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Leadership-Related Predictors of Intermediate and Final Employment Outcomes among Quick Commerce Employees in Germany

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Degree Thesis

International Business Management

2023

DEGREE THESIS	
Arcada University of Applied Sciences	
Degree Programme:	International Business Management
Identification Number:	9224
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Title:	Leadership-Related Predictors of Intermediate and Final Employment Outcomes among Quick Commerce Employees in Germany
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Abstract:

"Employees do not leave jobs, they leave bad managers", asserts a popular adage. Several studies have established a relationship between negative leadership experiences and negative employment outcomes, such as worse performance, higher absenteeism, and turnover intentions. Loosely based on Bakker and Demerouti's Job Demands-Resources model and Mayer and Allen's Framework of Organizational Commitment, this thesis aims to identify leadership-related predictors of outcomes of work engagement and organizational commitment. Further, it researches how the level of work engagement and organizational commitment affects the level of absenteeism and prevalence of turnover intentions among operations-level quick commerce employees in Germany. The data presented here was collected through a survey in January and February 2023, and analyzed by conducting regression analyses. A significant relationship between the leaders' level of support and the employees' level of work engagement and organizational commitment was found. Work engagement specifically had a significant impact on absenteeism and the prevalence of turnover intentions within the sample. The main takeaways from this research are that absenteeism and turnover intentions within the industry are alarmingly high, and to combat these problems, quick commerce companies should develop employee support and recognition. This would help companies avoid unnecessary costs related to recruitment, training, and bureaucracy, as well as to prevent loss of knowledge and social capital.

Contents

Tables

Figures

1 Introduction

In the past ten to fifteen years, a wave of digitalization has swept over numerous traditional industries, showing no sign of deceleration. The rise of smartphones, tablets, and wearable technology seemingly put everything at your fingertips through an app. Shopping, mobility and transport, finance and insurance services, communication, entertainment, media, learning, and boundless information can be found through digital services. While certain sectoral, generational, and regional differences persist, the trend is clear: almost all industries must digitize in order to ensure their future position in the current market.

Many of us have booked our trips and ordered our clothes online for a long time already, while we have stubbornly done other things the "traditional" way – offline. Probably the best example of this is grocery shopping. Although certain supermarket chains have offered online shopping options for years, it was not until the global COVID-19 pandemic that many of these services actually became commonplace. When governments and public health organizations around the world encouraged citizens to avoid unnecessary social contact, many traditional grocery store chains quickly improved their online options. Additionally, plenty of new companies entered the market, causing an online grocery store boom in many countries. Most of these newcomers used the same logic: they offered the most basic foods, beverages, and necessities through a mobile app and delivered them directly to the customer's door the same day or even much faster (Simmons et al., 2022). Many companies were much-hyped by consumers and investors alike, but as the pandemic began to lose its grip, the boom began to fade. Competition for customers started to overheat, leading most quick commerce companies to fail to become profitable.

Like many markets, Germany experienced an online grocery shopping boom during the pandemic. One of the earliest market entrants was also one of the most talked about: Gorillas; a Berlin-based start-up founded in May 2020. Hyped in the German media, it grew into a so-called "unicorn" due to its rapid expansion in major German cities and abroad (Kapalschinski & Kolf, 2021). Gorillas was quickly followed by numerous other German start-ups, including Flink, Wuplo, and GetFaster. Companies which had been active abroad also began entering Germany, such as Getir from Turkey. Simultaneously, two big players from the food delivery industry, Lieferando and Wolt, looked into expanding their business into the online grocery

shopping market. Furthermore, some brick-and-mortar grocery store chains entered the market by either offering their own delivery service (e.g. REWE) or partnering up with other providers (e.g. EDEKA).

Many of the above companies had some key commonalities: they were rapidly growing start-ups, and their organizational structures were still under development. As the hype began to wear off, the tone towards these companies in the media became increasingly critical. Several companies have been criticized by their current and former employees for various shortcomings such as inadequate equipment, harsh working conditions, unclear procedures, contractual issues, and low wages. According to stories in the media, employee turnover has been high, and some of the companies have suffered from labor force shortages. This has made it increasingly difficult for companies to keep up with their service promises regarding delivery times as astoundingly short as 10 minutes.

1.1 Purpose and Research Questions

Much of the discussion in regards to quick commerce employees has revolved around wages, contracts, physical conditions, and equipment, while most non-physical aspects of the work have received very little attention in both the media as well as public discussion. Therefore, this thesis focuses on those aspects of quick commerce work, more specifically the relationship of the five dimensions of transformational leadership (vision, inspirational communication, supportive leadership, personal recognition, and intellectual stimulation) and work engagement and organizational commitment, as well as the relationship of work engagement and organizational commitment and absenteeism and turnover intentions.The key aim of this writing is to identify which leadership dimensions predict quick-commerce employees' work engagement and organizational commitment and consequently how and if levels of work engagement and organizational commitment predict absenteeism and turnover intentions among the employees.

Several previous studies have found a significant relationship between leadership, work engagement, and organizational commitment (e.g. Tummers & Bakker, 2021 and Rafferty & Griffin, 2004). A significant relationship between work engagement and organizational commitment has also been established (e.g. Meyer & Allen, 1990). However, to the author's knowledge, none of the research has focused on quick commerce companies. Therefore, this

thesis is deductive and derives from existing research and theories, but takes advantage of certain modifications to improve the applicability of existing theories to the field of quick commerce. The main models used in this research are the *Job Demands-Resources model* (JD-R) by Bakker and Demerouti (2007, 1) and Mayer and Allen's framework of *organizational commitment* (1991).

The main research questions of the thesis are:

- How well do different dimensions of leadership predict work engagement among operations-level quick commerce employees?
- How well do different dimensions of leadership predict organizational commitment among operations-level quick commerce employees?
- How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees' absenteeism?
- How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees' turnover intentions?

The research was conducted using a quantitative approach. Data was collected through a survey of quick commerce employees in Germany in early 2023. The results were examined using regression analysis.

1.2 Scope and Limitations

This thesis works within important and conscious limitations to its scope, in that it does not research nor discuss the role of wage, bonuses, or other perks in work engagement, organizational commitment, turnover, or absenteeism. Thus, questions related to those topics were not included in the questionnaire that was conducted for this thesis. The reader should bear in mind that many factors can influence employment outcomes, but this thesis only focuses on leadership dimensions as predictors. It also does not research all possible intermediate or final employment outcomes, such job performance or job satisfaction, but only focuses on work engagement and organizational commitment.

Companies typically treat data on their employees' engagement, turnover, and absenteeism as confidential. For this reason, and because this thesis was not commissioned by any company,

it does not compare companies or even geographical locations. The reader should bear in mind that there may be significant differences between companies and locations. It is important to note that the industry is still new and is rapidly developing and changing. As the main quick commerce companies in Germany are only a few years old, certain parts of the thesis may quickly become outdated.

1.3 Structure

This thesis begins with a literature review, which consists of two parts: the market and delivery model overview in chapter 2, and the theoretical part in chapter 3. The market overview gives a general introduction to the German market and quick commerce as an industry, discussing the business model, including its emergence and current state. The theoretical part presents applicable theories of work engagement and organizational commitment, and their connection to leadership. The fourth chapter presents the research model and the fifth chapter the quantitative methodology that was used in the empirical part of the research. The sixth chapter will present the results, and the seventh will discuss and contextualize those results as well as present practical implications. Finally, a conclusion will be presented in chapter eight.

1.4 Definitions

Absenteeism = not being at work when one is supposed to; either appointed or not

E-commerce = electronic commerce; commercial transactions conducted on the internet

Leadership = in this thesis, act of leading the employees by a manager or a supervisor

M-commerce = mobile commerce; commercial transactions conducted through a mobile app

Organizational commitment = in this thesis, an employee's psychological and practical attachment to the company

Quick commerce = also delivery-on-demand; an e-commerce business model, which aims for very quick deliveries (usually within one hour) which are done by delivery couriers using micro-mobility solutions from local, decentralized warehouses

(Employee) Turnover = in this thesis, mostly in the meaning of voluntary employee turnover; an employee leaving the company voluntarily

Work engagement = employee's positive attitude and behavior towards their job, consisting of multiple elements

2 Market and Delivery Model Introduction

It is essential to understand the specifics of the market environment, the industry, and the business model itself before moving on to the theoretical and empirical sections. Therefore, this chapter begins with a brief general overview of the German economy, and the aspects of it which drive the demand for the type of consumer services that this thesis focuses on; purchasing power, service usage, digitalization, and labor supply. Afterwards, an overview of quick commerce as a concept and business model, its history, key characteristics, limitations, and future outlook, including an overview of the German quick commerce market will be presented.

2.1 German Market Overview

The Federal Republic of Germany is a country in Central Europe. At the end of September 2022 it had a population of 84.3 million (Destatis, 2022, 1), spread across 16 federal states, out of which three are city states. Germany has the largest population of all the European Union member states, and it is also the largest economy in the EU and of greater Europe. Its gross domestic product in 2021 was 4.22 trillion USD and gross domestic product per capita 50.801,8 USD (World Bank, 2022, 1).

Germany can be defined as a modern, stable, and democratic welfare state. Germany's Human Development Index – a measure that includes years of education, life expectancy, and per capita income – was 0.942 in 2021, ninth highest in the world and seventh highest in Europe (UNDP, 2022). Germany's Gini index, which measures wealth and income inequality, was 30.9 in 2021 (Eurostat, 2022, 1), close to but slightly above the EU average of 30.0 (Eurostat, 2022, 2).

Traditionally, the German economy has been reliant on export revenue generated by a strong manufacturing industry – machinery and automobiles comprising its main exported products – and strong presence of so-called *Mittelstand*, which often is translated to small and medium businesses. However, the service industry is the largest industry in modern Germany, much like in all developed economies, making up around 70% of the German GDP (iXPOS, 2022). Sectors included in the service industry are gastronomy, hospitality, health care, IT, education, public services, and many others.

Like most other Western European nations, Germany has an aging population. As of 2019, the median age was 46 years, which makes Germany's population one of the oldest in the world (Kle & Vogt, 2019). An aging population challenges the sustainability of the German welfare system and threatens economic growth across the country. However, its impact has been softened by an influx of immigrant workers into Germany; the country is the second-most-popular immigration destination worldwide, after the United States (OECD, 2019). Despite a high level of immigration, many industries in Germany suffer from a shortage in their labor force; most impacted are health care, medical, construction and technical industries, but also after abolishing the corona-related measures also hospitality. This shortage and which industries it affects varies from region to region (Agentur Jungesherz, 2022).

2.2 E-Commerce and M-commerce in Germany

Access to the Internet in Germany is near-universal, as in other developed countries. Internet access is nationwide, and 94% of Germans aged 16 to 74 are Internet users, which totals to more than 60 million individuals. The market penetration stood at 84% in 2019 (Goerwitz, 2021). While German digital economy is arguably behind many other EU states in terms of digitalization of public services and digital payment options, it has one of the largest *E-commerce* markets in Europe as well as the world, with the total sales value of €127.5 billion in 2021, with a very strong growth rate (Ecommerce News, 2022). However, the market is quite centralized by the five largest online retailers, which capture nearly 50% of all e-commerce sales in Germany; the largest of these being Amazon Germany (International Trade Administration U.S. Department of Commerce, 2022).

According to the Federal Statistical Office of Germany (*Statistisches Bundesamt*), 80% of German consumers aged 16 to 74 have at least once in their life ordered something online (Destatis, 2022, 2), meaning more than 60 million people. According to another study, over 85% of online consumers buy online every month, and the most popular shopping category is clothes and shoes (SoloBusinessTribe, 2022, 1). Unsurprisingly, younger Germans and those who live in the urban areas are more likely to shop online; almost 70% of 16 to 24 year olds bought something online at least once in 2019 and more than 30% did so at least once a month (IWD, 2020).

E-commerce is not the only rapidly-growing market in Germany – *M-commerce* (mobile commerce) is also showing very strong growth numbers, already comprising 40% of total online commerce revenue (Bundesverband E-Commerce und Versandhandel Deutschland e.V., 2022). As almost 90% of Germans aged 14 or more have a smartphone (Statista, 2022, 2), it comes hardly as a surprise that more and more of them make purchases using their mobile device. 56% of consumers already prefer to buy using their smartphone rather than a desktop computer (SoloBusinessTribe, 2022, 2).

To summarize, both E-commerce and M-commerce are of high importance in Germany and they are growing rapidly. Still, growth potential remains: many of Germany's European comparison countries – including the Netherlands and the UK – have even higher rates of frequent online purchases and higher online commerce revenue per capita. As younger generations are keener on E-commerce and especially M-commerce, the growth is expected to continue in the coming years.

2.3   Quick Commerce and ItsCharacteristics

Recently, retail has trended towards speed or convenience, or the combination of them, known as *hyper-convenience* or *ultra-fast convenience*. More and more customers expect both high delivery speed of their online orders and the delivery directly to their front door, instead of from a pick-up point. In recent years, a new E-commerce model called *quick commerce* (also *Q-commerce* and *delivery-on-demand*) emerged as a solution for such consumers (Deloitte, 2020). The term itself refers to an ultra-fast delivery service model where delivery happens instantly after the customer has made their purchase (typically using an app). The timeframe is countable in minutes rather than hours – usually it is between 10 and 60 minutes (Zunke, 2022). A related model which is a bit older and slower is the *same-day delivery* (*SDD*) model, where the purchase is delivered within the day of purchase (Voccia et al., 2015).

The unique nature of the quick commerce model differentiates them from traditional delivery models in several ways. The most important difference is a shorter delivery time, which creates logistical challenges. Typically, quick commerce companies make a service promise such as "order now and receive your order in 30 minutes", but gathering, packing, and delivering the goods within such a narrow timeframe would be impossible if the delivery area

was large. Therefore, quick commerce companies tend to operate within densely populated cities instead of larger regions. They typically rely on small warehouses ("dark stores") which are spread around the city and located near the customers. Each warehouse serves an area within a definite radius around it – for example a neighborhood or city district (Gliem & Melchert, 2022). In other words, the quick commerce logistics network is *decentralized* (Storebox, 2022).

When a customer places an order, it is essential that the warehouse employees begin processing it immediately and prepare the order to be picked up by the delivery courier as soon as possible. The timeframe for this portion of the model is typically a few minutes. Such speed is enabled by three factors: use of technology, small warehouse size, and small product range. The importance of these factors can be demonstrated through an example: When a new order is registered in the company's system, warehouse pickers are notified on their smart devices to begin gathering and packing the products, then to connect the package to the correct order. The courier then picks up the package (Welt der Logistik, 2021). This process may differ between quick commerce companies, and it may be partially or fully automated. Moderate warehouse size and well-planned stocking help to speed up the gathering process. Finally, and very importantly, quick commerce companies typically offer a quite limited selection of products. Whereas a typical German supermarket offers an average of 12.000 different products (Ahrens, 2021), the figure for quick commerce companies is between 1.000 (Smartstore, 2022) and 2.500 (Lebensmittel Zeitung, 2021). The number may seem low, but it actually resembles a typical German discount grocery store, which offers between 2.000 and 3.500 products on average (Ahrens, 2021). Understandably, such a small selection can only cover the most popular products of each product category and just a limited selection of special and novelty products.

As stated earlier, each warehouse serves its own micro-region, which has an impact on the transport method that is used to deliver the orders. Most quick commerce companies take advantage of micro-mobility solutions such as (electric) bicycles and e-scooters, some also traditional motor scooters (Hirwani, 2022). These vehicles may have a trailer or basket for storing orders or the delivery courier may carry the purchase in a backpack. The benefit of micro-mobility solutions is that they rarely are stuck in traffic congestion and can easily pass on narrow pathways. It is also easier to find a parking space for a bike or e-scooter than for a

car. Operating these modes of transportation is cheap, as they do not run on gasoline and require less maintenance than automobiles.

As of 2022, most quick commerce companies operate within the grocery retail sector, which is also the sector that still attracts most newcomers. Worth noting is that not all speedy delivery businesses are quick commerce, although they may have many commonalities. For instance, takeaway food delivery companies' delivery speed and methods are quite similar to those of quick commerce companies', but those typically only operate a platform where individual restaurants can register and sell their portions. The platform makes its profit from commissions from each order. Takeaway food delivery companies usually develop and maintain the platform and take care of customer service and marketing, but do not have their own warehouses, and do not necessarily even their own delivery staff, unlike quick commerce companies. That being stated, some takeaway food delivery platforms have developed towards quick commerce companies by partnering up with grocery stores, or testing their own grocery offering, which will be discussed in greater detail later.

Constant, stable demand makes grocery retail attractive to quick commerce companies. Groceries are necessity items purchased by all consumers. Operating multiple warehouses across the city, each having its own pickers and delivery staff, would be extremely costly if customers would not purchase frequently enough, as would be the case with clothes or electronics, for instance (NB: some companies in such industries have tried quick delivery models, too). Groceries are also lightweight, which enables the use of micro-mobility solutions, which would not be the case for heavier products. Furthermore, there has been a real need for grocery delivery services, especially during the COVID-19 pandemic – this will also be discussed more thoroughly in the next subchapter.

Finally, it is useful to summarize the profile of quick commerce companies. Many of these companies are start-ups; in other words they are young businesses with ambitious goals and high growth rate. They typically have very limited financial resources, and are reliant on capital from investors. The quick commerce companies have been struggling to find ways to operate on a profitable basis (Horn & Company, 2022); as of 2022, their products are typically slightly more expensive than at a regular supermarket and additionally there is a delivery fee. Despite the higher prices and the fees, quick commerce companies often make

losses (Stanjeck, 2022). In terms of employee profile, both the management and the operations-level employees tend to be rather young and also rather international.

	Quick Commerce	Same-Day	Traditional
Area	city district/ neighborhood	city/region	nationwide, international
Logistics	decentralized	regionally centralized	nationwide centralized / few warehouses
Companies	often start-ups	established players	most companies
Delivery time	10 to 60 minutes	same day	1+ days
Delivery type	bike or scooter	van	postal services
Product range	narrow	medium to large	large
Industry	food, grocery	food, grocery	most retail industries

Table 1. Characteristics of quick commerce, same-day delivery and traditional delivery models.
Own summary.

Table 1 summarizes the above-discussed characteristics of quick commerce companies and the delivery model and compares them with companies who use same-day delivery model and traditional delivery model. The table is of general nature; exceptions are possible.

2.4 Emergence of Quick Commerce in Germany

Over the years, multiple companies have been testing different quick delivery models in Germany. One of the best-known examples is probably the technology and E-commerce company Amazon, which has a strong market position in Germany and has been the biggest online retailer in the country for years (Statista, 2022, 1). Amazon launched the same-day delivery of selected non-food products in 2015, shortly after German electronics retail chains Media Markt and Saturn [NB: both belong to MediaMarktSaturn Retail Group] had done the same in cooperation with a delivery partner. The Amazon launch received a lot of attention in industry media for it's same-day delivery, which was available in 12 major German cities, one region with two cities very close to each other (Leipzig–Halle) and one larger region (The Ruhr area). However, availability varied within the cities and regions by zipcode (Floemer, 2015). In 2017 Amazon also launched its same-day food delivery service Amazon Fresh in selected German cities (E-Commerce Magazin, 2022). These launches marked one

of the first steps towards quick commerce in Germany, even though there are remarkable differences between same-day delivery and instant delivery models.

Emergence of quick commerce picked up speed during the COVID-19 pandemic. The World Health Organization announced that the pandemic had begun in March 2020, when a novel virus called SARS-CoV-2 began spreading across the world. Germany experienced its first COVID-19 wave between early March and mid-May 2020. The federal government and states gradually introduced measures to stop the spread of virus including restrictions for inbound and outbound travel in Germany, obligatory quarantines, and most notably a lockdown (Schilling et al., 2021). During the first lockdown in Germany, all non-essential businesses and hospitality services closed, wide restrictions of social contacts were adopted in several states, and restrictions on travel as well as nightly curfews were imposed. Breaking these rules was usually subject to fines; amount varying state by state (Bundesministerium für Gesundheit, 2022).

