

# A city center revival through catering

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## Summary

The city center is a place where people can come together and socialize. It is not just the center of commerce, but the center of social and communal connectedness. Due to recent developments in the retail landscape, city centers are declining in attractiveness and visitation numbers. One aspect of the city center that does not seem to be affected too much is catering. This study wants to find out whether catering could save the city center from its decline. Whether catering could be a pillar in promoting socialization and wellbeing through promoting city center visitation. The goal of this research is to get an understanding on the influence that catering has in making the city center more attractive for visitation. The main research question of this paper is:

*“To what extent does the catering offer influence the perceived attractiveness towards visitation”?*

To be able to answer this question, the literature on the subject was analyzed to create the theoretical framework on which this research is based. First the concept of attractiveness was defined, as attractiveness is a key concept on this research. It became clear that attractiveness is subjective and can only be measured through opinion-based grading. Then the possible implications of catering were made clear by theories that explain the importance of wellbeing in a democracy, and the possible role of catering in promoting these factors which are relevant to society. The theory on place attachment was used to make the direct connection with wellbeing and catering. The literature was used to lay the framework for a possible theory where the promotion of city center attractiveness and visitation through catering, would be a key part of social cohesion and democratic values. In the literature, catering was presented as the main function of the city center by multiple studies.

When the literature was analyzed, the questionnaire was set up in cooperation with Droogh Trommelen en Partners (DTNP). The questionnaire had already been used by DTNP since 2014 and was shared with 5 other students during this research. This meant that the questionnaire tackled more subjects than just the subjects relevant to this paper. The surveys took place in 7 different cities, divided over 14 days. In total 1379 respondents answered the questionnaires. For this research, the questionnaires from other years were also used, which made the total number of respondents go up to 6295.

With the data, different analyses were done. First, some descriptives analyses were done on the characteristics of the respondents and the ratings given to the different aspects of the city center. Then, a descriptives analysis was done to see what the contribution was from catering on the total visitation numbers of the city center. It became apparent that catering was not a main attraction for city center visitation. Then multiple regression analyses were done to look at the influence of catering on the attractiveness of the city center. Surprisingly, the results showed that the number of catering establishments had no influence on city center attractiveness. The perceived attractiveness of the catering offer did show some influence, but it was negligible. In the final results section, logistic regression analyses were done to look at the influence of catering on having catering as a main motive for visitation. As expected, having more catering establishments and a more attractive catering offer increased the chance that someone had catering as their main reason for visitation.

The results indicate that the influence of the catering offer on the perceived attractiveness to attract visitors was minimal. Catering does show to have a positive influence, but due to low visitation numbers the total impact it has on improving the city center and social wellbeing is low. Other aspects of the city center, like the atmosphere, seemed to be more influential on overall city center attractiveness and visitation. These results imply that catering is likely not the solution to the city

center problems. The results suggest that there is still a possibility that catering could contribute more to improving these aspects indirectly through enhancing the shopping experience. Further research is needed to confirm this possibility.

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# 1. Introduction

## 1.1 Problem statement

To maintain a democracy, the subjective wellbeing of the people play an important role, as it creates more sociability, community involvement, and generalized trust (Tov & Diener, 2009). To maintain the legitimacy of the democratic governmental system, a key state goal is to provide a high level of wellbeing to the citizens within the country. People with a higher subjective wellbeing tend to have a more positive attitude toward democracy (Tov & Diener, 2009). The wellbeing of people is one of the keys to a successful democracy, because it creates the bonds and attitudes needed to maintain a democracy (Tov & Diener, 2009).

But what factors stimulate the wellbeing of people within a democracy? Important factors that have a positive effect on wellbeing are social and leisure activities (Adams, Leibbrandt, & Moon, 2010). Social activities are shown to have a significant effect on the wellbeing and health of people, because it reduces risk of social isolation and increases emotional intimacy and support (Adams et al., 2010). Emotional closeness resulting from social and leisure activities are enhancing wellbeing (Adams et al., 2010). Some of the informal social activities mentioned by Adams et al. (2010) are social activities with family, within the house, visiting friends, and in a community like a church or charity. It is the informal and more intimate activities that have the strongest influence on wellbeing, compared to formal and solitary activities (Adams et al., 2010). The social intimacy within these informal social activities is the most important factor that influences the wellbeing of people (Adams et al., 2010). Social wellbeing is enhanced by trusting social relationships (Tov & Diener, 2009). Communication and trust are important for good cooperation between people within a society (Tov & Diener, 2009). The informal social capital, or the bonding social capital, is the type of social capital that can bring emotional support and solidarity to groups of people (Tov & Diener, 2009). It is the more intimate social connections that provide a stable community. The more professional and information driven social networks tend to be weaker than the more intimate ones (Tov & Diener, 2009). Research from Becchetti, Ricca, & Pelloni (2011), strengthen this argument by stating that social leisure has a positive effect on the life satisfaction of people. Due to retirement, the time spent on social leisure and relation life increased, and this increased the life satisfaction of the people that where studied (Becchetti et al., 2011). The article proves that focusing more on the informal social activities and relations with people, increases the life satisfaction and thus the wellbeing of people. So, informal social activities play a key role in promoting wellbeing and therefore, strengthening the democratic character of a nation.

However, there is a force driving a decrease in wellbeing metrics within democracies. This force is the internet, as people are getting more depressed and lonelier due to using extensive online communication (Kraut et al., 1998). The internet has brought social media to every corner of the planet and is being used all the time, affecting the lifestyle of people worldwide (Marttila, Koivula & Räsänen, 2021). The time that people spend on the internet might cause them to spend less time engaging in social activities, which might cause a negative effect on their wellbeing (Kraut et al., 1998). The way that social media use affects wellbeing is not direct. According to Marttila et al. (2021), a high degree of social media use increases loneliness. This increased loneliness is what causes a decrease in life satisfaction and overall wellbeing (Marttila et al., 2021). The research by

Marttila et al. (2021), found that an increase in heavy use of social media is what led to the increase in loneliness, and it excludes the possibility that heavy social media usage is a cause of loneliness. There is a clear one-way relation between social media use and increase in loneliness. Loneliness is very detrimental to society, as one in twelve people suffer severely from loneliness (Cacioppo & Cacioppo, 2018). Loneliness causes a mortality risk increase of 26%, which makes it a public health problem (Cacioppo & Cacioppo, 2018). So, for many people loneliness is caused by social isolation due to heavy social media use. This is detrimental to the wellbeing of the people. If wellbeing cannot be stimulated to reverse these trends, then the democratic character of a country might be jeopardized.

The city center is one of the few remaining places that drive social cohesion. The city center is a place where people are still socially interactive (Mehta, 2022). Historically, city centers were used as a place of trade (Butink, 2015). This historical function of the city center has made it a hotspot for shopping till this day (Butink, 2015). It brought with it a certain aesthetic and atmosphere that is still felt in the city centers today (Butink, 2015). City centers tend to be places where retail stores are clustered (Teller & Reutterer, 2008). Both Butink (2015) and Teller & Reutterer (2008), make a clear connection between shopping and the city centers of today. This is, however, not the only function that city centers have. While shopping activities in the main street of a city may be a draw for people to visit the city center, it is also an important opportunity for socialization, as people nowadays are also attracted to the city center to socialize (Mehta, 2022). Looking at the importance of social interaction for the wellbeing of people, putting effort in retaining and/or regaining attractiveness in the city centers seems an important aspect of retaining a stable democracy. It seems, however, that local governments are having trouble retaining the attractiveness of the city center, as there is a rise in vacant buildings in the city center and a downwards trend in retail revenue (Butink, 2015). Since 2008, revenue in the retail sector has gone down by 10%, which indicates that the city center is suffering (Butink, 2015). But what has caused the city center to lose its attractiveness and seemingly its function as the main place of trade?

The invention of the internet has brought many changes to the world. One of the changes that the internet has brought about is the rise of online shopping. This has ensured that many people who shop online spend less time physically shopping in the city center (Weltevreden & van Rietbergen, 2007). Recent developments like online shopping have caused the Dutch city centers to become less attractive as a shopping center (Butink, 2015). The non-daily goods that make up 92,5% of the shops within Dutch city centers are being taken over by online shops, which leads to a loss in revenue and eventually vacant buildings in the city center (Butink, 2015). People do not have to go to the city center anymore to buy their goods, as they can buy those good from home now. Another development that draws customers away from the city center is the rise of alternative retail clusters like shopping centers in neighborhoods and shopping boulevards (Butink, 2015). However, the biggest influencer on the downwards trend of the city center seems to be the rise of online shopping. This is supported by other articles that come to the same conclusion. As Ossokina, Svitak & Teulings (2017), also attributes a rise in shop vacancies in the city centers to the rise of internet shopping as a replacement for physical shopping. It seems that the function of the city center as a shopping center and a site for social cohesion is at risk of becoming something of the past.

There is still one powerful domain of city centers that can potentially defy these trends and can bring people together. Catering is the potential saving grace of the city center. City centers that have a variety of catering offerings tend to make the city center more attractive (Butink, 2015). It enhances the experience from just shopping to something that is about more than just shopping (Butink, 2015). The city center becomes a place of leisure and enjoyment, rather than a place to buy goods. It brings something to the city center that cannot be replicated online. According to Evers, Tennekes & van Dongen (2015), the catering industry is replacing shopping as the main function within Dutch city centers. This does not come as a surprise, as retail stores are closing and online shopping is replacing physical shopping (Ossokina et al., 2017). Even after the recent covid pandemic, the catering industry is continuing to grow (Centraal Bureau voor de Statistiek, 2023). The revenue of the catering industry increased by 7,7% between the third quarter of 2022 and the third quarter of 2023 (Centraal Bureau voor de Statistiek, 2023). These implications argue that catering is more material than shopping.

The amount of people that choose to shop online instead of physically is not equally distributed among different city centers. The attractiveness of the city center plays a role in the amount of people that choose online shopping over physical shopping. The higher the attractiveness of the city center, the less likely people are to shop online (Weltevreden & van Rietbergen, 2007). Attractiveness is a subjective term that differs from person to person (Hidman, 2018). It is that which is appealing and attracts people. It is a term that encompasses a certain feeling or energy that pulls people in. It is a social construct, which exists through social interactions and experiences (Hidman, 2018). It does not just have one simple meaning and will, therefore, be more thoroughly explored in chapter 2. According to Butink (2015), the catering offer of a city has a positive influence on the attraction for people to visit the city center. This article mainly names the positive influence of catering offer in cities with many tourists and students. Catering businesses are the new main attraction for people to visit the city centers, for leisure, relaxation and to work outside of the office (Evers et al., 2015).

This positive influence that catering might have in city centers should be analyzed, as the literature argues its positive influence on city center attractiveness. This is relevant as the attractiveness of city centers are diminishing, which could have a bad impact on social wellbeing and the democratic nature of the country. This paper aims to find out if catering is the solution to the downwards spiral of the city center, if catering is the answer to a diminishing social cohesion in modern countries, and if catering can be the force that pulls people back to the city center. It aims to add to current literature on the positive influence on catering and to spark an interest in policymakers in catering. This paper will look at the possible importance of the catering industry to the attraction of visitors to the city centers in the Netherlands.

### 1.1.1 Research Objective

The objective of this paper is to get an understanding on the role that the catering offer has in making a city center attractive and in stimulating visitation, as the retail stores are losing their function as the main attraction of a city center. This paper will specifically focus on medium-sized city centers, which makes the data from the different city centers comparable. The data will fill in a specific gap in knowledge, as the papers found on comparable topics were not focusing on medium-sized city centers. It helps to show whether catering is the answer to the problems facing the Dutch city centers today. This could provide an understanding in the influence that catering has in

promoting social interaction and cohesion. Which, in the bigger picture, can promote democratic stability.

### 1.1.2 Research Questions

The main research question of this paper will be:

*To what extent does the catering offer influence the perceived attractiveness towards visitation?*

The secondary questions to help answering the main question are:

- *To what extent is catering the main motive for people to visit the city center?*
- *To what extent does the perceived attractiveness of the catering offer influence the perceived attractiveness of the city center?*
- *What is the influence of the perceived attractiveness of the catering offer on catering being the main motive for visitation?*
- *To what extent does the amount of catering offer influence the perceived attractiveness of the city center?*
- *what is the influence of the amount of catering offer on catering being the main motive for visitation?*

## 1.2 Societal relevance

City centers, facing a trend of depreciation, are experiencing a downward spiral in attractiveness. Vacant buildings make a city center less attractive which causes more vacant buildings (Veenhuizen, 2018). Consumers complain about the abundance of corporate brands (Butink, 2015). This would indicate a negative effect on attractiveness. However, Consumers still buy most of their goods from corporate brands, which indicates that corporate brands do have a positive effect on attractiveness (Butink, 2015). This shows how unclear and subjective attractiveness is. What has become apparent from the literature is the importance of catering in improving the city center attractiveness. Adding catering businesses to places that lack them, could be a wise strategy for local governments to look at (Butink, 2015). To make sure there will be no further increase in vacant buildings and no further decrease in attractiveness, policymakers should get an understanding on what drives people to visit the city center. With this information, policymakers can make differences in policies that promote city center visitation. As this paper is exploring the role of catering in promoting the attractiveness of the city center, it could function as a useful source of information for policymakers

The result of this paper can make certain policy makers more interested in attracting more, or less, catering businesses or move the main function of their city centers away from shopping. The main relevance here is providing information on how to stimulate the city centers, combat the decrease in attractiveness of the city center, and find out how catering fits into all of this to make for a more attractive city center. This can, in turn, stimulate social cohesion and give stability to the democratic nature of the country.

The city center is used as a space to socialize (Mehta, 2022). Social activities have a positive effect on wellbeing (Adams et al., 2010). And the wellbeing of people has a positive effect on maintaining a democracy (Tov & Diener, 2009). If the results of this paper show a positive link between catering and the attractiveness of the city center and an increase in visitation numbers, then an assumption

can be made that catering brings people together. Bringing people together means that social interactions are stimulated by catering, which can lead to social cohesion. Therefore, catering could have a positive effect on the wellbeing of people and the democratic nature of the state. These findings could provide information with great societal implications. The theoretical framework will expand on this.

### 1.3 Scientific relevance

Catering is very important for the attractiveness and visitation of the city center (Butink, 2015; Evers et al., 2015). This paper aims to add to and expand on the current theory surrounding the effects of catering offering on the attractiveness for visitors to visit a city center. Having new and relevant data on subjects which have already been studied is important to keep scientific research up to date. This paper will specifically add data to the visitation behavior of people visiting medium-sized city centers in the Netherlands.

One specific point in the literature it will add to, is a contradiction in the literature about the influence of catering (as leisure activity) on attracting people to visit the city center. The contradiction is about whether catering attracts people to visit the city center. In the research done by Weltevreden & van Rietbergen (2007), the impact of e-shopping on city center shopping was studied. The research looked at the influence of the attractiveness of the city center in getting people to shop in the city center instead of online. Weltevreden & van Rietbergen (2007), found that leisure attractiveness (which included catering) had no influence on making people go to the city center instead of buying things online. In an article by Butink (2015), it is stated that catering does have a positive effect on the attractiveness of the city center and, therefore, stimulates visitation. Butink (2015), states that online shopping is the main cause for less visitors in the city centers and it mentions catering as a possible solution. So, Butink (2015) argues that catering does attract people to visit the city center, whilst Weltevreden & van Rietbergen (2007) argues that catering does not attract people to visit the city center. A possible explanation for this contradiction is the difference in the definitions used. Butink (2015) was looking directly at catering, whilst Weltevreden & van Rietbergen (2007) looked indirectly at catering through leisure activities, which included catering.

By looking at the influence that the catering offer has on attractiveness towards visitation, this paper could provide new or extra information that contributes to the findings of the two previous mentioned articles. Apart from these two articles, this paper will also add to the theories that this paper is built on. From the theories on attractiveness to the theories on democracy, the results of this paper could give a new perspective to all these theories. In the following chapter, the theories and concepts that are relevant to this paper will be explored and explained more thoroughly.

