lee et al. (2017) was a significant contribution but not a conclusion to the debate.

Mittendorf (2017a), in his research “Create an Uber account? An investigation of trust and perceived risk in the sharing economy,” focused on Uber as a specific example of a ride-sharing company that connects would-be riders via a mobile application. Modifying a research model from Pavlou and Gefen (2004) and employing survey data from 344, Mittendorf investigated the influence of perceived risk on the potential ride-sharing passenger. The results indicated that significant factors influence the ride-sharing passenger’s intention to create an Uber account and become an actual consumer. One main contribution of this research is that it introduces trust and risk into the literature to explain the mechanism of the SE, especially ride-sharing.

Meng et al. (2020) in their paper *Exploring Trust in Online Ride-sharing Platform in China: A Perspective of Time and Location*, researched the concept of trust in a ride-sharing platform in China. The authors first acknowledge that trust is the key issue in ride-sharing, given the circumstances of risk, uncertainty, and interdependence. In the paper, the authors highlight two distinct ride-sharing characteristics: onetime-only deals and a strange driver/passenger. Since one-time-only rides involve many financial and security risks for the riders, the ride-sharing platform must develop trust reputation mechanisms. The authors then explore the ride-sharing platform from two perspectives of one-time-only deals and a strange driver/passenger to fill two research gaps identified by the authors. These gaps are the time of day relating to heavy traffic and the location and length of the ride.

Meng et al. (2020) conceded that many researchers had investigated trust from different perspectives but that their common approach was through surveys, interviews,

and experiments. The authors (Meng et al. 2020) thought more was needed and therefore chose and justified their research method to be machine learning a form of data mining based on all the historical data to carry out their study. The justification for this choice of research method is twofold. First, in the information age, big data is now increasingly valuable. Second, machine data can process massive amounts of information simultaneously and perform better. Subsequently, Machine learning as a research method is used to estimate the trust in ride-sharing platform levels based on time and location. There were two research findings: first, under the conditions of this study, the trust-in-platform levels in economically developing regions are comparatively higher than those in economically developed regions; second, under the conditions of this study, the trust-in-platform levels between 7.00 and 11.00 pm are lower, and the trust-in-platform levels are higher between 1.00 and 5.00 pm than those in other time periods (Meng et al., 2020). The implications of these findings are: first, that time and location correlate with trust in the ride-sharing platform, and second, that there is a correlation between trust-in platform and time or location, which no research had mentioned before. This study makes excellent strides toward contributing to the existing knowledge on trust in ride-sharing platforms and has real-world implications for platform operators. The authors (Meng et al., 2020) suggest that the factors based on time or location be considered when building up a trust-in-platform predictive ride-sharing framework to improve the trust between drivers and passengers for a solution where everyone benefits.

To summarize: the literature and sources on this theme (customer trust and its implications in ride-sharing companies) reveal the complexity of the concept of trust.

First, trust originates through relationships among different parties. Second, trust is crucial in establishing relationships and interdependencies that involve risk. Third, trust effectively reduces stress and complexity to avoid the possibility of perceived negative outcomes.

Over the past two decades, research has stressed the need for customer trust for a good or service and as the internet and smartphones emerged, trust became more critical in business. Ostrum (2000) contended that customer trust was necessary for starting and maintaining C2C business relationships. Mittendorf (2017 b) found out through his research that trust in Uber influences the customers' intentions to request a ride. Liang et al., (2018) endorsed this view and then expanded further as they discovered that perceived risk is a precursor of trust and that customer trust is essential for customers' intention to use a ride-sharing platform. Lee et al. (2017) argued that safety is a significant factor in using ride-sharing services. As a result of the strength of perceived risk and trust as a vital issue in ride-sharing, Cheng et. al. (2019) supported the perspective of Mittendorf (2017 b) and Cheng et. al., (2019), but wanted to go a step further. Cheng et. al. (2019) proposed that there should be psychological contracts. This idea of psychological contracts emanates from Rousseau (1989), in which one party holds the view that the other party has an obligation to perform certain behaviors and that the violation of a psychological contract has a high probability of having a negative impact on trust. If a psychological contract is violated, recovery steps are taken to help rebuild customer trust, enhance customer satisfaction and prevent a customer from switching to a competitor (Sparks et al., 2016).

Indeed, the domination of trust has ignited research into customers' perceived risk and trust in a specific product or service. Ride-sharing is unique when it comes to the issue of trust because ride-sharing service providers like Uber and Lyft interact with passengers online and offline, thereby posing not only a potential financial loss, losing rider's personal information through hacking, but also potential physical harm, and even possible loss of life for the ride-sharing customer. Uber and Lyft interacting with passengers online and offline posing a potential financial loss, losing rider's personal information through hacking, potential physical harm, and even possible loss of life for the ride-sharing customer are all multiple risks for the ride-sharing customer. The high-profile case of Uber driver Jason Dalton, who shot and killed six people while driving in Kalamazoo, Michigan, decreased trust and increased scrutiny over rider safety (Kiplinger, 2016). In 2017, Uber settled a lawsuit by the Federal Trade Commission (FTC) for \$20 million. At issue was riders' personal information that was hacked but not timely reported by Uber. As of now, even though there has been some research into trust issues, there is no certainty as to whether perceived risk influences riders' trust and choice or the implication of trust for the management of ride-sharing providers. As the ride-sharing phenomenon continues to grow, there needs to be more research (Mittendorf, 2017b).

Ride-Sharing Operations in the Ride-Sharing Economy

Ride-sharing has gradually been accepted as common transportation instead of traditional taxis worldwide (Zuo et al., 2019). Although ride-sharing has brought many benefits to passengers, drivers, platforms, and society, there still exist some theoretical

and practical issues, such as trust and sharing intention from the perspective of the rider and driver, which are in urgent need of further research (Mittendorf, 2017a; Cramer and Krueger, 2015; Greenwood and Wattal, 2017). As mentioned in this study, Uber and Lyft are the two most prominent ride-sharing providers in the U.S. The operations are the same though each company has distinctive procedures.

Xusen et al. (2020), in their research contribution to ride-sharing and trust, purport that there is a trust issue in the ride-sharing industry. This trust issue contributes to the lack of drivers sharing their cars, riders not trusting drivers, and drivers not trusting ride-sharing providers like Uber and Lyft. Xusen et al. (2020) first go through the real-time step process in ride-sharing. These steps are: the passenger and the driver submit to the platform the arrangements for travel, stating the time, starting point, and destination, including any stops along the way. Passenger and driver can see each other's ratings and online reviews; the platform matches the requirements of the passengers and the drivers and sends messages to them as notifications; the matched passenger and driver share the car to the destination offline. On the way to the destination, they can have some social interaction; after reaching the destination, the passenger pays the driver online and can give the driver a tip online or in cash if the passenger so desires; then, they can give a rating and online review for each other.

The authors Xusen et al. (2020) contend that these steps show that the passenger and the driver being users of the platform are in a position of equality and that this ride-sharing process has benefited society enormously. Trust plays a critical role in reducing uncertainty and further influences the sharing intention of the passenger and the driver.

Consequently, understanding trust-related factors in ride-sharing could attract more drivers to share their cars and thereby begin to solve other multiple trust-related issues that are passenger, driver, or provider related.

In summary, this paper was motivated by the need for more drivers sharing cars in ride-sharing. Uncertainty reduction theory (URT), self-determination (SDT), and ride-sharing drivers' trust (RDT) onion model theories provided a useful theoretical framework for the research. The results of this study reflect that passenger canceling the order, politeness, appearance, rating, online review, driving expenses, social interactions, and enjoyment are factors that have an influence trust-in-passenger. Trust-in-passenger can then directly influence the driver's sharing intention. Together these findings contribute to the research of ride-sharing in the SE, add a new perspective on the driver, and explain the relationship between trust and sharing intention in ride-sharing.

The implications of this research for ride-sharing providers are as follows: first, ride-sharing providers should design strategies to attract more drivers. Second, improve information or strategies that may obstruct drivers' sharing information from the perspective of the ride-sharing platform's perspective. Third, conduct other operational activities relating to trust-in-passengers and trust-in-drivers from a position of equality that benefits society.

There exist some limitations in this study. First, the data is collected in Beijing, China, which constrains the findings from being extended to other countries due to the unique features of ride-sharing among countries. Second, the drivers were randomly chosen and involved only a limited number of female drivers compared to an equal

number of male and female riders. Randomly chosen that involve only a limited number of female drivers compared to an equal number of male and female riders may be an unavoidable gender bias. However, gender may be another factor in ride-sharing for future studies. Third, this paper only focused on the lack of drivers in ride-sharing, while many other issues in ride-sharing need attention, such as trust-in-platform. Fourth, the new models introduced would have to be academically tested using quantitative data and qualitative data for validity.

Goodspeed et al. (2019), in study about finding an alternative to slow transit, drunk driving, and walking in bad weather, contributed to the phenomenon of the ride-sharing report, contributed an exploratory study of trip patterns and mode choice in Washtenaw County, Michigan, USA. Goodspeed et al. (2019) suggested ride-sourcing instead of ride-sharing following Rayle et al., (2016) and pointed out that these services were purchased and not shared among riders. The primary purpose of this study by Goodspeed et al., (2019) is to see what patterns of use have developed since Uber and Lyft became available in Washtenaw County - Uber in April and Lyft in May (Allen, 2014). Goodspeed et al. (2019) use a convenience sample of 167 respondents (reporting 192 trips). The main highlights of the results from Goodspeed et al. (2019) are that most (65%) of the rider sourcing trips were chosen instead of taking transit. When the survey asked what other options were available for ride-sourcing trips, respondents reported transit (63%), private vehicles (32%), walking (32%), and bicycling (18%). Specific reasons for choosing ride-sourcing instead of these options included the frequency of transit, alcohol use for driving, and weather and distance for walking and biking. Of the

63% of the respondents that had other options available but chose ride-sourcing over driving, the top three reasons for this choice were to avoid driving under the influence of alcohol, parking costs, and the stress of driving. Another highlight of this survey result is that it answers the question of ride-sourcing influencing other modes of transportation. The results show that ride-sourcing has been adopted in specific ways, and other modes of transportation are still relevant. Further research on this may be needed to explore the relationship between ride-sourcing and other modes of transportation. The significant limitation of this study is that the respondents to the survey instrument were younger and primarily female, which may not fully reflect the true actual community picture. This limitation of this study that the respondents to the survey instrument were younger and primarily female, which may not fully reflect the true actual community picture sets the stage for future research, as there was a distinct need for more understanding.

Schaller (2018), in his report - *The new automobility: Lyft, Uber and the future of American cities* recognizes that Uber and Lyft (also called Transportation Network Companies, or TNCs) have become familiar household names, ever present in the news, present in millions of smartphones, and present in credit, and debit card bills. However, within this familiarity with Uber and Lyft are many gaps. Schaller (2018), was unsatisfied and highlighted these gaps as twofold; first, are these new mobility options (including Uber and Lyft) friendly to city goals for mobility, safety, equity, and environmental sustainability? Second, what risks do they pose for clogging traffic or poaching riders from transit? While these questions are pressing, the information to answer them is limited and sparse. To answer these questions, Schaller (2018), uses a

methodology based on published reports and news articles, available national travel surveys, and TNC trip data.

The main highlights of the results are as follows: First, TNC trips are concentrated in a small number of large metro areas, and users are affluent, educated, and tend to be younger. Second, TNCs are beginning to be a complement to public transit. There has been much interest across the country in working relationships between TNCs and micro transit companies on the one hand and cities and transit agencies on the other hand. It will be favorable if these private companies can truly complement transit services, or replace any inefficiencies in bus routes, or reduce costs for services to seniors and people with disabilities. This collaboration with TNC's and public transit will be a win for social change in transportation within and outside significant urban areas. There is hardly any limitation in this study. Continued research and data collaboration will make all participants (TNCs, transit services, and cities) winners.

To summarize: the literature and sources of the second theme (ride-sharing operations in the ride-SE) reveal the complexity of the concept of trust. Over the past few years, ride-sharing has brought benefits to riders, drivers, and the ride-sharing platforms of Uber, Lyft, and others in the US and worldwide. Despite these benefits, there are existing theoretical and practical issues in various facets of the ride-sharing industry that urgently need research.

Xusen et al. (2020), purport that there is a trust issue in the ride-sharing industry. They argued that this trust issue contributes to a lack of drivers sharing their cars, riders not trusting drivers, and riders with drivers not trusting ride-sharing providers like Uber

and Lyft. Xusen et al. (2020) further contend the sequential process of ride-sharing show that the passenger and the driver who are users of the platform are in a position of equality and that this process of ride-sharing has benefited society enormously. Trust plays a critical role in reducing uncertainty and further influences the sharing intention of the passenger and the driver. Consequently, understanding trust-related factors in ride-sharing could attract more drivers to share their cars and thereby begin to solve other multiple trust-related issues that are passenger, driver, or provider related. Expanding upon this idea, Goodspeed et al. (2019) contended that the term ride-sourcing instead of ride-sharing is more appropriate and point out that these services were purchased and kept from riders. The idea is to use ride-sourcing to complement other forms of community transportation, thus making all forms relevant and complimentary. Schaller (2018) even took this idea of all forms of transportation complimenting each other one step further. Schaller argued that Uber and Lyft (also called Transportation Network Companies, or TNCs) have become familiar household names, ever present in the news and in millions of smartphones and credit and debit card bills. However, within this familiarity with Uber and Lyft are many gaps that can be filled by continued research and data collaboration to make all participants (TNCs, transit services, and cities) winners in this process.

Indeed, the dominance of ride-sharing by Uber and Lyft reveals the following: First, ride-sharing trips are concentrated in a small number of large metro areas, and users are affluent, educated, and tend to be younger. Second, ride-sharing is beginning to be a complement to public transit. There has been much interest across the country in working

relationships between ride-sharing companies and micro transit companies on the one hand and cities and transit agencies on the other.

It will be favorable if these private companies can truly complement transit services, or replace any inefficiencies in bus routes, reduce costs for services to seniors, and people with disabilities. This type of collaboration will be a win for social change in transportation within and outside of significant urban areas.

