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Social media usage by Dutch museums and the visit intention of 18-to-35-year-olds. Does the traditional view change?

Master Thesis

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Executive Summary

This master thesis aimed to analyze how the social media usage by museums influences the behavioral intentions of 18-to-35-year-olds to make them consider visiting a museum. First, the previous literature was used to build the hypotheses and the conceptual model for this research. The conceptual model consisted of the five variables: (1) the social media usage by museums, the behavioral intentions that are formed through (2) attitudes, (3) subjective norms, (4) perceived behavioral control, and last, the variable (5) visit intention. Art museums were used as a reference category. Both, a qualitative and quantitative research were performed to increase the generalizability of this research. In a focus group session, it was checked if the measurement items that were intended to be used for the survey were appropriate for measuring the research topic. After that, the survey was distributed. The results from the survey were tested with a regression analysis. There, the hypotheses were checked as well and a final conceptual model was provided. The results showed that social media usage by museums affects the behavioral intentions of the 18-to-35-year-olds. In addition, social media usage also affects their visit intention. For the behavioral intentions, only subjective norms led to a significant and positive effect on the visit intention. Besides that, partial mediation was found for the indirect effect of social media usage by museums on visit intention through subjective norms.

Table of contents

Introduction

Museums are places where visitors get insights into the past of humankind or the beauty of art. They are places that educate their visitors (Gofman et al., 2011; Vu et al., 2018). Nevertheless, they offer much more, since museums are places where people can come together and learn about their history and past or look at beautiful paintings. In addition, museums are usually located in the heart of every city. This makes them present to a wide audience of visitors that can consist of locals or even tourists (Vu et al., 2018). However, in the management literature, those cultural institutions are mostly overlooked since many researchers do not see them as profitable places because many museums only charge little up to no fees for their visitors (Hume, 2011). During the last decades, there was a decline in museum visits identified, for example, in the UK (Jones, 2017), which has to do with the fact that museums fail to attract the younger generations (Easson & Leask, 2020; Gofman et al., 2011). Even though museums are often located in the center of a city they are often solely seen as a place for educational purposes and nothing else (Gofman et al., 2011; Vu et al., 2018;). Yet, the literature about museology would disagree with that fact because they argue that museums not only serve the educational purposes, instead they offer possibilities for social and emotional interactions (Chan, 2009; Ferilli et al., 2017; Gofman et al., 2011; Packer & Ballantyne, 2016; Ponsignon et al., 2017; Vassilakis et al., 2017). Those social and emotional interactions cope with what the younger generations seek today (Gofman et al., 2011; Manna & Palumbo, 2018). Still, this relation is lost, since visits by the younger generations seem to be missing in museums. Therefore, museums are more and more interested in this young age group and in understanding their behavioral intentions in order to encourage them to visit (Easson, & Leask, 2020; Gofman et al., 2011; Kotler, 2001; Lazzeretti et al., 2015).

Social media is very important in the everyday life of the so-called younger generations (Barron & Leask, 2017; Batat, 2020; Easson, & Leask, 2020; Kaplan & Haenlein, 2010; Sheng & Chen, 2012). Particularly, social media platforms are largely used by this age group. They use social media on a day-to-day basis for many purposes like connecting with friends or brands, sharing content through social media platforms like Instagram, or to inform themselves about something (Batat, 2020; Easson, & Leask, 2020). Therefore, many businesses and brands use social media to learn about and affect the behavior of their customers (Colladon et al., 2020; Hudson et al., 2015). Museums can make use of social media, too, especially when they want to attract the younger generations (Booth et al., 2020; Laws, 2015; Manna & Palumbo, 2018). By using social media as a tool to connect with these younger generations, museums can create

customer value as they can show this age group what the museum offers and what it represents (Antón et al., 2018; Barnes & McPherson, 2019; Zollo et al., 2021). With this, museums can aim for connecting with the younger generations through communicating via social media. Moreover, this can create a shift in how these generations might see the museum and it can increase their awareness (Hughes et al., 2019; Manna & Palumbo, 2018).

Within this research, the aim is to examine how social media can be relevant for and be used by museums. Since social media platforms enable museums to build communities and to co-create value by engaging in them together with their possible visitors (Barnes & McPherson, 2019; Manna & Palumbo, 2018; Zollo et al., 2021). Thus, those social media platforms can be used to motivate and stimulate people to visit museums.