## 2 Theoretical framework

### 2.1 Attractiveness in the urban landscape

#### 2.1.1 The concept of attractiveness as perceived in urban spaces

Due to the pressure that off-center retail stores and online shops have put on the city center, the importance of maintaining attractiveness has increased (Kohijoki & Koistinen, 2019). Urban developers are focusing more on maintaining and improving the characteristics that make a city center attractive (Kohijoki & Koistinen, 2019). To find out what makes a city center attractive, the concept of attractiveness should be defined. Attractiveness is perceived different between individuals, fields of research, and communities (Hidman, 2018). According to a paper by Hidman (2018), within the field of architecture and urban design, the term attractiveness is not tied to the nature of an object itself, but it is a socially constructed term. Hidman (2018) argues that the physical space does not have an objective attractiveness, but it becomes attractive when knowledge and meaning are attached to it through social interactions. Everyone has their own meaning for attractiveness, which makes it a concept that can be used ideologically to give explanations to decisions that are made with a certain ideology in mind (Hidman, 2018). Competition within the planning space makes the use of ideological words to validate certain argumentations more common (Hidman, 2018). This is why it is important to explain the concept of attractiveness, as it is a key concept in this paper. For this paper to find out the role that the catering offer plays in attractiveness, the concept of attractiveness must be defined to conclude how catering affects attractiveness. How the concept of attractiveness will be defined in this paper, will have an influence on the conclusion of this paper. Who do we look at to find out if catering makes the city center attractive?

As places are both designed by professionals and lived in by the people, the article makes a distinction between two spheres in which spaces exist. In the ideal sphere, the environment is built by professional's ideas, ideology, and research (Hidman, 2018). Whereas within the real sphere, the environment is built through the social and physical interactions of everyday life (Hidman, 2018). In the article by Kohijoki & Koistinen (2019) about the perspective of older people on city center attractiveness, spending time in catering businesses and socializing with people was an important part to enjoying the shopping experience in the city center. According to Hidman (2018), urban planning is not looking enough at the perspective of the people that are engaging in a place, when referring to the term attractiveness.

A key argument in the article by Hidman (2018), is that a place is a physical space, which has both a physical and a social context to it. To understand attractiveness, the article looks at the production of place as it gives an understanding on how and why meaning is given to a certain space. To get a better understanding on what attractiveness in an urban setting is all about, Hidman (2018) uses three dimensions of place production which are inspired by Lefebvre. The three dimensions mentioned here are: mental space, social space, and physical space (Hidman, 2018). The mental space focusses more on economic values, whilst the physical space is about the physical qualities of an urban area (Hidman, 2018). These are markers for attractiveness that are very self-explanatory, as a good-looking city center that promotes financial activities and opportunities would get everyone's

attention. Within the real sphere, the focus is more on recreational and participatory qualities and opportunities (Hidman, 2018), which fits more with the social space.

In the social space, attractiveness is socialized through a desired lifestyle consisting of recreational values and not so much the urban values like commerce and population growth (Hidman, 2018). The focus within socialized attractiveness is on the wellbeing of citizens (Hidman, 2018). Social elements are external elements that influence the perception that the consumer has of the city center (Kohijoki & Koistinen, 2019). Social elements like meeting people and socializing gives people reasons to go out to the city center (Kohijoki & Koistinen, 2019). The social dimension/element of a space like a city center is highlighted in both articles as being an integral part of attractiveness (Hidman, 2018; Kohijoki & Koistinen, 2019). Attractiveness is produced by the people that are using and shaping a certain place (Hidman, 2018). This is why this paper will focus on the perspective on attractiveness from the people that engage in the city center and not the professionals that designed them. At the end of the day, it is the people that engage in the city center that make up the visitation numbers of the city center. To relate attractiveness more to the city center, the following paragraph will delve deeper in the specific factors that play a role in the perception of attractiveness within a city center.

### 2.1.2 Perceived attractiveness within a city center

Which factors play a role in the perception of attractiveness within the city center, becomes clear in an article by Teller & Reutterer (2008). This article focusses on the attractiveness of retail agglomerations, which includes city centers. The article names 4 different factors that relate to the attractiveness of these agglomerations. Tenant-related factors, Environment-related factors, Site-related factors, and buying situation-related factors (Teller & Reutterer, 2008). Factors that influence the shopping experience of the customers have an impact on the overall attractiveness of the retail agglomerations (Teller & Reutterer, 2008). In the following paragraphs, the 4 different factors that relate to attractiveness are explained.

Tenant-related factors relate to retail tenants and non-retail tenants (catering, entertainment, etc.) (Teller & Reutterer, 2008). Fulfilling the wants and needs of the customers is key to the tenant-related factors when it comes to why it is a factor of attractiveness (Teller & Reutterer, 2008). The satisfaction of the customers is what attracts people. The non-retail tenants are especially fulfilling the needs of recreational shoppers, as meeting other people and going to cafés or restaurants is an important part of their shopping experience (Kohijoki & Koistinen, 2019).

Environment-related factors create attractiveness by enriching shopping experiences and making visitations to retail agglomerations about more than just buying things (Teller & Reutterer, 2008). Environment-related factors consist of environmental factors that represent atmosphere, ambience, and orientation (Teller & Reutterer, 2008). The article by Kohijoki & Koistinen (2019), suggests that ambience is a factor that should be more emphasized in the city center.

Site-related factors include everything that has to do with spatial distance and the amount of time a customer must travel between their point of departure and the location of the retail agglomeration (Teller & Reutterer, 2008). The accessibility of the agglomeration can make it either convenient or inconvenient to go shopping at that specific agglomeration and, thus, plays a role in the attractiveness of the agglomeration (Teller & Reutterer, 2008). Parking can also be seen as a part of

the attractiveness of an agglomeration, as cars are the main form of transportation in developed countries (Teller & Reutterer, 2008). The parking options within an agglomeration have an influence on the convenience of the shopping trip.

And finally, buying situation-related factors. These factors are concerned with the physical and temporal distance of a specific shopping trip, the clustering of choice, and the perceived importance of the shopping trip (Teller & Reutterer, 2008). The importance of the shopping trip, as perceived by the customer, can be measured by the commitment of the customer to the shopping trip (Teller & Reutterer, 2008).

Finding out what makes a city center attractive is important for this paper, as it can give an understanding to what creates attractiveness and how catering fits into this. Catering mainly influences the tenant-related factors and environment-related factors. The main attraction to the city center for leisure and relaxation purposes is catering (Evers et al., 2015). It adds to the shopping experience, just like the environment-related factors do. According to Hidman (2018), attractiveness in the social dimension is positively influenced by a balance between commercial, cultural and recreational activities, where leisure activities play a crucial role. With the importance of leisure activities being highlighted, and catering being the main leisure attraction of the city center, the role of catering fits in the environment-related factors. Therefore, catering should positively influence the attractiveness of the environment-related factors. Teller & Reutterer (2008), mentions the role of catering in satisfying the customers' needs when it comes to the supply and demand of tenant-related factors. Catering is a basic need in satisfying the customers' needs in a city center and is, therefore, positively influencing the attractiveness of the tenant-related factors. The paper by Teller & Reutterer (2008), indicates that catering could relate to two out of four factors relating to attractiveness within a city center. To prove if this assumption is right, attractiveness within the city center and the influence of catering on this attractiveness should be measured.

### 2.1.3 Measuring perceived attractiveness

The attractiveness of a city center is decided upon more on how people perceive it, rather than how attractive it is physically (Weltevreden & van Rietbergen, 2007). Now the question arises, "how do you measure the perception people have on the attractiveness of a city center?"

Weltevreden & van Rietbergen (2007), used a 5-point scale which respondents used to rate each aspect of a city center that influences attractiveness. Attractiveness of the city center is, thus, measured by letting the visitors give ratings to certain aspects of the city center. What becomes clear is that perception is measured through opinion-based grading, as that is the way Weltevreden & van Rietbergen (2007) measured perception of attractiveness. The concept of attractiveness could, therefore, be better described as perceived attractiveness. It is a concept which is created through social interactions, experiences, and knowledge of the people within a certain space (Hidman, 2018). Attractiveness is a subjective term that is measured through the perception of people (Weltevreden & van Rietbergen, 2007).

The importance of having an attractive city center becomes evident when looking at the bigger picture. Within the socialized part of attractiveness, citizens' wellbeing is the focus (Hidman, 2018). Good wellbeing of the citizens within a country seems like a valuable part of a well-functioning

society. The concept of wellbeing and its positive effect on a countries' democracy will be explained in the following paragraph.

## 2.2 Democracy and wellbeing

In a country where the people vote on how the country is ran, the wellbeing of these people is not something to be seen as an afterthought. The article by Tov & Diener (2009), argues that nations with a higher subjective wellbeing of its citizens, score higher on democratic attitudes and trust within society. The article found that a high life satisfaction is linked to people legitimizing their governments (Tov & Diener, 2009). It is the subjective social wellbeing that promotes behavior that helps in building a society with greater trust, sociability and cooperation (Tov & Diener, 2009). These three concepts form the foundation of a democratic society.

To show how these three concepts work in practice, the article gives an example with the theory on the tragedy of the commons. If people use too much of a public resource, then the public resource will vanish and the whole community will suffer (Tov & Diener, 2009). If people are responsible with the public resources, they will be replenishable to the benefit of the whole community (Tov & Diener, 2009). To keep a society sustainable and make sure resources are preserved for future use, people must take responsibility and be cooperative (Tov & Diener, 2009). For people to be able to work together and be responsible with public resources, trust is needed (Tov & Diener, 2009). Trust that people will take care of the community as a whole and not just take care of themselves as individuals. According to an article by Newton (1997) about social capital and democracy, trust is a key factor in creating social and political stability. Trust encourages cooperation, which makes people feel like they are part of a community with shared values and interests (Newton, 1997). Cooperation and trust make a society more productive and happier, which in turn creates greater subjective wellbeing (Tov & Diener, 2009). Trust plays a crucial part in creating a community and stimulating cooperation (Newton, 1997; Tov & Diener, 2009). This sense of community and cooperation is especially stimulating wellbeing in developed nations.

Once a nation is developed, money and material resources play a smaller role in increasing the wellbeing of people (Tov & Diener, 2009). One of the key factors for increasing wellbeing that is mentioned in the article, is having social relationships. The article refers to a study which found out that college students were happier when they had stronger social relationships compared to those who did not. The unhappiest students in the study were more alone and were spending less time with their social connections (Tov & Diener, 2009). Tov & Diener (2009), found that there are negative long term health impacts coming from loneliness and social isolation. Having rich social networks tend to increase the chances that people help each other, which leads to social integration and a reduction in social isolation (Tov & Diener, 2009). For social integration to be possible, social spaces are needed.

In a paper by Attia (2012), about revitalizing downtown Cairo to promote democracy and growth, the city center is linked to promoting democratic values and behaviors. The article used Tahrir Square as an example of a place where people came together to create a social transformation (Attia, 2012). The square was a place that enabled people to come together and it created solidarity within the Egyptian society, with public reform as a result (Attia, 2012). A place like Tahrir Square promoted togetherness in a time of political distress and made people realize that society is not a threat to

social wellbeing, but rather a promoter (Attia, 2012). Tahrir Square was a symbol that showed that when people have access to a familiar communal space, which promotes social networks, people are enabled to express themselves and speak out through public participation (Attia, 2012). The promotion of walkability in the city center is a big part of this success, as Tahrir Square was one of the urban spaces where walkability was promoted (Attia, 2012). The article by Attia (2012), shows how promoting aspects of a city center can have a positive effect on wellbeing and support social life.

The city center is a place where people come to socialize (Mehta, 2022). Promoting social behavior through promoting city center attractiveness is key in maintaining a democracy. The research by Tov & Diener (2009) has shown the importance of spending time socializing in creating social relationships, trust and cooperation. Getting people together in the city center is not about focusing on retail anymore but focusing on leisure and specifically catering. The main function of the city centers is changing from a focus on retail to a focus on catering (Evers et al., 2015). This is where this paper will lay a connection between promoting catering and promoting a stable democracy. To get a deeper understanding on the concepts of (social) wellbeing in relation to the city center, place attachment theory is used.

### 2.3 Wellbeing through place attachment in the city center

Place attachment theory describes the emotional bonds that people form towards physical environments (Tsourdos, Yang & Weber, 2021). Place attachment has been a popular subject within social sciences (Tsourdos et al., 2021). Place attachment theory is applied in research on different topics, one of which is health and wellbeing (Tsourdos et al., 2021).

In a study done by Afshar, Foroughan, Vedadhir, & Tabatabaei (2016), which looked at the effect that place attachment has on social wellbeing in old people, the connection between place attachment and wellbeing becomes clear. The study looked at the different aspects of place attachment and the different aspects of social wellbeing, and which factors relate most to each other. Aspects like, place identity and place dependence had a significant influence on social integration, contribution and acceptance (Afshar et al., 2016). The results of the study show that social wellbeing can be predicted by place attachment (Afshar et al., 2016). The research showed a positive correlation between social wellbeing and place attachment (Afshar et al., 2016). Both social wellbeing and place attachments are factors that play a role in the quality of life in older people (Afshar et al., 2016).

In a paper by Landström (2003), a connection is made between place attachment and the city center of Rovaniemi. In this case study on Rovaniemi, the forming of place attachment in the city center by its residents is being researched. In the results it became apparent that there are individual and collective aspects that form place attachment (Landström, 2003). More communal spaces tend to increase attachment between the residents and the city center (Landström, 2003). Communal spaces are often seen as meaningful places and meaningful places are important identity markers for the residents (Landström, 2003). Meaningful places have a positive impact on place attachment (Landström, 2003). These meaningful places create an identity and have a positive impact on place attachment (Landström, 2003). This attachment to a city center has a positive influence on (social) wellbeing, as place attachment has a positive influence on (social) wellbeing (Afshar et al., 2016; Tsourdos et al., 2021). This connection is also made in the article by Kohijoki & Koistinen, (2019), as they say that the city center functions as a social living room for old people. Calling the city center a

social living room shows the social importance of the center and it simultaneously implies that it is a place where place-attachment is present.

#### 2.4 Catering as a place of socialization and shopping enrichment

So, the attachment to a city center is positively influenced by having more communal spaces (Landström, 2003). Having places where people can come together to socialize and form a community is what increases place attachment. In an article by Radomskaya & Bhati (2022) on social space and community wellbeing, the role that social spaces play in promoting wellbeing becomes apparent. In this study, the researchers focused on hawker centers and how these places promote community wellbeing during the Covid-19 pandemic. A hawker center is a place where people can come together and eat from different food stalls. It is a very specific concepts, which is not directly comparable to western catering, but it is in its core a catering experience. These hawker centers are seen as a social space (Radomskaya & Bhati, 2022). A social space is referred to in this article as a public space that is used for people to meet and communicate (Radomskaya & Bhati, 2022). In Singapore these hawker spaces are key to the production of social spaces (Radomskaya & Bhati, 2022). These social spaces have a positive influence on wellbeing, as they enable people to socially interact, which shapes social relations, cause social bonding, and help build social capital (Radomskaya & Bhati, 2022). This does not only promote individual wellbeing, as it also leads to better public health and social cohesion (Radomskaya & Bhati, 2022). In other words, community wellbeing is being promoted by social spaces. The above-mentioned article does not mention place attachment specifically, but it does mention the importance of people having social spaces to connect to each other. In this case, the social space mentioned was a catering space.