Mitigating the Problem of Trust in Ride-Sharing Companies

Ride-sharing is an innovative transportation strategy that enables users to gain short-term access to transportation modes on an ‘as-needed’ basis (Shaheen et al., 2015). Ride-sharing is initiated by a potential rider and the online platform (Uber, Lyft, and others) matches the rider with an available driver who is registered with that platform. If this online match of rider and driver is successful, the transaction continues offline with the driver picking up the rider and dropping him/her at their destination. At the destination, the rider pays the driver on the online platform. This sequence of events adds risk complications and a trust expectation for the rider towards the ride-sharing service provider. The passenger may then be exposed to traditional risks such as personal safety, property loss, financial loss, and potential privacy disclosure. A large number of security incidents, including fatal shootings, rape, kidnapping, assault as well as fatal crashes, occur every year on various ride-sharing platforms (e.g., Uber, Lyft). The severity of the consequences and outrage on social media considerably damages ride-share platforms’ trustworthiness with the potential passenger pool. It pushes passengers to alternative trip modes (e.g., taxis, trains, or buses) (Etzioni, 2019). Therefore, finding an effective way to

repair trust and retain customers after security incidents is essential for ride-sharing platforms. As a result, ride-sharing platforms cannot win the trust of passengers or attract them to use their services unless they offer sound institution-based mechanisms to mitigate these issues and protect passengers. This mitigation is critical to the sustenance and continuation of the ride-sharing platforms. However, there is scarce literature on mitigating these trust issues in ride-sharing (Chen et al., 2022).

Chen et al. (2022) noted that trust issues in ride-sharing are unique to ride-sharing and are different from regular e-commerce trust issues in two ways. First, the consequences of security incidents in ride-sharing can be very severe when they occur and can subsequently cause passengers' trust to be gravely violated. Secondly, because of the online and offline nature of ride-sharing between drivers and passengers who are strangers, the trust is easy to break but hard to mend. Chen et al. (2022) found two response strategies to repair trust: first, security policies (SPs) and second, apologies. SPs require ride-sharing platforms to invest multiple resources and workforce. A response strategy involves using smart technology to first prevent security incidents and then used subsequently to construct or repair users' trust. These technology approaches provide sound solutions for the security issues in ride-sharing. Using these technologies, the ride-sharing platforms of Uber and Lyft can design various SPs and implement them on the apps to be used after security incidents, including certification of drivers, itinerary sharing, one-button police calls, real-time location monitoring, recording during trips, and emergency contacts. Implementing SPs using advanced technologies to counter violations provides institutional assurance that risks are controlled (Xu et al., 2011). Kang et al.

(2020) purport that the effectiveness of the SPs is primarily a function of the delivery approach. The delivery is through a smartphone application (App) and can be by a push or a pull approach. The push approach allows the rider of safety suggestions and warnings immediately after they access the ride-share platform. The pull approach is for the rider to access the information as they use the ride-share platform. Since the consequences of security incidents in ride-sharing are very severe, passengers will not trust platforms if they are concerned that similar security incidents may reoccur. Institutional SPs are fundamental in lowering risk perception and building trust.

The apology strategy embodies three parts, empathy, acceptance of responsibility, and compensation (Grover et al., 2019). Through the field survey of actual ride-sharing passengers, Chen et al. (2022) found that SPs and apologies repair passengers' trust and lead to continuance usage and that repaired trust fully mediates the effect of SPs on continuance usage and partially mediates the effect of apologies on continuance usage. The apologies are more effective in retaining passengers than SPs, while the SPs are more effective in repairing trust than apologies. Among the three dimensions of apologies, accepting responsibility is the most significant factor, while compensation is useless in repairing trust after security incidents (Chen et al., 2022).

A summary of the literature mitigating the problem of trust in ride-sharing companies reveals two response strategies: Security policies (SPs) and apologies. Ride-sharing platforms and administrators should take action to prevent security incidents. Implementing SPs supported by advanced technology is an effective way to address this issue. Ride-sharing platforms should design effective SPs. Advanced technology (e.g.,

intelligence identification technology, location tracking, language processing technology, and voice recognition technology) can provide excellent support for the design of SPs. Administrators should set standards and guidelines for SPs to ensure passengers' safety. Once security incidents occur, ride-sharing platforms should take appropriate actions to repair trust because it determines users' continuance usage. After the occurrence of security incidents, platforms should quickly apologize sincerely to victims, their families, and the general users of the platforms because apologies influence passengers' repaired trust and continuance usage. The apologies should consist of at least three parts: expressing empathy, accepting responsibility, and offering compensation. Denial of the incidents, making excuses, shirking responsibility, and staying silent does not work in the age of social media since negative incidents are disseminated quickly (Li et al., 2014). Among the three parts of apologies, platforms should place the most sincerity on accepting the responsibility and place the least resources on compensation. SPs are also an effective way to repair violated trust. SPs should make passengers secure so that security incidents will not reoccur.

Over the past few years, ride-sharing has brought many benefits to riders, drivers, and the ride-sharing platforms of Uber, Lyft, and others worldwide. Despite these benefits (some of which are questionable and debatable), there still exist theoretical and practical issues in various facets of ride-sharing that urgently need research.

Ride-sharing platforms and administrations should take actions to not only prevent the occurrence of security incidents but to repair the trust of investors and customers. Expanding upon this idea, Kang et al. (2019), contended that the information-

delivery approaches determine the comfortableness and efforts of users in acquiring information. Kang et al. interpreted this to mean that since pull-based information delivery requires more effort and time, these types of customers have a trust that can be repaired. On the contrary, BaLaU and Utz (2017), indicated that pull-information delivery meant users spent more valuable time and energy leading, to less ride-sharing behavior. Implementing SPs supported by advanced technology is an effective way to address this issue. Ride-sharing platforms should design effective SPs. Advanced technology (e.g., intelligence identification technology, location tracking, language processing technology, and voice recognition technology) can provide excellent support for the design of SPs. Administrators should set standards and guidelines for SPs to ensure passengers' safety.

With mitigation through the implementation of SPs, the possibility of similar security incidents occurring is decreased. Passengers then feel ride-sharing are safe and will trust the platform again. Through apologies, platforms exhibit their sincerity, integrity, and capability. Passengers are then willing to forgive the platforms and trust them again (Chen et al., 2022).

Mitigating the Problem of Customer Trust During the COVID-19 Pandemic

The outbreak and spread of the novel coronavirus (COVID-19) pandemic in 2019 affected every sphere of human activity worldwide. A pandemic is an infectious disease occurring across several countries and continents, which can affect a high proportion of the population in a short period of time (French et al., 2018). Because of globalization and increasing mobility, pandemic outbreaks have aroused more significant public health

challenges in recent decades. Although not all pandemic disease is fatal to humans, several pandemics such as HIV/AIDS (more than 32 million deaths), H1N1 (more than 151,700 deaths), and COVID-19 (1,192,644 deaths as of November 2, April 2020) have become the leading health threat to modern society (UNAIDS 2019; World Health Organization 2020). This pandemic has turned out to be unprecedented health and economic crisis, which by November 2, 2020, in addition to the deaths caused, had 45.9 million confirmed cases in more than 210 countries (World Health Organization 2020). This widespread transmission, high contagion potential, and mortality rate evoked fear, panic, suspicion, and even stigma among the public worldwide.

In December 2019, Wuhan, China, was one of the first cities to go through significant lockdown activities. However, the spread did not stop there. It continued rapidly worldwide, causing most countries and cities within them to take comparable stringent measures (lockdowns, quarantines, face masks, social distancing, and travel bans) to control population mobility and limit the transmission of COVID-19. The lockdown strategy resulted in significant nonessential mobility restrictions causing a great impact on ride-sharing companies like Uber and Lyft. The ride-sharing companies had to make significant operational modifications and alterations for riders using the ride-sharing services. In addition to mitigating the problem of customer trust in their regular daily operations, the ride-sharing companies now had to mitigate that trust in a novel COVID-19 environment. The severity of this problem was compounded because there was hardly any precedence in modern times to follow and hardly any literature to review for a novel challenge of this magnitude. However, some studies are now emerging.

Mojumder et al. (2021) conducted a study to understand the risks, responses, and challenges associated with the ride-sharing industry – the ride-sharing companies, drivers, and riders. Data was collected from online sharing forums, including Uber and Lyft drivers, during COVID-19 (January 25 to May 10, 2020), resulting in a large-scale data collection. The resulting data were preprocessed using various natural language processing techniques. Natural language processing (NLP) refers is a subfield of linguistics, computer science, and artificial intelligence concerned with the interactions between computers and human language; computers are programmed to have the ability to understand text and spoken words in much the same way human beings can. (IBM Cloud Education, 2020 ibm.com).

After the preprocessing, Mojumder et al., (2021) classified the data into the following behavior categories of risk associated with ride-sharing during a significant disease outbreak: risk perception, risk-taking, and risk-averting. The results of the study indicated three levels of concern that were aligned with the above-mentioned risk categories:

- high levels of risk perception of the economic disruption,
- unprecedented challenges and risk-taking due to unemployment, and
- the risk-averting uncertainties in the required personal protective actions against spreading the disease as a result of sharing.

The contributions of this study by Mojumder et al., (2021) are to help identify unobserved factors unintentionally affecting the ride-sharing companies, drivers, and riders; to help identify more efficient strategies, best practices, and options to deal with

the new normal of the current and any future pandemics; to render new insights to disseminate information to drivers and passengers. This study by Mojumder et al., (2021) has a significant limitation because of the data source. The participants had no prior notification or authentication; some may not even be Uber or Lyft drivers or riders because of the forum. The results of the study should be viewed from that perspective. However, the NLP data processing technique does offer a way forward when face-to-face techniques to collect data may not be feasible, especially during a pandemic.

Amekudzi-Kennedy et al. (2020) wrote an article about the lessons COVID-19 teaches about civil infrastructure and sustainable development through the lens of transportation. The article reflected on five lessons that COVID-19 taught. Amekudzi-Kennedy et al., (2020) contend that social and economic development have been beset with social and physical problems of great magnitude throughout human history. However, these challenges have ignited the fighting spirit of humans to evolve more wisely, overcoming adversity through creativity and leading to advancements in science and technology, medicine, ethics and legal systems, and socio-political systems. The dynamics of risks and opportunities caused by COVID-19 present opportunities for deepening the understanding of resilient and sustainable development in the ride-sharing industry. Kennedy et. al., (2020) added that COVID-19 may be unique, but the resilience of human infrastructure systems, in this case, the ride-sharing providers of Uber and Lyft, should put on a fighting challenge and win Kennedy et al., (2020). the authors of this article, stated that COVID-19 teaches five lessons. The lessons are

- sustainable development planning and analytical frameworks must be comprehensive for long-term sustainability;
- multi-modal transportation is a superior vision for sustainable development than any one particular mode;
- tele-activities are part of an effective infrastructure sustainability strategy;
- economic capital is critically important to sustainable development even when it is not a critical existential threat;
- effective social capital is essential in global disaster resistance and recovery and can and must be leveraged between fast-moving and slow-moving disasters; resilient and sustainable infrastructure will continue to be critical to addressing evolving natural and artificial hazards in the 21st Century. (year)

This article by Kennedy et al., (2020) is very generalized and broad in scope and does not narrow down to any specific mode of transportation like ride-sharing. It is not specific on what passengers can do in a pandemic, nor what a specific company can do to help protect traveling customers. However, as a policy recommendation for the ride-sharing industry, Kennedy et al. (2020) in this article create awareness for innovation to effectively stay ahead of future pandemics and minimize short and long-term societal problems.

During regular times ride-sharing riders express their concerns, habits, and emotions through posting on social media platforms such as Twitter and Facebook. As a result, Twitter and Facebook are emerging data sources forming an effective and innovative digital platform to observe the rider's behavior in ride-sharing services. Syed

et al., (2021) did a study using Twitter reactions to understand the impact of COVID-19 on ride-sharing services in pre-pandemic and during pandemic conditions. Worldwide 72% of the population uses web services, while 89% of internet users are from the USA (Poushter, 2016). This emergence of social media platforms and increasing engagement of people with social media have created a unique opportunity for transportation service providers to collect real-time information from social media users at a comparatively low cost.

Syed et al., (2021) used a 'Sentiment-Emotion Detection' model based on ride-sharing consumers' basic feelings and was done in Florida in the Miami South Beach area. The data collection process was divided into two timelines to represent pre-COVID-19 and during COVID-19. The Pre-COVID-19 data was collected every day from February 1st to April 30, 2019, at two days intervals. Similarly, data was collected during the same time for the year 2020, which was labeled as Amid-COVID-19 tweets. During the COVID-19 pandemic, opinions and expressions of TNC users on Twitter were inclined toward negative sentiment and emotions. However, positive remarks of satisfaction regarding the ride-sharing service during the COVID-19 pandemic suggest that riders still possess a positive mindset towards ride-sharing services. Therefore, it is important to understand public sentiment and reactions to sustainability, constant revenue generation, and policy development in the ride-sharing service domain. However, the study had limitations which included not pre-selecting the participants for validity and using a more straightforward path to avoid expenses.

A summary of the literature mitigating the problem of trust in ride-sharing companies during COVID-19, is that regarding protecting ridership for drivers and passengers, the ownership is on the ride-sharing companies. These companies should use technology to help prevent disease spreading, maintain customer trust, and keep the riders. Syed et al., (2021) A way forward with technology for ride-sharing companies is to collect real-time information and study the behavioral pattern of customers from social media platforms, thus creating a unique opportunity to improve their existing business model. In addition, the federal, state, and city governments must use all at their disposal, including financial stimulus payments for employee lost wages and lost business revenues, to effectively manage pandemics or other disasters.