Social contact restrictions were comprehensive and widespread in Germany during 2020 and even though these restrictions were loosened as Germany made progress with its vaccination campaign, many COVID-19-related restrictions were continued throughout most of 2021 and some all the way to spring 2022. Remote work and education were widely adopted across the country with around 30% of the workforce moving to home office. In many industries, a majority of employees did so (Infas, 2021). Given that millions of citizens were spending a lot of time at home and avoiding social contact, it could be said that quick commerce companies' launch timing in Germany was excellent. After all, ordering groceries online allows consumers to skip a visit to a grocery store, which is a frequent source of social contact. "Food" was the fastest-growing category in online retail in Germany during the COVID-19 crisis; growing by almost 60% in 2020–2021 in comparison to 2018–2019. Delivery platforms of takeaway restaurant food also grew rapidly and growth was seen in other online retail categories too, including electronics, clothing, cosmetics, and household products (HDE Handelsverband Deutschland, 2021).

The most-discussed quick commerce business start-up in Germany was Gorillas, founded in May 2020. It began delivering groceries in several districts of Germany's biggest cities in June of 2020. While unique in Germany at the time, Gorillas is actually a quite typical quick commerce company: it has a decentralized warehouse system, it employs its own staff, and it

has a limited selection of food and household necessities. Orders are exclusively made through a mobile app, and each delivery is subject to a delivery fee. With a rapidly-growing German market presence, Gorillas opened new warehouses within the cities where the company was already active, as well as expanding to new cities. Slightly later it began international expansion to the Netherlands, the UK, and France. This expansion was accompanied by eye-catching online and offline marketing campaigns and a noteworthy service promises of being "faster than you" and delivering groceries "within just 10 minutes." Gorillas became a "unicorn" start-up, in other words, it reached a valuation of more than a million USD in less than a year, which marked a new record speed in Germany (Holzki & Kapalschinski, 2021). However, in December 2022 Gorillas was sold to its competitor, which will be discussed in more detail later.

Gorillas' "monopoly" position on the market did not last long. Its main challenger, Flink, was founded in Berlin in late 2020. Flink's business model is remarkably similar to Gorillas', even up to the service promise of delivering within 10 minutes from the purchase. Flink is also available only as a mobile app and has a similar expansion strategy to Gorillas, as it first started in certain districts of bigger cities and then proceeded to expand to medium-sized cities (Goel, 2022). After Flink, even more new players entered the grocery quick commerce market throughout 2021, the most notably, Getir launched in June 2021 with a business model similar to Gorillas' and Flink's. However, Getir is not a German but a Turkish company. Active since 2015, Getir gained a notable valuation of 12 billion USD as of 2022 and has presence in multiple Southern and Western European countries (Dillet, 2022). Unlike Gorillas and Flink, Getir has mostly focused on large cities outside its home market of Turkey. In Germany it has not rushed to expand to medium-sized cities but has remained in the major cities of Berlin, Hamburg, Cologne, Dortmund, Düsseldorf, and Nuremberg.

Other quick commerce newcomers entering the market between 2020 and 2023 have been e.g., Foodpanda, Bring, Wuplo, Bring, Knuspr, Picnic, GetFaster, and Oda. Most of these only concentrated the a few biggest cities, or had otherwise strong regional focus; examples include Rohlik in Munich area and Picnic near the German–Dutch border. Some had international roots: Knuspr was founded as the German subsidiary of Rohlik from the Czech Republic (Wehmann, 2021), Picnic is from the Netherlands (Wehmann, 2022), Wuplo was from the Russian Federation (Mathewson, 2021), and Oda is from Norway (Schimroszik,

2022). Some of the companies were rather short-lived, which will be discussed in more detail later.

Traditional supermarket chains did not just passively watch the quick commerce hype sweeping Germany; rather, they were forced to consider their attitude towards delivery. Until the COVID-19 crisis, most of them did not offer online delivery at all, let alone with similarly quick delivery times as the emerging quick commerce grocery apps. Supermarket chains were forced to choose between the following strategies:

- **Provide their own traditional-type delivery service.** This strategy was launched by major grocery store chains REWE, EDEKA, and Netto Marken-Discount (owned by EDEKA). The delivery is typically subject to a delivery fee of up to €5 (vs. about €2 typically offered by quick commerce companies) and minimum order value of up to €50. The delivery is usually not particularly quick; typical delivery times are 1 to 3 days and customers have to book a delivery window.

- **Partner to provide quick delivery service.** EDEKA, REWE, Penny, and others have partnered with specialized delivery services to enable quick delivery of their products. In Berlin and Munich, EDEKA products can be delivered within 120 minutes by Bringmeister (Triltsch, 2022), a delivery company previously owned by EDEKA. Despite occasionally being very quick, Bringmeister is mainly focused on slower delivery models with pre-booked delivery windows or a same-day delivery. REWE entered a partnership with the previously-mentioned quick commerce company Flink (Kapalschinski, 2021). In this arrangement, REWE's own labels are included in Flink's selection, which is an interesting and thus-far unique example of cooperation between a traditional supermarket chain and a quick commerce start-up. Also, discount supermarket chain Penny (owned by REWE Group) has partnered with an external delivery service, Bringoo, to deliver groceries within 45 minutes in Berlin, Hamburg and Cologne (Hofstetter, 2021).

- **Not offer delivery service at all.** Major discounter supermarket chains Lidl and Aldi do not offer any grocery delivery service. Some other chains, such as Kaufland and Real, have previously provided grocery delivery service, now discontinued. However, all of these stores offer online shops selling their non-food products, which are sent by traditional mail services.

These supermarket chains were not the only companies looking to capitalize on the quick commerce boom: takeaway delivery companies also wanted their share of the market. The German takeaway food delivery market is dominated by Lieferando, Wolt, and Uber Eats. On these platforms, restaurants register their company and menu so customers can place online orders. The platform then forwards the order to the restaurant and takes a commission on the order. The commission is typically between 10% and 30%, depending on the platform. Orders can be delivered either by the platform's couriers, or by the restaurant itself. The delivery time is typically one hour or less. Lieferando (Költzsch, 2021) and Wolt began to accept convenience stores on their platforms, and therefore also entered the grocery quick commerce market to some degree. After 2022 acquisition of Wolt by US company DoorDash, there was speculation that Wolt would aggressively expand into quick commerce (Lebensmittel Zeitung, 2021). As of 2023, the primary focus of Lieferando, Wolt, and Uber Eats remains in their core market of takeaway food delivery. Other similar niched businesses, which have aimed to expand into grocery quick commerce, include brands such as Flaschenpost, a Münster-based beverage on-demand delivery service which has expanded its selection to groceries in selected locations, and partnered up with organic food supermarket chain Alnatura.

To conclude, it was during the COVID-19 crisis that quick commerce really took off in Germany. The market grew almost exponentially and became fragmented: one quick commerce company launch followed another. Consumers in major German cities in particular were spoiled with a multitude of choices. The market began to overheat, with companies struggling to differentiate themselves from one another, and the battle for consumers' euros intensified.

2.5 Quick Commerce in Germany Today

The last few years in Germany have been tumultuous. Germany gradually reopened in 2022 following the COVID-19 crisis, however, 2022 brought along new crises which severely affected the German economy. These include the Russian invasion of Ukraine, which began in late February 2022, the energy crisis, and record-high inflation. These have weakened consumer purchasing power and the performance of the German economy as a whole. Old problems such as labor shortages continue to complicate the situation.

Despite tough times, quick commerce remains relatively popular in Germany. The turnover for online grocery retail for 2021 was almost 4 billion euros (Ahrens, 2022) including all online grocery retail, not only quick commerce. Growth was forecasted for 2022 and 2023 as well, although at a slower rate. There are signs that demand has decreased from what it was in 2021 (Gründerszene, 2022). Competition within the market has become increasingly tough, and there are signs that the market is gradually consolidating again, as some newcomers, such as GetNow (Stadler, 2021), Wuplo (Mathewson, 2022), GetFaster (Rentz, 2022), and Jokr (Ksienrzyk, 2022) have already started to shut down. Some have had to merge with other companies, such as Bring joining with GoTiger (Kluge, 2022, 1). In December 2022 it was announced that Getir had acquired the market leader Gorillas, significantly changing the quick commerce landscape (Rest, 2022). Raging inflation and high energy prices make the market environment even tenser, as consumers are searching for ways to cut their spending. According to a survey published in June 2022, 39% of Germans were planning to cut their food spending, and among low-income earners the percentage was even higher (Behringer & Dullien, 2022). This should be alarming news to quick commerce companies, whose prices are typically above market average.

After Getir bought Gorillas, the market has two big players left: Flink and Getir, which as of spring 2023 operates under Getir and Gorillas brands. It is widely known that they, just like their smaller competitors, struggle to reach profitability. The business model has been described as challenging to make profitable. In order achieve a positive bottom line, the German quick commerce companies might have to make several changes to reach profitability: the average order size should grow, the product prices and delivery fees increase, and the employee shift planning must focus on peak hours (Grollmann, 2022). Executing such changes might be difficult: Bigger order sizes would be heavier and more difficult to transport. Quick commerce companies might be hesitant of price increases, as their products are already slightly above the average. German consumers are typically price-sensitive, and notable increases could drive the customers back to cheaper competitors or even to brick-and-mortar grocery stores, especially in high inflation. Reducing staff size could reduce daily operating costs as it is expensive to have a certain number of pickers and couriers constantly on duty, but staff cuts could increase the average delivery time, challenging the service promise of quick delivery.

Quick commerce companies are frequently opening and closing their locations, new companies still pop up frequently, older ones rebrand, merge or shut down, and numerous small companies with regional focus have emerged. Table 2 aims to provide an overview on active quick commerce companies on the German market and Table 3 provides an overview of inactive ones as of late 2022. Note the asterisks referring to the footnotes.

Company	Market Entry* / Exit**	Nationwide/ Regional***	Country of origin	Comment
Gorillas	6/2020	nationwide	Germany	market leader; sold to Getir in December 2022; future uncertain
Flink	2/2021	nationwide	Germany	market challenger
Getir	7/2021	nationwide	Turkey	market challenger
Picnic	4/2018	NRW / Hamburg area	Netherlands	until 2022 regionally focused on the state of North Rhine-Westphalia
Knuspr	8/2021	Munich / Rhine-Main area	Germany	owned by the Czech company Rohlik
Oda	1/2023	Berlin	Norway	market newcomer, testing its service in Berlin
Bringmeister	1997	nationwide	Germany	previously owned by Kaiser's and EDEKA, since 5/2021 Czech ownership; mostly non-quick delivery
Flaschenpost	2016	nationwide	Germany	focus on beverages; since 2020 delivers also groceries
Lieferando	2009	nationwide	Germany/ Netherlands	focus on takeaway food; since 2021 groceries from non-affiliated shops; own dark store since 2022
Wolt	8/2020	nationwide	Finland	focus on takeaway food; since 2021 groceries from non-affiliated shops; own dark store tested in 2022
Uber Eats	5/2021	nationwide	United States	main focus on takeaway food; owned by Uber

Table 2. Active companies on the quick commerce market in Germany, autumn 2022.
Own summary.

*"Market Entry" refers to the start month of the company's operations on the German market; note that some companies have expanded into quick commerce later (see the column "Comment").
**"Nationwide" refers to operations across Germany but not necessarily in all states or all of the large cities.

Company	Market Entry* / Exit**	Nationwide/ Regional***	Country of origin	Comment
Wuplo	9/2021 – 3/2022	Berlin	Russian Federation	announced a permanent "service freeze" in spring 2022
Foodpanda	2012 – 12/2021	Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich, Stuttgart	Germany	originally focused on takeaway food; sold in 2018 and withdrew from the German market in 2019; returned in 2021 as grocery quick commerce; shut down again in December 2021
GetNow	2015 – 12/2021	Berlin, Düsseldorf, Munich, Ruhr area	Germany	shut down in October 2020; returned to the market briefly in early 2021, announced "pause" for indefinite time in December 2021
GetFaster	2020 – 8/2022	Berlin, Düsseldorf, Ruhr area	Germany / RussianFederation	shut down, was originally founded in Russia butexited the Russian market
Bring	1/2021 – 6/2022	Berlin, Potsdam	Germany	merged to Asian food retailer GoTiger; exited quick commerce
Grovy	3/2021 – 5/2022	Frankfurt	Germany	shut down following an unsuccessful seed round

Table 3. Inactive companies on the quick commerce market in Germany, autumn 2022.
Own summary.
*"Market Entry" refers to the start month of the company's operations on the German market; note that some companies have expanded into quick commerce later (see the column "Comment").
**"Market Exit" refers to the last month of company's operations on the German market to date; note that some brands may be revived later.
***"Nationwide" refers to operations across Germany but not necessarily in all states or all of the large cities.

A look into Tables 2 and 3 should provide a clear illustration of how turbulent and competitive the German online grocery market is. After all, many start-ups entered the market with a bang and had highly ambitious expansion plans, but saw themselves in dire need for additional financing only a year later, or even sooner. It could be argued that stable financing is the only thing which has kept market leaders above water. Gorillas successfully

raised capital from its investors, including Chinese Tencent and German Delivery Hero (Reuters, 2021), and now that it is a part of Getir it should have stable funding due to the Turkish owner's financial backrest and expertise; however the Gorillas brand could be in danger of disappearing. Flink's financial rounds have been fruitful as well. Despite that, none of these companies have reached profitability in Germany, ergo, they are still highly dependent on external funding.

As delivery couriers have become a more and more common sight on the streets of German cities and urban consumers have become used to the presence of quick commerce companies, the media hype around them has begun to fade and the tone become increasingly critical. When searching for the most recent news about quick commerce companies on a search engine in October 2022, seven out of ten search results had a critical point of view. Market leader Gorillas has been under constant criticism for its employees' work conditions and low payment; however, the financial press has also been constantly raising concerns about financial sustainability of the quick commerce companies due to their business model and raging inflation. The companies have brought some of this critical coverage on themselves through tone-deaf marketing campaigns, strange PR incidents, and internal organizational matters leaked to the press. While there is "no smoke without a fire", some of these challenges are typical to start-ups – most start-ups just do not receive the same media attention as these companies.

Although some market newcomers were short-lived, and media attention has waned, public interest in the German online grocery market has not abated. On the contrary, this interest goes beyond the German borders; the US quick commerce company GoPuff has already expressed its interest in the German market, and the same goes for Estonian Bolt Market whose business model resembles that of Uber Eats' (Schader, 2021). Lieferando and Wolt, both currently active in Germany, also experimented in 2022 with their own "dark stores", i.e. opening a warehouse and delivering groceries. The first dark store of Lieferando was opened in Berlin in August 2022 and is still in operation (Kluge, 2022, 3). Wolt, however, closed its "Wolt Market" store in Berlin in July 2022, just after 5 months of operation (Buntrock, 2022).

Despite strong growth in recent years, there is a lot of remaining potential in the German quick commerce market. According to a 2022 Statista estimate, the total potential could be

560 million euros by 2030 (Statista, 2022, 3). The whole German e-food market has even higher potential and was already almost 4 billion euros at the end of 2021 (Kühberger, 2022). And there are a still a lot of potential customers who have not discovered these services yet: a 2021 consumer survey found out that less than 10% of respondents had heard of Gorillas or Flink (Statista, 2022, 4) despite their leading market position and active marketing, and only 7% had tried the services (Zunke, 2022). In larger cities, 85% of respondents were familiar with Gorillas or Flink, and 15% had used those services in 2021 (Horn & Company, 2022). Thus, one can conclude that quick commerce companies are more familiar to consumers in big cities where these companies are widely available, but also known on a national scale, and therefore there is a lot of unreached clientele. As a final remark, quick commerce may expand into new product categories, like pharmaceuticals, further increasing the market potential (Hüsing, 2021).

2.6 German Quick Commerce Companies as Employers

The focus of this thesis lies on the employees of German quick commerce companies and it is therefore appropriate to discuss the profile of these companies as employers, the range of jobs they offer, their typical job characteristics, and the working conditions.

Quick commerce companies employ relatively many people because the work is labor-intensive. There needs to be a certain amount of employees on duty throughout the opening hours, which tend to be long (often from 8 AM to 11 PM). This applies to all warehouses – typically there are one or two warehouses in all main city districts. The number of Gorillas employees was about 10.000 in autumn 2022 (Gorillas, 2022), out of which, a majority were employed in Germany in operational roles. However, it should be noted that Gorillas has laid off a significant number of employees in 2022 and the self-reported number may no longer be accurate. For Flink and Getir, there is no reliable public data available on the number of employees in Germany, but it is likely that the number of employees is also in the thousands.

The structure of a quick commerce company is quite typical to retail. A typical company organization consists from top to down of 1) top management, 2) layers of business departments including IT, business development, marketing, PR and communications, human resources, etc., and of 3) operational level, which is the largest employee group. The levels 2 and 3 include managers, supervisors, or team leads as well as ordinary employees. This thesis

focuses on the employees at the operational level. They take charge of daily logistics operations. Their roles can be divided into the following three main groups:

- **Pickers.** A picker is a person who works in a dark store (a warehouse) and whose task is to pack and prepare the orders and to inventory the items in stock. Pickers also supervise the product quality and ensure that bad products are disposed of and that they do not reach a customer. In German quick commerce companies, picking is often done by hand, but a picker usually has smart devices to help gather and assign correct items to an order, and to assist with the inventory. The pickers' manager is typically the warehouse manager, but during their shift, their supervisor is the shift coordinator.
- **Inventory workers.** Sometimes commerce companies employ workers especially for inventory. They do not prepare orders like pickers do, but their only task is to supervise product quality, record product losses and flaws, dispose of expiring and bad products, etc. Inventory workers also typically use smart devices to assist with their work tasks. Their manager is typically the warehouse manager, but during their shift, their supervisor is the shift coordinator.
- **Delivery couriers.** Couriers, sometimes called *riders*, are the most visible quick commerce job to an average consumer. They shuttle between the dark store and the customers, delivering orders using an e-bike, an e-scooter, or another, typically electric, micro-mobility vehicle. The courier needs a smartphone to communicate with the customer and the warehouse and to find route instructions. The smartphone can also work as a tracking device, which enables the customer to locate their order on the map. Although couriers usually use electric vehicles, the job is physically demanding, as they need to be able to carry heavy bags (often a backpack) which contain one or more order(s) per delivery round. They also need to be able to climb stairs. If the order size is very large, two or three couriers may deliver it together. The couriers' manager is typically the warehouse manager, but during their shift, their supervisor is the shift coordinator.
- **Shift coordinators / Shift managers.** A shift coordinator or shift manager coordinates the operations in the warehouse, helps to train new employees, schedules breaks, helps to resolve issues, and typically helps out during busy hours. A shift coordinator's tasks are operational; their role is to be rather a team lead than a manager. That means that they typically do not approve or reject time off, they do not do payroll, they do not have scheduled performance discussions with the employees

22

and they do not have budgetary or any other form of financial responsibility for the warehouse. Typically, shift coordinators handle complaints and other issues that occur during their shift and make notes on how the shift went. Shift coordinators report to the warehouse manager.

On the operational level, the quick commerce industry typically offers quite a lot of flexibility in working hours: part-time jobs, evening jobs, weekend jobs etc. are common. This makes the work attractive to people who cannot or are not willing to commit to full-time employment, including students. Quick commerce jobs have low barriers to entry in terms of language and educational requirements. Based on job ads, employees in picker and courier roles should be able to speak either English or German, which makes the work attractive to people who are new to Germany and do not yet speak German.