For decades, city centers are changing into leisure theme parks, where the focus is more on visitor experiences and fun instead of just shopping (Evers et al., 2015). Catering businesses are the main attraction as a place of leisure and relaxation or as a place to work outside of the office (Evers et al., 2015). The main motives to visit a city center are both shopping and catering, and of those two it is the catering that is taking over the main function of the city center (Evers et al., 2015). The city center has become a place of consumption, but not just the consumption of goods, as the number of shops has been declining since the early 2000's and the number of catering establishments have been rising (Evers et al., 2015). This is also shown in the number of available jobs within the catering industry compared to the retail industry (Evers et al., 2015). The focus of the city center is shifting towards a more experience-based center instead of a center of trade. In cities within the Netherlands, shops are being replaced by both housing and catering (Evers et al., 2015). This transformation is part of diversifying the Dutch city centers (Evers et al., 2015). There should, however, be a balance between catering and other functions in the city center. A city center that is too dependent on catering would not be enriching the shopping experience but replace it. As was established by Teller & Reutterer (2008), the tenant-related factors of attractiveness relate to both retail and non-retail tenants (Teller & Reutterer, 2008). The shopping experience should be enriched and be about more than shopping, it should be about a combination of retail and non-retail tenant like catering (Butink, 2015; Teller & Reutterer, 2008). This enhances the atmosphere of the city center, which is crucial to having an attractive city center (Butink, 2015; Teller & Reutterer, 2008).

So, having spaces where people come together and meet has a positive effect on the place attachment that people have (Landström, 2003). And with the shift of the city center towards a more

catering and experience-based center, there is a logical assumption that can be made about catering having a positive effect on place attachment, which has a positive effect on (social) wellbeing. And wellbeing is a key factor in maintaining a democracy (Tov & Diener, 2009). The link between these concepts has been established. To give these concepts meaning and measurable indicators within this paper, they need to be operationalized.

## 2.5 Operationalization

To get an understanding of what is being measured, the concepts and terms that are used need to be given meaning. There should be indicators that give meaning to the concepts that are being measured. The presence of these concept should be able to be demonstrated by giving them measurable indicators. In this paragraph, some of the key concepts and terms will be explained.

### *City center*

A city center can mean different things in different countries. For this research the city center will be identified by looking at it from a Dutch perspective. As stated by Butink (2015), Dutch city centers are historically also the center of commerce within the city limits. With the increase in vacant buildings, the limits of the city center are somewhat scattered. Therefore, the clustering of the retail stores will give an indication of the limits of the city center. The limits of the city center will not always be 100% accurate, but to give a clear meaning to the concept of a city center: A city center is the main cluster of retail stores within the limits of the city.

### *Catering offer*

This is the catering offer within the medium-sized city center. The catering offer includes catering establishments like restaurants and cafes. Catering offer is part of the tenant-related factors of attractiveness (Teller & Reutterer, 2008). These establishments are places of leisure and relaxation (Evers et al., 2015). The catering offer was measured in two different ways. The amount of catering as it is demonstrated in city center data, was collected and shared by Locatus. The other way catering offer is measured, is by the rating given to it by the respondents in this research. The concept of catering offer is divided into an objective and subjective part within this research. Just asking for people's opinions only brings clarity to the subjective part of catering. The main research question uses the concept of catering offer in a more general way. The most objective aspect of the concept of catering offer would be the number of catering businesses. The amount indicates the presence of catering, whilst the perception indicates the quality of the catering offer as perceived by the people. The presence of catering is found in a database, whilst the perception of catering is measured through people's rating given to the catering offer. This ties to the next concept of this paper, which is attractiveness.

### *Attractiveness*

Attractiveness of a place is that which appeals and attracts people to visit. It is a social construct that gets its meaning through social interaction (hidman, 2018). What is attractive differs from person to person. This is why a 10-point scale is being used to measure the visitor's perception of attractiveness. Using a point-scale to measure perception of attractiveness is supported by the article by Weltevreden & van Rietbergen (2007). Attractiveness within a city center can be measured by rating the perceived attractiveness of tenant-related, environment-related, site related, and buying

situation- related factors (Teller & Reutterer, 2008). In the survey provided by Droogh Trommelen en Partners (DTNP), these factors are subdivided into multiple categories.

### *Visitors*

The word “visitors” is used many times in this paper already, as it is an important part of this research. The visitors are the population on which this research will take place. A visitor is a person that has entered the city center and during the research, is either leaving or almost leaving the city center. The main criteria are that the person has physically been or is still present in the city center, at the time or close to the time of participating in the survey.

### *Visitation*

The visitors of the city center are physically going there to perform the activity of visiting the city center, this is what is meant by ‘visitation’. Due to the internet, physical shopping is being replaced by online shopping (Weltevreden & van Rietbergen, 2007). This has caused retail stores to close (Ossokina et al., 2017). These changes made the Dutch city centers less attractive (Butink, 2015). The attractiveness is, thus, influenced by the amount of people that shop physically (Weltevreden & van Rietbergen, 2007). As this paper is looking at the impact of catering on the visitation numbers within a city center, visitation should be measured by comparing the number of visitors that have catering as their main motivation and visitors that have other motivations for visitation. This gives an overview on the impact of catering on visitation.

### 2.6 Conceptual model

This paper is mainly focused on three aspects: Catering offer, attractiveness, and visitation. The conceptual model gives an overview of all the links between the concepts that were discussed in the paragraphs above. In this chapter, the aspects of attractiveness were clearly explained by using current literature. Its relevancy also became apparent, as city center attractiveness seems to have a positive influence on place attachment, which improves wellbeing, which improves democratic stability. Aside from the aspects and the relevancy of city center attractiveness, the conceptual model shows the role of catering offer and visitation in creating city center attractiveness. The arrows either show a one-way or a two-way relationship between the concepts. As seen in the figure down below, catering and visitation both influence the city center attractiveness (Figure 1). And both catering offer and city center attractiveness have an influence on visitation (Figure 1). To answer the main question, the 5 secondary questions should provide all the information needed. In the figure below, the secondary questions are displayed as a question mark (Figure 1). These are the relationships that this paper will focus on. The conceptual model gives a simplified overview of all the connections that were laid out in this chapter.

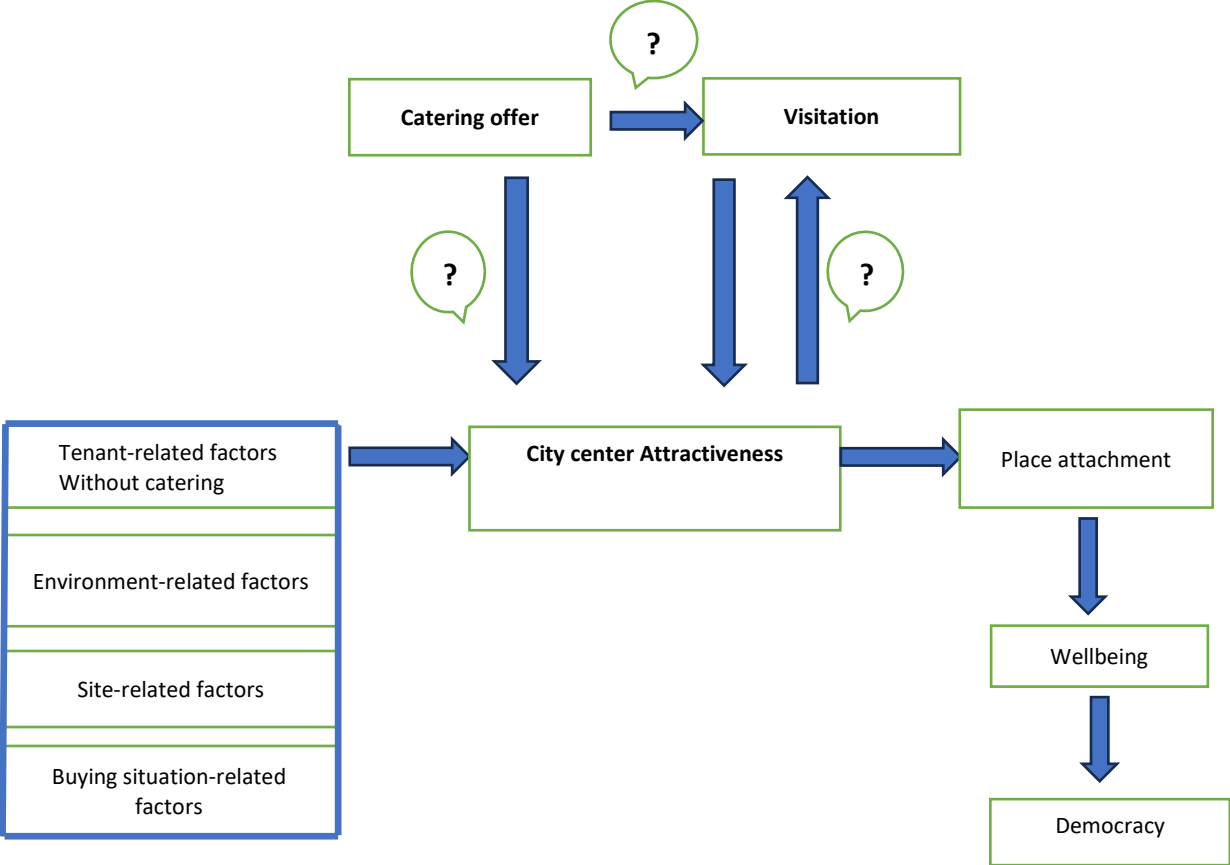


Figure 1: the conceptual model

## 3 Methodology

### 3.1 Research strategy

The main research question that must be answered is: *To what extent does the catering offer influence the perceived attractiveness towards visitation?* To answer this question, a fitting research strategy must be implemented. According to Korzilius (2008), there are 5 different classifications that can be made to find out which research strategy is the best option. These 5 classifications are: the scientific field of research, the scientific-theoretical approach that is used, the nature of the research (qualitative or quantitative), the objective of the research (theoretical or practical), and the type of research question (describing or explanatory) (Korzilius, 2008).

This research question aims to find out what attracts people to the city center. As this research is focused on people and their motives, this question belongs to the scientific field of social sciences. Within the field of social sciences, the focus is on people. Theory is a useful tool in social sciences, but peoples' behaviors can depend on many factors and are every changing. A research strategy that uses empirical data is the most fitting strategy in this case. According to Korzilius (2008), research that aims to answer research questions based on empirical data is empirical-analytical research. This research is focused on data on visitation numbers and ratings given to catering and the city center. This is why a quantitative research method was chosen, as it fits best with the data required to answer the research questions.

The objective of this research is theoretical, as it aims to add to the literature and knowledge available. It can, however, be used for practical implementation by third parties that make use of the findings of this research. And to answer the final classification, the research question is describing in its nature, as it observed to what extend the catering offer influences the attractiveness for visitors to visit a city center. It does not state why it influences it, so it is not explanatory. By using the theory from Korzilius (2008), the above-mentioned classifications are identical to those needed to use a survey research strategy. Therefore, this research uses a survey research strategy.

To substantiate the decision of the research strategy even more, the theory from Vennix (2019) also strengthens the decision of using a survey research strategy. According to Vennix (2019), there are three basic research designs: the case study, the survey, and the experiment. The case study is more qualitative in nature, so this type of research does not fit this research question. The survey and the experiment are both empirical-analytical (Vennix, 2019). This fits with the research of this paper, as this research is empirical-analytical. In an experiment, however, measurements are made in two or more points in time with the same group (Vennix, 2019). Therefore, an experiment is not a good choice as a research strategy, as people passing by on the streets had to be surveyed only once. This means the survey is the best possible choice for this research.

According to Vennix (2019), a survey looks at a large number of objects that are comparable. These objects are in many cases people. Surveys are a good way to do research on the attitude of people (Vennix, 2019). The attraction of people to visit a city center is connected to the attitude of people. In a survey, these people are referred to as the population, which are all the people that fit in a certain category. As it is not realistic to survey the whole population, this research uses samples. A sample is a small and representative part of the population that is surveyed, out of which

generalizations of the whole population can be made (Vennix, 2019). For research to be realistic, the use of samples is necessary. The most ideal sample to use is a random sample, as the population has a high probability of being accurately represented by the sample (Vennix, 2019). Therefore, this research uses random sampling. This was done by picking random people within the city center to participate in the survey.

### 3.2 Data collection

There are four types of surveys: written questionnaires, internet-based, face-to-face, and a telephone survey (Vennix, 2019). For this research the survey had to be done in person and on location, as people walking on the streets were the ones that had to be surveyed. This means that a face-to-face based survey was the survey method chosen to be used in this research. In this set up the questioner asks the questions from the questionnaire and fills them in for the respondent. This means that it is an oral questionnaire and, therefore, a face-to-face survey (Vennix, 2019). A face-to-face survey on location makes it easier for the respondents to remember what they did, where they went, and most importantly why they went to the city center.

This research was done in collaboration with Droogh Trommelen en Partners. DTNP has collaborated with Radboud students since 2014, to do research on medium-sized city centers. During those years, a questionnaire was used that had been set up by DTNP themselves. This questionnaire is also used for this research and can be found in de appendix (see Appendix A). The questionnaire has been used for multiple years now and has proven to be a useful tool in collecting the necessary data. For this research, however, not every piece of information within the questionnaire is relevant. The relevant information is focused on visiting motivation, perceived attractiveness of the city center, and the catering offer. The aspect used to measure perceived attractiveness were selected based on the theory on the attractiveness of retail agglomerations from Teller & Reutterer (2008). This theory explained the four factors that relate to attractiveness: Tenant-related factors, Environment-related factors, Site-related factors, and buying situation-related factors (Teller & Reutterer, 2008). The four factors were subdivided into multiple aspects by DTNP (See Appendix A). The questionnaire tackles multiple subjects and was used by multiple students this year to conduct their own research.

A group of 6 students conducted the research with the use of this specific questionnaire. Every student conducted the field work on 7 different days, in 7 different cities. The students went to these cities in groups of 3 and were expected to get between 90 and 120 respondents. This equates to 30 to 40 questionnaires per student per day of field work. The cities where the research took place are Tilburg, Oosterhout, Gouda, Roosendaal, Oss, Etten-Leur, and Venlo. These 7 cities are all cities with medium-sized city centers, chosen by DTNP. The field work was done in the weekends on Saturdays and in the weekdays on Wednesdays and Thursdays, as these are the busiest days according to DTNP. Fridays were not used in this research, as Fridays are in-between weekdays and weekends and do not clearly belong to one or the other. In total there were 7 weekends and 7 weekdays of fieldwork. Each of the students had to do the research on 7 days total. The surveys were conducted on these days by picking random people that walked in or out of the city center. In the questionnaire, the respondents were also asked to draw their walking path on a map of the city center. This is, however, not relevant for this paper.

To add more data to this research, the questionnaires from previous years are used. This will decrease the chance of coincidence. It also adds more data points, especially for the data on the amount of catering offer in a city center. In the questionnaires from 2024, only 7 cities were included. Having only 7 data points makes it hard to generalize the data. The questionnaires from 2018 till 2024 are included in this research, as the questionnaires from before 2018 did not include catering offer as a variable. The number of cities included in the data is 27 instead of 7. The added cities are: Amersfoort, Bergen op Zoom, Gorinchem, Haaksbergen, Helmond, Houten, Maashorst, Meppel, Nijkerk, Overbetuwe, Sittard-Geleen, Tiel, Waalwijk, Wageningen, Weert, Wijchen, Woerden, Zevenaar, and Zwolle. Not only do these cities add data points for the amount of catering offer, but they also increase the number of respondents from 1379 to 6295. The use of the questionnaires from previous years is beneficial to all the secondary questions of this research.

The two secondary questions relating to the amount of catering offer, need data that is not retrieved from the questionnaires. The questionnaires mainly focus on the perceived quality/attractiveness of the catering offer. For two of the five secondary questions, the physical amount of catering offer is relevant. These secondary questions are:

- *To what extent does the amount of catering offer influence the perceived attractiveness of the city center?*
- *What is the influence of the amount of catering offer on catering being the main motive for visitation?*

These two questions relate to the physical number of catering businesses that a city has to offer. This data is not collected through the questionnaire, as the people on the streets are no experts. This data is already produced by Locatus. This data is normally very expensive to get, but with the help of DTNP the data was free to use for this research. An excel file of the data was sent to DTNP, which contains data on more than 10.000 outlets in different cities. The file includes the cities that are relevant for this research. The addition of the questionnaires from previous years does not give the information on the amount of catering offer, but it does add more cities to the data. These cities are included in the Locatus data.