Summary and Conclusion

In just a few years, ride-sharing has brought benefits to riders, drivers, and sharing platforms of Uber, Lyft, and others in the US and worldwide. The growth of ride-sharing continues. However, theoretical and practical issues with ride-sharing platforms and processes need research. Trust heavily influences the usage of ride-sharing systems like Uber and Lyft. However, research in this area of trust is limited. Given this gap in the literature on trust in ride-sharing, the research focused on the lived experiences of riders in the ride-sharing phenomenon. This study researched the problem of rider trust in ride-sharing companies of Uber and Lyft in Dallas to add to the body of research on trust and ride-sharing.

The literature review revealed the intent of partnership interest across the country in working relationships between ride-sharing companies, micro-transit companies, and

light rail transit agencies within cities. It will be favorable if these private ride-sharing companies can truly complement transit services, replace any inefficiencies in bus routes, and reduce costs for services to seniors and people with disabilities. This type of collaboration would be a win for social change in transportation within and outside significant urban areas.

The literature review identified the risk, response, and challenges in the emergency of the novel coronavirus. Every aspect of economic activity and daily life, especially the transportation sector, was affected. Ride-sharing services being part of the transportation sector, may have to make severe shifts and addition to their operating policy. These shifts and addition to the policy include the requirement of face masks during a ride, no front-row seating in the ride-sharing vehicles to maintain a safe distance, distributing Personal Protective Equipment (PPE) to drivers, and requiring sanitizing of vehicles by drivers after every ride. In addition, significant lockdowns and social distancing requirements were instituted by the government and cities making it necessary to work from home. All these resulted in dwindling business for the ride-sharing industry.

However, the positive in all of this, according to Amekudzi-Kennedy et al. (2020), is that, in the past, challenges have forced humans to evolve more wisely, overcoming adversity through creativity and leading to advancements in science, technology, medicine, ethics, legal systems, and socio-political systems. The risks and opportunities caused by COVID-19 present opportunities for deepening the understanding of resilient, sustainable development, and infrastructure.

Chapter 3 lays out a design and methodology for this research project that seeks to add to the body of literature on trust and ride-sharing. the research design for this research and the rationale for this choice; the definition and explanation of the role of the researcher; the research methodology; the procedures for recruitment, participation, data collection, and the data analysis plan; the issues of trustworthiness. Chapter 3 continues further with a discussion relevant to the research questions, population sampling, and consent, along with details on the analysis, reliability, validity of the study, and a summary and transition to chapter 4.

Chapter 3: Research Method

The purpose of this transcendental phenomenological study was to research the lived experiences and perceptions of riders using ride-sharing in Dallas, Texas, on the concept of customer trust. In order to examine the impact of trust on riders' choice of ride-sharing, this research used a qualitative phenomenological research design. The following is a preview of the significant sections of this chapter: the research design for this research and the rationale for this choice; the definition and explanation of the role of the researcher; the research methodology; the procedures for recruitment, participation, and data collection, as well as the data analysis plan; issues of trustworthiness for the data analysis plan; and a summary and transition statement to Chapter 4.

Research Design and Rationale

The participants in the study sample totaled 15 riders (the point at which saturation was reached) of Uber and Lyft ride-sharing companies in Dallas, Texas. Uber and Lyft are the most common ride-sharing companies in Dallas, sharing most of the market share (Certify, 2019). The data collection process included in-depth interviews and observations to determine the experiences and perceptions contributing to the riders making a "use" or "not to use" decision for a ride. The information may help shed light on the level of trust the riders have in the ride-sharing companies and, in addition, inform and guide the ride-sharing companies as they mitigate trust issues to improve customer satisfaction and business. Above all, the study contributes to research into customer trust as this ride-sharing phenomenon continues to grow in the United States and worldwide.

The conceptual framework that I selected for this study was the TPB, which was proposed by Ajzen (1991) to improve on the predictive value of the TRA (Fishbein & Ajzen, 1967) by including the concept of PBC. TPB states that behavioral achievement depends on motivation and behavioral control and purports to predict an individual's intention to engage in a behavior at a specific time and place (Ajzen, 1991). The theory looks at intentions for a specific behavior and how attitudes and experiences are related to the eventual behavior (Ajzen, 2011). In effect, the TPB helps foster an understanding of human behavior and how that behavior can be planned, deliberate, and predictive. As stated in Chapter 1, the research question for this study was the following:

RQ: What are riders' lived experiences about ride-sharing on the concept of customer trust in Dallas, Texas?

For the purposes of this study, I investigated the motivations for participation in ride-sharing through the constructs of the TPB. Ride-sharing companies such as Uber and Lyft present an innovative approach that is changing the transportation industry. Kim et al. (2008) defined perceived risk as the consumer's thought and belief in the possibility of having an adverse effect in electronic trading. Perceived risk is regarded as a strong motivating factor in consumer behavior and is verified by the TRA (Fishbein & Ajzen, 1967). The higher the perceived risk, the higher the negative expectations, which produces an unfavorable attitude that ultimately negatively influences the intentions of the transactions (Pavlou Gefen, 2004). In online sharing platforms such as Uber and Lyft, the perceived risk becomes a critical issue because there are no face-to-face communications and customers cannot examine the service before their purchase and

usage. For example, while it is impossible for the ride-share driver to accept or not accept a ride, it may be impossible for the potential rider to evaluate available drivers or choose a specific driver in advance. The long-term success of these rider-sharing companies may hinge on the understanding and effective use of the TPB's predictive value to mitigate the rider's perceived risk and replace that risk with positive rider behavior and ultimately, rider trust. This positive rider behavior and trust could translate into increased and sustainable revenue for ride-sharing companies. The results of this study may offer new insights into riders' perspectives on ride-sharing and help ride-sharing providers improve their service, make more profits, and make more contributions to society.

I chose the qualitative methodology to explore the phenomenon of ride-sharing. There are multiple qualitative research designs. However, the aim was to address questions about the experiences of humans individually, in groups, or in institutions. A qualitative methodology comprises a semistructured interview setting as its main instrument of data acquisition to explore the research question at hand. A qualitative methodology means that a qualitative research method is used, which involves answers to *what, where, when, how, or why* questions on a phenomenon. Qualitative research is quite distinct from quantitative research, which relates to quantities of how many and how much. According to Yin (2016), it is appropriate to settle for a qualitative methodology when one or more of the following scenarios are met: A problem or issue needs exploring, and this exploration is needed because of a need to study the group or population instead of using predetermined information from literature or rely on data from other studies; there is a need to identify variables that cannot be easily measured;

there is need to hear silenced voices; and when a detailed understanding of an issue is needed, and this detail can only be established by talking directly with people and allowing them to share theirs willingly. This study fit in well with all the above to justify the choice of a qualitative methodology.

Boddy (2016) added that a qualitative study must have sufficient participants to allow for a meaningful study of qualitative approaches to data collection, analysis, interpretation, and report writing that differs from traditional quantitative methods. Purposeful sampling, collection of open-ended data, analysis of text or images (e.g., pictures), representation of information in figures and tables, and personal interpretation of the findings all inform qualitative methods. Thus, qualitative data are exposed to many different types of analytic thinking.

The phenomenological design is used to address the central question of how the customers of ride-sharing responded to the reality of the new phenomenon of ride-sharing. A phenomenological study is qualitative and describes the meaning for several individuals of their lived experiences of a concept or a phenomenon. Phenomena or human experience can be anger, affected by a disease, being left out, grief, or in this case, the phenomenon of ride-sharing. The inquirer then collects data from persons who have experienced the phenomenon. The description of the experience consists of “what” they experienced and “how” they experienced it (Moustakas, 1994). There are different types of phenomenology. The choice that was most suited to this study was Moustakas’ (1994) transcendental phenomenology, which focuses less on the interpretations of the researcher and more on the descriptions of the experiences of the participants. In

addition, Moustakas' phenomenological approach centered on Husserl's (2002) concept of "epoche" or "bracketing," which allows the researcher to voluntarily "stay away from or abstain." Moustakas noted that epoche is a conscious process of identification and subsequent quarantine of naturally occurring thought patterns.

The first rationale for selecting this transcendental phenomenological design was that this design describes lived experiences in a way no other approach does. Grounded theory design is a set of procedures used to systematically generate a theory that explains, at a broad conceptual level, a process about a substantive topic. A case study explores processes. An ethnography is a useful design for studying groups in education; their behaviors, beliefs, and language; and how they develop shared patterns of interacting over time. Ethnographic research is a qualitative design for describing, analyzing, and interpreting the patterns of a culture-sharing group. Narrative research is mainly used to study teachers, students, and educators in educational settings. None of these research designs are appropriate for this type of study (Yin, 2016). The second rationale for the choice of transcendental phenomenological design is that using the Moustakas (1994) approach for analyzing survey data helps provide a structured approach for researchers.

Role of the Researcher

The primary role of the researcher in a qualitative study is that of the principal instrument for data collection (Ravitch & Carl, 2015). The primary researcher has multiple roles: organizer and chooser of the interview participants according to selected criteria approved by the Institutional Review Board (IRB), data collector, interviewer, facilitator, and analyst. The primary researcher also has to be fully knowledgeable about

the research topic, care about the data and be a good custodian of the data to be collected, and create backups of the data collected (Yin, 2016).

In a transcendental phenomenological study, the researcher steps out of any personal worldview and go into the participant's worldview. Stepping out enables the researcher to make sense of the perception, realities, and experiences of the research group participants and then gain an understanding of specific phenomenological issues. As a researcher on the ride-sharing phenomenon in Dallas, Texas, I fulfilled that role by engaging in open-ended interviews with selected participants (a questionnaire is provided in the appendix). An open-ended interview is the most appropriate for data collection to get insight into lived experiences. According to Moustakas (1994), researchers should have a personal interest in what they seek to understand and a strong connection with the selected phenomenon. I acknowledge having an interest in ride-sharing and desire to see ride-sharing become a strong contributor and part of social change in transportation in the United States and worldwide. However, a researcher should intentionally manage and bracket their bias and interest to meet interviewees with the openness and freshness they deserve. There should not be any conflicts of interest or issues with power differentials on the researcher's side. In addition, the researcher should be deeply committed to fulfilling issues of trustworthiness and ethical integrity. Above all, I needed to be in solid compliance with the due diligence and the standards associated with the IRB approval from Walden University.

Methodology

This research was based on the lived experiences of riders about ride-sharing on the concept of customer trust in Dallas, Texas. A qualitative transcendental phenomenological design was utilized. This design involved interviewing a sample group of on-demand ride-share riders about their lived experiences and perceptions of the ride-sharing phenomenon. Polkinghorne (1989) suggested interviews of between five and 25 individuals who have all experienced the phenomenon firsthand. The sample for this study was planned to include between 12 and 15 individuals (or until saturation was reached). The target population was on-demand ride-sharing users of Uber and Lyft who had experienced the phenomenon of ride-sharing. The interviews were done via phone calls and backed by written and recorded conversations. The interviews were completed with the chosen sample as prescribed by Giorgi (2009) and through the lens of Moustakas' phenomenological approach centered on Husserl's concept of "epoche" or "bracketing," which allowed me to voluntarily "stay away from or abstain from." Moustakas noted that this difficult but necessary process was to let the researcher use new pair of eyes and suspend everything that interferes with fresh vision. I used the modified Stevik-Colaizzi method of analysis (Moustakas 1994) with the outlined steps of epoche or bracketing, phenomenological reduction, imaginative variation, and synthesis.

Participant Selection Logic

This design involved interviewing a sample group of on-demand ride-share riders about their lived experiences with ride-sharing. Polkinghorne (1989) suggested interviews of between five and 25 individuals who have all experienced the phenomenon

firsthand. The target population was on-demand ride-sharing users of Uber and Lyft who had experienced the phenomenon of ride-sharing in Dallas, Texas. The sample for this study was 15 participants.

Despite growing acceptance, saturation is covered with controversy among researchers. The definition, nature, purpose, and variations in the use of saturation are subjects of intense debate among scholars (Saunders et al., 2018). Glaser and Strauss (1967) described saturation as a parameter for judging when to cease sampling, the point where “no additional data are being found where the sociologist can develop properties of the category. Furthermore, he sees similar instances over and over again, thereby the researcher becomes empirically confident that data is saturated” (p. 61). Saunders et al. (2018) summarized that resolution for the definition of data saturation is explained as when evaluative and philosophical adequacy is attained in relation to the guiding conceptual framework. According to Saunders et al., the question to be answered establishes the relationship between saturation and sample size: “Do we have sufficient data to illustrate” the theoretical framework underpinning the study?

Qualitative researchers may be unlikely to agree on the exact sample size required or one style procedure to reach saturation because study designs are not universal. Failure to reach data saturation has an impact on the quality of the research conducted and has a negative impact on the validity on research. Findings show that not reaching saturation does not invalidate a researcher’s findings; rather, the findings should include the note that the phenomenon has not yet been fully explored. Various strategies can be employed to ensure the rigor of the work, which may include triangulation, member checking, audit

trials, reflexivity, peer debriefing, and reaching data saturation. Also, assuming a working sample size before data collection based on assessment facilitated by past related qualitative studies may be prudent.

In summary, researchers do agree on some general principles and concepts to reach saturation, which include the following: no new data, no new themes or subthemes, and the ability to replicate the study (Aguboshim, 2021). In addition, Sebele-Mpofu (2020) posited that saturation is an essential aspect of qualitative research where samples cannot be estimated with certainty. Even though there is controversy surrounding its definition, application, and underlying principles, saturation is viewed as vital for sampling and enhancing the quality of qualitative research. Sebele-Mpofu recommended that researchers must understand saturation so that they can tell a convincing story when they define the concept of saturation concerning their research; researchers must explain which form of saturation they targeted. Researchers must also strive not to let their pursuit of saturation overshadow other important measures of quality in qualitative research such as credibility, diversity, conformability, trustworthiness, and reliability.

Instrumentation

In this transcendental phenomenological study, I collected the data. Semistructured interviews and other forms of data collection such as recorded conversations through any form of media, formally written responses, accounts of experiences of drama, and observational field notes of the study participants are also part of the instrumentation. The target population was on-demand ride-sharing users of Uber and Lyft who had experienced the phenomenon of ride-sharing in Dallas, Texas. The

sample for this study was planned to include 15 participants, male and female, or as many participants as were required until saturation was reached. The minimum age for participation in the sample was 18 years, with ride experiences before and during the COVID-19 pandemic.