A clear downside of quick commerce jobs are low wages – typically at or just above the local minimum wage, which in October 2022 was €12 per hour in Germany. Delivery couriers can additionally keep their tips ("*Trinkgeld*") and may be eligible for additional bonuses depending on the company. However, even with tips and bonuses, the typical wage is so low that employees struggle to sustain themselves especially in big cities where the rents are high. Part-time employees almost always require additional income sources, such as a student loan, social benefits, income from another job, or support from their family. The wage level has been criticized for not being commensurate with the physical demands of the job. The nature of the work, and its suitability to German society, has been questioned as a whole, as it could be seen as part of the *servant economy* and more typical to countries where wide income gaps are more accepted (Fuest et al., 2021). "Servant economy" is a critical term which refers to an economy where workers are divided into high-skilled and low-skilled jobs, and high-skilled workers have the ability to delegate household tasks to hired labor force – or low-skilled workers – for a low pay (Krenz & Strulik, 2022). It is important to note that jobs produced by the so-called *gig economy* have been subject to similar criticism, but quick commerce employees are not in a similar contractual position as gig economy employees. In quick commerce, employees are in direct work contract with their company, whereas in gig economy, the service providers are usually not employed by their platform but work as "freelancers" or "entrepreneurs". A good example would be a car driver for the ride-hailing platform Uber, who works as an entrepreneur and offers his services on the platform as an

entreprenuer, not as an Uber employee. The contractual position of such "entreprenuers" has been disputed in courts around the world, including Germany.

As stated earlier, quick commerce jobs can be attractive to people who have not lived in Germany for a long time and do not have advanced German language skills. In Germany, a commonly used term is "a person with migration background" ("*Person mitMigrationshintergrund*"), which can mean i.a. first and second generation immigrants and refugees. Employment in quick commerce companies may sometimes be the only option for some persons with migration background who may be less-educated, struggle to find other jobs, or whose visa or residence permit are tied to having a job, and who are not eligible for social benefits. As stated by lawyer Martin Bechert in an interview with *Die Tageszeitung*, the employees with migration background are often poorly informed by their labor rights and vulnerable to exploitation and weak contract terms (Frank, 2022). Quick commerce jobs are typical low-wage industry jobs, characterized as such due to both low-wages and employees requiring only low-level formal qualifications. These employees are generally young, they commonly work part-time, the tasks are often physical, and the share of employees with migration background is proportionally above average (Grabka & Göbler, 2020). The risk of being paid low wages increases the less time a worker is employed by the same company (Schäfer & Schmidt, 2012). Since the employee turnover rate in quick commerce companies is high and opportunities for career advancement limited, many employees may find themselves in a permanent low-wage situation.

In 2021 and 2022 there has been a great deal of news in the German media about work conditions in quick commerce companies, and especially their shortcomings. A quick look reveals that the most typical points of criticism are the following:

- **Harsh physical working conditions.** Carrying heavy orders for up to 8 hours per day exposes drivers to physical ailments such as shoulder and neck pain. Besides, many customers live in buildings that are not equipped with elevators, and hence the couriers have to often climb stairs (Götzke, 2022). In Germany, buildings built before 1954 often do not have elevators, as elevators became compulsory for residential buildings of at least 5 floors only in 1954.

- **Poor condition of work equipment.** Delivery couriers of several quick commerce companies have criticized the condition of their work equipment, above all the e-bikes, which have repeatedly failed (Götzke, 2021).

- **Issues related to human resources management.** Issues related to human resources management are quite common in start-ups and prevalent also in quick commerce companies. Employees have reported delayed or incorrect wages or bonus payments, issues with shift planning, and contractual issues including wrongful terminations and questionably limited contracts.

- **Worker's initiatives to organize.** Most media attention has been given to disputes over the organization of workers. At Gorillas, Flink, and Getir, employees have aimed to form assemblies and workers' councils, to which the companies have reacted negatively. Some employees have been dismissed as a result (Fairwork, 2022). As of autumn 2022, related court cases were in progress.

- **Safety concerns.** Delivery couriers have to work in all sorts of weather conditions, including heat, rain, and frost. These can strain the body. Wet streets can be slippery, increasing the risk of being involved in a road accident, falling, or slipping. Sometimes couriers have not received adequate winter clothing (Neiteler, 2022). Furthermore, the traffic in big cities can be very fast-paced and even dangerous; Stuttgart, Berlin, and Cologne were cities where there were many accidents leaving cyclists seriously injured or dead, based on a European-wide traffic statistics comparison (Kayser-Bril, 2018). The aim to keep delivery times short amid severe weather conditions and high traffic can contribute to an increased risk of accident.

- **The relationship between workload and wage.** Operations-level wages are at par or close to the minimum wage, which has been criticized especially when the quick commerce companies successfully raised capital while keeping the wages low. The fairness of the wages has been questioned given the harsh physical conditions and time pressure (Zunke, 2022).

While the above-listed points of criticism are noteworthy, they are rather practical. Some of them could be easily solved by making the necessary physical resources available. Much less public attention has been paid to non-physical resources at quick commerce companies, which makes it an interesting research topic. The next chapter discusses what such non-physical resources can be, especially in terms of leadership, and how these resources can impact the work engagement and organizational commitment of operations-level employees.

3 Concepts and Theories of Work Engagement and Organizational Commitment

Quick commerce jobs are physically demanding jobs characterized by low wage level, highly international workforce, and widespread part-time work. Formal barriers to entry in terms of language and professional qualifications are typically low, and there are plenty of available jobs, which can attract candidates who seek for their first job in Germany. While the interests of candidates and companies may match well, it would be an exaggeration to say that this is a "match made in heaven". Employees may not be committed to their job because they know that if they will find something else, possibly with higher wage and better conditions, they will switch jobs. As a good reference, nearly 70% of jobs in hospitality industry, where jobs share similar qualities as in quick commerce industry, are re-advertised every year, according to the German Federal Statistical Office. Certainly, there can be many more reasons to work in quick commerce and many more reasons to switch jobs, but the example leads to the theoretical core of the thesis: quick commerce industry has challenges related to employee performance and retention, especially absenteeism and high voluntary turnover. After briefly discussing performance and turnover on a general level, this chapter moves into work engagement and organizational commitment theories. Then it proceeds to identify relationships between leadership and the concepts.

3.1 Performance

Performance as a concept is widely used and quite self-evident, but it is nonetheless important to define and limit. Scientists have differentiated two interlinked aspects of performance: the *action* (behavioral) aspect and the *outcome* aspect (Campbell, 1990). The former refers to the actions that an employee undertakes during their work. In a delivery courier's case this could be delivering an order, for instance. The latter refers to the outcome that is achieved through the employees' actions, for example sales profit for the company. It is dependent on the employees' actions and many other factors. Every company wants its employees to align their actions with the company's goals and perform well (Ilgen & Schneider as cited in Sonnentag & Frese, 2005). Well-performed actions are in the best interest of the company because they impact the performance of the entire organization.

Performance is dependent on numerous factors, which include e.g., proficiency in job-specific or non-job-specific tasks, communication, supervision, management, and technical

proficiency (Campbell et al., 1996 and Motowidlo & Schmit, 1999 as cited in Sonnentag & Frese, 2005). Brush & Borman (1993) list 18 dimensions, which are comprised of multiple sub-dimensions. Those are aspects of successfully executing the main dimension – in case of e.g. technical proficiency they can include keeping up-to-date, solving problems, possessing sufficient knowledge to perform the work, and advising others. Dimensions could also be related to physical resources, like adequate work tools and equipment, physical work environment, workplace personal relations, and more abstract constructs such as organizational values. Borman & Motowidlo (1993) argue that job performance consists not only of *task performance* involving the basic core skills to perform the task, but also of *contextualperformance*, which refers to the employees' extra-role performance i.e. ability to contribute to the organization outside of their scope of work. This can mean active cooperation with colleagues, active presentation of ideas, task proactivity, taking on an extra load, and so on (Koopmans et al., 2011). The dimensions can change constantly, and employees can have good days and bad days, so in a typical full-time job the performance is usually assessed as an average over the specific time period rather than on a daily basis.

Usually, sufficient task performance is possible even if one or more performance dimensions or sub-dimensions are missing. Such a situation is common; few people have worked in a perfect organization where all dimensions are constantly good. In the long run, missing dimensions may seriously impact the organization's performance (outcomes). Both individual outcomes such as job satisfaction, wellbeing, motivation, presence, or creativity, as well as organizational outcomes such as economic performance, can be harmed. In other words, declining performance is linked to declining commitment to the organization, and consequently to absenteeism and employee turnover (Somers, 1995), which are discussed next.

3.2 Employee Turnover and Absenteeism

The concept of *employee turnover* has multiple definitions. James L. Price, who in 1977 developed a causal model of impact of turnover, described turnover it as "the degree of individual movement across the membership boundary of a social system". A newer definition by Kreitner (2003) is that it is "the rate at which an organization's workforce terminates employment and requires replacement". Turnover can be either *voluntary*

(initiated by the employee) or *involuntary* (initiated by the employer). This research focuses on the voluntary type.

A high voluntary turnover rate in a quick commerce company means that many employees are continuously leaving the company, therefore the company must continuously hire new employees to replace those leaving. Employee turnover is always costly for a company. Total costs vary by industry, company size and position, and are categorized as either direct or indirect costs. O'Connell and Kung (2007) divide these costs into three main categories, which are *staffing* (costs incurred for recruiting and hiring both the old and the new employee), *vacancy* (productivity and business loss while the vacancy is open, decreased productivity of the employee after resignation), and *training* (onboarding costs of the old and new employee). Local regulations can affect these costs. In Germany, employees are entitled to paid vacation days, which must either be used or paid out before the contract expires. Germany also has mandatory health insurance and pension schemes, which increase the bureaucratic burden of employee turnover and tie up HR and payroll resources. High employee turnover not only puts a financial strain on the company but also leads to loss of human and social capital as well as knowledge, and can cause operational disruptions, De Winne et al. (2018) note. In the most affected departments, it can weaken team spirit, overwhelm team leaders who have to provide constant training, and make the work increasingly stressful due to staff shortages. In addition, high employee turnover can damage a company's reputation and lead to bad word-of-mouth. Hancock et al. (2013) state that high employee turnover rate negatively affects the organizational performance as a whole.

It is in the company's interest to retain and motivate its employees (Beechler & Woodward, 2009), i.e. do its best to keep the voluntary employee turnover low. A company should therefore identify the reasons for employee turnover. Those may be broadly categorized as emotional, rational, personal, and external reasons. *Emotional* reasons may include e.g. dissatisfaction with the work or the company culture, *rational* reasons dissatisfaction with the wage or working hours, *personal* reasons family and health, and *external* reasons the business cycle and availability of other jobs on the industry (Ritter & Wolter, 2022). The company has the ability to influence the first and the second categories and thereby reduce employee turnover. This may require financial investment, a review of company values, and active input from all departments. However, not only dissatisfied employees leave their jobs; while the correlation between job dissatisfaction and turnover is positive, it is not always very

strong (e.g., Griffeth et al., 2000). Even a highly satisfied employee can leave a company for a variety of reasons.

Ideally, an employee's resignation should not come as a surprise to the organization. Turnover is a multi-stage process, of which the actual resignation is only the last stage (Baker, 2020). There can be both direct and indirect signs of an individual employees' upcoming resignation or, in other words, *turnover intentions*. Direct signs can be that an employee has voiced that they are dissatisfied with some aspects of their job or the contract. These could be e.g. work conditions, working times, procedures, leadership, tools, or wage. The employee may provide feedback independently or the company can ask for feedback. Indirect signs can be linked to e.g. worsening performance, increasingly negative attitude towards the company, and increased *absenteeism*. Absenteeism means unplanned absences of the employee from work, most typically an unusually high number of sick days. Mitra et al. (1992) state that like turnover, absenteeism stems from the motivation to escape a job that the employee deems dissatisfying. Absenteeism can be an early indication that an employee is planning to leave the organization (Cohen & Golan, 2007), yet it is important to remember that the reasons for absenteeism can be complex and are not always linked to dissatisfaction.

Companies who operate in quick commerce tend to suffer from high employee turnover and according to some reports, also high absenteeism (Kluge, 2022, 2). It could be tempting to explain those as the "law of nature", given the character of quick commerce jobs as low-paid jobs with few formal barriers to entry. However, this would be a simplistic and potentially misleading explanation, as it excludes many other possible factors. Turnover could be accelerated or slowed by factors related to work engagement and organizational commitment, which can be seen as intermediate outcomes, and which in turn affect larger outcomes like the decision to stay or leave the organization. The following sections describe the concepts and the factors that influence them.

3.3 Work Engagement

The concept of *work engagement* (often termed *employee engagement*) has popular definitions. One of the earliest is by William Kahn (1990) who defined it as "the harnessing of organization members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances". Thus,

Kahn sees engagement as built on three dimensions. The "physical" dimension refers to the person physically performing their role, the "cognitive" to their beliefs of the organization and its leaders and the "emotional" to their attitudes towards the organization and the work (Kular et al., 2008). Schaufeli et al. (2002) define it as "a positive, fulfilling, work-related state of mind that is characterized by *vigor*, *dedication*, and *absorption*", describing more specifically how an engaged employee feels about his or her work. Vigor refers to working hard, dedication refers to being involved, and absorption refers to being happily engrossed in the work (Bakker et al., 2008). Later studies have sometimes also included *professional efficacy*. Maslach and Leiter (1999) approached the concept from a different standpoint, stating that work engagement is the antithesis of burnout.

One way to help define work engagement is to limit the term. *Employee engagement* is often used as a synonym for work engagement and Schaufeli et al. (2008) state that the two terms do not significantly differ in theoretical and academic findings. The slight difference, according to Schaufeli (2013), is that work engagement refers to an employee's relationship to their work, while employee engagement is a broader term that can refer to an employee's relationship to both their work and to their organization. Thus, the latter is related to the term *organizational commitment*, which refers to an employee's attachment to the organization but not necessarily to the work, and which consists of affective, continuance and normative dimensions (Yousef, 2017). The term will be discussed in detail in the next subchapter. Another concept that is related to work engagement, but should not be treated as synonymous, is *job satisfaction*. An employee may be quite engaged to their work but not necessarily satisfied or motivated, or vice versa, an employee may be motivated or satisfied but not for reasons related to the work itself (Miah, 2020). Most employers want to improve their employees' satisfaction, because satisfied and motivated employees benefit the organization. Two more related concepts are *work involvement* and *job involvement*. Those refer to the extent that an employee identifies with their work or job, in other words how it influences an employee's self-esteem and identity (Lundberg & Schaufeli, 2006). Finally, one more concept that has some things in common with work engagement but is definitely not its synonym is *workaholism*. Although an employee who is engaged to their work might work hard, they have a healthy relationship to it, unlike workaholics who feel compulsive need (addiction) to work. This thesis focuses on work engagement and gives less attention to the other concepts, unless they overlap with work engagement.

Work engagement is of great importance to an organization. A higher level of work engagement directly creates positive employee outcomes, such as improved in-role and extra-role performance (Bakker et al., 2004). These can benefit not only the individual employee in terms of potentially higher motivation and job satisfaction, but also the organization as a whole. From the organization's perspective, a high level of work engagement has a positive impact on productivity and performance, and it prevents negative outcomes such as voluntary turnover, thus saving resources related to turnover. The positive effects of high work engagement levels have been confirmed by several studies; for instance, a study that calculated the relationship between engagement and performance outcomes found that the differences between organizations in the top quartile and those in the bottom quartile were significant on several variables. The median percentage differences were 23% in profitability, 18% in revenue for high revenue organizations, 43% in revenue for low revenue organizations, 81% in absenteeism, 41% in quality, and 66% in well-being (Harter et al., 2020). In other words, organizations with highly engaged employees were more profitable, had higher sales, had less unplanned absenteeism, produced better quality, and had employees who felt better about their own wellbeing. Engagement had an impact on all 13 outcomes included in Harter et al.'s study.

Conclusively, leaders and HR departments should put their efforts into improving work engagement among the organization's workforce. Kim et al. (2019) write that employees should be provided with both work-related and personal resources by their workplace. Resources can function as *predictors*, meaning that they can help to predict an outcome. Ensuring that employees are provided with adequate resources should, as a consequence, predict positive outcomes for the organization, including those mentioned in the previous paragraph. An important question is what those resources should be and how to provide them. In their research from 2004 and 2007, Bakker, Demerouti, and Schaufeli divide job resources into three categories: 1) resources that decrease job demands and its physiological and psychological cost, 2) resources that support the achievement of work objectives, and 3) resources that support an employee's growth, learning and development. The job demands can be of mental, emotional, or physical nature. They can be neutral, but also negative, if there is an imbalance of resources and demands (Hakanen & Roodt, 2010). Resources should help employees cope with the demands and prevent the demands from becoming stressors. Resources affecting employees' motivation and their experienced job strain, leading to positive or negative organizational outcomes, as can be seen in Figure 1, a visual

31

representation of Bakker and Demerouti's *Job Demands-Resources model* (abbreviated as *JD-R model*).
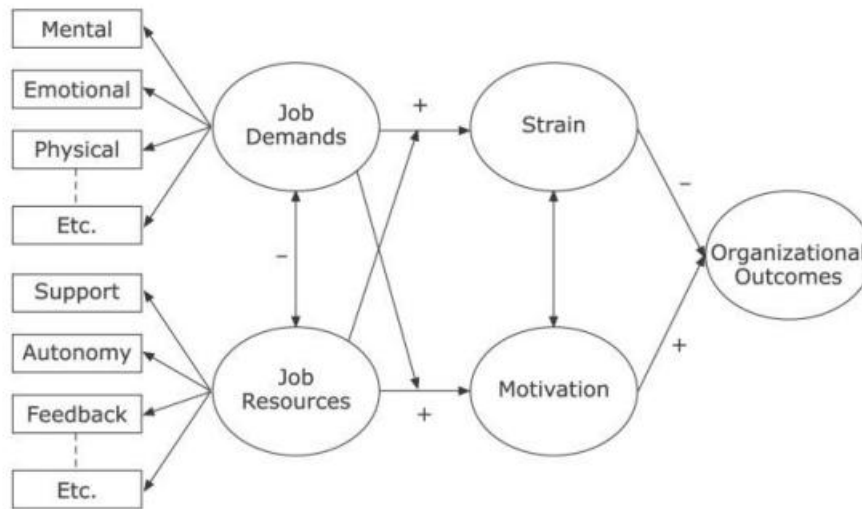
Figure 1. Job Demands-Resources model.
(Bakker & Demerouti 2007, 2, p. 10)

This thesis focuses on non-physical job resources: those of emotional or mental nature. Bakker and Demerouti's model in Figure 1 already names some of these resources. They can further be categorized into resources that are interpersonal and social, or related to organization of the work and the tasks themselves. They include, among others, the intrinsic resources presented in Table 4.

Category	Resource
Interpersonal and social relations with peers and leaders	support
	appreciation
	team climate
	organizational climate
	communication
	feedback
	training and coaching
Organization of work	role clarity
	participation in decision-making processes
	information sharing
	time control
Tasks	autonomy
	support with the tasks
	feedback about task performance
	task identity
	task significance
	task variety

Table 4. Three categories of resources.
Largely based on Bakker and Demerouti (2007, 1) and Bakker, Demerouti and Verbeke (2004).

Bakker, Demerouti, and Verbeke (2004) add also a fourth level, Organization, which refers to extrinsic resources such as salary, job security, and job opportunities and thus covers the contractual and organizational work resources.

Researchers have studied causations and correlations of high or low job demands and high or low job resources. For example, Bakker et al. (2005) found out that a high level of resources correlates with high engagement, even if the job's physical, emotional, and other demands are high. In the same study, researchers found that high demands but low resources predict negative outcomes. An important question is to what extent can an employee themselves, or their team lead and management, influence the availability of resources. Operational-level quick commerce jobs are physical service industry jobs with clearly defined roles and responsibilities. In the quick commerce industry, certain resources related to organization of work (e.g. role clarity or participation in decision making) and tasks (e.g. task variety) are

defined by the organization, and cannot significantly be influenced by the employee or the employee's direct supervisor.