Based on this the research question is introduced: *How does the use of social media by museums influences the behavioral intentions of 18-to-35-year-olds to make them consider visiting museums in their free time?*

For museums as well as other cultural institutions, the topic of consumer behavior and marketing is very important since they aim to attract and maintain visitors (Hume et al., 2011; Komarac et al., 2017; Piancatelli et al., 2020; Vu et al., 2018). Therefore, it is of importance to understand the behavior of the visitors and if social media usage by museums can be seen as a driver for this behavior. Similarly, from a practical and also from an academic perspective understanding consumer behavior is of importance for both and this topic has a relevant focus in marketing research and literature (Ajzen, 1991; Ferilli et al., 2017; Han & Hyun, 2017; Lam & Hsu, 2006; Lee et al., 2010; Piancatelli et al., 2020; Ulker-Demirel & Ciftci, 2020; Yamada & Fu, 2012). Besides that, social media platforms can be strong communication tools for almost every business and individual today (Colladon et al., 2020; Hudson et al., 2015; Lemon & Verhoef, 2016; Naylor et al., 2012). Therefore, understanding the influences that social media can have is becoming more important for researchers.

In the following chapter, the relevant literature for this topic will be examined. Based on this the hypotheses and the conceptual model are built. Then, the structure of the methodological part for this research will be provided where the aim is to do both a qualitative and quantitative study to answer the research question. Afterwards, the results from the studies will be discussed. Finally, a conclusion will be provided, followed by managerial recommendations, limitations and directions for further research.

Theoretical background

The role of museums today

The cultural sector, including museums, is usually described as a nonprofit organization that offers education and culture as well as entertainment to the public (Alcaraz et al., 2009; Barron & Leask, 2017; Hume, 2011; Komarac et al., 2017; Vu et al., 2018;). The issue for museums today is that less people tend to visit and especially the younger generations are missing (Easson & Leask, 2020; Gofman et al., 2011; Jones, 2017). This leads to pressure for museums to attract visitors, leading to an increased need for them to consider new ways of marketing (Hume, 2011; Komarac et al., 2017). Those pressures for museums are generated by investors or governments who want to see that the museum itself is still valuable since they usually fund cultural institutions that are considered valuable when many people are visiting (Alcaraz et al., 2009; Hume, 2011). Additionally, these pressures also lead to issues concerning their primary role where museums are seen as educational places (Alcaraz et al., 2009).

Traditionally, the primary role of museums was object-focused and had an educational purpose since materials that are part of the museum such as artifacts or paintings are displayed (Barron & Leask, 2017; Komarac et al., 2017; Sheng & Chen, 2012; Vu et al., 2018;). Alcarez et al. (2009) argued that the role of a museum is "to educate, inspire and portray stories of the past, knowledge generation and stimulation" (p. 220). Thus, their function includes educational purposes as well as the conservation and restoration of their collections (Nogare & Scuderi, 2020; Van Aalst & Boogaarts, 2002). However, the literature describes a shift in this traditional perspective. This shift is a result of the pressure caused by governments and investors and, moreover, they have to compete today with different leisure institutions in attracting visitors (Ballantyne & Uzzell, 2011; Hume, 2011; Recupero et al., 2019). Therefore, museums become more and more service-oriented in order to offer their visitors the greatest experience (Alcarez et al., 2009; Ballantyne & Uzzell, 2011; Barnes & McPherson, 2019; Easson & Leask, 2020; Hume, 2011; Komarac et al., 2017; Kotler & Kotler, 2000; Vu et al., 2018). The reason for this is that the visitors today seek great experiences and entertainment (Alcaraz et al., 2009; Easson & Leask, 2020; Manna & Palumbo, 2018).

Moreover, the museum's social role gains more importance today (Brown & Mairesse, 2018). People visit museums to interact and communicate with each other (Manna & Palumbo, 2018; Barnes & McPherson, 2019; Batat, 2020). For example, the shops or cafés that museums offer can be seen as places that establish this social interaction (Batat, 2020). Furthermore, digitalization is leading museums towards the use of web pages where their visitors can buy

online tickets, the creation of a social media account where users can engage or the use of online maps that visitors can use on their phones (Alcaraz et al., 2009; Barnes & McPherson, 2019; Light et al., 2016; Zollo et al., 2021). As visitors desire entertainment, social interaction and digitalization, museums have shifted from a traditional education-focused towards a service-oriented organization (Alcarez et al., 2009; Barnes & McPherson, 2019; Hume, 2011; Komarac et al., 2017).