Phenomenology is about getting the depth, not the breadth, of the participants' perceptions (Dawidowicz, 2016). The goal in determining the sample size is to obtain enough data appropriate to the study from a reasonable number of informed individuals. By choosing informed individuals, the researcher understands that people do not always consciously understand why they perceive a phenomenon the way they do. On some occasions, what they perceive is not what is happening. Also, as people are given the chance to express their perceptions, unconscious perceptions may emerge, which is significant evidence that perceptions may be evolving. The researcher may have to use a validation strategy such as triangulation to address this issue.

The focus of the researcher in this study was specific: a purposeful sampling of the target population. The rationale for using a purposeful sampling strategy was centered on the assumption that each participant must have a unique and vital perspective on a studied phenomenon (Koch et al., 2014). The purposeful sampling strategy enabled the easy selection of key participants. I combined purposeful sampling techniques with snowball sampling. Snowball sampling is another form of nonprobability sampling in which the existing study subjects recruit future subjects among their acquaintances (Patton, 2015). I used snowball sampling until data saturation was reached.

Procedures for Recruitment, Participation, and Data Collection

The participants of this study were from the Dallas metroplex of North Texas, Texas, USA. The initial eligibility of the participants was based on the following requirements: they must be at least 18 years old; must have been using Uber, Lyft, or both forms of ride-sharing before and during the COVID-19 pandemic; must be willing to do a semi-structured interview to participate in the study; must sign the informed consent form; and must have some time for any follow-up clarification interview if that becomes necessary. The researcher made the final selection of the participants based on their consent to the above criteria and then signed a letter of informed consent. The researcher then completed the semi-structured interview and data collection.

In qualitative research, the interview is the core technique of data collection and the most recommended for a phenomenological study (Labat & Sharma, 2016; Patton, 2015). The researcher will cautiously plan the interview process carefully. In-depth and face-to-face, semi-structured interviews will serve as this study's the primary data collection instrument. Janesick (2015) suggested steps a researcher must take to prepare for an interview. These include: developing a relationship with participants; being respectful; building and maintaining interest via verbal and nonverbal communication, writing notes; recording the interview with consent, and exhibiting an inviting countenance (Janesick, 2015).

The researcher sought approval from the IRB at Walden University prior to the recruitment of participants before conducting the planned 30 to 60-minute interviews. The interview location could affect the quality of data, researcher credibility, and

information recall about the phenomenon (Ranney et al., 2015). The location for the interview was the individual's private and quiet location of choice. The outline format started with an introduction; then the goal of the study; the study's outline, discussion protocols, and a confidentiality statement (Ranney et al). Patton (2015) also recommended using an interview protocol for the data collection. Marshall and Rossman (2014) described three forms of interviews for collecting data. They are structured, semi-structured, and unstructured interviews. Structured interviews contain specific questions, limiting the responses from participants. Unstructured interviews engage the participants in informal discussions in collecting the data.

In contrast, semi-structured interviews comprise open-ended questions which give the researcher the latitude to explore in-depth information based on participants' lived experiences of the phenomenon. The selection of the semi-structured interview format ensures a strong association of the questions to the central research question. For this study, the researcher used open-ended 'how and what' interview questions to encourage participants to provide rich descriptive information and experiences. Each interview will start with general questions and will be followed up with a calm and flexible format.

The researcher proposed to use the following interview questions: What motivated you to be a rider with Lyft or Uber? What is your experience with ride-sharing with Lyft or Uber on customer service? How satisfied are you with riding with Lyft or Uber? Can you give me an example of your satisfaction or non-satisfaction with Lyft or Uber? How likely are you to continue riding with Lyft or Uber? Why? How safe do you feel riding with Lyft or Uber? What are the reasons you may not want to ride with Lyft or

Uber? Describe how your experiences in ride-sharing with Lyft and Uber have affected your transportation choices. What are your experiences with Lyft and Uber during the COVID-19 epidemic? Can you explain further? What information can you share about your trust in Lyft and Uber from your experiences?

In addition, the researcher used some exploring questions such as “Could you please explain it more?” or “Can you clarify what you mean with an example?” will be asked to achieve rich and clear data. To enhance the trustworthiness of the findings, the researcher will document the entire interview process. The researcher kept a reflective journal. A reflective journal in qualitative research is a written record by the individual researcher written throughout the research process. The journal includes the details of what the researcher did, thought, and felt while analyzing the data. According to Jasper (2005), writing and keeping a reflective journal allows researchers to own the centrality of their research process, which gives credibility and legitimacy to the author for their research and, above all, to achieve a rigorous research process.

The interviews were phone calls and backed by recorded conversations. All of these were done with the well-chosen sample prescribed by Giorgi (2009) and through the lens of Moustakas’ (1994) phenomenological approach centered on Husserl’s concept of ‘epoche’ or ‘bracketing,’ which allows the researcher to voluntarily ‘stay away from or abstain.’ Moustakas’ noted that this difficult but necessary process was to let the researcher “see with new eyes and suspend everything that interferes with fresh vision” (p121-122).

Data Analysis Plan

In this study, the researcher used open-ended questions as the key method to obtain lived experiences about ride-sharing on the concept of customer trust in Dallas, Texas. The modified Stevik-Colaizzi method of analysis outlined steps of epoche or bracketing, phenomenological reduction, imaginative variation, and synthesis was used. Stevik-Colaizzi's method of data analysis consists of seven steps: first, read, reread and transcribe all the participants' verbatim transcripts of the phenomenon to acquire a feeling for it. Second, extracting significant statements or phrases are extracted from participants' transcripts pertaining directly to the research phenomenon. Third, formulated meanings are constructed from the significant statements and arranged into themes. Fourth, incorporation of the results into a rich and exhaustive description of the lived experience. Fifth, validation of the exhaustive description from the participants involved in the research to identify the fundamental structure of the phenomenon. Sixth, themes and similar sub-themes were organized in larger clusters to make larger main themes. Seventh, reaching out to ensure the accuracy of any participants' data and, to obtain and incorporate new or pertinent data obtained from participants' validation. All these are then adapted to attain congruence with the lived experience of the participants studied.

The essence of all these above seven steps is to enable the use of coding in the data analysis. Developing a unique data coding system and organizing field notes play a critical role in the enhancement and credibility of data. The researcher used a coding system to analyze the data. The NVivo 12 software was used to analyze and code the data

for this study. With this process, the researcher simplified, enhanced, and increased the validity of the research.

To the purpose of this study was to bring in new knowledge from the lived experiences of the research participants. The initial step in the transcendental phenomenological process was to look at the phenomenon with a fresh pair of eyes and a receptive stance (Moustakas, 1994). Epoche is the preliminary phase of the phenomenological reduction process and it involves the researcher setting aside his personal perspectives of the said phenomenon and focusing only on the perspectives of the study participants. Epoche allows the researcher to access new knowledge that is free of any taint. The researcher identified and isolated the views and recorded views of the participants of the study.

The reduction stage is the next step in the phenomenological process. Typically, this is to the transcendental stage where everything is freshly perceived as if for the first time (Moustakas, 1994). In this stage, the researcher embraced the data with an open mind and a different perspective to enable the identification of important units of meaning and segmentation. There are four stages for this step: bracketing, horizontalizing, clustering the horizon into themes and organizing the horizons and ideas into a coherent textual description of the phenomenon (Moustakas, 1994).

The third step of the transcendental phenomenological process dealt with an imaginative variation. This aspect involves the researcher making a solid attempt to stem out a structural description of the participant's experiences. The researcher used his imagination instead of pure experimental information. According to Moustakas (1994),

this structural description of the experiences of the participants “structural description involves conscious acts of thinking and judging, imagining and recollecting, to arrive at core structural meanings” (p.79). The imagination process expects to remove needless descriptions by uncovering a probable meaning that reflects the themes pertinent to the participant's experiences.

The fourth step of the transcendental phenomenological process includes synthesizing of the textual description and structural descriptions Moustakas (1994). This synthesis is a grafting together of the common attributes of the textual and structural descriptions. The synthesis of the data is then contextualized by location, time peculiarities, and viewpoints of the researcher and participants (Moustakas, 1994). The textual description includes descriptors of ‘what’ whereas the structural description includes descriptors of ‘how’ to out a mutual textual composite description of participants’ experiences.

Issues of Trustworthiness

Credibility

Lincoln and Guba (1985) rely on four general criteria in their approach to trustworthiness. These four general criteria are credibility, transferability, dependability, and confirmability. Credibility refers to how congruent are the findings of a study with reality. In other words, credibility is how truthfully the study represents the participant’s views. There are appropriate strategies to establish credibility which include triangulation, prolonged contact, member checking, saturation, reflexivity, and peer review. The researcher used a member checking step and emailed individual interview

transcripts to each participant for verification. Noble et al., (2015) opined that thorough documentation of the research process, a reflection of data analysis, and transparency of the researcher could foster credibility in qualitative research. To help ensure study credibility and data validity, the researcher kept detailed researcher notes regarding each interview and the data analysis process.

Transferability

A second factor for trustworthiness offered by Lincoln and Guba (1985) is transferability. However, according to Stahl and King (2020), this proposition is somewhat tricky, given that qualitative research does not (cannot) aim for replicability by design. Transferability signifies how the study outcomes can be useful to different frameworks and future research (Marshall & Rossman, 2014). The researcher utilized purposeful sampling, which allowed for the recruitment of informants with critical knowledge about the phenomenon. The researcher also supported the transferability of the study by recording full descriptions of all research steps taken.

Dependability

A third perspective on trustworthiness offered by Lincoln and Guba (1985) is dependability or trust in trustworthiness. Research dependability addresses validity and focuses on the study's consistency, including components of time, researcher, data collection, and analysis techniques (Marshall & Rossman, 2014). Appropriate strategies to establish dependability include audit trails and triangulation. The researcher assured the study's dependability by checking on their experiences with ride-sharing companies,

cross-checking the interview transcriptions, and ensuring that their confirmed themes were reasonably established from numerous points of view.

Confirmability

The fourth perspective on trustworthiness is confirmability or getting as close to objective reality as qualitative research can get (Stahl & King, 2020). Marshall & Rossman (2014) add that transferability signifies the level at which the study outcomes can be useful to different frameworks, including future research. The researcher used reflexive journal practice, transcriptions, member checking of transcriptions, and detailed research process documentation for reviewers to follow if needed.

Ethical Procedures

Ethical procedures and considerations help qualitative researchers to plan their studies within moral bounds. Qualitative researchers have the moral obligation to uphold the highest ethical standard in planning and executing their studies, and are also required to limit the potential risk to the lowest minimum possible Wa-Mbaleka, (2019). The researcher acted ethically and sought Walden University's IRB clearance, guidelines, and moral expectations regarding this study.

The researcher ensured that all participants clearly understood the study's aims and interview procedures. Each participant received a consent form and was informed of their right to voice any concern or end the interview or participation in the study without consequence if they wished to. The researcher reviewed the consent form details with each participant before the interview. The researcher did not use the participant's given

name in the transcript or the study and did follow all of Walden University's security guidance for physical and electronic materials related to this study.

Summary

Chapter 3 described the research design and rationale, the role of the researcher, and the methodology for this study. The purpose of this qualitative phenomenological study was to explore the lived experiences of riders in ride-sharing on the concept of customer choice in Dallas, Texas. The exploratory purpose dictated using a qualitative method when collecting the lived-experiences reflection data from the riders. Exploring the participants' lived experience in ride-sharing narrowed the research design to transcendental phenomenology. The primary data collection instruments for the study were semi-structured interviews with open-ended questions and a reflective journal supplement. Purposeful sampling with inclusive criteria to identify potential participants and snowball sampling was used. This study consisted of 15 interviews when saturation was reached. Data were coded, and the NVivo software was utilized when analyzing the data and distilling themes. A Modified Stevick-Colaizzi-Keen phenomenology data analysis model was used to analyze the data. Member checking, reflective journal, and peer-reviewing were used to support validation. Participant confidentiality and security were followed to stay compliant with Walden University's IRB ethical procedures and expectations for trustworthiness.

Chapter 4: Results

The purpose of this qualitative phenomenological study was to explore riders' lived experiences with ride-sharing on the concept of customer trust in Dallas, Texas. The research question of this study was the following: What are the riders' lived experiences about ride-sharing on the concept of customer trust in the choice of rides in Dallas, Texas? This chapter includes the pilot study, research setting, participant demographics, data collection method, data analysis, evidence of trustworthiness (with reference to credibility, transferability, dependability, and confirmability), study results, and a summary of the chapter.

Pilot Study

Before the actual study, I used two volunteers who were not part of the 15 study participants and conducted a pilot study of the questionnaire to help determine the clarity and effectiveness of the following items: the questions, the response times, and the data collection procedures. The data and feedback received after the completion of the pilot study helped improve the effectiveness and how the interview questions were asked in the actual study, which did not involve any changes in the instrumentation and/or data analysis strategies of the main study.

Research Setting

The participants were selected from responses to an online recruitment flyer, hand-delivered flyers to known ride-sharing riders, and snowball sampling. The would-be participants were also required to have been an Uber and/or Lyft rider before the COVID-19 pandemic (before March 2020), during COVID (March 2020 to June 2022), and a

rider after June 2022. Finally, the chosen participants had to email me saying “I consent” to comply with the IRB requirement. The semistructured interviews identified each participant by a unique digital code as part of the confidentiality agreement.

All the participants then individually took part in a confidential phone interview by appointment with me. The participants responded to 10 open-ended questions indicating their lived experiences about trust in ride-sharing in Dallas, Texas. The participants were free to choose their own convenient and quiet place, free from interruption, during the interview. All the interviews started at their scheduled times, and none of the conversations were interrupted. The average time for the interviews was 52 minutes.