Employees can be seen both as part of their own work community (team) and the wider organization (company). The resources from the work community and from the whole organization form two different layers, whose impact on the work engagement may vary. In other words, it is possible for a given employee to have different levels of engagement and commitment to their team than to their company. Specifying which organizational layer is relevant to a specific job can enable more accurate identification of job outcome predictors. Therefore, the next chapter discusses organizational commitment.

3.4 Organizational Commitment

As the Job Demands-Resources model establishes, work engagement is linked to *organizational commitment*. Mowday et al. (1979) define organizational commitment as "the relative strength of an individual's identification with and involvement in a particular organization". Meyer and Allen presented a framework in 1991 indicating three different types of commitment: *affective*, *continuance*, and *normative*. *Affective* commitment refers to the emotional attachment, identification and involvement that a member of the organization feels towards the organization; an employee's will to stay within the organization. *Continuance* commitment (also "commitment to continuity") refers to a member's awareness of the costs which are associated with leaving the organization. If the costs of leaving are greater than the costs of staying, the employee stays. *Normative* commitment refers to a member's feeling of obligation to remain in the organization. According to Meyer and Allen, these three types of commitment are all psychological states which describe a member's relationship with the organization, with implications as to whether the member will stay within the organization or leave it. Meyer and Allen's components have some resemblance to Porter et al.'s older three-component model, those three components being belief in an organization's values and goals, willingness to make an effort for the goals of the organization, and desire to remain within the organization. To further limit the definition of organizational commitment, it does not describe how the employee feels about their tasks, team, work conditions, leaders, etc., but all these things can have an impact on work engagement, which then consequently has an impact on an employee's level of organizational commitment.

From an organization's perspective, the level of organizational commitment among its members is crucial. All dimensions of commitment are connected to turnover intentions in Meyer and Allen's model of organizational commitment (1990), yet how strongly they correlate with outcomes such as turnover or absenteeism has varied by study (Somers, 1995). Generally, higher levels of organizational commitment has been found to correlate with various positive organizational outcomes (higher performance, good level of engagement, high attachment, competitive advantage, intent to remain) whereas low organizational commitment has been found to correlate with the negative ones (turnover, intended turnover, absenteeism). Positive organizational outcomes have a positive impact on the organization's productivity and performance, and thus to its financial health, while negative outcomes increase recruitment and training costs and may deteriorate the general motivation and team spirit among the remaining members of the organization. Organizational commitment does not just appear by itself, but it results from the employer–employee relationship; the values and goals that they share and the inputs that employer gives to the employee (Buchanan, 1974). As a conclusion, every organization should try to cultivate commitment among its members because commitment is related to positive organizational outcomes. As the Job Demands-Resources Model suggests commitment is cultivated by providing enough resources for the employee to meet the demands of the job.

Organizational commitment and work engagement are related, in that if an organization wants to improve the commitment of its members, it should also improve their work engagement. Several studies have reached this conclusion (Hakanen & Roodt, 2010). The two-way causal relationship between these facets is so strong that it is not always easy to say whether low work engagement leads to low organizational commitment, or vice versa. As the former can be either the cause, or the reason, of the latter, the risk of reverse causality exists. It is also possible that work engagement and organizational commitment do not correlate at all, or they correlate partially, or that they correlate but not for the reasons that one would expect. An example could be a worker who is very passionate about their job and team, but is constantly looking for better opportunities in other companies because of personal ambition. This person is highly engaged, but experiences low organizational commitment. In other words, they may experience high *affective commitment* but low *continuance* and *normative commitment*. Another example could be someone who dislikes their job but for one reason or another (e.g. work visa-related reasons) has high barriers to leaving the company. This person's work engagement may be low, but their organizational commitment may be high in

terms of loyalty, but not for "natural" reasons. In other words, they experience strong continuance and normative commitment but low affective commitment.

Organizational commitment is a psychological state felt by each employee individually. Therefore it is subject to demographic and dispositional differences, such as an employee's age, gender, personal values and personality traits. Every employee has also had different experiences with the organization, feels differently about the company's values, and has different experiences with the coworkers in the workplace. Even the wage can feel adequate for one employee and too low for another. To which extent each of these variables affects an individual's organizational commitment varies (Meyer & Allen, 1997). Some employees might be fully satisfied with the job resources and conditions and feel strong commitment to the company, while the other employees who have exactly the same resources and conditions might be unhappy with them and feel less committed. From the company's perspective, it is important that a majority of employees feel committed. In their 1997 research, Meyer and Allen even questioned whether employees' commitment really matters in all jobs. They argue that in some jobs where the timing and performance of required duties are tightly constrained, differences between employees with different levels of commitment are hard to notice. Such a busy work environment can probably be found in health care and retail industries, and in that respect the question is relevant also for quick commerce. Another relevant point from Meyer and Allen's research is that an employee may feel committed to their own team and behave accordingly (e.g. help out a colleague), while simultaneously they may not feel committed to the organization and thus not behave in a way that helps the entire organization (e.g. saving organization's resources). There is a certain extent of reciprocity; according to organizational support theory, employees perform better when they perceive that they gain support from the organization in the form of physical and non-physical resources. The emphasis is on the verb *perceive*; the degree of *perceived organizational support* may vary employee by employee (Eisenberger et al., 1986).

3.5 The Impact of Leadership on Work Engagement and Organizational Commitment

As discussed earlier, work engagement and organizational commitment are the result of multiple factors and resources. One important factor that can affect both of these concepts is *leadership*. The New Oxford Dictionary of English defines it as "the action of leading a

group of people or an organization". In organizations, there are many types of *leaders*. Typically within a company, a leader is in a managerial role and is responsible for the performance, strategy, and decision-making of their department and for the management and guidance of its members.

Leadership has a significant impact on work engagement, as it affects the employees' job demands and resources, and therefore subsequent motivation and strain, because leaders usually have the power to participate in employees' job-crafting and self-undermining (Tummers & Bakker, 2021). This affects the employees' well-being, satisfaction, and performance (Antonakis & Day, 2017) as well as organizational outcomes. Incorporating leadership into the JD-R model can be fruitful; see Figure 2.

There has been debate about whether leadership is a *job resource* or a *job demand* (Fernet et al., 2015), but the majority of studies consider it a resource (Tummers & Bakker, 2021). The position of the leader in relation to the employee can influence the type of influence the leader has on the employee. A direct supervisor – often a team leader – may have more influence on the "day-to-day business", along with a department manager. Senior managers make strategic decisions that affect workload, role, and strategy. Top management may not have any direct contact with the employee, but their decisions typically impact the entire organization. In quick commerce companies, delivery couriers, pickers and inventory workers typically report to a shift coordinator during their shift. The coordinator is not their manager, but rather a team leader who takes care of the affairs that occur during the shift. Their actual manager is the warehouse manager, and they are usually the person who has more strategic control and influence over the resources available, since they negotiate for those resources with the regional managers, who in turn negotiate with upper management.
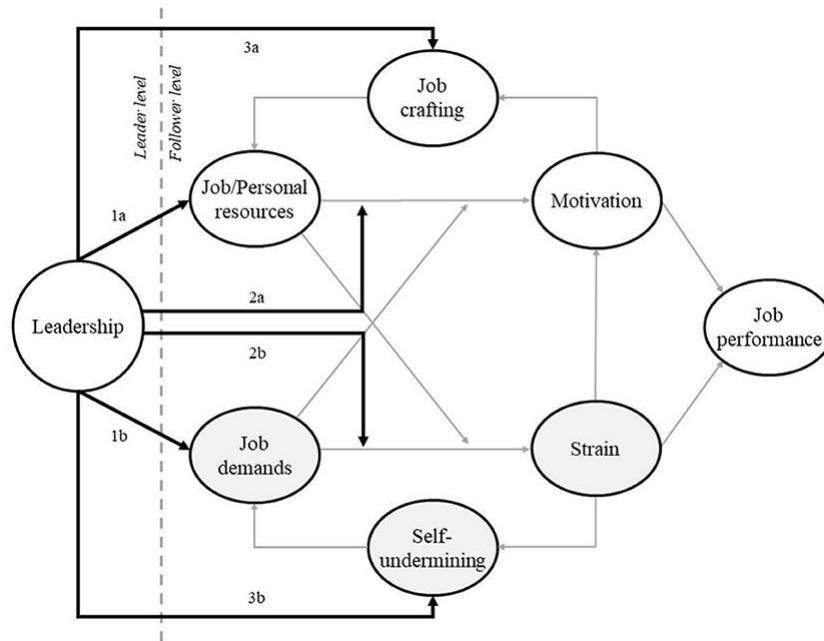
Figure 2. Job Demands-Resources model with leadership.
(Tummers & Bakker, 2021, p. 8)

Leadership may also impact organization-level outcomes. Although phenomena like high employee turnover and absenteeism rates are significant problems in certain industries, companies are not always good at identifying the causes of these issues. Whereas the management often believes that employees are leaving because they want better pay, an Austrian survey by Deloitte (2019) revealed that the most common reason to voluntarily change jobs was dissatisfaction with the management (19% of respondents), followed by the salary (18%), lack of promotion opportunities (17%), and lack of positive employee experiences (13%). Management behavior or lack of appreciation was also among the top reasons in several studies from Germany (Personio, 2022; Kununu, 2022, Compensation, Partner 2019). Indeed, leadership has a special role in building work engagement and organizational commitment due to its influence on job resources and demands. Leaders – especially in higher management – should also articulate the company's values and lead the company accordingly, setting a symbolic example (Schein, 1985). Multiple studies have proven a significant positive relationship between leadership and organizational commitment (Öztekin Bayır et al., 2015).

Academics have approached leadership's influence on organizational commitment primarily by researching and comparing different leadership styles, types and behaviors and focusing especially on transformational leadership (Tummers & Bakker, 2021). Without going into too much detail about the different leadership types, transformational leadership is especially

well-researched, and it refers to the type of leadership where subordinates are given personal responsibility and inspired to drive change and innovation within the company. In this leadership type, leaders are not micromanagers, instead, they inspire their subordinates and set clear norms, values, and goals. Communication is transparent and open, and the organization provides coaching, training, and mentoring which support subordinates in taking responsibility and making decisions on their own (Seebacher & White, 2022). Independent of the leadership type, there are some desirable leader qualities and behaviors which can have a positive influence on work engagement, and possibly employee commitment to the work community. These qualities can include, for example, charisma. However, leadership behaviors can be more interesting to look into since fostering them is easier than more innate qualities. Transformational leadership, for instance, has dimensions such as idealized influence on the subordinates, inspirational motivation, intellectual stimulation and individualized concentration (Bass, 1985). Rafferty and Griffin (2004) built upon Bass' research stating that the five dimensions of transformational leadership are vision, inspirational communication, supportive leadership, personal recognition, and intellectual stimulation. Hereafter, the dimensions are referred to as vision, communication, support, recognition, and intellectual stimulation, for brevity. See Table 5 for examples of related behaviors.

Dimension	Behavior
Vision	positive influence, clear goal articulation and setting, task focus, value congruence
Inspirational communication	positivity, encouragement, enthusiasm-building, confidence-building, motivation, emotion
Supportive leadership	individualized attention, recognizing needs and preferences, caring for needs and preferences, caring for feelings and welfare, friendliness, supporting psychologically, supporting in practical matters
Personal recognition	appraisal, rewards, acknowledgement, pay raise and promotion recommendations, positive feedback, recognition.
Intellectual stimulation	involving subordinates in problem-solving and decision-making, asking and welcoming their ideas, fostering creative environment

Table 5. Leadership dimensions and behaviors.
Expanded from Rafferty and Griffin (2004).

Previous research has found relationships between the dimensions in Table 5 and organizational commitment. Rafferty and Griffin examined the relationship between dimensions of transformational leadership and the three dimensions of organizational commitment (as previously detailed: affective, continuance, and normative). The researchers found out, inter alia, that inspirational communication was positively related to affective commitment, and intellectual stimulation was positively related to both affective and continuance commitment. Interestingly, in their sample, personal recognition was significantly negatively associated with continuance commitment and vision did not always lead to higher continuance commitment among subordinates. In fact, in Rafferty and Griffin's sample, vision was negatively associated with continuance commitment, contrary to popular belief. This example illustrates well that research findings can vary from organization to organization, and can lead to surprising results.

4   The Research Model

The research model of this thesis is shown in Figure 3. This research is based on five dimensions of transformational leadership (Rafferty & Griffin, 2004): vision, (inspirational) communication, (personal) recognition, support, and intellectual stimulation. In the first and second stage (marked with numbers 1 and 2 in the Figure) these five dimensions are treated as predictor independent variables whose impact on the intermediate outcomes of work engagement and organizational commitment is measured. Work engagement consists of three dimensions (vigor, dedication, and absorption, e.g. Schaufeli et al., 2002) and organizational commitment also consists of three dimensions (affective, continuance, and normative commitment, e.g. Meyer and Allen, 1991). Those are compiled into composite scores, one for work engagement and one for organizational commitment, respectively. The aim of the first and the second analysis is to answer the first and second research question "How well do different dimensions of leadership predict work engagement among operations-level quick commerce employees?" and "How well do different dimensions of leadership predict organizational commitment among operations-level quick commerce employees?".

The aim of the third and the fourth analysis (marked accordingly in the Figure 3) is to answer to the third and the fourth research question "How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees'

absenteeism?" and "How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees' turnover intentions?". In these analyses, the composite score of work engagement and the composite score of organizational commitment work as independent variables. Absenteeism and turnover intentions work as dependent variables.

LEADERSHIP:
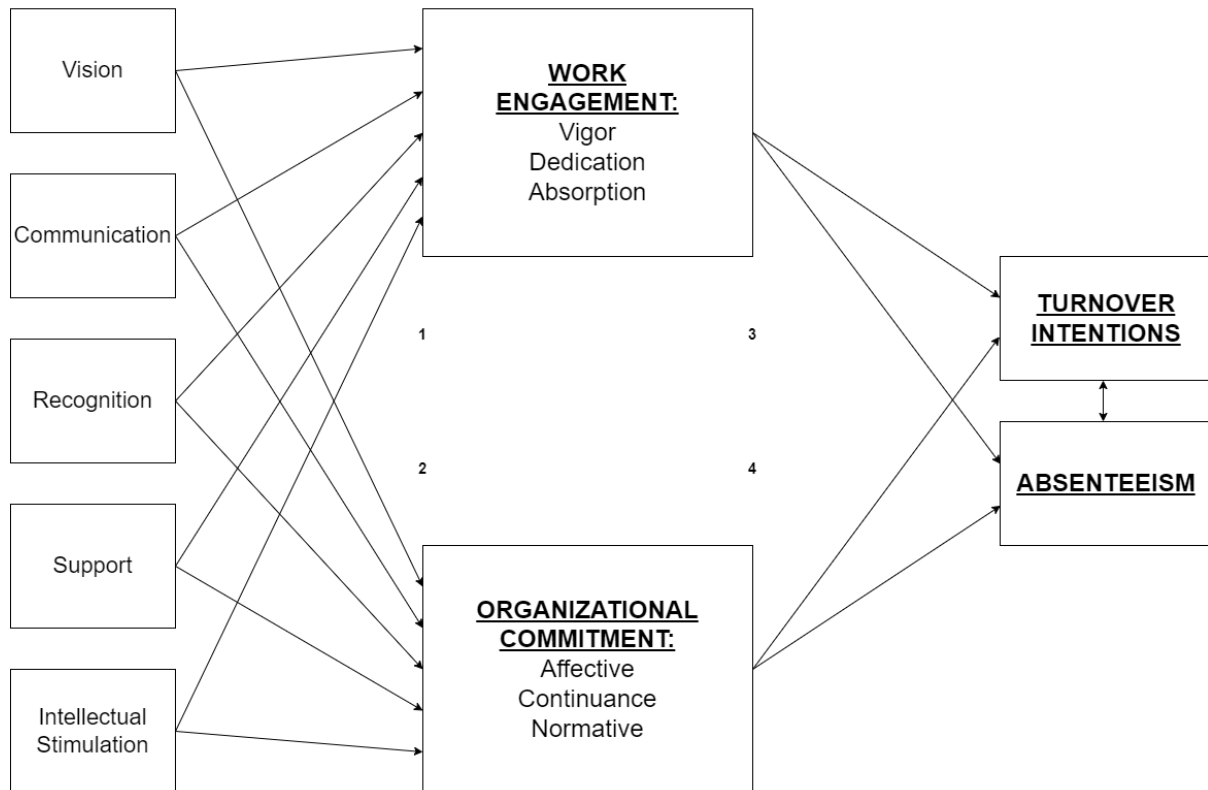
Figure 3. The research model.

The predictor variables, that function as the independent variables – the five dimensions of leadership – are discussed in more detail below.

4.1 Vision

In transformational leadership, a leader should aim to create a common, inspiring vision, which is based on the values and goals of the organization. A clear vision makes it easier to set objectives and reach them (Rafferty and Griffin, 2004). Some studies talk about the leader's charisma or idealized influence instead of vision; an important part of creating a vision is acting as an inspiration for subordinates, animating them and arousing emotion in them (Bass, 1985). Vision, however, does not need to be something so abstract – just

understanding what is expected of oneself in an organization, having clear goals, and understanding how one's performance is measured are already big steps towards clear vision, and consequently, also employee retention (Buckingham & Coffman, 1999 as cited by Wong, 2017).

4.2 Communication

Poor communication frequently appears on the lists of most common workplace challenges. Indeed, communication has been proven to have significant impact on employee engagement (Verčič &Vokić, 2017). In five dimensions of transformational leadership, inspirational communication refers to a leader communicating to subordinates with positive, encouraging, motivating, and confidence-building messaging and statements (Rafferty & Griffin, 2004), which is aligned by the organization's goals. However, transparency and clarity of communication, and a sufficient amount of it, are equally important for building trust and contributing to work engagement (Hadziahmetovic & Salihovic, 2022).

4.3 Recognition

Everyone wants to be given credit for their hard work and be recognized as a valuable member of the organization. Personal recognition can be non-monetary (e.g., praise for a job well done) or come in form of rewards (e.g., a bonus). A good leader should know this and be fair in giving recognition to their subordinates. Hansen et al. (2002) state that non-monetary recognition fosters motivation and enhances positive behavior among employees, and it is therefore also a strategic tool for an organization to retain its employees. The authors see it as an underused opportunity for organizations and criticize heavy reliance on reward programs and wage and lack of other ways of recognizing the employees' efforts. Other studies also confirm the importance of recognition in decreasing absenteeism and improving productivity and engagement (Castrillon, 2022).

4.4 Support

A leader can support their subordinates in a variety of ways. Typical ways include, for example, providing guidance, helping out, mentoring, and fostering the subordinate's development. A supportive leader makes sure that the subordinates feel heard, seen, valued, trusted, cared about, and not left alone with any challenges. Multiple studies confirm the

importance of supervisor support in work engagement, organizational commitment, and employee retention, including e.g. Eisenberger et al. (2002), Cole et al. (2006) and Mohamed and Ali (2018).

4.5 Intellectual Stimulation

According to Sánchez-Cardona et al. (2018), a good leader should encourage subordinates to actively participate in problem solving, critical thinking, innovation, and creativity in the workplace by questioning their old ways and finding new ways of doing things. Such activities are intellectually stimulating and have been found to increase affective commitment (Rafferty & Griffin, 2004) and creative climate in the team (Sandvik Madsen et al., 2018), among other positive organizational outcomes. While there may be little room for creativity at the operational level of quick commerce organizations, leaders can always encourage their subordinates to share ideas and feedback, and ensure that these are heard and implemented to the extent possible.