The experience that visitors seek today can be defined by several factors that are outlined by Sheng and Chen (2012) as "easiness and fun, cultural entertainment, personal identification, historical reminiscence and escapism" (p. 58). Furthermore, research stressed that it is not only the experience that visitors seek instead they want to be part of the museum's experience and therefore, museums need to also co-create value by engaging their visitors (Barnes & McPherson, 2019; Manna & Palumbo, 2018; Zollo et al., 2021). The co-creation means that there is a continuous engagement by the museums with their visitors and possible visitors (Barnes & McPherson, 2019). Museums need to be aware of this experience seeking behavior of their visitors. Apart from that, museums should be aware of interacting and engaging with all of their visitors, whether they are inside the museum or outside of it (Antón et al., 2018; Barnes & McPherson, 2019). To satisfy this behavior and to offer an experience, museums, for example, offer late night openings or the launch of special events to attract their visitors (Alcaraz et al., 2009; Easson & Leask, 2020; Nogare & Scuderi, 2020). For instance, the museum night in Amsterdam can also be seen as such a special event. Another example is the launch of workshops or lectures. Here, the museum can organize an art workshop where the participants can learn about paintings and different manners of painting while also practicing those different manners and creating their own paintings. These events are not only used to attract new visitors, their aim is also to offer a special experience to the audience and to entertain them (Komarac et al., 2019). Batat (2020) argued that especially the younger generations seek an experience and entertainment. Having a great experience is what satisfies them in their free time and this is one of their main motivators when they have to make decisions about their free time activities (Batat, 2020; Hughes & Moscardo, 2019).

Still, the visits are declining (Easson & Leask, 2020). Especially, many of the younger visitors think that the main function of a museum is still solely educational since many visited museums during their schooldays (Hughes & Moscardo, 2019). Therefore, some of them might see museums not as fun and entertaining. In addition, Hughes and Moscardo (2019) argued that

some younger audiences might be afraid of visiting a museum because it evokes bad memories about their schooldays. This leads to less motivation for visiting a museum. This decline in visitors, and especially young visitors, shows that the communication between young visitors and the cultural institutions is lacking behind. Since maintaining visitors and increasing visitor numbers is one of the main goals of museums, they need to think about how they can attract the younger generations to encourage them to visit (Hume et al., 2011; Komarac et al., 2017; Piancatelli et al., 2020; Vu et al., 2018). Besides that, they have to integrate new ways of marketing such as social media or online services for drawing the interests of this age group and to increase the visitor's awareness (Manna & Palumbo, 2018). Therefore, the shift of the traditional function of museums today towards offering great experiences can build a link between what the younger visitors seek and what the museums can offer. Besides that, the presence on social media that is used on a daily basis by this generation (Batat, 2020). Thus, this might also create a shift in their view about a museum.

However, the definition of this younger age group is vague. Hughes and Moscardo (2019) argue that a clear definition of who belongs to this younger generation is missing. Most previous research focused on the age between 18 and 35 (Batat, 2020; Gofman et al., 2011; Hughes & Moscardo, 2019). Therefore, this research is going to use this age range for the definition of individuals that belong to the younger generation.

Social media usage by museums

For organizations, social media can be a strong tool for gaining insights into the behavior of their customers, increasing the awareness of a brand and using it as a tool for enhancing customer loyalty or connecting with customers (Colladon et al., 2020; Hudson et al., 2015; Lemon & Verhoef, 2016; Naylor et al., 2012). Besides that, social media offers the "potential for engagement and collaboration with consumers" (Hudson et al., 2015, p. 69). For cultural institutions like museums, the use of social media can mean a shift in the traditional museology. Manna and Palumbo (2018) argued that for museums who want to attract the younger generations using social media is pivotal in order to gain their interest and make them engage with the museum. A presence on social media can make them accessible for visitors and possible visitors at any time and from everywhere around the world (Navarette, 2019). Additionally, for the museums, engaging in social media platforms gives them the possibility to reach a much wider audience that consists of possible visitors, particularly the younger generations since they are present on those platforms (Batat, 2020; Kaplan & Haenlein, 2010;

Navarrete, 2019; Zollo et al., 2021). Garibaldi (2015) stressed that museums need to engage in social media in order to reach this age group.