It was essential that these conditions were present and followed to get the participants’ full contribution and provide invaluable insight into the phenomenon being researched (Gelinas et al., 2017). In addition to the above conditions, as required in a transcendental phenomenological study, I stepped out of my worldview and went into the participants’ experiences of ride-sharing. Stepping out enabled me to make sense of the realities and experiences of the research group participants and then gain an understanding of specific phenomenological issues of the group on the concept of customer trust in ride-sharing in Dallas, Texas. There were no personal or organizational conditions that may adversely influence the interpretation of the study results. Saturation in data collection is reached when there is no new information or theme observed (Fusch and Ness, 2015). During the data collection for this study, saturation was reached on Participant 14. I then interviewed Participant 15 to confirm that saturation was reached.

Demographics

The targeted population of this study included participants who were 18 years or older. Table 1 shows the demographics of the 15 participants collected for this study.

Table 1

Demographics

Demographics	Number of participants
Gender	
Female	7
Male	8
Total	15
Age range	
21–30	3
31–40	6
41–50	0
50 & older	6
Total	15

There was a total of 15 participants for this study. Eight participants (53%) were male, and seven (47%) were female. Out of the 15 participants, three (20%) were in the 21–30 age range, six (40%) were in 31–40 range, none (0%) were in the 41–50 range, and six (40%) were 50 and older.

Data Collection

All the participants were also required to have been an Uber and/or Lyft rider before the COVID-19 pandemic (before March 2020) and during COVID (March 2020 to June 2022), as well as be a rider after June 2022. Finally, the chosen participants had to email me, saying, “I consent” to be in compliance with the IRB requirement. As part of the confidentiality agreement, the semistructured interviews identified each participant by a unique four- to eight-digit code.

The participants were free to choose a convenient and quiet place free from interruptions during the interview. All 15 participants agreed with me for their respective interview days and times. All participants were interviewed from their homes and individually took part in the confidential phone interview. The participants responded to 10 open-ended questions indicating their lived experiences about trust in ride-sharing in Dallas, Texas.

All the interviews started at their scheduled times, and none of the conversations were interrupted. Each interview started with an expression of gratitude from me to the participant for consenting to be part of the study and going over the questions, reviewing the purpose and the research question of the study. Finally, I mentioned that the participation was voluntary, anonymous, and confidential and that the participant could drop out at any time without penalty.

Before every interview, I started a communication engagement to create an understanding with the interviewee, build trust, and foster openness and sincerity to get their best lived experiences of the ride-sharing phenomenon. During the interview, I

listened and did not allow personal biases or assumptions to cloud my judgment (Yin, 2015). The interviews were done and recorded by careful note-taking of the answers and comments to all my questions. Each participant was asked subsequent inquisitive questions relating to the responses to each interview question. This inquisitiveness enabled the participants to give more open and more profound responses, which then aided in understanding each participant's environment (Patten, 2015). Also, during the interviews, it was quickly realized that some participants gave similar answers to some questions. The response was to ask similar questions in a more subtle way. I then reviewed the answers and comments with each participant to make any needed corrections. Each participant was then given a chance to attest to the correctness of their interview and to reconcile any discrepancies at the end of the interview session. The time recorded for each interview ranged from 47 to 58 minutes, and the average time for all the interviews was 52 minutes. The variation in the interview times was directly related to the enthusiasm and excitement level of all 15 participants to share their ride-sharing experiences. After the data collection, all items were safely locked and secured in compliance with IRB expectations.

There was a slight variation in the data collection for two of the participants but not any change in the data collection plan I presented in Chapter 3. Survey Participant 10 is the adult son of the actual rider, who was his mom. The son paid for the rider (his mom, aged 92), and he then used the tracking option on the ride-sharing app to track the ride of his mom from its origin to its destination of the ride while having intermittent

phone conversations when necessary. The son and his mom continue to use ride-sharing successfully in the same manner.

The second variant participant does not usually use ride-sharing as a rider but uses it to deliver her business items to her customers. This participant was, therefore, more of a user than a rider using ride-sharing, and still now continues to use ride-sharing successfully in the same way as was done before. This participant was very valuable for the various facets of information from the multitude of experiences she encountered and shared with me. A thank you card and gift as a token of gratitude were later sent to all the interview participants by mail.

Data Analysis

After the interviews were completed, an improved understanding of the study's phenomenon of ride-sharing was gained. Data from the 15 participants were transcribed using NVivo 12. I used NVivo 12 to move data inductively from coded units to categories and themes. In NVivo, codes are referred to as nodes. These codes are then used as a unit of analysis to code the participants' responses individually. The codes that emerged in the current study included "satisfaction," "motivated," "experience," "likely," "safety," and "trust."

The word frequency query process in NVivo was used to see how these codes were most frequently used by the participants in their interview responses with regard to the phenomenon of ride-sharing. The query was for 70 of the most frequently used words in the interview transcripts. The query result was a tabulation of the words in a format of word, length, count, weighted percentage, and similar words in categories, as shown in

Figure 1. In this word cloud, the size of the word image corresponds to the total word count of that individual word in all interview transcripts. For example, words such as “experiences,” “driver,” and “rating” that appeared most often in the interview transcripts are represented by corresponding large font images in the word cloud. In contrast, codes such as “safety,” “cost,” and “charged” appeared fewer times in the interview transcripts and are represented by correspondingly smaller font images in the word cloud.

Figure 1

Word Cloud of the Top 70 Words in Interview Transcripts



This word count and frequency process helped me move inductively from coded units such as “motivated” to categories of motivation and then to a theme of motivation to use ride-sharing. This word count and frequency process was the same for all of the five themes that emerged. The six themes were motivation to use ride-sharing, satisfaction with ride-sharing, customer service experience with ride-sharing, likelihood

of continuing to use ride-sharing, safety of ride-sharing, and trust in ride-sharing. These themes relate to the research question: What are the riders' lived experiences about ride-sharing on the concept of customer trust in Dallas, Texas?

Emergent Theme 1: Motivation to Use Ride-Sharing

This first theme that emerged was different life-changing circumstances that various participants faced. When asked about what the motivation for ride-sharing was, Participant 1 said, "I no longer had transportation. I gave up driving because of partial loss of my sight, and I could not always rely on anyone." Participant 3 said, "I do not drive and my husband became sick and unable to give me a ride so ride-sharing was just the perfect choice." Participant 6 added, "airport pickup from doorstep to doorstep." All three of these quotes signify a strong motivation to start using the service of ride-sharing, and all three participants continued to stay with it. All participants had their individual stories that they communicated that motivated them to start ride-sharing.

Emergent Theme 2: Customer Service Lived Experience with Ride-Sharing

When asked about the experience with ride-sharing on customer service, Participant 7 responded, "pretty satisfied. Nothing to make you not happy with them. On a 10-point scale, I give them 8.5 for satisfaction." Participant 8's response was "very satisfied. No bad experience. Clean vehicles. I rate ride-sharing an 8 on a 10-point scale." Participant 12 responded:

"I am satisfied. It meets my requirements and satisfaction travelling from points A to B. The drivers communicate with you and help with your luggage. On top of

that, the app lets you share the tracking of your ride with a loved one. On a 10-point scale, I will rate them 9.5.”

All participant quotes were communicated convincingly to me and signified a strong sense of getting good customer satisfaction. The lowest rating was from Participant 12, who gave a rating of 6 on a 10-point scale. His response was “driver went the wrong way and I got charged a cancellation fee. Too much time was wasted even though it was rectified by a refund. You do not get time lost back.” All participants conveyed their points of view for me to understand that these participants were getting good customer service.

Emergent Theme 3: Satisfaction with Ride-Sharing

When questioned about satisfaction or dissatisfaction, Participant 10 gave this response: “My mom was going to the hospital and the driver took a quick short cut on the route thereby costing less and arriving on time. This was a great example of humanity by the driver going that extra mile.” Participant 2 had this response: “I am so use to ride-sharing now that I have no better choice. It is muscle memory. Drivers’ conversations can be good too.” Participant 3 had dissatisfaction but was satisfied at the end, with this response: “I requested a ride after work to go home and two different drivers canceled on me. However, a third driver came and to my surprise he turned to be my coworker working part-time as a driver with ride-sharing.” All participants had examples of satisfaction and dissatisfaction, but they all conveyed to that their satisfaction outweighs their examples of dissatisfaction.

Emergent Theme 4: Likelihood of Continuing with Ride-Sharing

Participants were questioned about how likely they were to continue using ride-sharing, and all 15 participants expressed their likelihood of continuing with ride-sharing. Participant 15 said it this way: “Yes very likely. Now, I can’t live without ride-sharing. Ride-sharing is now a part of my daily life, and it would be a tougher transportation world without ride-sharing.” The likelihood to continue ride-sharing was strongly conveyed to me by all participants and was evident from their individual responses. In numerical terms, 100% of the participants will continue with ride-sharing. From their lived experiences with ride-sharing as a phenomenon, they may not be able to live without ride-sharing going forward.

Emergent Theme 5: Safety of Ride-Sharing

Participants rated the safety of ride-sharing on a 10-point scale. Fourteen participants rated safety of ride-sharing above 7. Participant 7 did not give a rating but had this comment: “Pretty safe because of my personal experiences. I know of horror stories. I do give the trust but I share my location with friends and family. I cannot rate this as I am always aware of my surroundings.” However, Participant 12, who gave a rating of 8, had this to say: “I feel very safe. They do background checks on all the drivers. I have the option to stop the ride and report for any reason if I so choose. I have to be vigilant about my surroundings.” In summary, the experiences conveyed to me were that ride-sharing is safe but one must always pay attention to the surroundings. There was an expressed feeling that ride-sharing was safe but that riders must pay attention during

the progress of their rides and that they always have the option to share their location if they so choose.

Emergent Theme 6: Trust in Ride-Sharing

The responses to the question about the participants' trust in ride-sharing were similar to their responses about safety in ride-sharing. The responses included a rating on a 10-point scale. All the ratings were 8 and above. Participant 1 said "for me, the cell phone app is the biggest thing. My worry is gone. I trust them. The drivers talk to you, and for me that is a good thing since I live alone. I rate them a 10 out of 10." Participant 9 had a similar response: "I have a good amount of trust in ride-sharing. There is visibility and transparency on the transactions and tracking of rides. Nothing is shady. On a 10-point scale, I will give them a 10." The conclusion that I derived from participants' responses was that ride-sharing gives riders tools to use to solidify the ride-sharing company's trustworthiness.

I noted two discrepant cases (participants 10 and 13) in the data collection. These two cases of discrepant participants did not cause any change in the data collection and analysis procedures. The qualities of the first discrepant Participant 13 is that he is the adult son of the actual rider and not the rider himself. The son has never used ride-sharing himself as a rider, but regularly pays for the rider (his mom, aged 92) to use the ride-sharing service. He uses the tracking option in the ride-sharing app to track the ride of his mom from its origin to its destination and while of them have intermittent phone conversations when necessary. I was able to have a conversation with mother and son and get them to share their lived experiences with ride-sharing. The son and his mom still

now continue to use ride-sharing successfully in the same manner. The second discrepant Participant 13, does not normally use ride-sharing as a rider but uses it for delivering her business items to customers. This is a new facet of options that the growing ride-sharing phenomenon has available. These two discrepant cases factored well into the analysis and provided a unique experience into an otherwise unknown possibility that ride-sharing brings to transportation.

Evidence of Trustworthiness

Credibility

All the participants were also required to have been an Uber and/or Lyft rider before the COVID-19 epidemic (before March, 2020); during Co-Vid (March, 2020 to June, 2022); and being a rider after June, 2022. Finally, the chosen participants had to send an email response to the researcher's flyer saying "I consent" to be in full compliance with the IRB requirement. As part of the confidentiality agreement the semi structured interviews identified each participant by a unique four to eight-digit code.

The participants were free to choose a convenient and quiet place free from interruptions during the duration of the interview. All 15 participants individually agreed with the researcher to their respective interview days and times. All participants did their interviews from their homes and individually took part in the confidential phone interview with the researcher responding to 10 open-ended questions requesting about their lived experiences about trust in ride-sharing in Dallas, Texas.

Transferability

A second factor for trustworthiness offered by Lincoln and Guba (1985) is transferability. However, according to Stahl & King (2020), this proposition is somewhat tricky, given that by design qualitative research does not and cannot aim for replicability. Transferability instead signifies the level at which the study outcomes can be useful to different frameworks, and including future research (Marshall & Rossman, 2014). Purposeful sampling was utilized to help with recruiting informants with critical knowledge about the phenomenon. Transferability of the study was supported with written records of full descriptions of all research steps taken.

Dependability

The participants were selected from responses to a recruitment flyer online, hand-delivered flyers to known ride-sharing riders, and snowball sampling. All the participants were also required to have been an Uber and/or Lyft rider before the COVID-19 epidemic (before March 2020), during COVID-19 (March 2020 to June 2022; and a rider after June 2022). Finally, the chosen participants had to email to the researcher saying “I consent” to comply with the IRB requirement. As part of the confidentiality agreement, the semi-structured interviews identified each participant by a unique four to eight-digit code.

The participants were free to choose a convenient and quiet place free from interruptions during the interview. All 15 participants agreed with the researcher on their respective interview days and times. All participants were interviewed from their homes and individually took part in the confidential phone interview. The participants responded

to 10 open-ended questions indicating their lived experiences about trust in ride-sharing in Dallas, Texas.

Confirmability

The fourth perspective on trustworthiness is confirmability or getting as close to objective reality as qualitative research can get (Stahl & King, 2020). Marshall & Rossman (2014) add that transferability signifies the level at which the study outcomes can be useful to different frameworks, including future research. The reflexive journal practice, transcriptions, member checking of transcriptions, and detailed research process documentation for reviewers to follow if the need arises were utilized.