4.6 Work Engagement

Work engagement refers to a positive cognitive-affective state, whose three dimensions are vigor, dedication, and absorption. According to Schaufeli et al. (2002), who have developed the much-used definitions, vigor refers to having high energy, mental resilience, persistence and willingness to invest effort at work. Dedication refers to "being strongly involved in one's work and finding significance, enthusiasm, challenge, pride and inspiration in it". Absorption refers to the extent at which an employee is mentally positively immersed in the work. Levels of work engagement have been found to predict turnover (e.g. Abraham, 2012 as cited in Park & Johnson, 2019) as well as absenteeism (e.g. Schaufeli et al., 2009). In this thesis, these dimensions are not looked into separately, but they form a common work engagement score.

4.7 Organizational Commitment

Organizational commitment refers to the psychological attachment that an individual experiences towards their organization. According to Meyer & Allen (1991), it has three dimensions, which are affective, continuance, and normative commitment. Affective commitment refers to emotional attachment, continuance commitment refers to willingness to

stay in the organization, and normative commitment refers to the sense of responsibility or moral obligation related to staying in the organization. In earlier studies, the level of organizational commitment has been found to predict turnover and absenteeism (e.g. Somers, 1995). In this thesis, the dimensions are not looked into separately, but they form a common organizational commitment score.

4.8 Absenteeism

Absenteeism refers to an employee's intentional or habitual absence from work, typically for one or more days (Cucchiella et al., 2014). It can be caused by multiple factors. As stated in 4.6. and 4.7, absenteeism can be connected to low level of work engagement and/or organizational commitment. In this thesis, absenteeism refers to unplanned absences that can be agreed upon within the organization (e.g. falling ill and asking for sick leave) or no-shows that are not agreed upon within the organization (not appearing at work and also not informing the manager). Absenteeism was measured by two questions, retrieving numbers of absent days and no-show days.

4.9 Turnover Intentions

Turnover in this thesis refers to the employee voluntarily leaving the organization, and turnover intentions preparing for that either on the mental level or by taking action in searching for jobs. From the employer's side, it can be defined as the rate at which an organization's workforce terminates employment and requires replacement (Kreitner, 2003). As stated in 4.6. and 4.7, turnover intentions can be connected to low level of work engagement and/or organizational commitment. Turnover intentions were measured by three questions which measured mental intention, active job search, and future outlook as a member of the organization. They retrieved a single turnover intentions score.

The next chapter proceeds to the methodology, before the results of the research are presented in chapter 6.

5 Methodology

This chapter outlines the methodology that was used in this research. The first and the second subchapter describe the data collection method and sample characteristics. Subchapters three, four and five present the measures, data analysis strategy, and the ethical aspects of the research.

5.1 Data Collection Method

The data was collected by conducting an online survey. Survey was chosen as the data collection method because it is a simple method that allows for the collection of quantified and measurable data, and it was probable that many of the target respondents would be reachable online. The questionnaire was created using the online survey tool Google Forms and it consisted of 38 questions, mostly in 7-point Likert scale format. The target respondents were people who are currently employed in the quick commerce industry in Germany in one of the operational-level positions: delivery courier, order picker, warehouse worker, or shift coordinator. The position or the employer name was not asked. The questionnaire was in English.

The link to the questionnaire was shared on Facebook group *Rider & Driver Group (Lieferando/Wolt/UberEat/Gorillas/Flink/Mjam/Getir)* [sic] with the permission from the group administrators. The group is a private (closed) Facebook group with more than 2.000 members, targeted to operations-level employees of companies that are mentioned in the group name, but also welcoming employees from other companies. It was also shared in a few smaller groups. Furthermore, it was shared to the author's friends and acquaintances in the industry with a request to pass it on to colleagues. In addition, the questionnaire was distributed on the online career platform LinkedIn by directly contacting people whose current job matched the target group, and whose location was in Germany. Direct outreach was a surprisingly efficient method of reaching respondents.

A short description of the purpose and scope of the questionnaire, as well as a privacy notice, were attached to the shared questionnaire link in all locations. Sharing the link among relevant respondents was encouraged. Furthermore, the link was submitted to different workers collectives, which are unofficial groups of quick commerce employees in Berlin.

The questionnaire was open between January 17, 2023 and February 6, 2023. The number of potential respondents was quite high (several hundred to thousands) but reaching them was challenging. The goal was to get at least 100 responses and preferably as many as possible to increase statistical power. The number of respondents fell slightly short of the goal, but was sufficient to conduct regression analyses (Pallant, 2016).

5.2 Sample Characteristics

The total number of respondents was 96. After removing invalid responses, the sample size was 93. The three invalid responses that were removed were empty, which means that the respondent had answered "no" to the first question, which asked whether they are currently working in a quick commerce company in Germany. This was a mandatory question where responding "yes" led to the start of the actual questionnaire and "no" led directly to its end and submission of an empty questionnaire.

The questions regarding demographics were voluntary, except for a question about citizenship, but over 90% of the respondents answered these questions voluntarily. Most respondents were between the ages of 25 and 29 or 30 and 34; these age groups accounted for 63.9% of all respondents. The median age of respondents was 29. The sample was quite male-dominated, with 63.3% identifying as male, 31.1% female, 1.1% other or no gender, and 4.4% preferred not to answer. 54% said they were from Berlin, which can probably be explained by the efficient distribution of the questionnaire in Berlin networks and by the fact that Berlin has a very high concentration of quick commerce companies. Other locations with five or more respondents were Hamburg (9.2%), Leipzig (5.7%), and Munich (5.7%). The rest of the locations had less than five respondents. 10% preferred not to disclose their location or worked in a location that was not listed. A slight majority of respondents were German or EU citizens (53.3%). The median length of time respondents had worked for their current employer was approximately 12 months. Responses varied fairly evenly between a minimum of 0 full months and a maximum of 25 months. See the summary of the sample in Table 6.

Demographic feature	Option	Number of responses	In %*
Age	18–24	16	18.6%
	25–29	32	37.2%
	30–34	23	26.7%
	35–39	7	8.1%
	40–44	4	4.7%
	45+	4	4.7%
Gender	male	57	63.3%
	female	28	31.1%
	prefer not to say	4	4.4%
	other/none	1	1.1%
Location	Berlin	47	54%
	Cologne	4	9.6%
	Düsseldorf	3	3.4%
	Frankfurt AM	4	4.6%
	Hamburg	8	9.2%
	Leipzig	5	5.7%
	Munich	5	5.7%
	Stuttgart	2	2.3%
	other/ prefer not to say	9	10.3%
Citizenship status	German/EU	48	53.3%
	non-German/ non-EU	42	46.7%
Length of employment at the current company	0–6 months	19	22.1%
	7–11 months	20	23.3%
	12–19 months	25	29.1%
	20+ months	13	15.1%

Table 6. Respondent demographics.

*Please note that all demographic questions except citizenship status were voluntary; the response rate for employment length was 92.5% (n=86), age 92.5% (n=86), gender 96.8% (n=90), and location 93.5% (n=87).

5.3 Measures

The questionnaire consisted of six sections, each measuring a separate topic. The questionnaire began with a short opening section, where the respondent was asked to confirm that they were currently working in a relevant role in a quick commerce company in Germany. If the answer was no, the questionnaire ended automatically. The second section asked how long the employee had been working at their current job, and then four questions on basic demographic information followed, asking for the respondent's age, gender, and location, as well as citizenship status to measure if there were differences between employees with German or EU citizenship and those without. For the questions about the employment length and age, the respondent could enter a number, which were later grouped into employment length groups and age groups. The other questions had multiple choices for the respondent to choose from. Out of the demographic questions, only the question about citizenship status was mandatory; it was a binary question.

The third section presented 15 leadership-related statements: 3 for each of the transformational leadership dimensions of vision, communication, support, recognition, and intellectual stimulation (Figure 3). The statements were largely based on the Gallup Q12 Index, which also measures work engagement, but focuses more on relationships with the supervisor and the team or social and support aspects at the workplace. It was slightly modified and extended to ensure that each dimension had three questions, as well as to adapt it to the quick commerce environment. The respondents rated the leadership-related statements on a 7-point Likert scale, where 1 indicated "strongly agree" and 7 "strongly disagree". It should be noted that the word "supervisor" was replaced with "manager" to make sure that the respondents think of their manager – typically the warehouse manager – instead of their shift coordinator(s). All questions in this section were mandatory. A composite score was created for each of the 5 dimensions. Cronbach's alpha coefficient for all of the variables was good or very good; generally above .7 is deemed acceptable (DeVellis 2012), and the coefficients were as follows: vision α=.83, communication α=.84, recognition α=.78, support α=.89, and intellectual stimulation α=.93. A common composite score for all 15 leadership dimensions was calculated, and in this case it was .94. Thus, the entirety of the leadership scale can be considered internally consistent and reliable.

The fourth section presented six statements related to three dimensions of work engagement: vigor, dedication and absorption (Figure 3). The respondents again rated the statements on a 7-point Likert scale, where 1 indicated "strongly agree" and 7 "strongly disagree". The primary theoretical background of the statements was founded in the Job Demands-Resources model. For instance, Schaufeli & Bakker (2004) and Hakanen et al. (2006) have successfully used the JD-R model to study work engagement and used it as a mediator of organizational outcomes in their research. Many studies use the Utrecht Work Engagement Scale (*UWES*), which may include up to 24 statements, however, in this thesis, the questionnaire was used in its shortened form UWES-6 as a compromise between a longer form and an ultra short 3 question form, which has also been deemed efficient by Schaufeli et al. (2019). It is noteworthy that personal characteristics may play a role in work engagement and it would be possible to incorporate them into the JD-R model, as Hakanen and Roodt (2010) present by describing studies of, e.g., Hallberg et al. (2007) and Zhang et al. (2007) that do so. However, in this thesis, no personal characteristics are included, as doing so would widen the scope of research beyond practical applicability. All statements in this section were mandatory. A common composite score was created for the six dimensions of work engagement: Cronbach's alpha coefficient was high .89, suggesting good internal consistency and reliability of the scale.

The fifth section presented 10 statements about organizational commitment: four about affective commitment, three about continuance commitment, and three about normative commitment (Figure 3). The respondents rated the statements on a 7-point Likert scale, where 1 indicated "strongly agree" and 7 "strongly disagree". The statements were largely based on the organizational commitment survey of Allen and Meyer from 1990, though partially modified. Allen and Meyer's questionnaire was, in turn, adapted from the Organizational Commitment Questionnaire (*OCQ*) developed by Porter and Smith in 1970 and published by Mowday, Steers and Porter in 1979, which consisted of 15 statements to measure affective commitment, out of which nine are positive and six negative (Maier & Woschée, 2008). The questionnaire was extended with a few statements from Organizational Identification Questionnaire (*OIQ*), which had been used by Parker and Haridakis (2008) in a survey about organization identification among workers. All statements in this section were mandatory. A common composite score was created for the ten dimensions of organizational commitment. As the Cronbach's alpha coefficient was .73, it was good. After validating the data, it became evident that the three dimensions of continuance commitment were distorting the data. After

removing them, the common composite score for the remaining seven organizational commitment items, representing normative and affective dimensions, was high .86.

The sixth section presented two statements about absenteeism: one about agreed absenteeism (e.g., due to illness) and one about no-shows (not showing up for work without informing the manager) within the last 3 months. The respondent was to give a numeric input about their record of absenteeism. The section continued with three statements about turnover intentions (thoughts of quitting, concreteness of job search, and 12 month outlook). All statements related to absenteeism and turnover intentions were mandatory. After the final statements, the respondent was given the opportunity to provide comments and feedback before the questionnaire was closed. The final section thanked the participants for their responses and described how to participate in the voluntary giveaway.

Table 7 presents leadership dimensions (independent variables) in more detail, and Table 8, the rest of the concepts (dependent variables). Its third column shows which existing theory or questionnaire the measures were based on. Please note that Table 8 continues on the second page. The full questionnaire, including the demographic questions, can be found in Appendix 1.

Concept	Dimension	Measure	Based on
Leadership	**Vision**	I know what is expected of me at work I understand how my performance is measured I have clearly set goals	partially Q12, partially self-created questions based on five dimensions of transformational leadership (e.g. Rafferty and Griffin 2004)
	Communication	My manager clearly communicates information that I need to work efficiently My manager explains how the organization's future plans affect me I am satisfied with how much communication I receive from my manager	same as above
	Recognition	In the last 7 days, I have received recognition or praise for doing good work I feel valued by my manager My manager treats me with respect	same as above
	Support	My manager cares about my development My manager cares about me as a person When I approach my manager with a problem, they will listen	same as above
	Intellectual stimulation	My manager makes me feel that my opinions count My manager is responsive to my ideas, requests, and suggestions I am encouraged to share my ideas and suggestions	same as above

Table 7. Measures of leadership dimensions.

Concept	Dimension	Measure	Based on
Work Engagement	**Vigor**	At my work, I feel bursting with energy At my work I always persevere, even when things do not go well	Utrecht Work Engagement Scale (Schaufeli & Bakker 2004, Schaufeli 2019), shortened version, slightly modified
	Dedication	I am enthusiastic about my job I am proud of the work that I do	same as above
	Absorption	When I am working, I forget everything else around me I feel happy when I am working intensely	same as above
Organizational Commitment	**Affective**	I would be very happy to spend the 3 next years in this company I feel like "part of my family" at this company I tell my friends that this company is a great company to work for I find that my own values and the company's values are very similar	Organizational Commitment Questionnaire (orig. Porter and Smith 1970) / Organizational Identification Questionnaire (Allen and Meyer 1990), shortened and modified
	Continuance	It would be very hard for me to leave my job at this company right now even if I wanted to I believe I don't have many options outside this company One of the major reasons I continue to work for this company is that leaving would require considerable personal sacrifice	same as above

Normative	I feel obliged to remain with this company This company deserves my loyalty I owe a great deal to this company	same as above
Absenteeism	How many days have you been unplanned absent from work during the last 3 months? (For example, due to illness, mental health issues, childcare obligations, unforeseen circumstances etc.)? On how many days have you simply not shown up at work (without informing your manager) during last 3 months?	own
Turnover Intentions	Are you thinking about quitting your job at your current company? Are you currently looking for a new job? How likely is it, in your opinion, that you will still be employed at your current company in 1 year?	own

Table 8. Measures of work engagement, organizational commitment, absenteeism, and turnover intentions.

5.4 Analysis Strategy

The goal of the analysis was to determine how well leadership dimensions predict employee work engagement and organizational commitment, and how well work engagement and organizational commitment predict employee absenteeism and turnover in the quick commerce setting. The gathered data was analyzed by conducting regression analyses, which is a suitable method for numerical variable data gathered through a Likert scale.

The analysis began with importing the data, screening, and cleaning it. Out of total of 96 responses, 3 were invalid where the respondent had responded "no" to the starting question which asked whether they currently worked at a quick commerce company – subsequently the questionnaire was submitted empty. The 93 remaining responses were checked for reliability and validity. The internal consistency was mostly good for the composite score, as discussed earlier. See Table 9 for the descriptive statistics of the analyzed variables and their reliability scores (Cronbach's alpha). The scores are on a 7-point Likert scale. Note that work engagement, organizational commitment, absenteeism, and turnover intentions' values are for the composite scores of their dimensions.

Concept	Variable	Mean	Std Dev	Cronbach's alpha
Leadership	Vision	5.48	1.44	.83
	Communication	3.69	1.74	.84
	Recognition	3.98	1.82	.78
	Support	3.58	1.95	.89
	Int. Stimulation	3.29	1.96	.93
Work Engagement	Vigor	4.13	1.61	.65
	Dedication	3.12	1.77	.82
	Absorption	3.80	2.08	.83
Organizational Commitment	Affective	2.46	1.29	.77
	Continuance	4.44	1.73	.78
	Normative	2.07	1.33	.81
Absence	Absence	1.48	2.20	–
Turnover Intentions	Turnover Intentions	4.03	0.93	.90

Table 9. Descriptive statistics and reliability.

The research itself consisted of four analyses, according to the description in the research model (Figure 3). The first analysis examined whether vision, communication, recognition, support, and intellectual stimulation explained the respondents' level of work engagement, and if yes, to which extent. The second analysis examined whether the aforementioned variables explained the respondents' level of organizational commitment and if yes, to which extent. The third analysis examined whether work engagement and organizational commitment are determinants of absenteeism level in this industry. The fourth analysis examined whether work engagement and organizational commitment explain the prevalence of turnover intentions. The analyses were executed using IBM SPSS version 29.0.0.0 (241).

5.5 Research Ethics

This research was conducted solely for the purpose of writing a thesis, and not as an assignment for any of the quick commerce companies. It was conducted anonymously, and only minimal demographic information was deemed necessary to collect. The survey was not targeted to employees of any particular company, and the name of the employer was not

asked at any point in the questionnaire. Respondents were not asked for their name. Questions about location, gender, and age were optional. Location options were only available at the city level, so respondents could not indicate a specific neighborhood or warehouse.

To increase the incentive to respond, respondents were given the opportunity to win a €50 gift card to an online store. The gift card was drawn at random. To participate in the draw, respondents were asked to send an email with the subject line "DRAW" to an email address created specifically for this survey. The drawing was done on February 25, 2023, after the survey had closed. The emails were immediately deleted after the drawing, except for the winner's email, which was utilized to notify the winner. Afterwards, the winner's email was deleted as well. This was done in order to avoid collecting participants' data, and therefore to ensure maximum anonymity.

6 Results

This chapter presents the key statistical data – correlation analyses – of the questionnaire. It begins with correlations of the leadership and demographic dimensions below, and then proceeds to four subchapters, which present the results of the regression analyses that are relevant to the four research questions.

Table 10 shows the correlations of the five leadership dimensions and the four demographic dimensions (NB: "TimeIn" means the length of employment at the current company and "Citizenship" means the citizenship status). All the leadership dimensions demonstrated a positive and significant correlation, however, the strength of the correlation varied. The lowest, though still moderate, correlations were between Vision and Support (0.32) as well as Vision and Intellectual Stimulation (0.32). Correlations between Vision and Communication (0.41) as well as Vision and Recognition (0.42) were relatively strong. High correlation was found between Communication and Recognition (0.68) as well as Communication and Support (0.75). Very high correlation was found between Recognition and Intellectual Stimulation (0.80), Support and Recognition (0.85), and most significantly, between Support and Intellectual Stimulation (0.90).

Demographic characteristics barely correlated with any of the variables.

	Pearson Correlation				
	Vision	**Communication**	**Recognition**	**Support**	**Int. Stimulation**
Vision	1				
Communication	.413**	1			
Recognition	.421**	.684**	1		
Support	.328**	.748**	.853**	1	
Int. Stimulation	.323**	.696**	.798**	.899**	1
TimeIn	.101	.024	-.046	-.034	-.054
Age	-.041	-.036	-.026	-.006	.054
Gender	-.174	-.046	.020	.009	-.047
Citizenship	.032	-.218*	-.114	-.227*	-.193

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 10. Correlations of the leadership dimensions and demographics.

6.1 The Relationship of Leadership Dimensions and Work Engagement

The first analysis aimed to measure how well different dimensions of leadership predict work engagement, and thus to respond to the first research question, "How well do different dimensions of leadership predict work engagement among operations-level quick commerce employees?". This was done by conducting a regression analysis, wherein the independent variables were the composite scores of the five dimensions of leadership (Vision, Communication, Recognition, Support, Intellectual Stimulation), and the dependent variable was the composite score of three dimensions of work engagement (Vigor, Dedication, Absorption). The leadership dimensions explained 74% (.741 Adjusted R Square) of the variance in the level of work engagement. As illustrated in Table 11, Support garnered the highest standardized beta coefficient, .678, meaning that this dimension made the highest unique contribution to explaining the dependent variable, when the variance explained by the other variables was controlled for. Also, the part correlation value for Support was below .001, which means that it made a significant and unique contribution towards the prediction of work engagement level. However, all of the independent variables except Communication had a direct positive relation with work engagement.