### 3.3 Validity

The validity of research, questions whether the research is collecting the right data that it is intending to collect (Korzilius, 2008). Validity focuses on systematic errors. This means that the errors being made are not coincidental, but a result of collecting the wrong data. According to Korzilius (2008), there are 4 types of validity: content validity, construct validity, internal validity, and external validity.

Content validity looks at the concepts that are to be measured, and whether those concepts are measured correctly (Korzilius, 2008). Here it is important that the concepts are well implemented in the questionnaire that will be used for this research. The operationalization of the concepts is of importance here. As stated before, the questionnaire that is used has proven to be well operationalized. In the theoretical chapter (chapter 2), the concepts of this research have been operationalized in a way that it fits the questionnaire that was used.

The construct validity looks if the concepts that are chosen to conduct the research are measuring the right data that is needed to get the intended results (Korzilius, 2008). Following the

operationalization in chapter 2 and the operationalization done by DTNP, it is safe to assume that the construct validity is sufficient.

The internal validity of a survey is not high. The internal validity is the weak point of a survey research strategy. Internal validity looks at the causality as an important part of the quality of a given conclusion (Korzilius, 2008). To measure causality, multiple measurements must be done. This research did not do a before and after measurement, as these face-to-face surveys only took place once. This is where the survey lacks what an experiment excels in (Korzilius, 2008)

The final type of validity is the external validity. This is what a survey research strategy excels at. External validity looks generally at larger populations to generalize the results to the larger population (Korzilius, 2008). This is exactly what a survey research strategy intends to do, therefore the external validity of this research is good. Apart from a good validity, the reliability is also an important part of conducting good research.

### 3.4 Reliability

The reliability of the research focusses on the error caused by coincidence (Korzilius, 2008). To increase the reliability of the research, the chance of a coincidental error must be minimized. The results should be the same if the research is repeated in the same way. To make sure that the results will not differ upon repeating the same research, it is important that the time, the instrument used, the size of the sample, and the questioner will not interfere with the results (Korzilius, 2008). To make sure this research will adhere to these requirements, there are some important rules to follow.

To make sure time will not impact the results of the research, the surveys were held at similar times between 9:30 and 17:30. The fieldwork took place on different days, to make it more representative. During the selected days, between 90 and 120 people were surveyed. Across 14 days, this amounted to 1379 respondents in this year's survey and 6295 respondents across all surveys used. This sample size is sufficient to guarantee a representative sample. The use of the same questionnaire by all students also allowed for minimal interference of the questioner on the results. The questionnaire has already been used since 2014 and has been proven to be a reliable instrument. The questionnaire needs to be well operationalized. A good operationalization is key to a good reliability (Korzilius, 2008). DTNP has made a good and reliable questionnaire that has been used for multiple years now and has shown to collect the data that is intended to be collected. It is safe to assume that this year, the questionnaire collected the right data too. After the data was collected, the data analysis began.

### 3.5 Data-analysis

Within the data-analysis of a survey research, the use of statistics is central to analyzing the data (Korzilius, 2008). As mentioned before, SPSS is the statistics program that was used for analyzing the data. The first step of the data analysis is putting the data in a computer file where the concepts and variables are defined and coded (Korzilius, 2008). The coding is important to make the data suitable to be compared to each other. The data from the written surveys was transferred into an excel file. The open questions about what the reason is for visiting the center, were converted to quantitative data by putting it into categories. The four categories here are: recreational stay, recreational

shopping, groceries, and targeted shopping. When the data was transferred to excel, the file was checked for any mistakes and fixed where needed. After this was done, the excel file was put into SPSS, where the analyzing began.

For the data-analysis in SPSS, the measurement level had to be determined. Attractiveness was measured by giving the different aspects on the city center a score from 1-10. This makes it an interval measurement level, as the numbers reflect a rank order with an equal distance between grades. The number of catering falls into the ratio measurement level category, as it has a true zero point. For visitation there is no order, it is either catering or not catering as motivation to visit the city center. This falls under the nominal measurement level.

To find out if catering is the main motive for people visiting the city center, catering was filtered out from the motives. As stated before, recreative stay is one of the four possible motives. Catering first needed to be filtered out from this by choosing the people that have recreative stay as their main motive and then look at which of these people visited any catering. When this new variable was created, it became visible which share of the total visitors were visiting specifically for catering. The result of this analysis is shown in paragraph 4.2.

To examine the relationship between the catering offer and the perceived attractiveness of the city center, a regression analysis was done. A regression analysis is used to find out if there is a relationship between a dependent and one or more independent variables (De Vocht, 2021). The measurement levels of these variables must be interval/ratio. Both independent variables on catering offer fall within this category. The dependent variable also falls within this category. The analysis looks specifically for a causal relationship, where the independent variable(s) explain changes in the dependent variable (De Vocht, 2021). Here, the amount and the perception of catering offer are the independent variables, and the perceived attractiveness of the city center is the dependent variable. Control variables were also used to take the possible influence of characteristics of the respondents and the other aspects of the city center into account.

To find out what the influence of catering is on having catering as a main motivation to visit the city center, a logistic regression analysis was done. Visiting motivation was divided into two categories. People either did or did not have catering as their main motive. This makes this nominal variable a dichotomous variable. The independent variables in the analysis are the amount of catering offer, and the rating given to catering offer. A logistic regression looks at which of two categories a person belongs to (Field, 2018). A logistic regression analysis shows the chance someone belongs to one of the two groups. In this research it shows whether a higher rating given to the catering offer will indicate if people go to the city center because of the catering offer being perceived well. The analysis also shows whether more catering businesses in a city center will increase the chance that people go there with catering being their main reason. In the following chapter the results are reported.

## 4. Results

In this chapter, data of the research is presented and analyzed. Only the relevant data from the surveys and Locatus, needed to answer the research questions, were analyzed. This includes the data on the perceived attractiveness of the catering offer, the perceived attractiveness of the city center, catering as the main motive for visitation, and the physical amount of catering offer. In total there were 6295 respondents. The analysis of the result starts with descriptive analyses on the characteristics of the respondents and the ratings given to the different aspects of the city center in paragraph 4.1. This gives the reader an understanding on which demographics and which aspects of the city center were taken into this research or why some were left out. In paragraph 4.2, the results for the first secondary research question are shown and analyzed. This paragraph shows the results that show the extent to which catering is the main motive for people to visit the city center. In paragraph 4.3, a linear regression analysis was done to see to what extent the catering offer plays a role in the perceived attractiveness of the city center. Here, the perceived attractiveness of the catering offer and the amount of catering offer were included. This paragraph gives the results relating to the two secondary questions on city center attractiveness. In paragraph 4.4, the relationship between the catering offer and visiting motivation is analyzed by using a logistic regression analysis. The catering offer consists of the perceived attractiveness and the amount of catering offer, which makes the analyses give the results for both secondary questions relating to visitation.

### 4.1 Descriptive analyses

To get an overview of the population on which the research was done and their perception of the different aspects of the city center, descriptive analyses were done. These analyses show who the respondents were and how the respondents rated the different aspects of the city center. The view that people have on catering offer becomes clear, as the rating given to the catering offer can be compared to the other ratings. Most of the data from these descriptives analyses were useful for the regression analyses, as the respondents' characteristics and the ratings on the different aspects of the city center are used as control variables in these analyses. The data on age, gender, level of income, education level, and the ratings given to the different aspects of the city center are displayed in the following paragraphs.

#### 4.1.1 Age

The first characteristic to be discussed is age. Out of the 6295 respondents, 6264 gave a valid answer to the question about age. The output showed 31 missing values. The average age of the respondents was 52 years old. The youngest respondent was 8 years old, whilst the oldest respondent was 93 years old. The standard deviation was 18.5 years, which shows a great spread of age within the data set. It also shows that most of the respondent were between 33.5 years old and 70.5 years old. A great standard deviation means that there is a great diversity in age within the group of respondents. Figure 2 shows a histogram which displays the distribution of age within the research population.

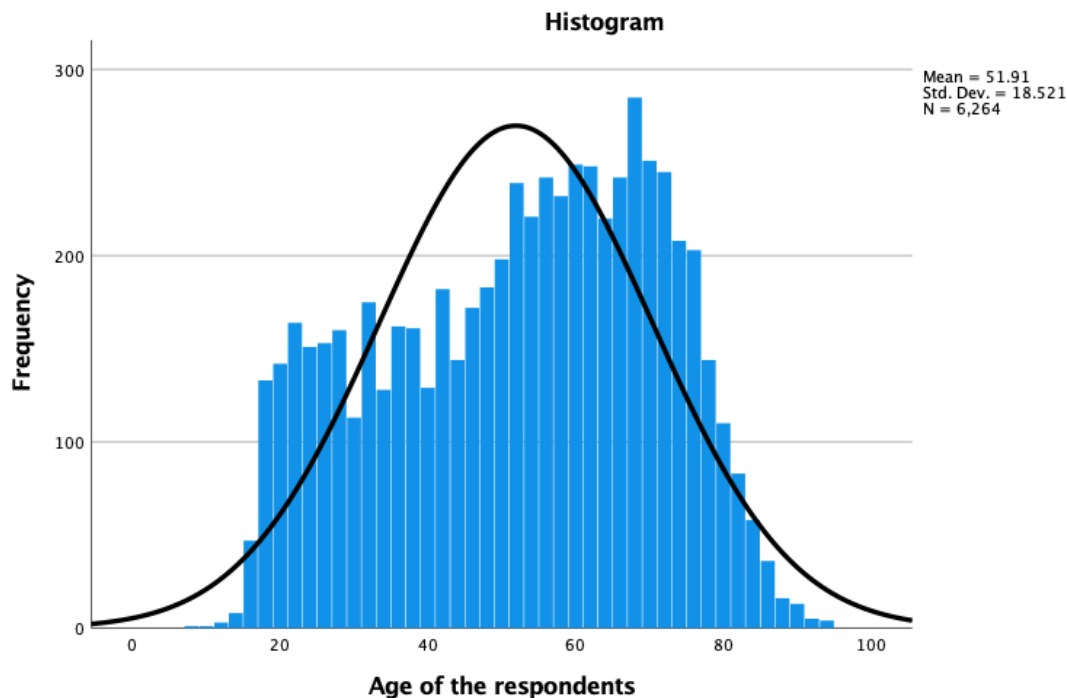


Figure 2: A histogram on the distribution of age within the group of respondents

#### 4.1.2 Gender

The data on gender shows that within the group of respondents there were more women than men included in this research. The data shows that 63% of the visitors were women, whereas 37% were men. From the 6295 respondents, 15 people did not answer the question about their gender. From the 6280 respondents that did answer the question, 3984 were women and 2296 were men. This was to be expected, as in all the previous years the DTNP surveys also had a gender distribution favoring women. This could suggest that women tend to visit the city center of a medium sized city more often than men or that women are more likely to participate in a questionnaire compared to men.

#### 4.1.3 Income

For data on the income of the respondents, there were 617 missing. The remaining 5678 respondents were divided into low, medium, or high income. The data showed a clear divide in income levels. With 54,5% of the respondents having a medium income. The medium-income group was by far the biggest group, as more than half of the people belong to this group. The high-income group was 30,1% of the respondents. The data clearly shows that there was a lack of low-income groups, as only 15,4% of respondents belonged in this group. This could be attributed to the cities that were used for this research, or the fact that the range of income in the “middle income” category is the largest. Due to the high number of missing values, the data on income will not be included in the regression analyses. An overview of the income data is shown in the pie-chart below (Figure 3).

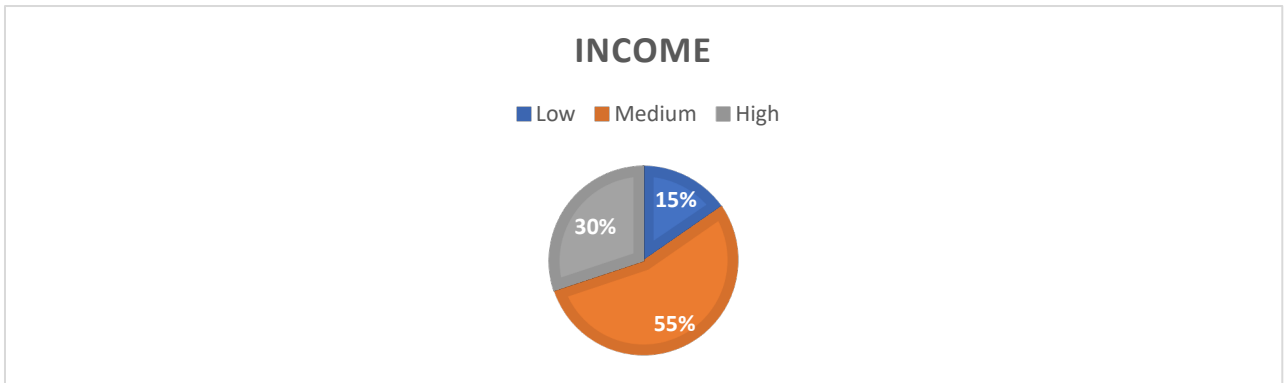


Figure 3: Pie-chart on the income distribution of the respondents

#### 4.1.4 Education level

In the survey, the respondents had to choose their education level from the following different levels: Lower, V(M)BO/MAVO, HAVO, VWO, MBO, HBO, and WO. With 33,4%, the largest share of the respondents finished an HBO degree or something equal to this. MBO was the second most finished degree with 28,2% of respondents. Followed by WO with 13,8% of the respondents having finished a WO degree or something similar. Most of the people finished an education level that was higher than a high school education level, as MBO, HBO and WO are all levels of education that proceed high school. This shows that most of the respondents that took part in the survey were educated. What is, however, noticeable in the data is that V(M)BO/MAVO is the biggest group out of the high school degrees within the group of respondents. The full overview of the data on level of education is shown in the pie-chart below (Figure 4)

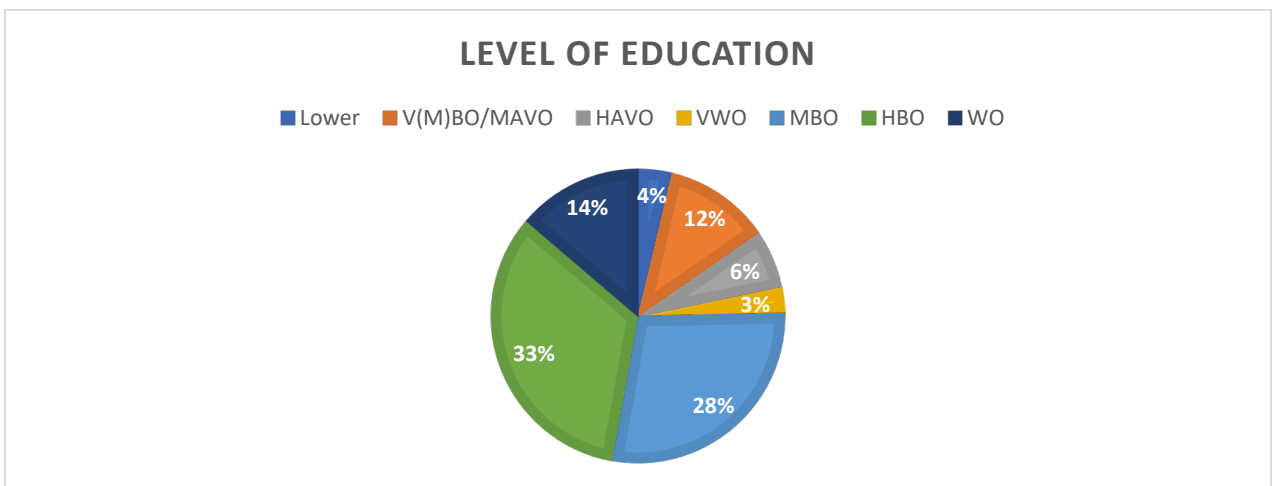


Figure 4: pie-chart on the level of education of the respondents

#### 4.1.5 Descriptives on ratings on aspects of the city center

Each respondent gave a rating between 1 and 10 to each aspect of the city center that has an influence on the attractiveness of the city center. The most important aspects of the city center relating to the research questions of this paper are catering offer and the city center. The other aspects also serve their purpose in answering the research questions, as they are used as control variables to see how much catering offer influences the overall perception of the city center. The data showed that accessibility scored highest with an average score of 7.7 out of 10. Catering offer scored second highest, with an average score that rounded up to a 7.6 out of 10. The attractiveness of the city center had an average rating of 7.1, which seems to be somewhere in the middle of all the

ratings. This was to be expected, as all these ratings should reflect the rating of the city center. The aspect that scored the lowest, was the rating given to the attractiveness of the streets. Three aspects of the city center that were included in this years' questionnaire, were not included in other years. Therefore, the ratings on cultural sights, historical sights, and green spaces, were not included in the results. Parking options, which was included in the results, showed a high number of missing values. The choice was made to exclude this variable from the regression analyses, as the high number of missing values hurts the reliability of the results. The ratings of every aspect that contributes to the attractiveness of the city center are shown in Table 1.