Social media itself is part of Web 2.0, which is based on the invention of the web and was formed due to the ongoing digitalization during the last decades (Booth et al., 2020; Light et al., 2016; Kaplan & Haenlein, 2010). Kaplan and Haenlein (2010) described social media as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content" (p. 61). Thus, social media fosters communication with the users of those platforms through sharing texts, photos and videos on those platforms (Kaplan & Haenlein, 2010; Zollo et al., 2021). Based on this definition different types of social media can be distinguished. Van Dijck (2013) highlighted two types of social media platforms, social networking sites and user generated content sites. Social networking sites include platforms like Facebook or LinkedIn where individuals can form relationships with other individuals, organizations or brands (Booth et al., 2020; van Dijck, 2013). On the other hand, are the platforms for user generated content like Instagram or Snapchat where individuals, as well as organizations, can generate, create and share visual content (Booth et al., 2020; Budge, 2017; van Dijck, 2013). Those different types of social media platforms can be used by museums to communicate and engage with the users of those platforms (Booth et al., 2020; Zollo et al., 2021). Additionally, the followers and audiences of those platforms can also engage and communicate with the museums and with other users (Barnes & McPherson, 2019). This engagement and communication between the museums and the users of the platforms can lead to community building, as well (Barnes & McPherson, 2019; Camarero et al., 2018). Besides that, this continuous engagement and interaction with the museums and the users of the platforms also lead to a co-creation of value (Antón et al., 2018; Barnes & McPherson, 2019; Zollo et al., 2021). This makes them so important for organizations like museums today. As Zolllo et al. (2020) argued this is especially true for the generation for whom technology and digitalization are a crucial part of their everyday life and free time. Thus, when museums intend to reach the younger generation they need to be present and engage on social media.

Furthermore, social media can be used as a strong tool for creating awareness and word-of-mouth for possible visitors (Hughes et al., 2019; Manna & Palumbo, 2018). For example, a museum creates a post on Instagram about a new exhibition together with an appealing visual content including a short video or professional photos. An individual can like this post and can share it via their own account with their friends. Then, the friends start to like the post and share

it with their friends as well and so on. This shows that using and communicating via social media enables museums to share information and the experience that they offer with a wide range of individuals that can become possible visitors (Vassilakis et al., 2017).

Based on this, the social media usage by museums is defined as the social media marketing activities that a museum undertakes (Zollo et al. 2021; Zollo et al., 2020). According to Zollo et al. (2020), these social media marketing activities consist of five dimensions: "entertainment, interaction, trendiness, customization, and word of mouth" (p. 257). The activities are analyzed from the perspective of the visitors (Zollo et al., 2021). These individuals can be both, current visitors of the museum or new visitors. They have to evaluate the used social media platform such as Instagram of the particular museum based on what the platform looks like and what the individuals think about it (Zollo et al., 2021). Thus, it is about an individual's perception of the museum's used social media platform.

Furthermore, engaging on social media can allow visitors to stay in touch with the museum about the latest exhibitions or information related to their visit (Zollo et al., 2021). For instance, when the museum introduces new opening hours or special seasonal events. Moreover, they can, for example, make use of social influencers and invite them to visit the museum. Many organizations use influencers today to spread word-of-mouth (Hughes et al., 2019). Additionally, creating awareness about brands or products works very well on those social media platforms (Hughes et al., 2019). Influencers can, for example, post photos about the collections of the museum on social media and share their thoughts about the museum with their followers. Apart from that, museums can create visual content on those platforms. For example, by showing stunning videos about the collections of the museum. Thereby, they can match with what the younger generations want as they seek something fun and entertaining (Batat, 2020; Easson & Leask, 2020; Manna & Palumbo, 2018; Sheng & Chen, 2012).