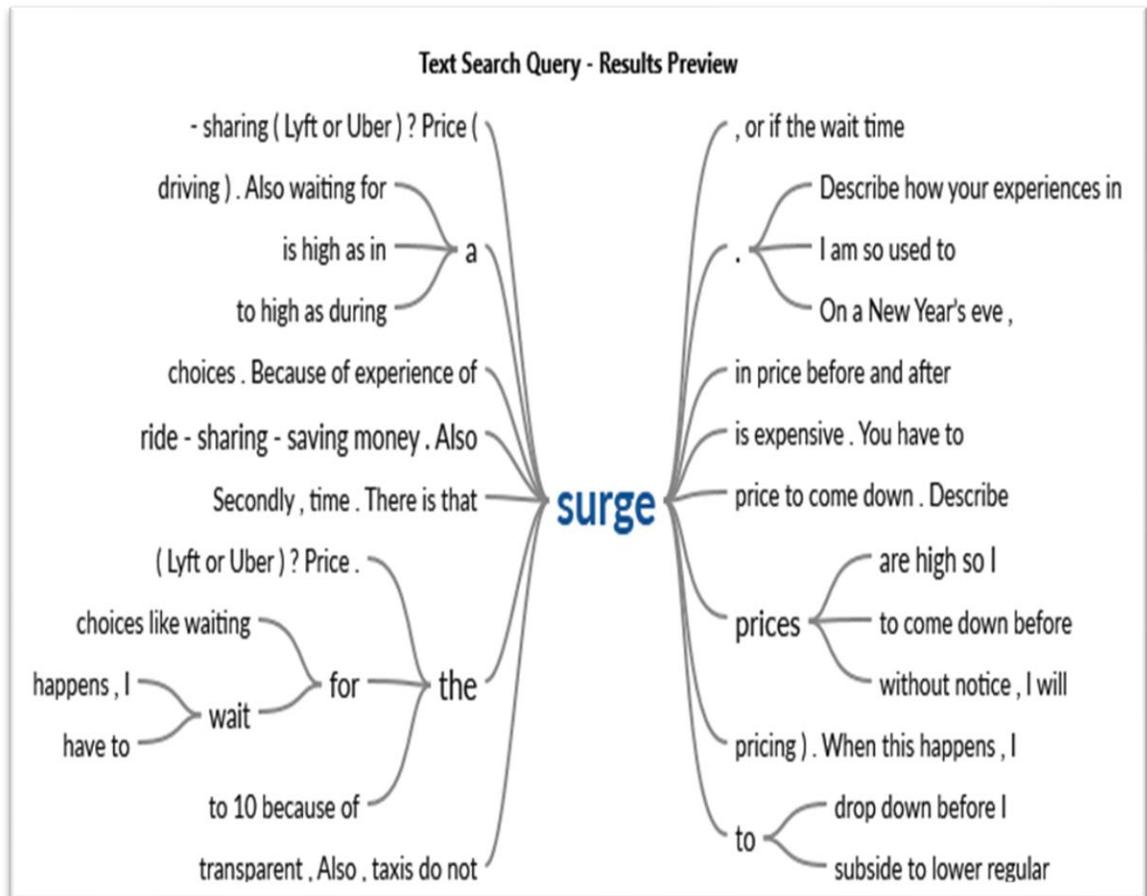
Study Results

This section details the study results organized by the research question. The research question for this study is: What are the riders' lived experiences about ride-sharing on the concept of customer trust in Dallas, Texas? This theme search process revealed the following six significant themes:

- motivation to use ride-sharing
- customer service experience with ride-sharing
- satisfaction with ride-sharing
- likelihood of continuing to use rider-sharing
- safety of ride-sharing
- trust in ride-sharing

These themes from the coding described earlier in this chapter revealed the lived experiences expressed by the interview participants to the researcher. The researcher

gained an understanding of what the participants experienced with ride-sharing and how these experiences were established. Green et al. 2016 recommend researchers should explore patterns and themes from the collected data in qualitative studies. In addition to these significant themes, there were sub-themes and patterns emerged from the data. This section of this chapter will be organized using these sub-themes and patterns. The sub-themes that emerged are 'surge,' 'epidemic,' and 'airport.' These three sub-themes appear in word clouds in Figures 1, 2, and 3 below respectively. These word themes are in small word fonts justifying their subtheme status when compared to the bigger word fonts of the 3 significant themes.

Figure 2*Word Tree of the Subtheme Surge*

Using the content text search process in NVivo, the researcher did a text search query which conducts a word search in all the 15 participants' transcripts. The words used in the query are 'surge,' 'airport,' and 'epidemic,' also called root words. The results of these searches revealed three respective word trees, as seen in (Figures 2, 3, and 4). A word tree is a visualization that displays text data in a hierarchical or pictorial way. The root word sits in the middle of the word tree visualization, and other words which precede

the conversation around the root word are on the left, while the other words that follow the conversation are on the right.

Figure 2 is a visualization of the participants' lived experiences about a surge. It shows a cluster pattern of the responses and conversations with the researcher about their experiences with a ride-sharing surge. A surge is shown in the ride-share app of the riders' phones as a graduating shade of a light shade of red to a bright shade of red background. The brighter the shade of the red background, the higher the cost of the ride. This variation in color and price is an alert to the rider when there are more riders (representing the demand for ride-share) than drivers (representing the supply of cars and drivers), thus pushing the price of the ride upwards steeply. This variation in color and price is an alert to the rider occurs, for example, during rush hour times, a sporting event, a New Year's Day, or another event when most people are having a party but want to avoid DWI (driving while intoxicated) and other significant community events. During these times, ride-sharing demand skyrockets, causing an upward push of in the price. When asked about what are the reasons you may not want to ride with ride-sharing, Participant 12 responded: "Firstly, price. If the price is too high, like when there is a surge, then the cost outweighs the benefits. Participant 9 responded: If surge prices are high, I will wait until they go down. If the trip is a necessity, yes, I will do the ride-share. Otherwise, no!"

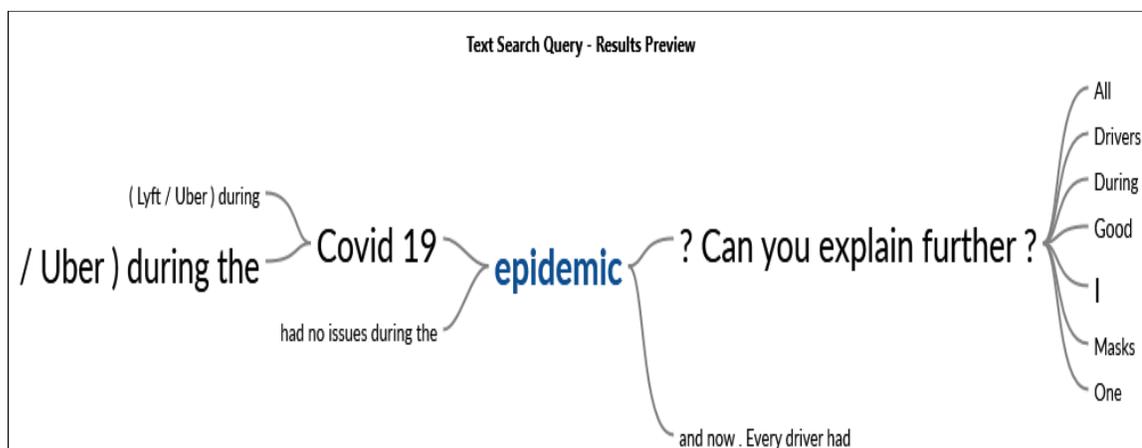
Participant 5's response was: There is that surge price before and after a game. One has to weigh the cost-benefit analysis of the ride to see if the extra cost is worth it." Participants 4, 6, 11, 13, and 15, responded similarly about their lived experience of a

surge. An aggregate of 8 out of 15 respondents (over 50 %) registering their lived experience with the surge and holding unfavorable views.

In Figure 3, the interview participants communicated with the me about their lived experiences using ride-sharing during the COVID-19 epidemic. The interview participants shared their lived experiences with the researcher. There is no cluster pattern in this word tree visualization. This visual conveys a straightforward lived experience with COVID-19 that all went well during the ride-sharing activity.

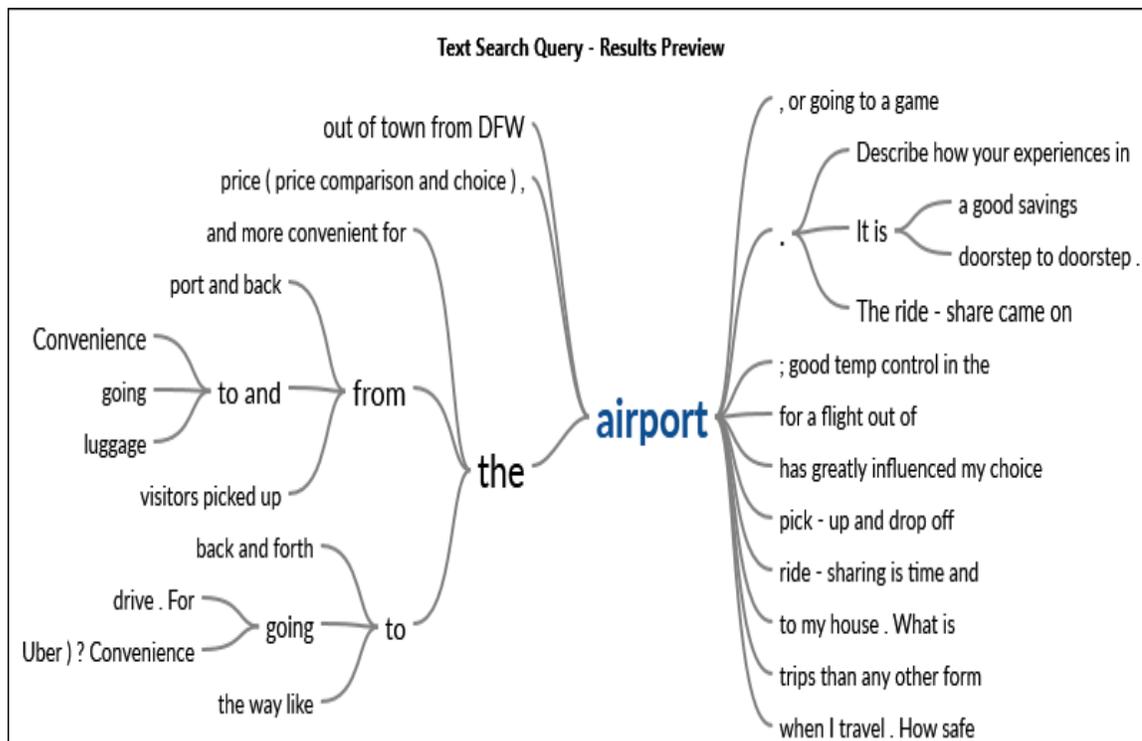
Figure 3

Word Tree of the COVID-19 Epidemic



The responses of the participants, Participants 1 through 15, were all positive across the board. The drivers and riders all did what was necessary to protect against COVID-19 and shared their lived experiences with the researcher.

In Figure 4, the interview participants communicated with the researcher about a specific example of a ride-share pick-up and drop-off at airports. The significance of this type of pick-up and drop-off resonates well with riders and was shared with the researcher.

Figure 4*Word Tree of Airport Pickup and Drop-Off*

When the interview participants were asked to describe how their experiences have affected their transportation choices, their answers hovered around the reality of ride-sharing being from doorstep to doorstep, especially with regard to air travel. Their satisfaction with this convenient way to leave home and come back home this way was not only noticeably appealing to them but that they wanted to stay that way. Participant 2 responded, “I still drive, but ride-sharing is my solid choice when I choose not to drive. Ride-sharing is my first option when going to the airport to travel out of town and back home from the airport.” Participant 12 responds by adding, “Convenience to and from the airport has greatly influenced my choice of ride-sharing. Participant 6 added “I need ride-sharing for going back and forth to the airport when I travel.

Participant 8 mentioned: “The ease of getting visitors from out of town picked up from the airport to my house and getting them picked up again at the end of their visit for the return trip to the airport.” In Figure 4, this visual pattern is evident in the word tree showing multiple textual connecting lines with the root word ‘airport.’

There were two discrepant cases in this research. These two had responses that were not representative of the whole group. The first is Participant 10. This survey participant is the adult son of the actual rider and not the rider himself. The son has never used ride-sharing himself but pays for the rider (his mother, aged 92). He uses the tracking option on the ride-sharing app to track the ride of his mother from its origin to its destination of the ride while having intermittent phone conversations when necessary. The son and his mother continue to use ride-sharing successfully in the same manner.

The second discrepant case is Participant 13, who does not usually use ride-sharing as a rider but uses it deliver her business items to her customers. She complains of not getting great business customer service and would love to see that arm of ride-sharing upgraded to give great customer service to businesses. Participant 13 shared her dissatisfaction: “For my packages I am dissatisfied. A driver took my package home instead of delivering it. 15 minutes before dropping the package, he turned around and went home and did not respond on the phone or the app. I called the police. He gave the package to the police and I had to pick up the package from the police station. On top of it all, Uber tried to charge for the trip and for extended time. Finally, after a prolong ‘fight’ I got a refund.” However, on the question of how likely it will be for her to continue her ride-sharing usage, participant 13 responded: “Very likely. The necessity

exists for that door-to-door service and there is no better option than ride-sharing.” These two discrepant cases are not necessarily nonconforming data but part of another facet of ride-sharing data that points to the growth and acceptance of this phenomenon.

Summary

The purpose of this qualitative phenomenological study was to explore riders’ lived experiences with ride-sharing on the concept of customer trust in Dallas, Texas. This chapter, the pilot study, research setting, participant demographics, data collection method, data analysis, evidence of trustworthiness in terms of credibility, transferability, dependability, and confirmability, and the study results were presented. The emergent themes referred to earlier revealed the lived experiences expressed by the interview participants. Knowledge and an understanding of what the participants experienced and how these experiences were established were gained. The themes emerged from the collected data that aligned with the research question: The research question was: What are the riders’ lived experiences about ride-sharing on the concept of customer service? Green et al.,2016 recommend that researchers explore patterns, categories, and themes from the collected data in qualitative studies. The collected data were analyzed using NVivo 12, a Qualitative Data Analysis (QDA) software well suited for identifying common patterns in qualitative data. The researcher chose this software because it allows the organization of non-numerical unstructured data that this study processed. The theme search activity involved querying the codes to determine conformity with this study’s research question. All these themes emerged from the data collected from the participants

and then transcribed, coded, and analyzed using the NVivo software. The word trees show the linkage between words and categories, helping tell the story of the patterns.