Table 1: Descriptive analysis of the different aspects of the city center

	N	Mean	Std. Deviation
Perceived attractiveness of the city center	6279	7.2226	1.13316
Perceived attractiveness of the catering offer	6053	7.5715	1.22612
Perceived attractiveness of the atmosphere	6251	7.2439	1.36426
Perceived attractiveness of the accessibility	6257	7.6654	1.17151
Perceived attractiveness of the parking options	5799	7.0911	1.45672
Perceived attractiveness of the streets	6266	6.9177	1.23580
Perceived attractiveness of the buildings	6267	6.9267	1.22692
Perceived attractiveness of the shopping offer	6269	7.0676	1.16338
Perceived attractiveness of the quality of the shops	6238	7.3322	0.97264
Perceived attractiveness of the shop windows	6026	6.9568	1.01540
Perceived attractiveness of the shopping circuit	6189	7.2429	1.08429
<b>Valid N</b>	<b>5393</b>		

#### 4.2 Catering as main motive

In this paragraph, the results relating to the secondary question on “to what extent is catering the main motive for people to visit the city center”, are shown and analyzed. This data gives insight into how many people had catering as their main motive and how it compares to other motives. This should indicate the importance of catering as a main motivator for people to visit the city center. First, there must be insight on which of the respondents had catering as their main motive.

To get the data on how many respondents had catering as their main motive to visit the city center, a descriptives analysis was done. This analysis gave the percentages on the distribution of the respondents that either did or did not have catering as their main motive for visitation. Out of the 6295 total respondents, 13 were missing. From the remaining 6282 respondents, 666 had catering as their main motive to visit the city center. This means that 10,6% of visitors were visiting the city center with catering as their main motive for visitation. This indicates that catering was not the main motive for visiting the city center for most of the respondents.

As there are multiple reasons for people to visit the city center, a clear overview of all the main motives was produced. This shows how catering as a main motive performs compared to other main

motives for visitation. To get this data a descriptive analysis was executed, where all motives for visitation were included (Table 2). The distribution of all the main motives gives meaning to the 10,6% attributed to people having catering as their main motive for visitation. Catering as a main motive is included withing recreational stay. Recreational stay was the least popular motive with 15,6% of respondents having this as their main motive for visiting the city center. Targeted shopping is clearly the biggest motivator for people to visit the city center with 42,2%. Catering, however, scores the second lowest if it is seen as a separate motive from recreational stay as a motive. This shows that catering is not the main motive for visiting the city center. Interestingly, most of the respondents that chose recreational stay as their motive had catering as their main motive, 67,9% compared to 32,1%. So, within recreational stay catering seems to be the main attraction for people to visit the city center.

Table 2: the distribution of visiting motives within the group of respondents

Visiting Motives	Percentages of total visitors	Percentage within Recreational stay
<b>Targeted shopping</b>	42,2%	-
<b>Recreational shopping</b>	16,8%	-
<b>Groceries</b>	25,5%	-
<b>Recreational stay</b>	15,6%	-
<b>Total</b>	100%	-
<b>Within recreational stay</b>		
<b>Catering</b>	10,6%	67,9%
<b>Other recreational stay</b>	5%	32,1%
<b>Total</b>	15,6%	100%

The total visitation numbers of catering are different from the data mentioned in the paragraphs above. Not everyone who visited catering had catering as their main motive. The respondents who had other main motives for visiting the city center, could have also visited a catering business during their stay. From the 6295 respondents, 1088 had visited at least one catering business during their stay (Table 3). This equates to 17,3% of the total respondents. This means that of the 1088 catering visitors, 666 had catering as their main motive. This equates to 61,2% of catering visitors having catering as their main motive. Still, the data shows that a great majority of 82,7% of visitors did not visit any catering business during their stay (Table 3). This contradicts the literature that claims that catering is the new main attraction to the city center.

Table 3: The distribution of total catering visitation

Amount of catering visited per person	frequency	percentage	Cumulative percentage
<b>0</b>	5207	82,7	82,7
<b>1</b>	1024	16,3	99,0
<b>2</b>	54	0,9	99,9
<b>3</b>	7	0,1	100
<b>4</b>	2	0,0	100
<b>5</b>	1	0,0	100
<b>Total</b>	6295	100	-

#### 4.3 The effect of catering on city center attractiveness

In this paragraph, the effect that catering has on the perceived attractiveness of the city center will be analyzed. This will show whether the perceived attractiveness and/or the amount of the catering

offer has any effect on how people perceive the city center. Both the subjective and objective data on catering were taken in the regression analyses. Multiple regression analyses were done to see if the rating on catering offer or the amount of catering offer can predict the rating on the city center. The characteristics of the respondents and the ratings on the different aspects of the city center were used as control variables, to see if there are any other factors that have a major impact on how the city center is perceived. Before doing a regression analysis, the presence of multicollinearity was checked to see which variables can be used in the analyses. The multicollinearity analysis checks whether the variables used in the regression analysis are not measuring the same thing and thus, create unreliable data.

This sub-chapter will give the results on the data relating to the two secondary question about the effect of catering offer on city center attractiveness. The first question focusses on the perceived attractiveness of the catering offer. The two main variables here are the variables on the perceived attractiveness of the catering offer and the perceived attractiveness of the city center. To give value to these variables, the means were calculated through a descriptives analysis (see Table 1). The catering offer scored an average of 7.6/10, whilst the city center had an average score of 7.2/10. The respondents seemed to be more positive on the catering offer than they were on the city center. The second research question this sub-chapter focusses on, is the question relating to the effect of the amount of catering offer on the attractiveness of the city center. The total amount of catering offer taken in the data are 2313 establishment divided over 27 different cities.

#### 4.3.1 Multicollinearity check for the multiple regression analyses.

Before running the data through a regression analysis, the model needs to be checked on the presence of multicollinearity. According to De Vocht (2021), a multiple regression analysis should not contain multicollinearity, because an independent variable in the model should not measure the same values as another independent variable in the model for the analysis to work. When there is multicollinearity between the predictor variables, the individual influence on the dependent variables is difficult or impossible to measure (Field, 2018). As multiple regression analyses were executed, making sure that the independent variables do not measure the same values is important before running the analyses. To find out if there is a multicollinearity problem, the variance inflation factor (VIF) is used to indicate the level of multicollinearity. The rule of thumb for interpreting the VIF value, is that a VIF greater than 10 is considered a serious problem and a VIF greater than 5 is a potential problem (Field, 2018).

First, all the variables were put into the analysis. This was done to create an overview of all the variables and see if there were any signs of multicollinearity between the variables. This model is called model 0, as it does not represent any of the used models in the regression analyses (see Appendix B). The first findings of the analyses on multicollinearity found that education levels MBO and HBO had multicollinearity values which could be problematic ( $VIF > 5$ ). WO had a VIF-score that came close to 5, which is acceptable but could also indicate a possible multicollinearity problem. To fix this multicollinearity issue, the education levels were grouped together in three separate groups: lower education, medium education, and higher education. The medium education level consists of HAVO, VWO, and MBO, which means that three variables had to be combined. A reliability analysis was done to find out if these three variables could be put together (See Appendix B). The Cronbach's Alpha value was not great but acceptable, which means that putting these three variables together is

an acceptable solution to prevent multicollinearity. Running all the independent variables through the test again, showed a low probability that multicollinearity will be a problem.

There were six different regression analyses done with the data. There were two analyses per main independent variable, one with and one without control variables. Then there were two analyses done where both variables on catering offer were included. Again, one with and one without the control variables. Four out of six regression analyses were multiple regression analyses. For each multiple regression analysis, a multicollinearity analysis was done (See Appendix B). In none of the four models was there any sign of a multilnearity problem. None of the VIF values reached a VIF-score of 3, which is well below the maximum of 5. With multicollinearity not being a problem, one of the assumptions for a multiple regression analysis is met.

#### 4.3.2 Regression analyses on effect of catering on the attractiveness of the city center

A multiple regression analysis should be linear, homoscedastic, and the residuals should have a normal distribution (De Vocht, 2021). The assumptions for the multiple regression analyses, apart from multi collinearity, were checked in three ways. To check the assumption of a normal distribution of the residuals, residuals analyses were done using histograms and normal probability. Having both types of plots helps with any uncertainties that one of the two plots can create. To check for homoscedasticity and linearity, scatter plots were used. The results of these analyses are shown in Appendix C. Model 2 seems to have a possible questionable distribution. However, the data points are still distributed closely around the diagonal line. According to De Vocht (2021), this is still considered a normal distribution. The histogram confirms this. All models adhere to the assumptions of a multiple regression analysis, the data can be presented.

For the interpretation of the results from the regression analyses, the adjusted R square and the F-value were the first values that were looked at. The adjusted R square indicates the share of variance that the model explains, whilst the F-value indicates the significance of the whole model (De Vocht, 2021). The higher the value is for R square, the better the fit is of the model. For the interpretation of the results, the interpretation of the values according to De Vocht (2021) were used. In Table 4 and Table 5, the unstandardized B coefficients and the standard error for each variable are shown. The unstandardized B coefficient, which is the first value shown for every variable, shows the effect of the independent variable(s) on the dependent variable (De Vocht, 2021). Here it shows how much the rating people give to the city center changes for every +1 increase in the independent variables.

Table 4: Results Multiple Regression Analyses without the control variables on effect of catering on city center attractiveness

	Model 1	Model 2	Model 3
<b>(Constant)</b>	4.452***	7.147***	4.459***
	(0.083)	(0.027)	(0.084)
<b>Perceived attractiveness of the catering offer</b>	0.367***		0.367***
	(0.011)		(0.011)
<b>Amount of catering offer</b>		0.001***	0.000
		(0.000)	0.000
<b>Adjusted R<sup>2</sup></b>	<b>0.159</b>	<b>0.002</b>	<b>0.159</b>
<b>F-value</b>	<b>1147.346</b>	<b>11.364</b>	<b>573.744</b>
<b>N</b>	<b>6048</b>	<b>6279</b>	<b>6048</b>

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

Table 5: Results Multiple Regression Analyses including the control variables on effect of catering on city center attractiveness

	Model 4	Model 5	Model 6
<b>(Constant)</b>	0.447***	0.517***	0.473***
	(0.104)	(0.103)	(0.105)
<b>Perceived attractiveness of the catering offer</b>	0.019**		0.020**
	(0.009)		(0.009)
<b>Amount of catering offer</b>		0.000	0.000
		(0.000)	(0.000)
<b>Age</b>	-0.001**	-0.001**	-0.001**
	(0.001)	(0.001)	(0.001)
<b>Gender (referential category: man)</b>	0.018	0.014	0.016
	(0.020)	(0.020)	(0.020)
<b>Education level (Referential category: Lower education)</b>			
<b>Medium education</b>	0.032	0.027	0.031
	(0.030)	(0.029)	(0.030)
<b>Higher education</b>	0.090***	0.084***	0.090***
	(0.030)	(0.029)	(0.030)
<b>Aspects of the city center</b>			
<b>Perceived attractiveness of the atmosphere</b>	0.211***	0.221***	0.213***
	(0.010)	(0.009)	(0.010)
<b>Perceived attractiveness of the accessibility</b>	0.038***	0.037***	0.037***
	(0.009)	(0.009)	(0.009)
<b>Perceived attractiveness of the streets</b>	0.087***	0.086***	0.087***
	(0.010)	(0.009)	(0.010)
<b>Perceived attractiveness of the buildings</b>	0.144***	0.144***	0.144***
	(0.010)	(0.010)	(0.010)
<b>Perceived attractiveness of the shopping offer</b>	0.357***	0.356***	0.357***
	(0.012)	(0.012)	(0.012)
<b>Perceived attractiveness of the quality of the shops</b>	0.011	0.011	0.009
	(0.014)	(0.014)	(0.014)
<b>Perceived attractiveness of the shop windows</b>	0.042***	0.046***	0.042***
	(0.013)	(0.012)	(0.013)
<b>Perceived attractiveness of the shopping circuit</b>	0.041***	0.044***	0.041***
	(0.011)	(0.011)	(0.011)
<b>Adjusted R<sup>2</sup></b>	<b>0.595</b>	<b>0.594</b>	<b>0.595</b>
<b>F-value</b>	<b>634.701</b>	<b>650.634</b>	<b>589.592</b>
<b>N</b>	<b>5609</b>	<b>5772</b>	<b>5609</b>

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

The results of the regression analyses are presented in Table 4 and Table 5. In total, 6 regression analyses were done. In all analyses, the perceived attractiveness of the city center was the dependent variable. In model 1, only the perceived attractiveness of the catering offer was included as the independent variable. In model 2, only the amount of catering offer was included as the

independent variable. In model 3, both variables relating to catering offer were included as independent variables. In model 4, the respondents' characteristics and the ratings on the different aspects of the city center were added as control variables to the rating given to the catering offer. In model 5, all the control variables were added to the amount of catering offer. In model 6, all the independent variables were included in the analysis. The number of respondents taken into the analyses differ, as not all respondents answered every question on ratings or characteristics. All models have an F-value that indicate a statistically significant model within the 1% range.

The adjusted R-squares indicate that all models fit the data. In Table 4, model 1 indicates that 15,9% of the variance in the rating of the city center is explained by the rating in catering offer. Model 3 explains the same variance, which shows that the addition of the amount of catering offer has little influence on how much variance the models explain. This is confirmed by model 2, which only explains 0,02% of the variance in the perceived attractiveness of the city center. When the control variables are added, the model fit of all models improves. Model 1 and model 3 both show a moderately strong relationship between the independent variables and the city center. Models 4, 5 and 6, which include the control variables, show a much stronger relationship, as the R-squares of those models indicate a very strong relationship (Table 5). In model 4, the independent variables are the ratings on the catering offer and control variables. The model shows that 59,5% of the variance in the rating given to the city center is explained by these variables. The explanation rate of the model goes down by 0,01% when the rating on catering offer is swapped with the amount of catering offer in model 5. Just like in models 1 through 3, Model 4 through 6 indicate little influence from the amount of catering offer in explaining the variance in the rating given to the city center. In model 6, the explanation rate of the model is the same as model 4. In general, all four models are significant and show a moderately strong or a very strong relationship. The addition of the control variables improves the relationship from strong to very strong.

The result within each model is different, based on the independent variables that are included in the analysis. The independent variables that are most important in this paper, are the variables relating to catering offer. In models 1 and 3, the regression coefficients for the rating on catering offer are significant,  $p < 0.01$ . In model 1 and 3 for each full point awarded to the perceived attractiveness of the catering offer, the rating for the city center will go up by 0.367. In model 2 the regression coefficient for amount of catering offer is significant,  $p < 0.01$ . For each catering establishment added, the rating of the city center goes up with 0.001. In these models, the effect the amount of catering offer has on city center attractiveness seems to be very low. The effect that the rating on catering offer has on the rating of the city center is strong.