In step 2, demographic variables TimeIn (= length of employment at the current company), Age, Gender, and Citizenship (= citizenship status) were included in the analysis. The adjusted R square value decreased from .741 to .723. As seen in Table 11, Support remained the single most contributing variable with beta coefficient of .753; its p-value remained below .001, thus its unique contribution to the prediction of work engagement level remained significant. However, none of the demographic characteristics themselves had any significant impact on the results.

It should be noted that some of the independent variables had high bivariate correlations. This was the case in both steps 1 and 2 for Support and Communication, Support and Recognition, Support and Intellectual Stimulation, as well as Recognition and Stimulation in both steps 1 and 2. Since Support had such a strong effect in addition to a high bivariate correlation with three other independent variables, it was omitted in step 3 of the correlation analysis to see whether that would change the results. Demographic variables were still included in the analysis. As can be seen in Table 11, the adjusted R square decreased further to .666, which is still a rather high value. When Support was not included, Recognition's beta coefficient

was .418 and its part correlation value less than .001, thus in this case, Recognition made a significant unique contribution to the prediction of work engagement level. Furthermore, Intellectual Stimulation had a very low part correlation value. Demographic characteristics still did not have a significant impact on the results.

No particular concerns regarding linearity, normality, homoscedasticity, or the presence of outliers were identified in the residual analysis. The normal P-P plot of the regression standardized residual and the scatterplot are presented in Appendix 2.

	Step 1		Step 2		Step 3	
	β	p	β	p	β	p
Vision	.019	.758	-.019	.781	-.026	.729
Communication	-.004	.960	.010	.914	.119	.232
Recognition	.179	.098	.160	.194	.418	<.001
Support	.678	<.001	.753	<.001		
Stimulation	.032	.792	-.018	.902	.378	.002
TimeIn			-.002	.969	-.019	.786
Age			.033	.615	.020	.781
Gender			-.047	.465	-.037	.608
Citizenship			.026	.684	.011	.876
R square	.755		.755		.699	
Adjusted R square	.741		.723		.666	

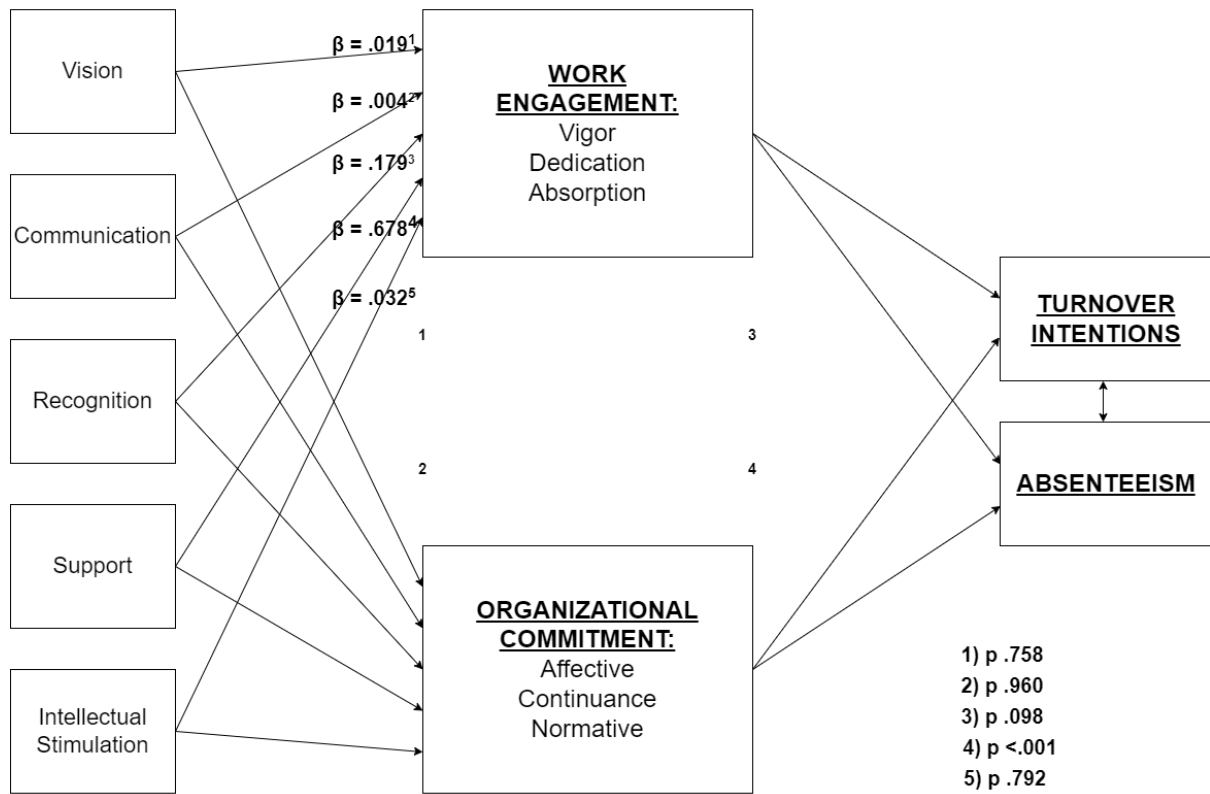*Table 11. Predictors of work engagement, steps 1, 2 and 3.*

Figure 4. Results of the first research question.

6.2 The Relationship of Leadership Dimensions on Organizational Commitment

The second analysis was related to the second research question, "How well do different dimensions of leadership predict organizational commitment among operations-level quick commerce employees?". The independent variables were the same five leadership dimensions as in the first analysis (Vision, Communication, Recognition, Support, Intellectual Stimulation), but the dependent variable was now the composite score ComOrgCom of the two dimensions of organizational commitment (Affective and Normative). Importantly, Continuance was not included as a dimension of organizational commitment in the analysis, because as previously mentioned, during the validation stage it became evident that the three dimensions of continuance commitment were distorting the data and decreasing its validity.

The first step in answering the second research question was to conduct an analysis with only the above-mentioned independent and dependent variables, but excluding demographic variables. In this analysis, the leadership dimensions explained 47% (.470 Adjusted R Square) of the variance in the respondent's level of organizational commitment. Of the

60

leadership dimensions, Support garnered the highest standardized beta coefficient, .323. That means that Support once again made the highest unique contribution towards explaining the level of organizational commitment when the variance explained by the other variables was controlled for. None of the other independent variables made a significant unique contribution to the prediction of the level of organizational commitment.

Step 2 was to repeat the analysis but this time including demographic independent variables TimeIn (= length of employment at the current company), Age, Gender, and Citizenship (= citizenship status) in the analysis. As can be seen in Table 10, the independent variables now explained 45.3% of the variance in the level of organizational commitment – slightly less than in step 1. Support remained the strongest independent variable, and its standardized beta coefficient value even moderately increased. However, the beta coefficient and part correlation values for the leadership dimensions did not change much in step 2. None of the demographic variables had any significant impact on the level of organizational commitment.

This analysis was conducted in only two steps, because none of the leadership or demographic independent variables proved to be very strong or overlapping in steps 1 and 2, therefore there was no reason to omit any of them to test whether the results would change. The results for steps 1 and 2 can be seen below in Table 12 and Figure 5.

No particular concerns regarding linearity, normality, homoscedasticity, or the presence of outliers were identified in the residual analysis. The normal P-P plot of the regression standardized residual and the scatterplot are presented in Appendix 2.

	Step 1		Step 2	
	β	p	β	p
Vision	-.030	.733	-.036	.714
Communication	.010	.930	.032	.811
Recognition	.291	.061	.281	.104
Support	.323	.133	.371	.119
Stimulation	.131	.456	.090	.645
TimeIn			-.016	.853
Age			.101	.266
Gender			-.013	.885
Citizenship			.074	.414
R square	.499		.515	
Adjusted R square	.470		.453	

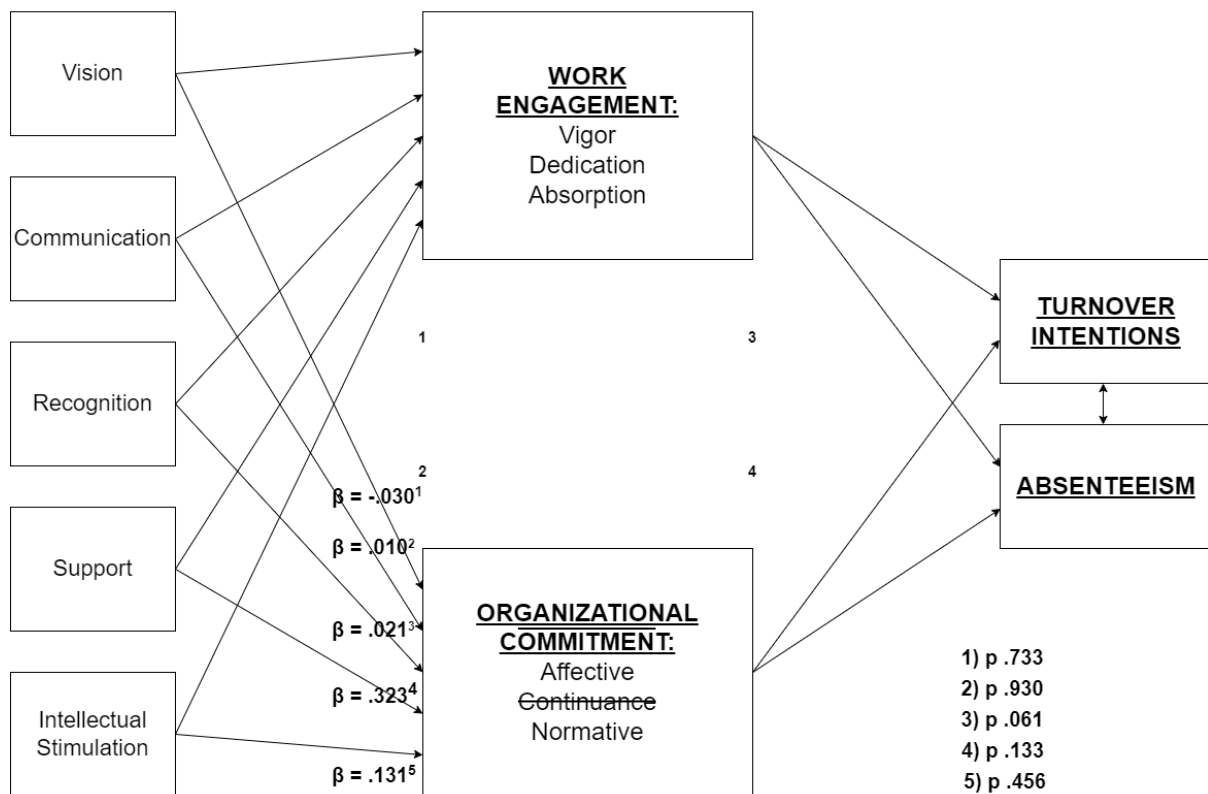*Table 12. Predictors of organizational commitment, steps 1 and 2.*

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Figure 5. Results of the second research question.

6.3 The Relationship of Work Engagement and Organizational Commitment and Absenteeism

The aim of the third analysis was to measure what kind of impact the level of work engagement and the level of organizational commitment have on absenteeism and thus to respond to the third research question "How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees' absenteeism?".

Before presenting the results of the regression analysis, it should be mentioned that absenteeism data was collected by asking respondents to write their number of unplanned absent days (including sick days, etc. but excluding planned vacations etc.) and number of no-show days (not showing up at work but not informing the manager) within the last three months. These questions were not mandatory. The results can be seen in Table 13. Almost a half of the respondents, 46.2%, indicated that they had zero unplanned absences, and even higher number of respondents (84.1%) indicated zero no-show days during the same period. Among those who reported one or more absence days during the period, the average number of absence days was 5, and the median was 3. As for no-shows, 15.9% of respondents reported not showing up at work on one or more days during last three months; their average number of no-show days was 1.7 and the median was 2. Note that for absenteeism data, there were remarkable concerns regarding linearity, normality and homoscedasticity, and there were clearly some outliers (i.e. individuals with abnormally high number of absence or no-show days). See the normal P-P plot of the regression standardized residual and the scatterplot in Appendix 2 for visual reference.

	Option (in days)	Number of responses	In %*
Unplanned absences (Illness, etc.)	0	43	46.2
	1–3	26	28
	4v6	9	8.7
	6–9	3	3.3
	10≤	13	14.1
No-shows	0	69	84.1
	1	6	7.3
	2	3	3.7
	3	3	3.7
	4≤	1	1.2

Table 13. Descriptive statistics on absenteeism.

*Please note that absenteeism-related questions were voluntary. The response rate for absent days was 100% (n=93) and no-show days 88.2% (n=82).

The analysis was conducted in three steps, however, in step 3 the adjusted r value turned negative. Therefore, only steps 1 and 2 are presented here and very high caution should be applied when interpreting the results.

In step 1, the three dimensions of work engagement (Vigor, Dedication, Absorption) were summed up to create a work engagement composite score ComWorkEn, and the same was done for the two dimensions of organizational commitment (Affective, Normative) to create a organizational commitment composite score ComOrgCom. The dimension Continuance was still excluded for validity reasons. ComWorkEn and ComOrgCom now acted as independent variables and the composite score of two absenteeism scales (n Absent days, n No-show days), ComAbsence, as the dependent variable. The results can be seen in Table 14. Work engagement and organizational commitment together explained 15.4% (.154 Adjusted R Square) of the variance in absenteeism. Work engagement had much higher standardized beta coefficient value (-.559) and it also had the part correlation value of <.001, meaning that it made a significant unique contribution to prediction of absenteeism.

In Step 2, ComWorkEn and ComOrgCom were kept and demographic variables TimeIn (= length of employment at the current company), Age, Gender, and Citizenship (= citizenship

status) included in the analysis. Consequently the adjusted R square decreased to .131. Work engagement and organizational commitment still had the highest standardized beta coefficient values. Out of the demographic variables, citizenship status had the highest beta coefficient value and the lowest part correlation value; however, none of the demographic variables had a strong impact on the absenteeism.

The results of the steps 1 and 2 can be seen in Table 14 and Figure 6.

	Step 1			Step 2	
	β	p		β	p
ComWorkEn	-.559	<.001		-.531	<.001
ComOrgCom	.296	.037		.286	.054
TimeIn				.083	.454
Age				.021	.852
Gender				.036	.752
Citizenship				.121	.277
R square	.175			.199	
Adjusted R square	.154			.131	

Table 14. Predictors of absenteeism, steps 1 and 2.
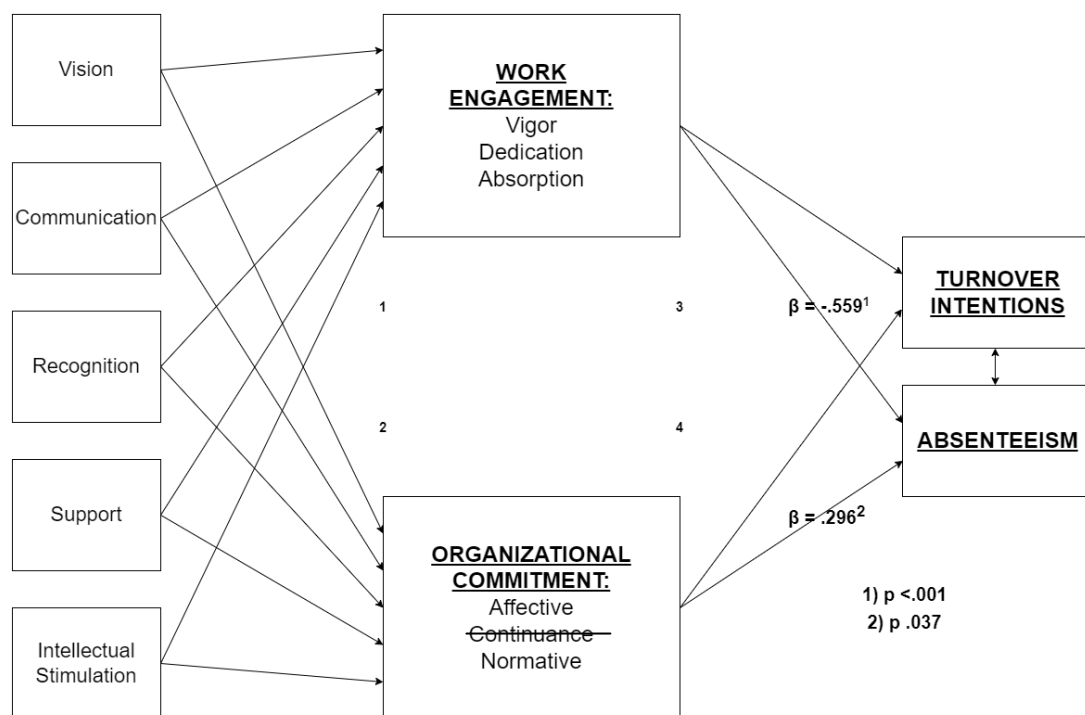
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Figure 6. Results of the third research question.

6.4 The Relationship of Work Engagement and Organizational Commitment and Turnover Intentions

The fourth and final analysis was conducted to respond to the fourth research question "How well do the levels of work engagement and organizational commitment predict operations-level quick commerce employees' turnover intentions?". Before moving onto the results, one one remarkable data point bears mentioning: a clear majority, 65.7%, of the respondents said that they think about leaving their job at least from time to time, and 55.9% further said that they were currently looking for a new job (see more descriptive statistics in Table 15). The former figure is twice as high as a German national average; a 2022 survey by McKinsey found out that 28% of German respondents representing different industries said that they are thinking about quitting their work. Generally speaking, such high turnover intentions in quick commerce suggest that quick commerce companies are not attractive as permanent employers.

	Option	Number of responses	In %
Are you thinking about quitting your job at your current company?	7 (very actively)	29	31.2
	5–6	24	25.9
	4 (neutral)	8	8.6
	2–3	22	23.7
	1 (not at all)	10	10.8
Are you currently looking for a new job?	7 (very actively)	23	24.7
	5–6	23	24.7
	4 (neutral)	6	6.5
	2–3	23	24.7
	1 (not at all)	18	19.4
How likely is it, in your opinion, that you will still be employed at your current company in 1 year?	7 (extremely likely)	7	7.5
	5–6	21	22.6
	4 (neutral)	14	15.1
	2–3	24	25.8
	1 (extremelyunlikely)	27	29

Table 15. Descriptive statistics on turnover intentions.

In this analysis, the dependent variables were the composite score ComWorkEn of the three work engagement dimensions (Vigor, Dedication, Absorption) and the composite score ComOrgCom of the two organizational commitment dimensions (Affective and Normative; NB: Continuance was still excluded). The dependent variable was ComTurnInt, a composite score of the three turnover intentions questions. Note that the third turnover intentions question was reverse coded. This analysis was conducted in three steps and the results can be seen in Table 16.

In Step 1, ComWorkEn and ComOrgCom were the independent variables and ComTurnInt the dependent variable. These independent variables together explained 60.3% (.603 Adjusted R Square) of the variance in turnover intentions. As was the case in the previous analysis, ComWorkEn had higher beta coefficient value (-.489) than ComOrgCom (-.363). Both independent variables had a p-value of <.001, which means that they both made a significant unique contribution to the equation, and thus have a statistically significant relationship with the dependent variable.

Step 2 was to include TimeIn (= length of employment at the current company), Age, Gender, and Citizenship (= citizenship status) as independent variables in addition to ComWorkEn and ComOrgCom. This did not influence the results significantly. The adjusted R square increased a little to .610. ComWorkEn still had the highest beta coefficient value, and both ComWorkEn and ComOrgCom still made statistically significant unique contributions. Out of demographic variables, TimeIn had the highest beta coefficient value and the lowest p-value, but far from being significant on its own.