Chapter 5 presents an interpretation of the findings, limitations of the study, and recommendations for further research. Discussions regarding implications for positive social change at social, organizational, and individual levels will be included.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this transcendental phenomenological study was to research the lived experiences of riders in ride-sharing on the concept of customer trust in Dallas, Texas. Customer trust is negatively influenced by perceived risk, thus making trust crucial and worthy of evaluation and mitigation in any business environment (Liang et al., 2018). In order to examine the impact of trust on riders of ride-sharing, this research used a qualitative phenomenological research design. The study had a sample total of 15 riders of Uber and Lyft ride-sharing companies in Dallas, Texas. Uber and Lyft are the most common ride-sharing companies in Dallas, sharing a significant portion of the market share (Certify, 2019). The data collection process included in-depth interviews and observations in determining the experiences and perceptions that contributed to the riders making a “use” or “not-to-use” decision for a ride.

The nature of this study was a qualitative transcendental phenomenological design. The modified Stevic-Colaizzi method of analysis was used (Moustakas, 1994). This method employs a clear description of steps to be followed for analysis. The purpose of the phenomenological approach was to attain the essence of the phenomenon being studied by exploring the lived experiences of individuals. This qualitative nature aligned with the purpose of the study and provided the data for the research question by removing any preconceptions I had.

Interpretation of Findings

In this study, the word count and frequency process of NVivo 12 helped to move inductively from coded units to themes. A total of six emergent themes and three were subthemes observed in this study. The significant themes were as follows:

- motivation to use ride-sharing
- satisfaction with ride-sharing
- customer service experience with ride-sharing
- likelihood of continuing to use ride-sharing
- safety of ride-sharing
- trust in ride-sharing

The subthemes were as follows:

- surge
- airport
- epidemic

All these themes, including the subthemes are directly related to the research question:

What are the riders' lived experiences about ride-sharing on the concept of customer trust in Dallas, Texas?

The knowledge in the discipline, as found in the peer-reviewed literature described in Chapter 2, highlighted four main themes:

- customer trust and its implications for ride-sharing companies
- ride-sharing operations in the ride-sharing economy.
- mitigating the problem of customer trust in ride-sharing companies

- mitigating customer trust during the COVID-19 pandemic

Confirmation of Knowledge in the Discipline

The following are examples where the findings in the study confirm the knowledge in the discipline:

Theme 1 in the study (motivation to use ride-sharing) confirms Theme 2 (ride-sharing operations in the ride-sharing economy) knowledge in the discipline where Zuo et al. (2019) purported that ride-sharing has gradually been accepted as common transportation instead of traditional taxis worldwide. One hundred percent of the interview participants were motivated to do ride-sharing.

Theme 6 in the study (trust in ride-sharing) finds confirmation in Theme 4 (mitigating the problem of customer trust in ride-sharing companies) and Theme 1 (motivation to use ride-sharing) with regard to the knowledge in the discipline. The evidence in the responses to the question about the participants' trust in ride-sharing is similar to their responses about safety in ride-sharing. The responses included a rating on a 10-point scale. All the ratings were 8 and above. Participant 1 said:

“For me, the cell phone app is the biggest thing. My worry is gone. I trust them. The drivers talk to you, and for me that is a good thing since I live alone. I rate them a 10 out of 10.”

Participant 9 responded similarly: “I have a good amount of trust in ride-sharing. There is visibility and transparency on the transactions and tracking of rides. Nothing is shady. On a 10-point scale, I will give them a 10.” The summary that I derived from their responses is that ride-sharing providers such as Uber and Lyft give customers tools to use to

solidify the ride-sharing company's trustworthiness. These responses confirm Theme 4 (mitigating the problem of customer trust in ride-sharing companies) and Theme 1 (customer trust and its implications for ride-sharing companies) with regard to the knowledge in the discipline. In Chapter 2, I noted that Mittendorf (2017b) discovered through his research that trust in Uber influences the customers' intentions to request a ride. Liang et al. (2018) endorsed this view. Then they expanded further as they found out that perceived risk is a precursor of trust and that customer trust is essential for customers' intention to use a ride-sharing platform. Lee et al. (2017) argued that safety is a significant factor in using ride-sharing services. As a result of the strength of perceived risk and trust as a vital issue in ride-sharing, Cheng et al. (2019) were supportive of the direction of Mittendorf (2017b).

The first subtheme in this study is surge. As I mentioned earlier, a surge is a sudden spike in the cost of rides in ride-sharing. A surge is shown in the ride-share app of the riders' phones as a graduating shade of red background. The brighter the shade of the red background, the higher the cost of the ride. This variation in color and price is an alert to the rider when there are more riders (representing the demand for ride-share) than drivers (representing the supply of cars and drivers), thus pushing the price of the ride upwards steeply. This research finding shows the occurrence of surges and the unpleasant experiences of riders with these surges. This Subtheme surge confirms Theme 2 (ride-sharing operations in the ride-sharing economy) of the knowledge in the discipline where Xusen et al. (2020), in their research contribution to the field of ride-sharing and trust, purported that there is a trust issue in the ride-sharing industry. This trust issue

contributes to the lack of drivers sharing their cars. This research confirms that there may not be enough supply of drivers to match the demand of riders, typical of what happens in a “surge.” This situation confirms the need to have more drivers to match the needs of riders in an on-demand market like ride-sharing.

The second subtheme in this study is epidemic. This epidemic is COVID-19. This research findings show that this epidemic was managed well by the ride-sharing platforms and the riders. The responses of Participants P1 through P15 were all positive across the board. The drivers and riders all did what was requested by the ride-sharing platforms for the necessary protection against COVID-19, and the riders shared their lived experiences with me. These findings confirm Theme 4 (mitigating the problem of customer trust during COVID-19) in the discipline. Amekudzi-Kennedy et al. (2020) wrote an article about the lessons COVID-19 teaches about civil infrastructure and sustainable development through the lens of transportation. The article reflected on five lessons that COVID-19 is teaching us. Amekudzi-Kennedy et al. contended that social and economic development has been beset with social and physical problems of great magnitude. However, these challenges have ignited the fighting spirit of humans to evolve more wisely, overcoming adversity through creativity and leading to advancements in science and technology, medicine, ethics and legal systems, and socio-political systems. The dynamics of risks and opportunities caused by COVID-19 present opportunities for deepening understanding of resilient and sustainable development and infrastructure.

Extension of Knowledge in the Discipline

The sixth theme in this study is trust in ride-sharing. This theme has facets such as customer service satisfaction, safety, and the likelihood of riders continuing to use the service as they acknowledge room for improvement. This study can register an extension of knowledge in the discipline that there is now trust in ride-sharing. The responses to the question about the participants' trust in ride-sharing are similar to their responses about safety in ride-sharing. The responses included a rating on a 10-point scale. All the ratings were 8 and above. Participant 1 said: "For me, the cell phone app is the biggest thing. My worry is gone. I trust them. The drivers talk to you, and for me that is a good thing since I live alone. I rate them a 10 out of 10." Participant 9 had a similar response, saying, "I have a good amount of trust in ride-sharing. There is visibility and transparency on the transactions and tracking of rides. Nothing is shady. On a 10-point scale, I will give them a 10." The summary that I derived from their responses is that ride-sharing gives customers tools to solidify the ride-sharing company's trustworthiness.

The second subtheme in this study is epidemic. This epidemic was COVID-19. This research findings show that this epidemic was managed well by the ride-sharing platforms and the riders. The results of this research are represented and visualized in Figure 3. The responses of Participant 1 through 5 were all positive across the board. The drivers and riders all did what was necessary to protect against COVID-19 and shared their lived experiences with the researcher. This research date met and matched the opportunities that were expressed by Amekudzi-Kennedy et al. (2020).

Limitations of the Study

There were limitations to trustworthiness that arose from the execution of this study. These limitations to trustworthiness are things that a researcher cannot control and may affect the validity of the research (Simon, 2011). In effect, these limitations are the weak points of a research study. The first limitation of this study was that knowledge and perceived risk may not always be reliable predictors of behavior (Ajzen, 2011). Perceived risk refers to the customers' perception of the risks associated with purchasing a good or service. In this case, the service is a ride between two locations with Uber or Lyft. A potential rider may have a perceived risk but may need to use a ride no matter the circumstances, and a researcher will not be able to control that scenario. The perceived risk in this research may be reflected in the experiences shared by the riders in regard to their responses to the possibility of continuing to use ride-sharing as a method of transportation. All 15 participants expressed the likelihood of continuing with ride-sharing. Participant 15 said it this way: "Yes very likely. Now, I can't live without ride-sharing. Ride-sharing is now a part of my daily life, and for me it would be a tougher transportation world now without ride-sharing." The likelihood of continuing ride-sharing was strongly conveyed to me by all the participants, and this was emotionally evident from the tone of voice during their responses, which translates to mean that riders will make their choices in an on-demand or as-needed basis.

A second limitation is that this study was only in Dallas, Texas. As a result, the study only captures the lived experiences of riders using ride-sharing who live in a significant city. I do not know if or how different the study would look if the participants

lived in the suburbs or the rural parts of Texas. In addition, Dallas is a part of the DFW metroplex. I focused specifically on the experiences of ride-share riders in Dallas and not on experiences in other cities in the DFW metroplex. A third limitation of this study was that the demographics are not based on ethnicity and race. Information on race and ethnicity should be considered for a longitudinal study if the need arises.

Recommendations

The recommendations for further research are grounded in the strengths and limitations of this study and the literature review in Chapter 2. The strengths of this study lie in the fact that the riders have registered their lived experiences with this on-demand transportation phenomenon. The riders are motivated to use ride-sharing, they are satisfied with trust and customer service, ride-sharing is now commonplace, and there is no going back. As indicated by the results, one significant area of concern is the need for improvement or elimination of surge pricing. When asked about the reasons they might not want to ride with ride-sharing, Participant 12 responded, "Firstly, price. If the price is too high, like when there is a surge, then the cost outweighs the benefits." Participant 9 responded, "If surge prices are high, I will wait until they go down. If the trip is a necessity, yes, I will do the ride-share. Otherwise, no!" Participant 5's response was as follows: "There is that surge price before and after a game. One has to weigh the cost-benefit analysis of the ride to see if the extra cost is worth it." Participants 4, 6, 11, and 13 responded similarly about their surge lived experience, adding to of eight out of 15 (over 50%) registering their lived experience with the surge and holding unfavorable views. The recommendation is that ride-sharing providers should make drivers full-time

or part-time employees to cover the driver needs during these established surge periods. The employee drivers can be scheduled to cover these surge hours, which may lead to more rider participation and satisfaction.

A second recommendation is for the ride-share providers to consider having scheduled drivers cover the slower but necessary transportation periods of the day. Participant 14, in response to “What are the reasons you may not want to do ride-sharing,” said: “When I have a really early flight (5:30 or 6:00 a.m.), I ask a friend to take me as I always like to be early for my flights when I travel. I don’t want to deal with the unavailability of drivers when I have a pressing time-conscious need. Employee drivers can also cover these needed times, leading to more rider participation and satisfaction.” The third and final recommendation is that this study captured six individuals who were 50 + years old and that these data may speak to the constant evolution of humans and technology. Future studies could assess this correlation based on the data provided here.

Implications

The results from this study show that over 50% of the riders included words like “drinking,” “party,” and “avoiding DWI” (driving while intoxicated) among the motivating reasons for using ride-sharing. There is a potential impact for positive social change at the individual, family, organizational, and societal/policy levels. However, I am expressing these implications only as tangible improvements and not in any way suggesting methodological, theoretical, and/or empirical implications.

At the individual level, individuals should be thoughtful about their choices regarding drinking and driving and make the right choices, as these data demonstrate. Over 50% of the study participants included words like “drinking,” “party,” and “avoiding DWI” (driving while intoxicated) among the strong motivating reasons for using ride-sharing. The implication is that there are choices if people intend to go out for a drink. I am not assuming that a driver decides to get ride-share after drinking, but rather before going out to drink. If an individual chooses to drive their car to go for a drink, it becomes difficult for them not to want to drive back home. The implications of this study are that individuals should intend to use ride-share beforehand and not after drinking. The choice should be ride-share over driving. At the family level, the implication of the study is to encourage good choices and make the designated driver ride-share. These would all be tangible improvements and recommendations at the individual and family levels.

At the organizational and societal/policy levels, if data prove that DWI injuries and fatalities are on a downward trend, engagement with ride-sharing providers should be encouraged. Another implication of this study is to encourage using more new technology across age groups. The ages of participants in this study age ranged from 21 to 60-plus years, and every age group commended the ride-share app’s user-friendliness. User-friendly technology has led to individual, community, regional, and universal positive social change. This study captured six individuals who were 50 + years old, and these data may be speaking to the constant evolution of humans and technology, and future studies could assess this correlation based on the data provided here.

This research may contribute to positive social change by providing valuable real-time informative knowledge in an interactive setting empowering, drivers and riders to act on the information as needed. The social impact of ride-sharing facilitated by the internet, advancement in information technology and the use of smart phones puts decision making in more and more individual hands. This research may contribute to positive social change by encouraging more research into the social aspects of ride-sharing. More research into the social aspects of ride-sharing is going to make an important contribution to understanding the cost and benefit to society as a whole by helping to give an informed approach to solving pressing societal problems and then making necessary change and improvement.

Conclusions

The purpose of this transcendental phenomenological study was to research the lived experiences of riders in ride-sharing on the concept of customer trust in Dallas, Texas. The focus of the study was to explore the lived experiences in ride-sharing on the concept of customer trust in the ride-sharing companies in Dallas using a qualitative phenomenological research design. The management of ride-sharing companies may find the results useful in addressing riders' emergent trust concerns about ride-sharing and making management solutions for passengers' safety, comfort, transportation efficiency, and reliability concerns. This study may address a gap in the literature and contribute to the body of knowledge on how perceived risk influences riders' trust and the eventual choice of a ride in ride-sharing. Additionally, research such as this study may contribute

to the understanding of issues of trust and help ride-sharing companies mitigate these trust issues to improve customer satisfaction and increase revenue.