Models 4, 5 and 6, however, paint a different picture (Table 5). In these models, the regression coefficients for the rating on catering offer are not high and less significant,  $B = 0.019$ ;  $p < 0.05$  and  $B = 0.020$ ;  $p < 0.05$ . The amount of catering offer has no statistical significance at any level in models 4 through 6. The different aspects of the city center do have a significant impact on the overall attractiveness of the city center. All aspects except for the quality of the shops, had a significant regression coefficient. The significance levels of these variables were in the 1% range for all 3 models in Table 5. The shopping offer has the greatest impact on city center attractiveness. For each point increase in shopping offer, the rating for the city center goes up with 0.357. In models 4 and 6. The rating on the atmosphere and on the buildings also had relatively high regression coefficients. The

rating for the atmosphere increases the rating of the city center by more than 0.2 points for each point increase. In all three models in Table 5, the rating of the city center goes up by 0.144 for each point increase in attractiveness of the buildings. These results indicate that these aspects of the city center have a strong influence on the overall attractiveness of the city center.

The characteristics of the respondents showed little significance in these models. Only higher education showed a significance within the 1% range. People with a higher education have a 0.09 higher rating to the city center on average, compared to people with a lower education. Age showed a significance within the 5% range. The influence of age is minimal, as for each year increase, the rating of the city center goes down by 0.001. This shows that it is mainly the perception of certain aspects of the city center that have an influence on the overall rating of center, with catering offer not being one of these aspects.

#### 4.4 The influence of catering offer on visitation

In this paragraph, influence of the catering offer in attracting visitors to the city center is analyzed. The results show the relationship between the objective and the subjective aspect of the catering offer on people's reason for visitation. It shows whether catering is the main reason or not. The rating that people give to the catering offer is an interval measurement level and the amount of catering is a ratio measurement level. The dependent variable, which is the visitation motive, is a dichotomous variable. According to De Vocht (2021), a logistic regression analysis is used when a model is predicting a dependent dichotomous variable with the use of one or more independent interval/ratio variables. This analysis predicts whether the main motivation for visitation is either catering or something else, based on the values of the independent variables. It shows whether the rating people give to catering offer or the amount of catering in a city gives any predictability on their main motivation for visitation. The main independent variables here, are the rating given to the catering offer and the physical amount of catering offer. The characteristics of the respondents and the ratings on the different aspects of the center, were used as control variables to see if they had any influence on the outcome. Before running the logistic regression analyses, the means of the rating on catering offer were compared between the groups that did and did not have catering as their main motive. This was done to see how the respondents within each of the two groups rated the catering offer, and whether there is any difference between the groups. After the means were compared, a multicollinearity analysis was done to check the variables for any multicollinearity.

##### 4.4.1 Comparing the ratings on catering offer between the two groups

The two groups that were compared were the group that did, and the group that did not have catering as their main visiting motivation. A t-test was done to see what the difference is between these two groups in rating the catering offer. The results of this t-test are shown in Appendix D. The group that had catering as their visitation motive gave the catering offer an average score of 7.8, whilst the group that did not have catering as their visitation motive gave an average score of 7.5. The Levene's Test for Equality of variance showed no statistical significance,  $p=0.742$ . This indicates that there is no statistically significant difference in equality of variance between the two variables. The t-value, when the variance is assumed to be equal, is statistically significant,  $t(6046)=-4.988$ ;  $p<0.001$ . This means that the assumption of equal variance can be rejected. The ratings given to the catering offer by the people who did have catering as their main motive for visitation differs significantly compared to the ratings given by the people who did not have catering as their main motivation to visit the center.

#### 4.4.2 Multicollinearity check for the logistic regression analysis

Before running the data through a logistic regression analysis, the model needs to be checked on the presence of multicollinearity. According to De Vocht (2021), one of the assumptions a logistic regression analysis must adhere to is the absence of multicollinearity. The independent variables in the model should not be too similar. If they measure the exact same thing then the results will not be valid. Like the multicollinearity check for the multiple regression analysis, four out of the six models have more than one independent variable and were checked for multicollinearity. Each model was checked separately for the presence of multicollinearity (see Appendix E). Models 3, 4, 5, and 6, were checked on multicollinearity. The results of the analyses showed that none of the models contained any problematic multicollinearity. According to Field (2018), a VIF of greater than 5 could be problematic. All models contained VIF-scores lower than 3, which makes it very unlikely that multicollinearity is a problem in the models. According to De Vocht (2021), multicollinearity is the main assumption that should be checked. The other assumptions are related to variable type and causality, which these variables adhere to. Linearity is an assumption that is hard to check (De Vocht, 2021). The assumption that can be measured were checked. The results of the logistic regression analyses can be analyzed.

#### 4.4.3 Logistic regression analyses on rating catering offer and visitation motivation

The independent variables used in the logistical regression analyses are the perceived attractiveness of the catering offer, the amount of catering offer, the respondents' characteristics, and the ratings on the different aspects of the city center. These are the same variables used in the multiple regression analysis. In Table 5, the Nagelkerke pseudo R square was used to indicate the quality of the model. For the interpretation of the value, the interpretation by De Vocht (2021), was used. For each variable in the model, the Exp(B) and Wald values are shown. The Wald value indicates the relative importance for each variable, whilst the Exp(B) gives the growth of the odds for each point increase in the independent variable (De Vocht, 2021). The Exp(B) represents the odds-ratio. This value will indicate how much the chance of having catering as visiting motive increases for every increase in the independent variable(s). The results of the logistic regression analyses are shown in Table 6 and Table 7.

Table 6: Logistic regression analysis without control variables on the influence of catering on visitation

	Model 1		Model 2		Model 3	
	Exp(B)	Wald	Exp(B)	Wald	Exp(B)	Wald
<b>Constant</b>	0.029***	147.225	0.068***	1186.765	0.022***	168.928
<b>Perceived attractiveness of the catering offer</b>	1.203***	24.836			1.168***	17.408
<b>Amount of catering offer</b>			1.007***	81.184	1.006***	65.516
<b>Nagelkerke pseudo R<sup>2</sup></b>	<b>0.009</b>		<b>0.024</b>		<b>0.029</b>	
<b>N (included in analysis)</b>	<b>6048</b>		<b>6282</b>		<b>6048</b>	

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

Table 7: Logistic regression analysis including control variables on the influence of catering on visitation

	Model 4		Model 5		Model 6	
	Exp(B)	Wald	Exp(B)	Wald	Exp(B)	Wald
<b>Constant</b>	0.062***	31.489	0.047***	40.869	0.039***	41.989
<b>Perceived attractiveness of the catering offer</b>	1.118**	5.775			1.099**	4.145
<b>Amount of catering offer</b>			1.005***	37.533	1.005***	34.065
<b>Age</b>	0.993***	9.131	0.994**	6.335	0.993***	7.082
<b>Gender (referential category: man)</b>	0.693***	16.778	0.706***	15.163	0.712***	14.203
<b>Education level (referential category: Lower Education)</b>						
<b>Medium education</b>	0.802	2.459	0.801	2.573	0.813	2.162
<b>Higher education</b>	1.030	0.047	1.008	0.004	1.026	0.035
<b>The aspects of the city center</b>						
<b>Perceived attractiveness of the atmosphere</b>	1.225***	18.536	1.226***	21.372	1.185***	13.083
<b>Perceived attractiveness of the accessibility</b>	0.997	0.004	1.028	0.443	1.022	0.269
<b>Perceived attractiveness of the streets</b>	0.952	1.235	0.957	0.999	0.947	1.539
<b>Perceived attractiveness of the buildings</b>	1.018	0.140	1.009	0.038	1.020	0.176
<b>Perceived attractiveness of the shopping offer</b>	1.013	0.052	1.029	0.268	1.019	0.113
<b>Perceived attractiveness of the quality of the shops</b>	0.927	1.347	0.948	0.689	0.947	0.716
<b>Perceived attractiveness of the shop windows</b>	1.048	0.618	1.071	1.328	1.054	0.791
<b>Perceived attractiveness of the shopping circuit</b>	0.908**	3.935	0.914*	3.499	0.905**	4.187
<b>Nagelkerke pseudo R<sup>2</sup></b>	<b>0.030</b>		<b>0.041</b>		<b>0.041</b>	
<b>N (included in analysis)</b>	<b>5611</b>		<b>5773</b>		<b>5611</b>	

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

Six logistic regression analyses were done. Three without the control variables (Table 6), and three with control variables (Table 7). For each model, the main motive for visitation is the dependent variable. In model 1, the attractiveness of the catering offer is the independent variable. The amount of catering offer is the independent variable in model 2. In model 3, both variables on catering are used as the independent variables in the model. In model 4, the control variables are added to the attractiveness of the catering offer. Model 5 uses the amount of catering offer and the control variables as the independent variables. In model 6, all the variables are included. The results show that all six analyses are not a good fit for the data. Although the Nagelkerke R<sup>2</sup> is similar to the R-square in a multiple regression analysis, it is not allowed to represent the Nagelkerke R<sup>2</sup> as a percentage (De Vocht, 2021). As the Nagelkerke R<sup>2</sup> is considered similar to the multiple R-squared, the interpretation is also similar. Therefore, the values in Table 6 and Table 7 are considered to be low. Model 1 has a Nagelkerke R<sup>2</sup> value of 0.009, which is close to 0 and shows that there is almost

no effect from the rating of the catering offer on having catering as visiting motive. Models 2, 3, 4, 5, and 6 all show a Nagelkerke  $R^2$ -value that is clearly above 0, but still considered low. Models 5 and 6 seem to be the best models that fits the data, Nagelkerke  $R^2=0.041$ . The models do not explain much of the variance. It is, however, still relevant to look at the individual independent variables to see if these variables have a significant role in predicting the dependent variables.

Both variables relating to catering offer are significant in all models. In the models including the control variables, the significance of the perceived attractiveness goes down to the 5% range. In these models, the amount of catering is more significant. As model 6 has the highest Nagelkerke  $R^2$  value, and it includes all the variables, this is the main model to look at. The model shows that for each point increase in the perceived attractiveness of the catering offer, the chance of having catering as a main motive goes up by almost 9,9%. This is lower compared to the other models, especially the models without the control variables. This shows the importance of including the control variables, as these predict a significant amount of the model. The amount of catering offer has a much higher Wald-score than the rating of the catering offer, Wald= 34.065 compared to Wald= 4.145 (model 6). This shows that the importance of the amount of catering offer is higher than the rating given to the catering offer. Compared to the other independent variables, the amount of catering offer has the highest Wald-score, which shows it is the most important independent variable in the logistic regression analysis. The odds ratio indicates that for each catering establishment added, the chance of having catering as a main motive for visitation goes up by 0,5%. This number is similar in all the models.

Some of the characteristics of the respondents show statistical significance in the models in Table 7. Age and gender were significant in all three models in Table 7. For each year someone gets older, the chance of having catering as motive to visit the city center, goes down by 0,7%. This indicates that older people are less likely to have catering as their main motive to visit the city center. Gender has a bigger impact, as being a woman reduces the chance of having catering as a main motive for visitation by 28,8% in model 6. The aspects of the city center that are significant in the analyses, are the atmosphere and the shopping circuit. For each rating increase in atmosphere, the chance of having catering as main motive goes up by 18,5% in model 6. The shopping circuit seems to have a negative impact on having catering as a main motive. For each point increase given to the shopping circuit, the chance of having catering as the main motive for visitation goes down by 9,5%.

## 5. Discussion

The results from the different analyses give insight into the influence of catering in combatting the downwards trend in city center attractiveness and declining visitation numbers. The findings on the influence of catering did not meet the expectations set by the literature review. Most of the literature showed that catering contributes greatly to the overall attractiveness and visitation number of the city center. Catering was presented as the new main attraction of the city center. However, the results imply that the influence of catering on attractiveness and visitation are overstated in the literature. The attractiveness of the city center relies more on other aspects of the center such as, the atmosphere, the look of the buildings, and the shopping offer. Especially shopping offer has a big influence on overall city center attractiveness, which contradicts the literature that claims that catering is taking over shopping as the main function of the city center. Interestingly, the results do show an influence of catering on having catering as main motivation for visitation, so there is an influence on visitation. Both the amount of catering offer and the perceived attractiveness of the catering offer have a notable influence on the chance that someone would have catering as their main motivation for visitation. Especially the amount of catering offer seems to have an important role in making catering a main motive for visitation, as it is the most important independent variable in the models. Surprisingly, the perception of the atmosphere of the center is more influential on having catering as the reason for visitation than the perception on catering offer. However, due to the low contribution of catering on the total visitation numbers, catering should not be considered a main attraction based on this research. And with the low explanation rates of the analyses on visitation motives, the results should be interpreted carefully.

Some other interesting findings were those on respondent characteristics. Looking at the attractiveness of the city center, people with a higher education level seem to be more positive than people with a lower education level. Higher educated people gave the city center a score that was almost 0.1 points higher than their lower educated counter parts. This is a finding that did not become apparent from the literature review. Looking at catering as the reason for visitation, gender and age played an important role. Gender and age are more important factors in making catering the main reason for visitation, compared to the rating given to catering offer. Women are less likely to have catering as their main reason for visitation, compared to men. The results also showed that for each year someone gets older, the chance of them having catering as a main reason for visitation goes down. This was unexpected, as the literature indicated that older people would have more time to go to the center for recreational purposes. And as the result show, catering is the main visitation attraction for recreational purposes.

Linking the results directly to the literature, catering offer not having much impact on the perceived city center attractiveness is a surprising result. According to the Butink (2015), the presence of a range of catering offerings should make a city center more attractive. The results show that having more catering offerings does not have any impact on the attractiveness of the city center. Looking at the perceived attractiveness of the catering offer, the results also contradict the literature. According to Teller & Reutterer (2008), The tenant and non-tenant related factors play an important role in city center attractiveness. As catering belongs to this category, the assumption was made that catering would also play an important role in enhancing the attractiveness of the city center. The results indicate that this assumption is likely not true. A possible reason for this could be that catering should not be considered as a separate function from other recreational functions. In the article by Hidman (2018), recreational activities and leisure activities are mentioned as having a great influence on attractiveness. Although catering is part of these activities, they encompass much more. Another reason for these results could be that catering might not have a direct but an indirect effect on city center attractiveness. Both Hidman (2018), and Teller & Reutterer (2008), mention catering as an enrichment to the shopping experience. The results show that shopping offer is the greatest

influencer on overall attractiveness. Having catering as an enhancement of the shopping experience and shopping as the focus, seems to be supported by the results and parts of the literature. Another way catering enhances the experience people have in the city center is through atmosphere. The atmosphere did show a significant impact on the attractiveness of the city center, which confirms the literature. As the literature showed that enhancing the atmosphere of a city center should improve the overall attractiveness of the center (Butink, 2015; Teller & Reuterrer, 2008). Catering is not directly enhancing the city center attractiveness, but it is possible that there is an indirect effect through enriching the shopping experience.

The concept of visitation was important to three different secondary questions on in the research. Looking at the influence that catering offer has on whether a person has catering as their main reason for visitation, the results were as expected. The amount of catering offer and the perceived attractiveness of the catering offer were shown to have an influence on visitation motives. Butink (2015) stated that catering offer has a positive influence on visitation. Catering gives people a reason to go out and visit the city center (Kohijoki & Koistinen, 2019). The results indicate that catering offer does increase the chance that someone visits the city center specifically for catering. Atmosphere having a bigger influence on having catering as motivation, compared to the rating given to the catering offer, could imply that people tend to want to visit a catering establishment more to enjoy the ambience and atmosphere of the city center, rather than the catering experience itself.

However, total visitation number with catering as the main motive for visitation were low. Almost 40% of the people that did visit catering had other main motives. The results show that catering is not a popular main motive for visitation. The effect that catering has on total visitation seems to be exaggerated in the literature. The article by Evers et al. (2015), mentioned catering and shopping as the two main motives for visitation. The results showed that catering was the main motive for only 10,6% of the respondents, and only 17,3% of the respondents visited catering. Catering was, however, the main motive for people that had recreational stay as their main motive. The article by Evers et al. (2015), does mention catering being the main attraction for people to visit for leisure purposes. As a part of recreational/ leisure activities, catering is the main attraction. This could imply that catering is a reason for people to visit the city center, when their main purpose is to relax and make their stay a leisure activity. For the city center in general, catering is not a main attraction. It is rather an attraction for recreational/leisure purposes. The literature used seemed to be biased towards catering. However, there was a contradiction mentioned in the literature. The article by Weltevreden & van Rietbergen (2007), contradicts the article by Butink (2015). The results of this research seem to be more in line with the findings by Weltevreden & van Rietbergen (2007, which stated that leisure (which included catering), did not attract people to go to the city center instead of buying online. This research adds more nuance to this statement, as visitation does seem to get influenced by catering but the total effect on visitation is small.