Due to the strength of ComWorkEn, this analysis also required a third step, where ComWorkEn was omitted. Adjusted R square value fell to .482, thus without ComWorkEn the model could still explain 48.2% of the variance in turnover intentions. Now ComOrgCom had the largest beta coefficient (-.699). Its p-value was below .001, thus it made a significant unique contribution to prediction of turnover intentions. Demographic variables remained insignificant.

No particular concerns regarding linearity, normality, homoscedasticity, or the presence of outliers were identified in the residual analysis. The normal P-P plot of the regression standardized residual and the scatterplot are presented in Appendix 2.

	Step 1		Step 2		Step 3	
	β	p	β	p	β	p
ComWorkEn	-.489	<.001	-.400	<.001		
ComOrgCom	-.363	<.001	-.127	<.001	-.699	<.001
TimeIn			.180	.052	.161	.071
Age			-.033	.704	.051	.577
Gender			-.002	.577	-.186	.853
Citizenship			.035	.578	.041	.968
R square	.613		.642		.518	
Adjusted R square	.603		.610		.482	

Table 16. Predictors of turnover intentions, steps 1, 2 and 3.

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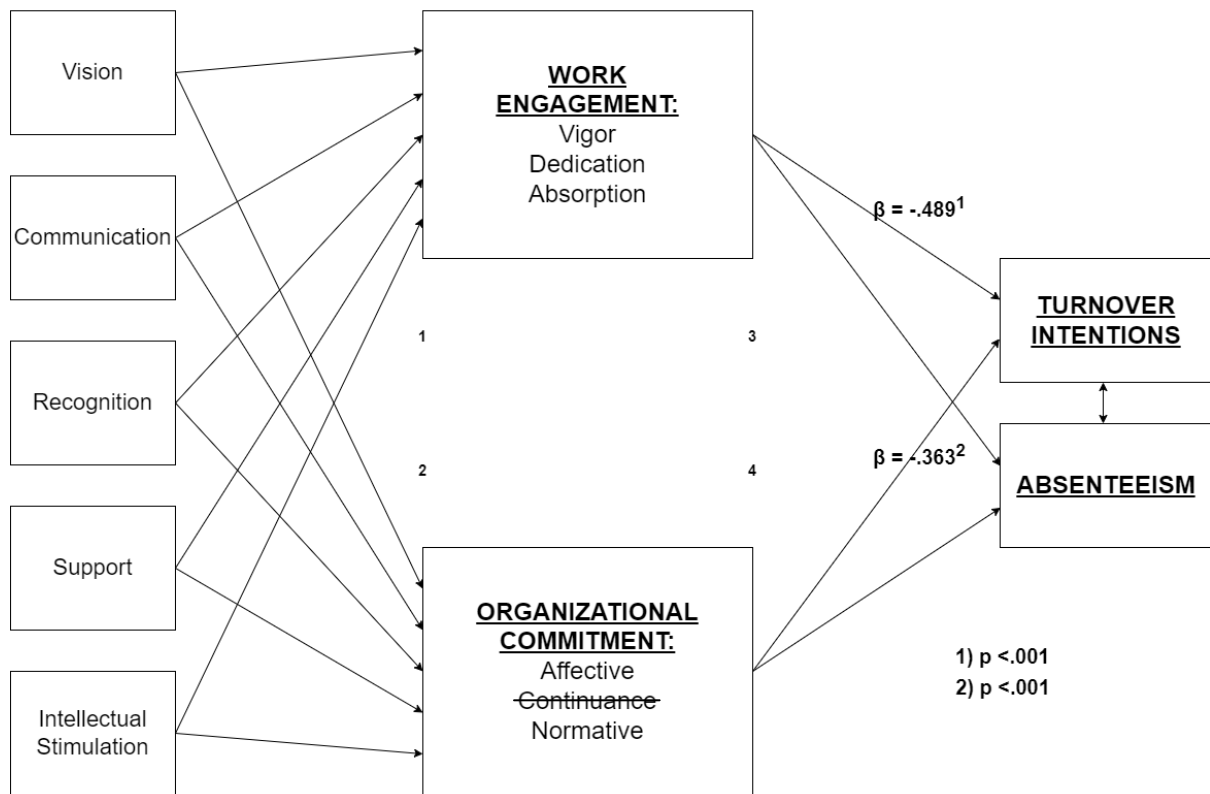
Figure 7. Results of the fourth research question.

7 Discussion

The aim of this thesis was firstly to identify how well the selected five leadership dimensions of transformational leadership (vision, communication, recognition, support, and intellectual stimulation) predict intermediate employment outcomes of work engagement and organizational commitment among operations-level quick commerce employees, and secondly, how well such outcomes predict final employment outcomes of absenteeism and turnover intentions in the same sample. The research followed a research model with four analyses. The data was collected through an online survey of target respondents and analyzed using multiple regression analysis.

The research model, which was created for the purpose of this thesis, was based on the assumption that an employee's leadership experiences can have both intermediate outcomes (work engagement and organizational commitment) and final outcomes (absenteeism and voluntary turnover). It was loosely based on the Job Demands-Resources model (*JD-R model*) by Bakker and Demerouti (originally developed in 2001, updated 2004 and later) in the sense that in the model, leadership dimensions were treated as job resources, which can have an impact on the job demands, and thus to intermediate employment outcomes (in Bakker and Demerouti's research, e.g. job satisfaction, burnout). Like in the JD-R model, intermediate outcomes of work engagement and organizational commitment were seen as psychological constructs on the way to more practical final outcomes. In terms of organizational commitment, the research model was partially based on the framework of organizational commitment by Meyer and Allen (1991), which assumes that the three dimensions of organizational commitment have implications on whether a member will stay within the organization or leave it.

While both intermediate and final outcomes can undeniably depend on numerous factors, a conscious decision was made to focus on just leadership dimensions. The five dimensions which were included in the research (Vision, Inspirational Communication, Personal Recognition, Supportive Leadership, and Intellectual Stimulation]) are commonly seen as building blocks of transformational leadership (e.g., Rafferty and Griffin, 2004). The related questions – three for each dimension – were partially borrowed from earlier literature and partially were the author's own adaptations. Regression analyses were executed for all four analyses of the research: 1) leadership dimensions and work engagement, 2) leadership

dimensions and organizational commitment, 3) work engagement and organizational commitment and absenteeism, and 4) work engagement and organizational commitment and turnover intentions.

The results of the first analysis showed that each of the above-mentioned leadership dimensions, except Communication, had a direct positive relationship with employees' work engagement. Combined, these factors could explain 74%, of the variance in the level of work engagement, which is a high number. The strongest dimension was Support, and out of its components, the feeling of being cared for as a person by the manager, and the trust that if a problem appears, the manager will be there to listen was most influential. This result is in line with various studies from different industries and countries that have found supervisor support to be the key predictor of employee work engagement, including e.g. Bakker et al. (2008) and Afzal et al. (2019). The dimension Recognition was also a strong predictor of work engagement. Its components focused on the feeling of being valued and respected by the manager, and on whether the employee had received recognition or praise for their good work. The statements of Support and Recognition dimensions are both more emotionally loaded than e.g. statements of Vision and Communication dimensions. This highlights the importance of a personal, emotional relationship between employee and manager in a workplace which has a hectic atmosphere, and where the nature of work is highly practical. This concept is also supported by the weakness of the more practical dimensions, Vision and Communication, as predictors of work engagement. In other words: building an abstract vision, having specific goals and receiving the right amount of information are all essentially important at any workplace, but they are not enough to build work engagement among quick commerce employees. Instead, the leader has to be there for the employee on a supportive and emotional level, which might require more investment from the company.

The second analysis found out that the five leadership dimensions together explained 47% of the variance in organizational commitment. The strongest dimension was again Support, however, none of the dimensions made a statistically significant contribution to predicting the level of organizational commitment. This finding suggests that the employees differentiate between their manager and the rest of the organization: they may exhibit positive attitudes toward their immediate supervisors, but then their attitude toward the entire organization may be different, as also Asif et al. (2023) note. In this sample the perceived leadership experiences did not significantly impact on how committed employees were to the

organization. Although leadership behavior certainly has an impact on work engagement, even positive leadership experiences may not directly translate into a higher level of organizational commitment. Organizational commitment, after all, refers to the relationship between the employee and the organization, not the relationship between the employee and their supervisor. An earlier meta-analysis by Öztekin Bayır et al. (2015) found that related studies have generally found a medium-level positive correlational relationship between various leadership behaviors and employee organizational commitment, however, the differences in the effects of commitment types (Affective, Continuance, Normative) have not been statistically significant, as was the case in this research, too. Some studies which specifically measured the impact of transformational leadership on organizational commitment have generally found the relationship to be positive (Keskes, 2014). It is important to note that while a transformational leadership style would be ideal in many ways, this study did not examine the leadership style of quick commerce managers. It is possible that managers in the quick commerce companies have very different leadership styles, as well as different levels of experience in leading a team.

The third analysis measured the extent to which levels of work engagement and organizational commitment could explain the presence of absenteeism among employees. The result was that 15.4% of variance in absenteeism could be explained by these two factors. Work engagement made a significant contribution towards explaining absenteeism. When the work engagement composite score was removed, the model stopped working. A meta-analysis by Neuber et al. (2021) found that related studies have typically concluded that higher work engagement leads to reduced absenteeism, both in terms of absence frequency and absence length. Schaufeli et al. (2009) had come to similar conclusions when they found out that work engagement predicts lower rates of future sickness-related absence frequency. A larger sample would have been beneficial to fully comprehend absenteeism and its predictors in quick commerce. A look into the data (see Table 11 in Chapter 6.3) suggests high polarization: while almost a half of employees had no irregular absences at all (46.2%) during the last three months, almost every sixth employee had more than 10 absent days during the same period. Such a high number is alarming and would suggest that there is a remarkable industry-wide absenteeism issue, as it is three times higher than the average number of illness-related absences (2.8) per employee per 3 months in Germany (calculation based on Destatis, 2022, 3). Every sixth employee also had had at least one day when they simply did not show up at work during the last three months. If a similar figure applied

industry-wide, this would indicate a significant and costly problem. However, high caution should be exercised when making such extrapolations, because the sample size of this research was small.

The fourth analysis measured the extent to which levels of work engagement and organizational commitment can explain turnover intentions among employees. Together, 60.3% of the variance in turnover intentions was explained by these factors. The level of work engagement correlated significantly with the turnover intentions, which confirms the conclusion of multiple previous studies (e.g., Bailey et al., 2015, Shantz et al., 2016) and suggests that those whose work engagement was low had stronger intentions to leave their job. The level of organizational commitment also correlated significantly with the turnover intentions, suggesting that those who felt less committed to the organization had stronger intentions to leave it. However, no particularly strong relationship between each of the commitment dimensions and turnover intentions was found, which contradicts some studies, e.g., Zhao and Zhao (2017), who noticed a strong correlation of the level of affective commitment and the prevalence of turnover intentions. Affective commitment had the strongest correlation with turnover intentions also in this research, yet not statistically significant.

Demographics, such as age and gender of the employees, did not show any significant impact on the results of the four analyses of this research. Related studies have generally not found any significant relationship between demographics and intermediate or final employment outcomes either; for example, Xanthopoulou (2007) found no such relationship in her study of fast-food workers, a sample that is likely to share some similar characteristics with the sample used in this thesis.

7.1 Practical Implications

Several of the findings of this thesis reached the same conclusion as previous studies in the field. First and foremost, these findings underscore the importance of managerial support in this industry as a building block of the intermediate outcomes of work engagement and organizational commitment. In further analysis, work engagement acts as a primary component which includes the final employment outcomes of absenteeism and turnover intentions. The second practical implication was that the relative importance of the more

emotional dimensions of managerial support and recognition was higher than the importance of more practical leadership dimensions, like vision (e.g., goal setting), communication, or intellectual stimulation (e.g., involving team in development work). Such findings could be useful in determining the direction in which leadership in this industry should be developed.

The findings on absenteeism and turnover intentions should be taken as a warning. First, they may indicate that there are widespread problems with employee engagement and commitment, which are likely to correlate with overall levels of job satisfaction and performance within the industry, and thus may lead to poorer financial returns for affected firms, as suggested by Xanthopoulou (2007). Second, widespread absenteeism is costly in the short term, and should be treated as a high priority issue in the affected organizations. Third, such a high level of turnover intentions among employees is likely to be realized, to some extent, into actual turnover, which results in increased staffing, recruitment and training costs, as well as eroding knowledge and social capital in affected companies. In the longer term, absenteeism and high turnover can lead to even more serious challenges. In the prevailing German labor market environment, labor shortages are commonplace. Increasing attractiveness of both individual quick commerce companies and the industry as a whole is essential. A lack of motivated and engaged employees may even jeopardize the very "quick delivery" service promise that have made this industry so popular and newsworthy in the first place. And if that promise can no longer be kept, then quick commerce is in danger of losing what may be its most important competitive advantage over traditional brick-and-mortar grocery stores.

The final practical implication of these findings is that because leadership is connected to work engagement and organizational commitment outcomes in this industry, developing quality leadership should be invested in to prevent undesired employment outcomes and to encourage good performance. It has been proven by e.g. Breevaart et al. (2013) that actively improving leadership behavior has a direct influence on work engagement among the employees. In the long term, such investments could help quick commerce companies decrease their high absenteeism and turnover rates, as well as to ensure that they can keep their promise of quick delivery times.

7.2 Limitations

The main limitations of this thesis are related to scope and generalizability. First, the intermediate employment outcomes of work engagement and organizational commitment discussed in this thesis in particular are complex concepts that are influenced by a wide range of factors. In this thesis, a conscious choice was made to address the topic through five leadership dimensions. There may be varying or different dimensions if a different concept of leadership is to be used than the one in this thesis (transformational leadership). Second, a large variety of other factors influence work and organizational commitment, and the role of these unaccounted for factors cannot be completely obscured. In the low-wage industry, pay is obviously important, but so are flexibility of working hours, location, conditions, requirements, and other issues. Regarding generalizability, it would have been desirable to have more respondents from outside of Berlin, so that the sample would have better reflected the whole country. In addition, the size of the sample limits the generalizability of the results.

Some of the conceptual dimensions used may be very close to each other, or even partially overlapping. There are also causality and correlation challenges for certain outcomes. It should be remembered that work engagement not only depends on leadership but also on other factors. It is also difficult to fully separate work engagement and organizational commitment, as they may or may not be correlated with each other.

A clear limitation of this thesis is the lack of predictability in the quick commerce industry. In recent years, the industry has developed very rapidly and has been unusually turbulent. Therefore, the statistics may become outdated quickly. On the other hand, this thesis should be seen as a documentation of the state of quick commerce at the time of its publication, and the research model used in the thesis is applicable to other studies of the same character.

7.3 Future Research

This topic offers plenty of scope for further research. Of particular interest would be a longitudinal study that follows employees in the industry, and includes also those who left their positions, therefore their turnover intention was materialized. Such a research could certainly ask those who quit what were the main reasons for their turnover. Absenteeism, also, in this industry would definitely benefit from further research, and it would be interesting to explore the causes in more detail.

8 Conclusion

The aim of the thesis was to identify how well certain leadership dimensions predict work engagement and organizational commitment, and how well work engagement and organizational commitment predict absenteeism and turnover for operations-level quick commerce employees in Germany. Several statistically significant relationships were found. First, leadership dimensions explained 74% of variance in the level of work engagement in the sample; the strongest dimension was Support, which made a statistically significant contribution to the equation. Secondly, the leadership dimensions explained 47% of variance in the level of organizational commitment in the sample; Support was again the strongest dimension, yet not statistically significant. These findings underscore the importance of managerial support in the industry and also suggest that its relative importance among quick commerce employees is higher than that of vision, communication, or intellectual stimulation. Third, the research provided some interesting descriptive statistics on absenteeism. Absenteeism in the sample was much higher than average German level, but the issue was highly polarized, with almost a half of respondents having no absent days at all, but every sixth respondent having 10 or more such days. For no-shows, the data was even more polarized. High absenteeism suggests that there is low work engagement and organizational commitment in the industry. The regression analysis, however, showed that just 15.4% of variance in absenteeism could be explained by work engagement and organizational commitment, thus the result should be treated with caution. Fourth, work engagement and organizational commitment together explained 60.3% of the variance in turnover intentions. Both significantly correlated with turnover intentions, indicating that among engaged and committed employees, thinking of quitting and searching for new jobs was less common than among those whose engagement and commitment were lower. The respondents' demographic characteristics did not influence the results on a statistically significant level at any step of any analysis.

The findings suggest that developing leadership at the operational level would benefit the quick commerce industry. It would be particularly important to ensure that employees feel supported and valued by their manager and receive recognition for their work. The positive outcomes this development could produce could help companies prevent loss of knowledge and social capital, decrease their costs related to absenteeism, recruitment, and training, and in the long term, increase the credibility and attractiveness of the industry as a whole.