Above all, these research findings show case the use of new technology across age groups. The demographics of this study ranged from 21 to 60 plus years of age, and every age group commended the rise-share app's user-friendliness. User-friendly technology especially for users of age 50 and above may lead to individual, community, regional, and universal positive social change in the ride-sharing sector of the transportation industry.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control* (pp. 11–39). Springer.
https://doi.org/10.1007/978-3-642-69746-3_2
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Amekudzi-Kennedy, A., Labi, S., Woodall, B., Chester, M., & Singh, P. (2020). *Reflections on pandemics, civil infrastructure and sustainable development: Five lessons from COVID-19 through the lens of transportation*. Preprints.org.
<https://doi.org/10.20944/preprints202004.0047.v1>
- Calo, R., & Rosenblat, A. (2017). The taking economy: Uber, information, and power. *Columbia Law Review*, 117(6). <https://columbialawreview.org/content/the-taking-economy-uber-information-and-power/>
- Certify. (2015). *Sharing the road: Business travelers increasingly choose Uber* (A University of Washington School of Law Ground Transportation Sharing Economy Report).
- Chen, A., Wan, J., & Lu, Y. (2022). Repairing the trust in ride-sharing after security incidents. *Industrial Management & Data Systems*, 122(1).
<https://doi.org/10.1108/IMDS-10-2020-0623>
- Cheng, X., Bao, Y., Zarifis, A., & Mou, J. (2019, August 15–17). *A model of customer trust in sharing economy-driven ride-sharing platforms involving psychological*

contract violation and recovery. Paper presented at the 25th Americas Conference on Information Systems, Cancun, Mexico.

Peng, Chen. (2022). Chen et al., 2022 JSG.

Chowdhary, K. R. (2020). Natural language processing. In *Fundamentals of artificial intelligence* (pp. 603–649). Springer. https://doi.org/10.1007/978-81-322-3972-7_19

Coffman, R. B., & Shreiber, C. (1977). Title of article. *Journal of Transport Economics and Policy*, 11(3), 288–304.

Cook, K. S. (2015). Institutions, Trust & Social Order. In E. J. Lawler, S. R. Thye, & J. Yoon (Eds.), *Order on the edge of chaos: Social psychology and the problem of social order* (pp. 125–144). Cambridge University Press.
<https://doi.org/10.1017/CBO9781139924627.008>

Curtis, O. P. (2015). Common sense, fair play, and transportation network companies. *Institute of Transportation Journal*, 85(12), 44–47.
<https://doi.org/10.1017/CBO9781139924627>

Dheepan, R. (2015). *Trust in the sharing economy*. <https://www.clarabridge.com/trust-in-the-sharing-economy/>

Duckworth, I. (2019, April 26). *What is an Airbnb and how does it work*. Bnb Duck.
<https://bnbduck.com/what-is-an-airbnb-and-how-does-it-work/>

Farren, M. D., Coopman, C., & Mitchell, M. D. (2016, July 19). *Rethinking taxi regulations: The case for fundamental reform*. Mercatus Center at George Mason

University. <https://www.mercatus.org/research/research-papers/rethinking-taxi-regulations-case-fundamental-reform>

Federal Trade Commission. (2017, January 19). *Uber agrees to pay \$20 million to settle FTC charges that it recruited prospective drivers with exaggerated earnings claims* [Press release]. <https://www.ftc.gov/news-events/news/press-releases/2017/01/uber-agrees-pay-20-million-settle-ftc-charges-it-recruited-prospective-drivers-exaggerated-earnings>

Frier, A. (2015, September 14). *Uber usage statistics and revenue*. Business of Apps.

Green, C. H. (2015). *Trust and the sharing economy: A new business model* [White paper]. <https://trustedadvisor.com/public/White-Paper-Trust-and-the-Sharing-Economy.pdf>

Grover, P., Kar, K. K., & Dwivedi, Y. K., (2022). Understanding artificial intelligence adoption in operations management: Insights from the review of academic literature and social media discussions. *Annals of Operations Research*, 308 , 177–213. <https://doi.org/10.1007/s10479-020-03683-9>

Gruel, W., & Piller, F. (2016). A new vision for personal transportation. MIT SLOAN Management Review, 57(2), 20–23.

Gupta, S., Buriro, A., & Crispo, B. (2019). DriverAuth: A risk-based multi-modal biometric-based driver authentication scheme for ride-sharing platforms. *Computers & Security*, 83, 122–139. <https://doi.org/10.1016/j.cose.2019.01.007>

IBM Cloud Education. (2020). [ibm.com](https://www.ibm.com/cloud/education).

Kamal, & Chen, J. Q., "Trust in Sharing Economy" (2016). PACIS 2016 Proceedings.

Paper 109. <https://aisel.aisnet.org/pacis2016/109>

Kang, L., Ma, S., Chen, M., Yang, J., Wang, Y., Li, R., Yao, L., Bai, H., Cai, Z., Xiang Yang, B., Hu, S., Zhang, K., Wang, G., Ma, C., & Liu, Z. (2020). Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain, Behavior, and Immunity*, 87, 11-17.

<https://doi.org/10.1016/j.bbi.2020.03.028>

Keller, M., & Kim, E. T. (2015, May 8). The gap at the app: Uber's practices fall short of written policy. *The Scrutineer*. Al-Jazeera America.

<http://america.aljazeera.com/blogs/scrutineer/2015/5/8/ubers-practices-fall-short-of-written-policy.html>

Kiplinger. (2016). The website "Who's Driving You?"

Morens, D. M., Folkers, G. K., & Fauci, A. S. (2009). What is a pandemic? *The Journal of infectious diseases*, 200(7), 1018-1021. <https://doi.org/10.2139/ssrn.2686227>

Sebele-Mpofu, F. Y. (2020). Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review. *Cogent Social Sciences*, 6(1), Article 1838706. <https://doi.org/10.1080/23311886.2020.1838706>

SSRN: <https://ssrn.com/abstract=2686227> or <http://dx.doi.org/10.2139/ssrn.2686227> incidents at <https://www.whosdrivingyou.org/rideshare-incidents>

Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26-28.

- Koopman, C., Mitchell, M. & Thierer, A., (2015) The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change. *The 8 Journal of Business, Entrepreneurship and the Law* 2014 – 2015, 529-540.
- Lampe, C. (2012). The role of reputation systems in managing online communities. H. Masum, M. Tovey, eds, 77-88.
- Liang, X.B., Li, J.J and Xu, Z. (2018). The impact of perceived risk on customers' intention to use – An empirical analysis of DiDi car-sharing services. In *Proceedings of the 18th International Conference on Electronic Business* (pp. 644-653). ICEB, Guilin, China, December 2-6. T
- Maidenberg, M. (2016, Jan 11). Two firms to offer ride-hailing apps for taxi industry. *Crain's Chicago Business*, 39, 16. Retrieved from Majerol, V. (2015, Apr 20). The sharing economy.
- Marangunic, N., & Granic, A. (2015). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81-95.
- Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2, 173–191.
- Mazzella, F., Sundararajan, A., D'espous, V. B., & Möhlmann, M. (2016). How Digital Trust Powers the Sharing Economy. *IESE Insight*, (30), 24–31.
<https://doi.org/10.15581/002.ART-2887>
- Mittendorf, C. (2017a). Create an Uber account? An investigation of trust and perceived risk in the sharing economy. *Journal of Customer Behavior*, 16(3), 281-307.

- Mittendorf, C. (2017b). The implications of trust in the sharing economy – an empirical analysis of Uber. <https://hdl.handle.net/10125/41866>
- Möhlmann, M., and A. Geissinger, “Trust in the Sharing Economy: Platform-Mediated Peer Trust,” in N. Davidson, M. Finck, and J. Infranca (eds), Cambridge Handbook of the Law of the Sharing Economy, Cambridge University Press, Cambridge, 2018.
- Mojumder, M., N., H., Ahmed, M., A., Sadri, A., M., (2021). Identifying Ridesharing Risk, Response, and Challenges in the Emergence of Novel Coronavirus Using Front. Built Environ., 15 February 2021 Sec. Transportation and Transit Systems Volume 7- 2021 <https://doi.org/10.3389/fbuil.2021.619283>
- Interactions in Uber Drivers Forum. Frontiers in Built Environment. 7:619283.
- Moustakas, C. (1994) Phenomenological research methods. Thousand Oaks, CA Sage.
- New York Times Upfront, 147, 8-11.
- Naderifar, M., Goli, H., Ghaljaie, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. Strides in Development of Medical Education, 14(3), <https://doi.org/10.5812/sdme.67670>
- Noble H, Smith J. Issues of validity and reliability in qualitative research. Evid Based Nurs. 2015 Apr;18(2):34-5. <https://doi.org/10.1136/eb-2015-102054>
- Palvia, P. (2009) “The role of trust in e-commerce relational exchange: A unified model.” Information & Management. 46, 213-220
- Pigou, A. C. (1920) The economics of welfare.
https://oll.libertyfund.org/EBooks/Pigou_0316.pdf

SSRN: <https://ssrn.com/abstract=2686227> or <http://dx.doi.org/10.2139/ssrn.2686227>

Pages Catherine, A. L. (2007). Applications of car sharing in small cities in the United States: A framework for implementation and analysis.

Poushter, J. (2016, February 22). Smartphone ownership and internet usage continues to climb in emerging economies. Pew Research Center's Global Attitudes Project. <https://www.pewresearch.org/global/2016/02/22/smartphone-ownership-andInternet-usage-continues-to-climb-in-emerging-economies/>

PricewaterhouseCoopers, "The Sharing Economy" 16.

Press, A. "The Sharing Economy." Saturday Evening Post 287.5 (2015):

34- Academic Search Complete. Web. 27 Nov. 2015.

Qi, B., Costin, A., & Jia, M. (2020). A framework with efficient extraction and analysis

Rayle, L., Dai, D., Chan, N., Cervero, R., Shaheen, S.: Just a better taxi? A survey-based comparison of taxis, transit, and ridesourcing services in San Francisco. *Transp. Policy* 45, 168–178 (2016)

Rosenblat, A., and Stark, L., Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers (July 30, 2016). *International Journal of Communication*, 10, 27, 2015. Available at from <https://par.nsf.gov/biblio/10215933>
<https://doi.org/10.3389/fbuil.2021.619283>

Safary Wa-Mbaleka *International Forum* Vol. 22, No. 2 December 2019 pp. 116-

132 FEATURE Ethics in Qualitative Research: A Practical Guide

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its

conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893–1907.

<https://doi.org/10.1007/s11135-017-0574-8>

Schaller consulting (2018) *The new automobility: Lyft, Uber and the future of American cities*. [automobility.pdf](https://schallerconsult.com/automobility.pdf) (schallerconsult.com)

Shaheen, A., Nassar, O., Amre, H., Uda, & Hamdan- Mansour, A., (2015). Factors Affecting Health-Promoting Behaviors of University Students in Jordan. *Health*. 7. 1-8. [10.4236/health.2015.71001](https://doi.org/10.4236/health.2015.71001).

Smith, J. W. (2016). The uber-all economy of the future. *The Independent Review*, 20(3), 383-390.

SSRN: <https://ssrn.com/abstract=2686227> or <http://dx.doi.org/10.2139/ssrn.2686227155-165>, ISSN 2226-5856.

Syed Ahnaf Morshed, Sifat Shahriar Khan, Raihanul Bari Tanvir, Shafkath Nur, Impact of COVID-19 pandemic on ride-hailing services based on large-scale Twitter data analysis, *Journal of Urban Management*, Volume 10, Issue 2, 2021, Pages

Catherine, A. L. (2007). Applications of car sharing in small cities in the United States: A framework for implementation and analysis.

Teo, Thompson S. H. and Liu, J. (2007). Consumer trust in e-commerce in the United States, Singapore and China. *Omega*, 35, 22-38.

Uber Technologies. (2023). *About us*.

https://www.uber.com/us/en/about/?uclick_id=fafe969f-7f9f-432c-90d8-abfb836a6c2c

- Wasserman, T. (2013). Report: 70% of Consumers Trust Brand Recommendations from Friends. Mashable. Online <https://mashable.com/2013/03/21/70-percent-brand-recommendations-friends/#ixIK7gjV4aqR>
- Williams, L. (2016, Apr 27). The Uber effect. Orange County Register.
- World Health Organization. 2020. "Coronavirus (COVID-19)." <https://covid19.who.int>
- Xu, Y., et alia (2011) Mass spectrometry- and lysine amidination-based protocol for thermodynamic analysis of protein folding and ligand binding interactions. *Anal Chem* 83(9):3555-62
- Xusen, C., Ying B., & Zarifisc, A. (2020) Learning to Generalize for Sequential Decision Making. Investigating the impact of IT-mediated information interruption on emotional exhaustion in the workplace. *Information Processing & Management*, Volume 57, Issue 6, 2020. ISSN 0306-4573, <https://doi.org/10.1016/j.ipm.2020.102281>
- Y. Zhou, Y. Huang, J. McGlynn, and A. Han. Who will you share a ride with: Factors that influence trust of potential rideshare partners - arXiv preprint [arXiv:1707.04284](https://arxiv.org/abs/1707.04284), 2017- arxiv.org.
- Yadav, A., Chakraverty, S., & Sibal, R. (2019). A framework for classifying trust for online systems. *World Wide Web*, 22(4), 1499–1521. <https://doi.org/10.1007/s11280-018-0626-6>
- Yin, R. (2016) *Qualitative Research from Start to Finish*. Guilford Publications, New York.
- Zheng, D., Luo, Q., and Ritchie, B., W. The Role of Trust in Mitigating Perceived Threat,

Fear, and Travel Avoidance after a Pandemic Outbreak: A Multigroup Analysis

Journal of Travel Research 2022, Vol. 61(3) 581 –596 © The Author(s) 2021

Article reuse guidelines: sagepub.com/journals-permissions.

<https://doi.org/10.1177/0047287521995562>