These results imply that the role of catering in bringing people together is smaller than expected. As became clear in the introduction of this paper, the city center is a place of socialization (Mehta, 2022). Having social relationships is important for wellbeing (Tov & Diener, 2009). Having a space where socialization is promoted, helps to increase the wellbeing of people. It was expected that catering would be the main attraction for people to visit the city center, this appears no to be true. And although it makes people visit the center with catering as their main reason, the total visitation numbers indicate that catering is far from the main attraction of the city center. Bringing people to the city center was the main reason why this research focused on catering. The idea was that catering would increase socialization and wellbeing. To a certain extent it still does, as catering is the main attraction for people looking for recreational/leisure activities. These activities are key to wellbeing, as it is the informal social activities that show the greatest positive influence on the wellbeing and health of people (Adams et al., 2010; Becchetti et al., 2011). So, catering has some influence on wellbeing but due to the low visitation number of catering, the total contribution to the

wellbeing of the people is questionable. However, any small contribution to the wellbeing metric of the people within democratic countries could show some improvements in overall democratic behaviors. Policymakers could keep this in mind but should understand that there are possible other factors like the atmosphere, or factors related to shopping, that could benefit visitation numbers and socialization more. Making a statement of any significance on the effect that catering has on the state of a nation's democracy, seems out of proportion. To say that catering does not contribute to a healthy society would also be a false statement based on these results. Catering seems to contribute to people coming together, although the contribution is not as big as the literature made it look. A reason for the low amount of visitation number could be the setup of the research.

### 5.1 Reflection and limitations

The research was done between 9:30 and 17:30. After 17:00 the shops close but the catering establishments are still open till much later. Due to this research being done with a group of people, these were strict times. This seems to be a flaw in the set up for this research, as a focus on catering would benefit from surveying till the catering establishments close. The visitation number could, therefore, be deflated. The interpretation of the results should take this into account. One of the main statements that came forward from the literature, was catering being just as, if not more important than shopping as the main function of the city center. If this were to be true, the visitation numbers of catering should also perform well when the shops are opened. The result show that catering is influencing the attractiveness of the city center less than the shops do. The main takeaway from the results is still valid in this context.

The length of the questionnaire was also a possible issue during the research. Answering all the questions, especially rating all the different aspects of the city center, was time consuming. Having a shorter and more focused questionnaire, would likely increase the number of respondents. Some respondents also seemed to be annoyed by the length of the questionnaire. This made the field work more inconvenient than necessary. Having respondents be annoyed could take away their focus and influence the results. Apart from the length of the questionnaire and the time schedule of the survey, the field work went smoothly. The surveying started when the shops opened and ended when the shops closed. The days that were chosen were relatively busy, so getting between 30 and 40 respondents was doable. The planning was strict and followed by everyone involved. Putting the data in excel was very time consuming but the excel file was well made, so no problems were encountered during the data processing. The only thing that could be improved for future research would be to work with a tablet, so the questionnaire would be automatically saved in excel. This would give the researchers more time for analyzing the results.

The limitation of the research make it is difficult to determine the exact influence of catering on the city center in a general sense. Certain data is missing due to the constraints of the research, which is why this paper will not generalize the data. This paper does add to the existing literature and can be used for future research frameworks. This research does provide a perspective on the balance between shopping and catering, during shopping opening hours. It shows that people still tend to choose shopping over catering for visitation. And a more attractive city center relates more to the shopping experience than the catering experience.

## 6. Conclusion

This research aimed to find out what the influence of the catering offer is in the overall attractiveness of the city center to get people to visit the center. The main research question for this research was:

*“To what extent does the catering offer influence the perceived attractiveness toward visitation”.*

To answer this question, the main question was subdivided into five different secondary questions. Two of which relate to attractiveness and three relating to visitation. To first get an understanding on the overall relevance and impact that catering has on city center visitation numbers, the extent to which catering is the main motive for visitation was analyzed. The results show that the contribution of catering in total visitation numbers was low, which indicates that catering is not the main attraction for the city center.

To find out to what extent the amount of catering and the perceived attractiveness of catering influence the perceived attractiveness of the city center, multiple regression analyses were done. The analyses show that both aspects of catering offer have little influence on improving the attractiveness of the city center. The amount of catering seems to have no influence on how the city center is perceived, whilst the rating given to the catering offer shows a slight improvement in city center attractiveness. The rating given to the shopping offer shows the most influence on city center attractiveness, which contradicts the literature that claims the function of the city center is being taken over by catering.

The last two secondary questions were focused on finding out what the influence of the catering offer is on having catering as the main motive for visitation. The results show that the amount and perception of catering do influence the chance of catering being the main reason for visitation. This was the only result that was not surprising. Having more catering establishments in a city and having a more attractive catering offer makes it more likely for people to visit the city center specifically for catering. But, as the first secondary question shows, the total visitation number of catering is low. This indicates that, even though catering offer increases the chance that people visit the city center with catering being their main motive, the total visitation number of catering is too low to make it appear as the savior of the city center.

So, to answer the main question of this research, the catering offer does not seem to have much impact on making the city center a more attractive place for visitors to visit the city center. It should not be seen as the primary tool to fixing the diminishing attractiveness and visitation numbers of the city center. The results and the literature could imply a more indirect effect from catering on city center attractiveness and visitation, through enhancing the shopping experience. This could be the framework for a follow up study.

Further research is needed to find out if and how catering influences the city center attractiveness and visitation numbers indirectly. The literature and the result imply that there is a possibility that catering enhances the shopping experience and the atmosphere of the city center. As the shopping experience has a great influence on overall attractiveness of the center, and atmosphere showed to have an influence on both attractiveness and making catering the reason for visitation, further research could establish this link directly. If further research would be done on the same topic, it is advised to look at recreational activities more broadly, instead of just focusing on catering. Catering is a significant part of recreational activities, but recreational activities encompass much more.

Another link that should be researched more is the link between catering and wellbeing. As catering did not seem to have a direct impact on city center attractiveness and visitation, the link between catering and wellbeing did not become apparent in this study. The literature showed that bringing

people together in social spaces increases wellbeing, but the effect that catering had on visitation is too small to claim that catering showed signs of potentially being a key part in improving social wellbeing. A follow up study could focus more on the direct link between the two. Comparing objective and subjective aspects of the catering offer between cities and see whether the wellbeing metrics of these cities correlate with the data on catering. This way the relevancy towards democratic stability could become more apparent.

In conclusion, the aim of this research was to get an understanding on the influence that catering has in making the city center more attractive for visitation. This way it could be presented as the possible solution to the diminishing attractiveness the Dutch city centers, and possible loss of social wellbeing that is related to that. However, this research concludes that catering offer is not likely to be the answer to the city center problem. And although the results of this paper should not be generalized and would serve better as a framework for follow up studies, researchers should find out if catering or another aspect of the city center could be the solution to the city center problem. Because if the connections made in the literature are true, then a diminishing city center could lead to less social interactions, which leads to less social cohesion, which could be detrimental to democratic stability of this nation. But hopefully this is all just an exaggeration made by a researcher that looked too deep into the pages.

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# Appendix

## Appendix A: Survey Questionnaire

vj	mj
vo	mo

nr. 1

**1a. Welke winkels/horeca/voorzieningen heeft u bezocht? [Ongeacht iets uitgegeven]**

.....

.....

.....

**2a. Wat is de reden dat u naar het centrum bent gekomen?**

.....

**3. Hoe lang duurde dit bezoek aan het centrum? .....** minuten

**4. Vervoermiddel:** te voet / fiets / auto / ov / .....

**5. Uitgaven bezoek:** € ..... winkels / € ..... horeca / € ..... diensten/ambachten

€ ..... overig / € ..... markt

**6. Hoe vaak bezoekt u het centrum gemiddeld?**

..... x per dag / week / maand / jaar

**7a. Aankopen via internet (gemiddeld):** ..... x per dag / week / maand / jaar

**7b. Producten/artikelgroepen op internet:** food&drogist / kleding&schoenen / sport&spel /  
boeken&media / elektronica&telecom / huis&tuin / anders : .....

**8. Rapportcijfers**

Centrum geheel	.....	Kwaliteit winkels	.....	Groen in het centrum	.....
Diversiteit aanbod	.....	Etalages	.....	Culturele bezienswaardigheden.....	
Inrichting straat	.....	Lengte winkelcircuit	.....	Historische bezienswaardigheden	.....
Uitstraling panden	.....	Aanbod Horeca	.....	Bereikbaarheid	.....
		Gezelligheid	.....	Parkeren	.....

**9a. Leeftijd:** ..... jaar [geslacht: M / V / A] **8b. Postcode (/Woonplaats):** .....

**10. Opleidingsniveau:** Lager / v(m)bo - mavo / havo / vwo / mbo / hbo / wo

**11. Maandinkomen huishouden:** Laag (<1.500) / Midden (1.500-3.700) / Hoog (>3.700)

**12. Wat is uw afgelegde route + gebruikte parkeer- of stallingslocatie?** ►

Route te voet:  Route per fiets:  Parkeerlocatie(s): x Locatie enquête: o

## Appendix B: Multicollinearity checks for the multiple regression analyses

The first model (model 0) shows the analysis where multicollinearity was present. Because of these results, the variables on education level were grouped together to get rid of the multicollinearity problem. This was done with the use of a reliability analysis. Models 3, 4, 5, and 6 are the multicollinearity analyses for the regression models with the same name.

<b>Model 0</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.681	1.469
Amount of catering offer	.945	1.058
Age of the respondent	.900	1.111
gender	.978	1.022
MAVO	.258	3.877
HAVO	.360	2.778
VWO	.543	1.842
MBO	.146	6.830
HBO	.133	7.494
WO	.218	4.580
Perceived attractiveness of the atmosphere	.522	1.917
Perceived attractiveness of the accessibility	.822	1.216
Perceived attractiveness of the streets	.650	1.538
Perceived attractiveness of the buildings	.560	1.786
Perceived attractiveness of the shopping offer	.503	1.990
Perceived attractiveness of the quality of the shops	.497	2.013
Perceived attractiveness of the shopping windows	.559	1.789
Perceived attractiveness of the shopping circuit	.687	1.456

Dependent variable: Perceived attractiveness of the city center

### Reliability analysis to fix the multi collinearity issue:

<b>Reliability Statistics</b>	
<b>Cronbach's Alpha</b>	<b>N of Items</b>
.588	4

<b>Model 3</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.987	1.013
Amount of catering offer	.987	1.013

Dependent variable: Perceived attractiveness of the city center

<b>Model 4</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.688	1.454
Age of the respondent	.921	1.085
gender	.988	1.012
Medium education	.433	2.311

Higher education	.416	2.407
Perceived attractiveness of the atmosphere	.529	1.892
Perceived attractiveness of the accessibility	.833	1.201
Perceived attractiveness of the streets	.652	1.533
Perceived attractiveness of the buildings	.561	1.783
Perceived attractiveness of the shopping offer	.503	1.987
Perceived attractiveness of the quality of the shops	.499	2.003
Perceived attractiveness of the shopping windows	.561	1.783
Perceived attractiveness of the shopping circuit	.687	1.455

Dependent variable: Perceived attractiveness of the city center

<b>Model 5</b>	Tolerance	VIF
Amount of catering offer	.954	1.049
Age of the respondent	.917	1.091
gender	.984	1.016
Medium education	.444	2.254
Higher education	.425	2.351
Perceived attractiveness of the atmosphere	.574	1.741
Perceived attractiveness of the accessibility	.827	1.209
Perceived attractiveness of the streets	.651	1.535
Perceived attractiveness of the buildings	.557	1.794
Perceived attractiveness of the shopping offer	.501	1.997
Perceived attractiveness of the quality of the shops	.501	1.996
Perceived attractiveness of the shopping windows	.561	1.783
Perceived attractiveness of the shopping circuit	.687	1.455

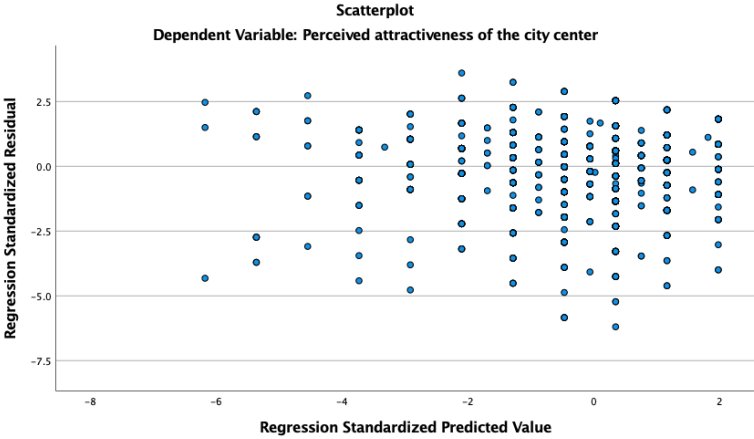
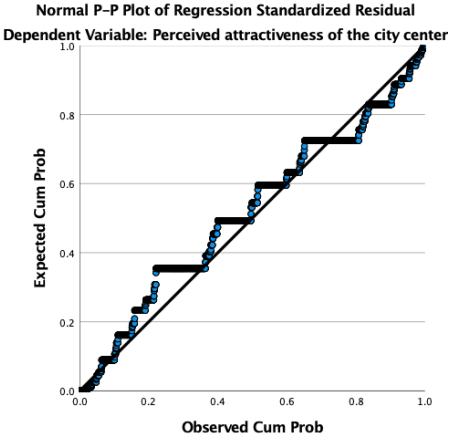
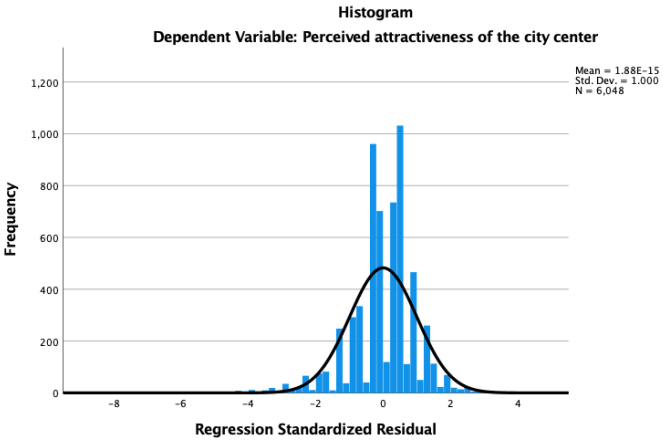
Dependent variable: Perceived attractiveness of the city center

<b>Model 6</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.684	1.463
Amount of catering offer	.950	1.053
Age of the respondent	.918	1.090
gender	.984	1.016
Medium education	.432	2.314
Higher education	.415	2.407
Perceived attractiveness of the atmosphere	.522	1.916
Perceived attractiveness of the accessibility	.824	1.213
Perceived attractiveness of the streets	.652	1.534
Perceived attractiveness of the buildings	.561	1.783
Perceived attractiveness of the shopping offer	.503	1.989
Perceived attractiveness of the quality of the shops	.497	2.013
Perceived attractiveness of the shopping windows	.561	1.783
Perceived attractiveness of the shopping circuit	.687	1.455