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Appendices

Appendix 1: Questionnaire

| #	Construct	Question	Scale
1	Start	Are you currently employed at a quick commerce company in Germany?	yes/no
2	Demographic	How long have you been employed at your current company (approximately)?	months (free input)
3	Demographic	What is your age?	years (free input)
4	Demographic	What is your gender identity?	male female other/none prefer not to say
5	Demographic	Your working location is in…	Berlin Cologne Dortmund Dresden Düsseldorf Essen Frankfurt am Main Hamburg Hannover Leipzig Munich Stuttgart other / prefer not to say
6	Demographic	Are you currently a German / EU citizen?	yes/no
7	Leadership: Vision	I know what is expected of me at work	7-point Likert scale
8	Leadership: Vision	I understand how my work performance is measured	7-point Likert scale
9	Leadership: Vision	I have clearly set work goals	7-point Likert scale
10	Leadership: Communication	My manager clearly communicates information that I need to work efficiently	7-point Likert scale

11	Leadership: Communication	My manager explains how the company's future plans affect me	7-point Likert scale
12	Leadership: Communication	I am satisfied with how much communication I receive from my manager	7-point Likert scale
13	Leadership: Recognition	In the last 7 days, I have received recognition or praise for doing good work	7-point Likert scale
14	Leadership: Recognition	I feel valued by my manager	7-point Likert scale
15	Leadership: Recognition	My manager treats me with respect	7-point Likert scale
16	Leadership: Support	My manager cares about my development	7-point Likert scale
17	Leadership: Support	My manager cares about me as a person	7-point Likert scale
18	Leadership: Support	When I approach my manager with a problem, they will listen	7-point Likert scale
19	Leadership: Intellectual Stimulation	My manager makes me feel that my opinions count	7-point Likert scale
20	Leadership: Intellectual Stimulation	My manager is responsive to my ideas, requests, and suggestions	7-point Likert scale
21	Leadership: Intellectual Stimulation	I am encouraged to share my ideas and suggestions	7-point Likert scale
22	Work Engagement: Vigor	At my work, I feel bursting with energy	7-point Likert scale
23	Work Engagement: Vigor	At my work I always persevere, even when things do not go well	7-point Likert scale
25	Work Engagement: Dedication	I am enthusiastic about my job	7-point Likert scale
26	Work Engagement: Dedication	I am proud of the work that I do	7-point Likert scale
28	Work Engagement: Absorption	When I am working, I forget everything else around me	7-point Likert scale
29	Work Engagement:	I feel happy when I	7-point Likert scale

	Absorption	am working intensely	
31	Organizational Commitment: Affective	I would be happy to spend the next 3 years in this company	7-point Likert scale
32	Organizational Commitment: Affective	I feel like "part of my family" at this company	7-point Likert scale
33	Organizational Commitment: Affective	I tell my friends that this company is a great company to work for	7-point Likert scale
34	Organizational Commitment: Affective	I find that my own values and the company's values are very similar	7-point Likert scale
35	Organizational Commitment: Continuance	It would be very hard for me to leave my job at this company right now even if I wanted to	7-point Likert scale
36	Organizational Commitment: Continuance	I believe I don't have many options outside this company	7-point Likert scale
37	Organizational Commitment: Continuance	One of the major reasons I continue to work for this company is that leaving would require considerable personal sacrifice	7-point Likert scale
38	Organizational Commitment: Normative	I feel obliged to remain with this company	7-point Likert scale
39	Organizational Commitment: Normative	This company deserves my loyalty	7-point Likert scale
40	Organizational Commitment: Normative	I owe a great deal to this company	7-point Likert scale
41	Absence	How many days have you been unplanned absent from work during the last 3 months? (for example due to illness, mental health issues, childcare obligations,	days (free input)

|		unforeseen circumstances etc.).	
42	Absence	On how many days have you simply not shown up at work (without informing your manager) during last 3 months?	days (free input)
43	Turnover Intentions	Are you thinking about quitting your job at your current company?	7-point Likert scale
44	Turnover Intentions	Are you currently looking for a new job?	7-point Likert scale
45	Turnover Intentions	How likely is it, in your opinion, that you will still be employed at your current company in 1 year?	7-point Likert scale
46	Feedback	Is there anything else you would like to say before we finish?	text field (free input)

Appendix 2: Residual Statistics of the Research Questions

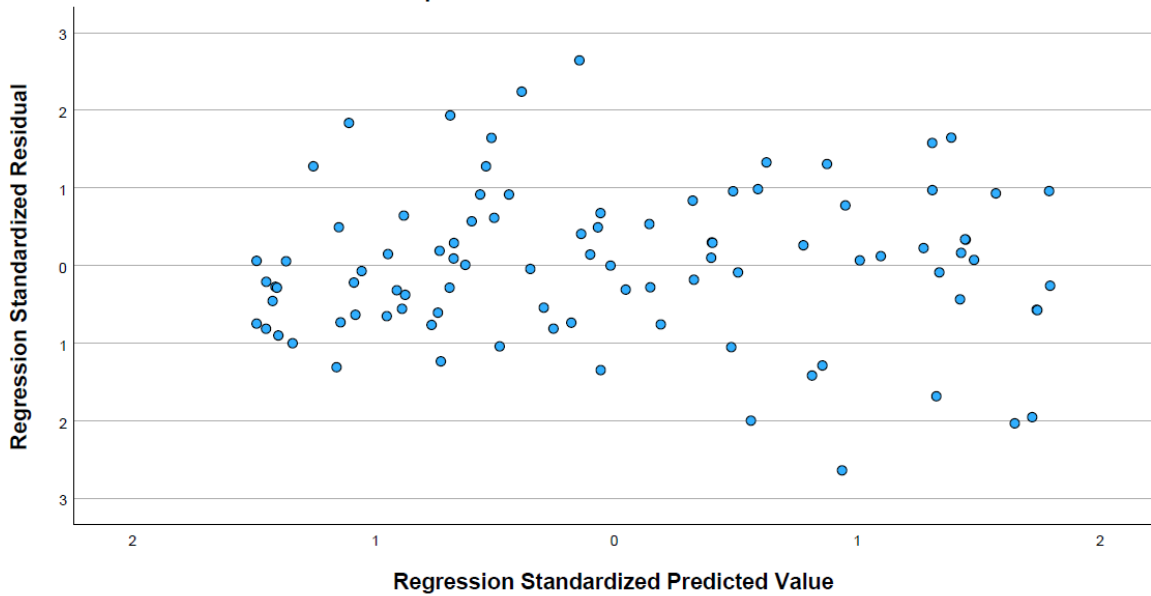## Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ComOrgCom

Scatterplot
Dependent Variable: ComOrgCom
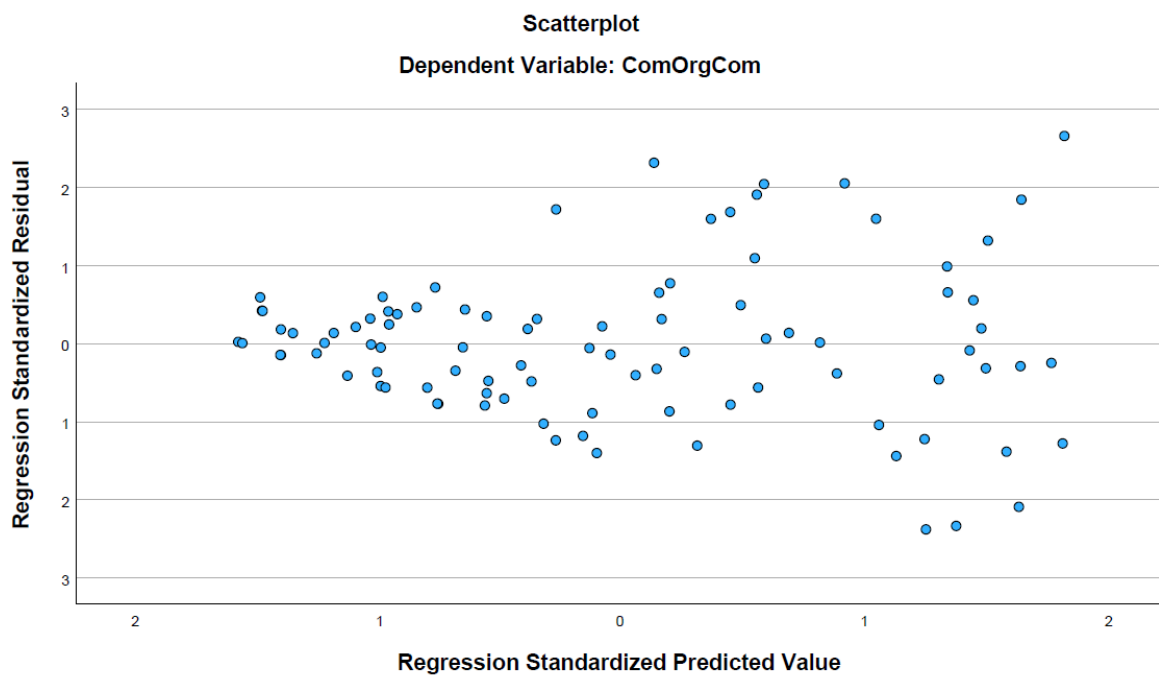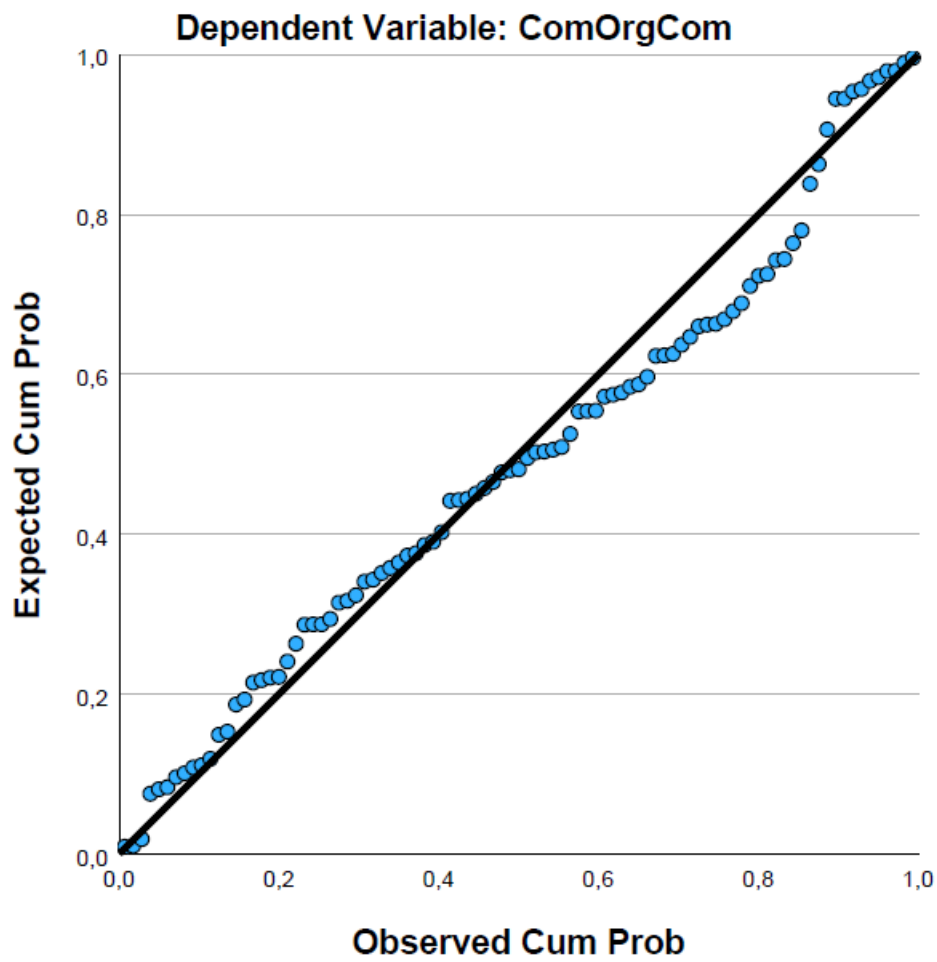
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ComWorkEn
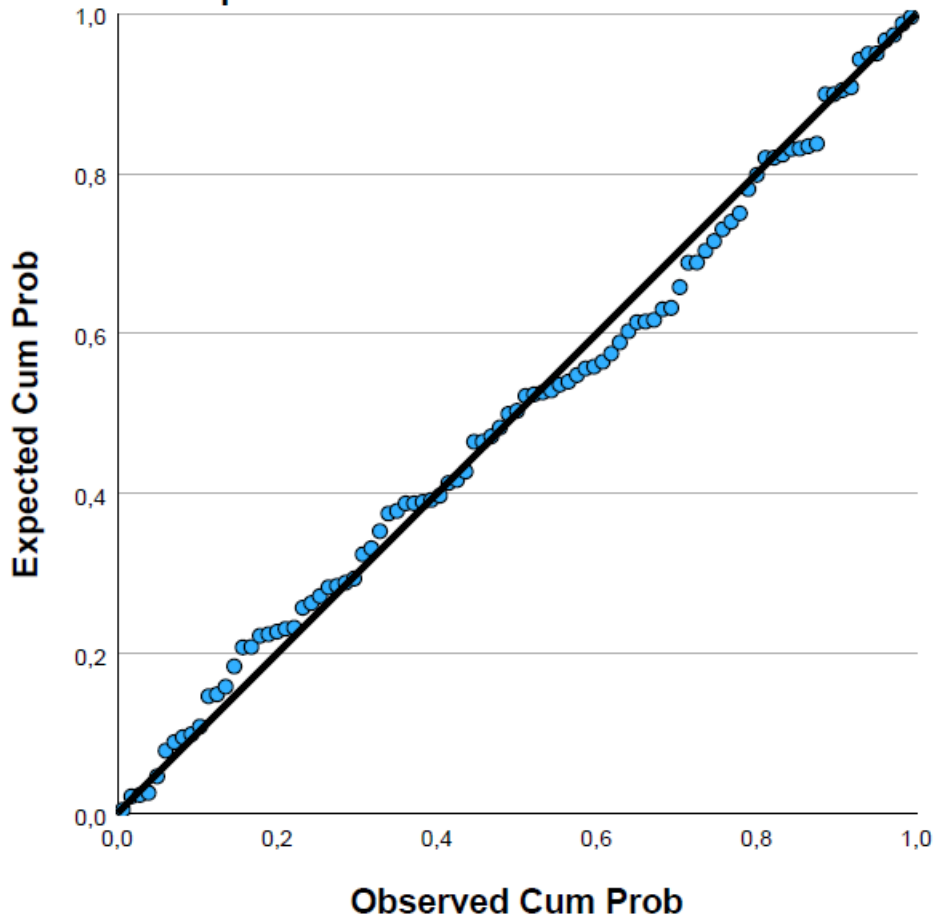
Scatterplot

Dependent Variable: ComWorkEn

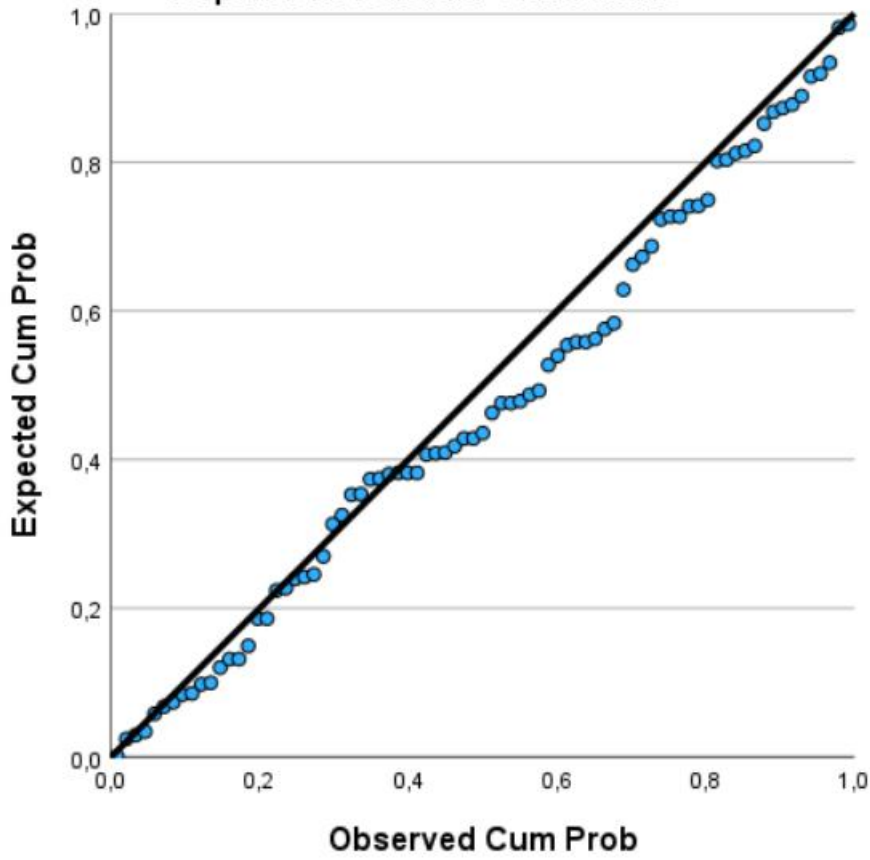# Normal P-P Plot of Regression Standardized Residual
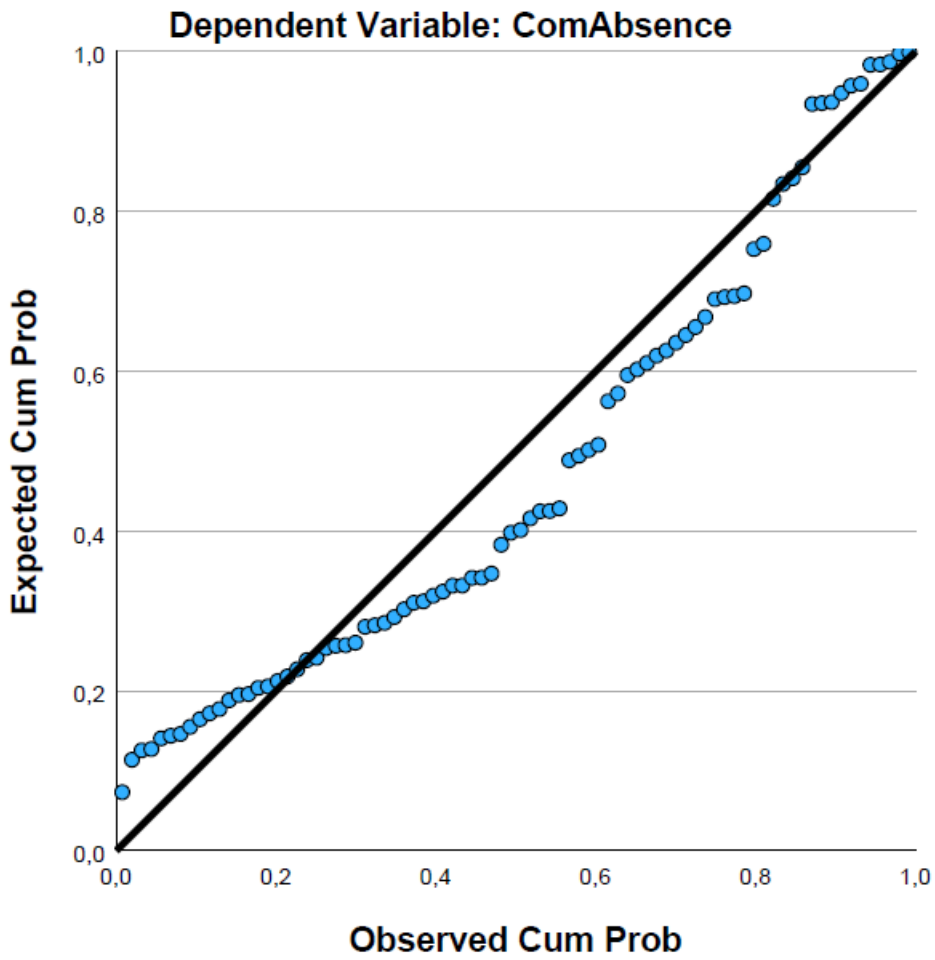
Dependent Variable: ComAbsence

Scatterplot

Dependent Variable: ComAbsence
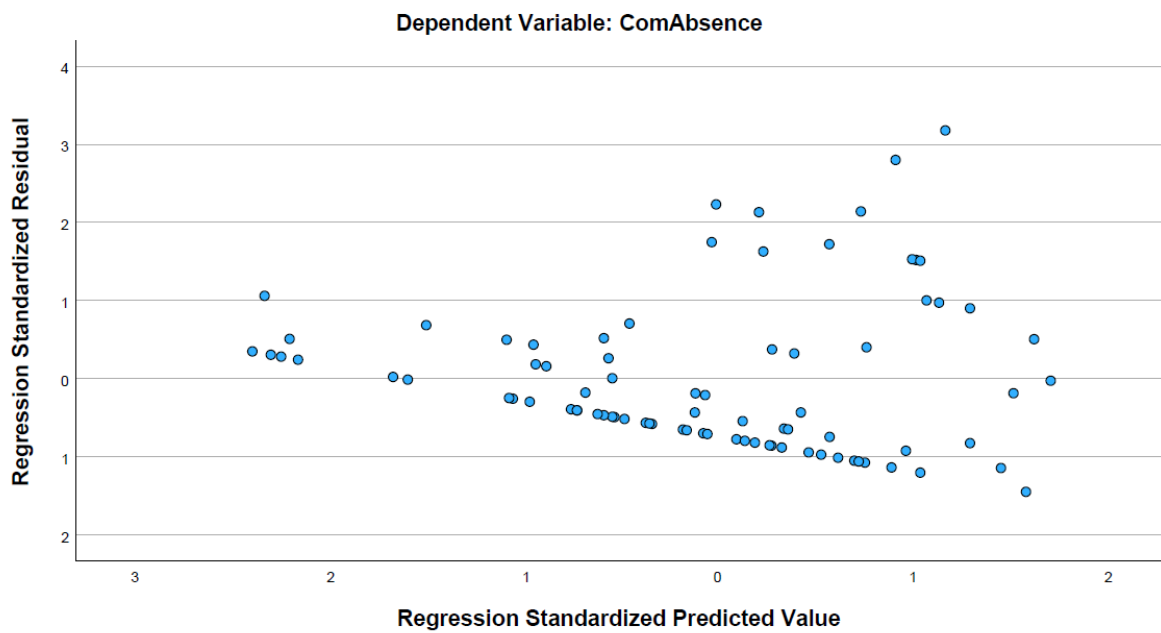
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ComTurnInt

Scatterplot

Dependent Variable: ComTurnInt