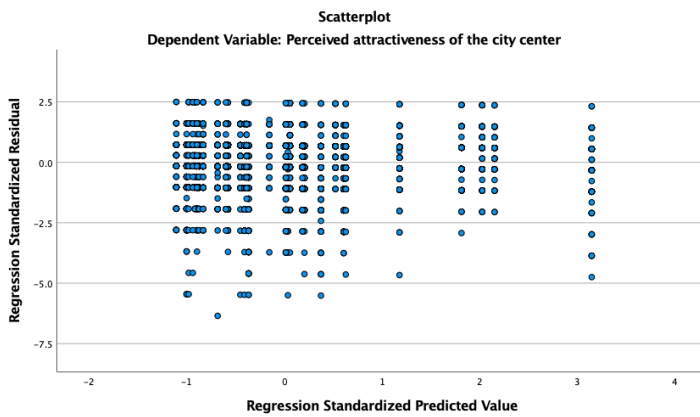
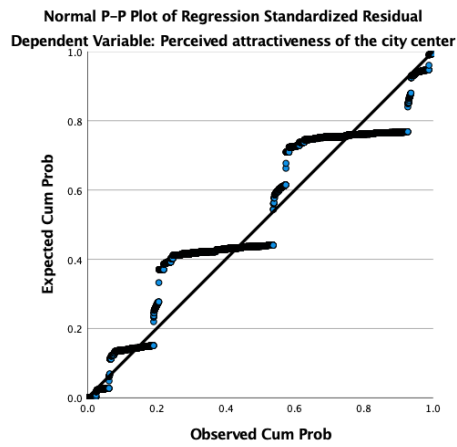
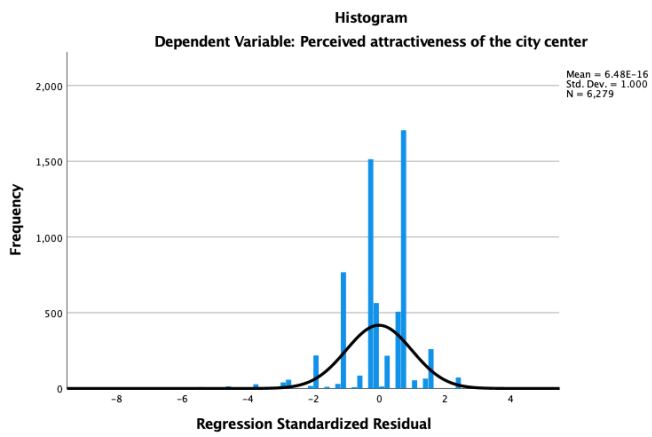
Dependent variable: Perceived attractiveness of the city center

# Appendix C: Assumptions for the multiple regression analyses

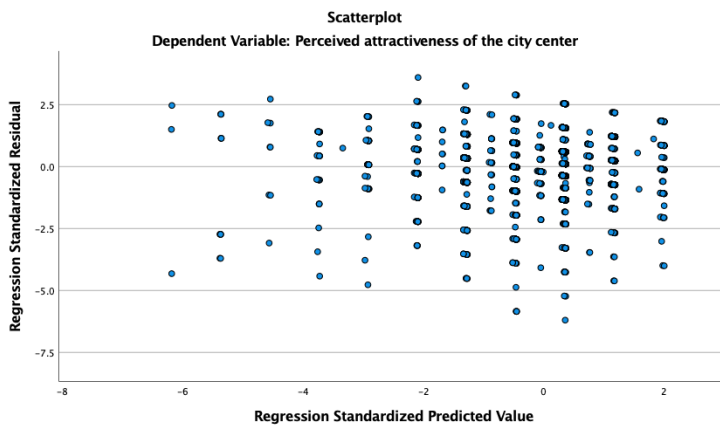
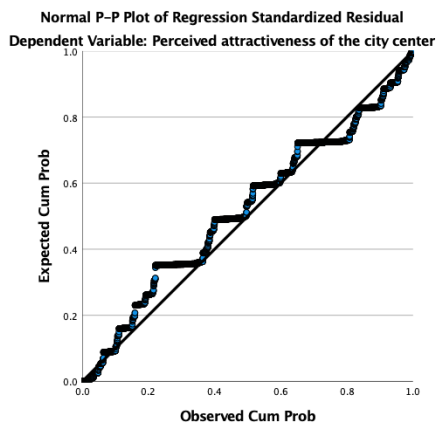
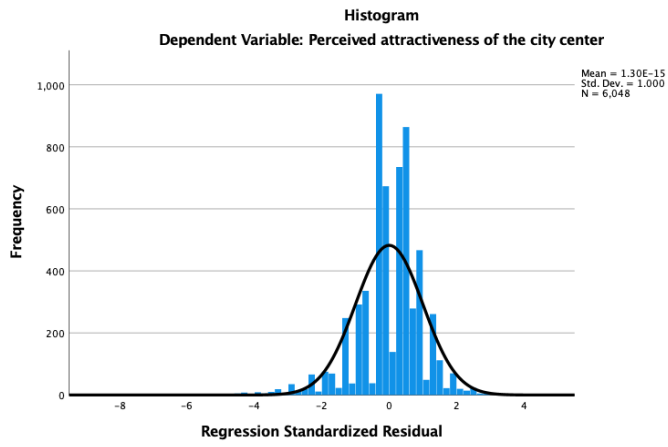
## Assumption checks for model 1:



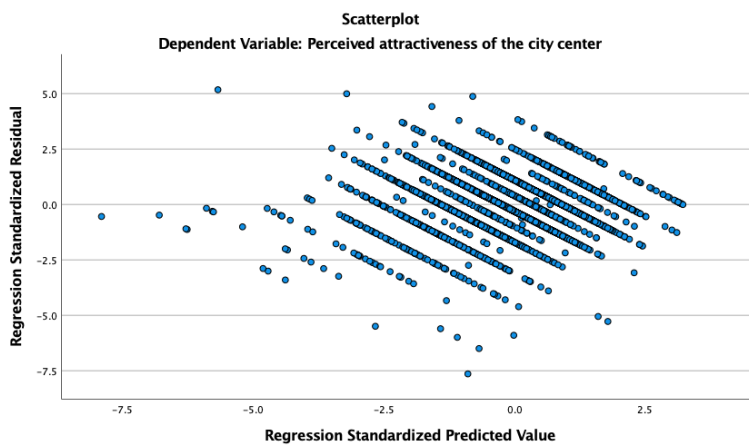
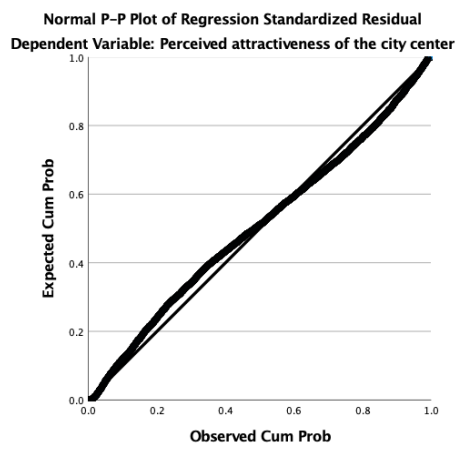
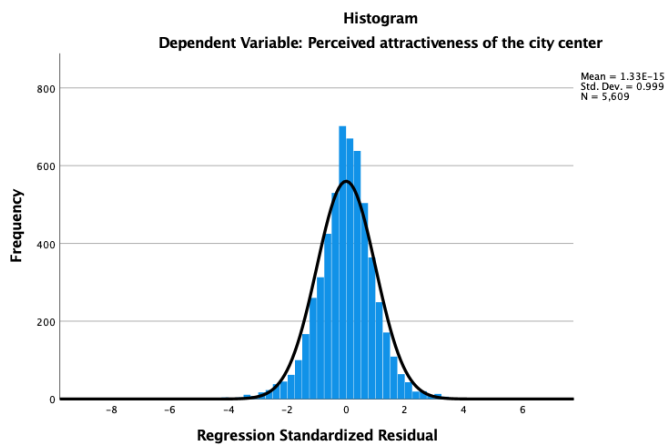
## Assumption checks for model 2:



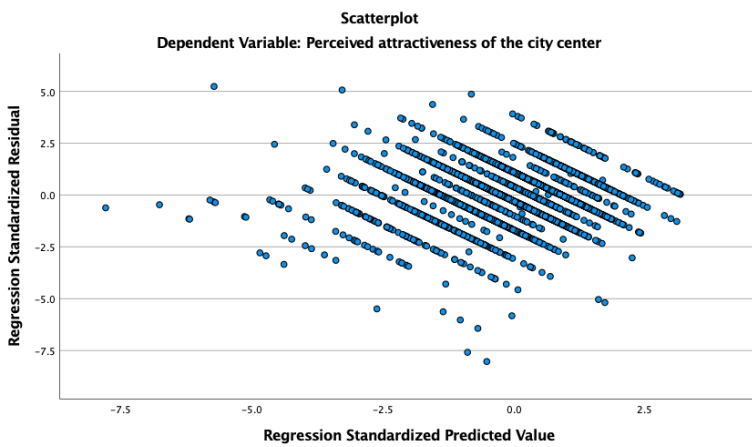
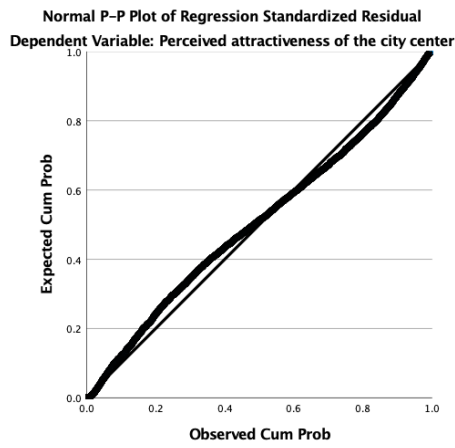
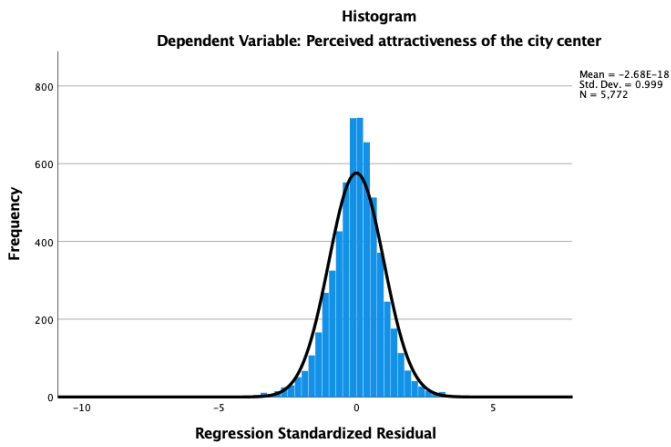
### Assumption checks for model 3:



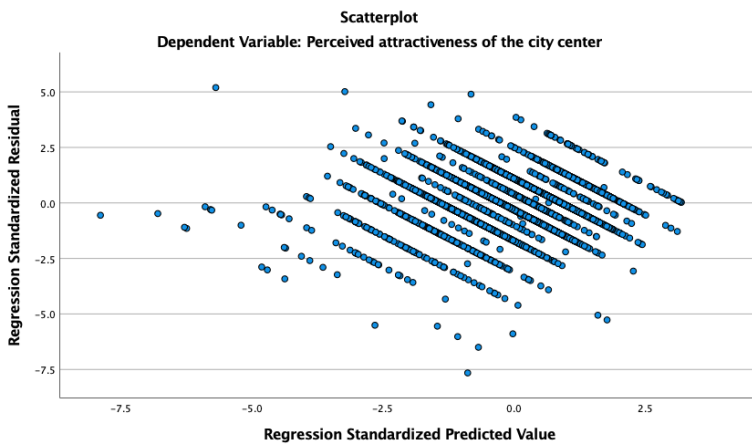
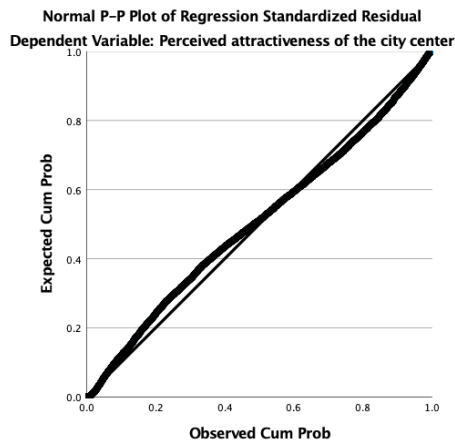
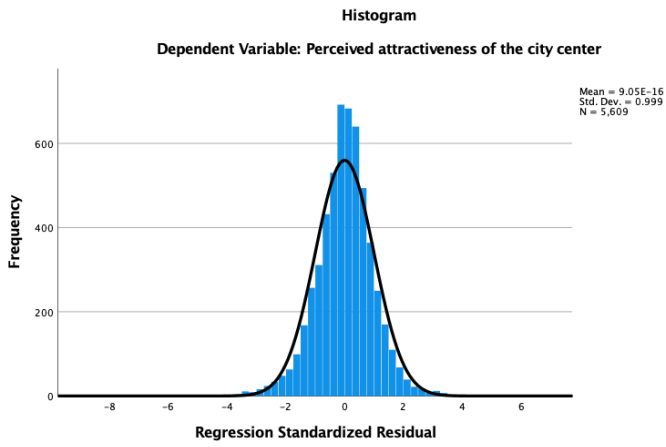
## Assumption checks for model 4:



### Assumption checks for model 5:



### Assumption checks for model 6:



## Appendix D: T-test

Variable	Group	N	Mean	Std. Deviation	Std. Error
Perceived attractiveness of the catering offer	0	5397	7.5439	1.22002	0.01661
	1	651	7.7972	1.25621	0.04923

		Levene's test for equality variances		t-test for equality of means		
		F	Sig.	t	df	Sig. (2-tailed)
Perceived attractiveness of the catering offer	Equal variances assumed	0.108	0.742	-4.988	6046	<.001
	Equal variances not assumed			-4.875	805.064	<.001

## Appendix E: Multicollinearity checks for the logistic regression analyses

<b>Model 3</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.987	1.013
Amount of catering offer	.987	1.013

Dependent variable: catering as visitation motive

<b>Model 4</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.686	1.457
Age of the respondent	.922	1.085
gender	.988	1.012
Medium education	.433	2.312
Higher education	.415	2.407
Perceived attractiveness of the atmosphere	.528	1.895
Perceived attractiveness of the accessibility	.832	1.202
Perceived attractiveness of the streets	.651	1.535
Perceived attractiveness of the buildings	.560	1.786
Perceived attractiveness of the shopping offer	.502	1.992
Perceived attractiveness of the quality of the shops	.499	2.004
Perceived attractiveness of the shopping windows	.560	1.786
Perceived attractiveness of the shopping circuit	.686	1.458

Dependent variable: catering as visitation motive

<b>Model 5</b>	Tolerance	VIF
Amount of catering offer	.954	1.049
Age of the respondent	.917	1.091
gender	.984	1.016
Medium education	.443	2.256
Higher education	.425	2.352
Perceived attractiveness of the atmosphere	.573	1.744
Perceived attractiveness of the accessibility	.827	1.210
Perceived attractiveness of the streets	.651	1.537
Perceived attractiveness of the buildings	.557	1.796
Perceived attractiveness of the shopping offer	.500	2.002
Perceived attractiveness of the quality of the shops	.501	1.997
Perceived attractiveness of the shopping windows	.558	1.792
Perceived attractiveness of the shopping circuit	.691	1.447

Dependent variable: catering as visitation motive

<b>Model 6</b>	Tolerance	VIF
Perceived attractiveness of the catering offer	.682	1.466
Amount of catering offer	.950	1.053
Age of the respondent	.918	1.089
gender	.984	1.017
Medium education	.432	2.314
Higher education	.415	2.407
Perceived attractiveness of the atmosphere	.521	1.920
Perceived attractiveness of the accessibility	.824	1.214
Perceived attractiveness of the streets	.651	1.536
Perceived attractiveness of the buildings	.560	1.786
Perceived attractiveness of the shopping offer	.502	1.994
Perceived attractiveness of the quality of the shops	.497	2.014
Perceived attractiveness of the shopping windows	.560	1.786
Perceived attractiveness of the shopping circuit	.686	1.458

Dependent variable: catering as visitation motive