Booth et al. (2020) found that in the context of art museums platforms like Instagram are seen as useful in order to engage with audiences since Instagram is a visual platform and this relates to the visual content that an art museum offers. On Instagram the interaction takes place based on images which makes it an effective platform for art museums and also for other types of museums that rely on visual content (Budge, 2017). Instagram can represent the "visual quality and the corresponding visual nature of a museum" (Budge, 2017, p. 72). For example, on Instagram museums can not only engage with their visitors by posting aesthetic photos about

collections, but they can also upload videos or include audiovisual content on their social media account. By doing so, they show their visitors and possible visitors what experience they can expect in that museum and what the museum offers. Especially in times of the COVID-19 pandemic, this visual content representation might have a strong reach, because for some visitors or possible visitors it might not be possible to visit the museum physically and seeing it visually on Instagram might increase their interest to visit when they have the possibility to do so. Apart from that, a museum can inform their followers on a social media platform about new opening hours or special events, too.

On their social media account museums can post about their collections and specific artists or provide general information about opening hours and events. Besides posting content, they can make use of hashtags. A hashtag is a symbol (#) that can be used to make a post searchable on the whole social media platform or to promote or highlight something that is related to, for example, the museum (Hays et al., 2013). By using a hashtag like, for example, #amsterdam or #vangogh they can promote specific places or artists. Doing this increases their reach on a social media platform because people can search on platforms like Instagram also by using specific hashtags to find content that might interest them (Hays et al., 2013). By using a social media platform such as Instagram museums can display social values such as fun or entertainment (Vu et al., 2018). As said before, they are valued by the younger generations and this might lead them to consider visiting a museum (Alcaraz et al, 2009; Easson & Leask, 2020; Manna & Palumbo, 2018; Sheng & Chen, 2012). For example, a museum can make a post on Instagram about a new collection that they will host. In this post they can make use of nice photos or videos that can attract attention for this collection. Furthermore, they can use hashtags to increase their reach and to gain awareness from possible visitors that might even become a follower of their Instagram account. To increase the awareness, they can also put information about this post into their Instagram story that can be watched by visitors or possible visitors. When using an Instagram business account, museums can choose different kinds of advertisements that can either be used as story advertisements or photo advertisements which are shown to all different kinds of users when they scroll through their own Instagram account (Instagram, 2021). These advertisements are also shown to users of Instagram that do not follow the museum and therefore, they can reach a wider audience by doing this.

In addition, a social media platform like Instagram can enable informal ways of communicating with all users of this platform (Vassilakis et al., 2017). This informal way of communicating can be especially of interest for younger generations since they are attracted by a “stimulating environment” (Manna & Palumbo, 2018, p. 509). Social media platforms like

Instagram can be seen as such an environment because they provide "tools for participatory engagement" (Vassilakis et al., 2017, p. 40). Thus, engagement with visitors and possible visitors can take place since people that see a post can react on it. First, they can like the post. Apart from that, they can make comments beneath the post or even share the post in an Instagram story with their followers. The museum can also engage there by liking the posts or even commenting back. Furthermore, the users of Instagram can also react to a story that the museum posted. Additionally, the museum can encourage the audience as well to react to a story by including, for example, questions that the audience can answer within the Instagram story. Besides that, users can get in touch with the museum by sending them a private message on Instagram, where they can also ask questions about, for example, a new collection. Normally museums or other businesses also put a link to their website on their Instagram account from where the visitors or possible visitors can directly be forwarded to the website. There, they can, for example, buy tickets.

Instagram is used by more than one billion people (Iqbal, 2021) which makes it a platform with a large reach. Besides that, Instagram is a platform that is easy to use and the visual content provided makes it a very aesthetic platform (Budge, 2017). Therefore, in this research Instagram will be taken as the social media platform of choice for analyzing the influence of a museum's social media usage. Art museums will be used as a reference category. It will be analyzed if art museums that use Instagram have an influence on the behavior of the younger generations, leading towards a change in the traditional view of a museum and if this makes them consider visiting a museum in their free time.

Behavior of visitors

Ulker-Demirel and Ciftci (2020) argued that individuals base their decisions, such as visiting a museum, on behavioral intentions. One of the most prominent concepts to explain behavior is the theory of planned behavior by Ajzen (1991). This theory outlines factors that influence the behavior of individuals (Han & Hyun, 2017; Leung, 2019; Ulker-Demirel & Ciftci, 2020; Yamada & Fu, 2012).

Based on that theory the behavioral intentions of individuals result in the outcome of an actual behavior (Ajzen, 1991; Han & Hyun, 2017; Yamada & Fu, 2012). This means that the intentions shape the behavior of individuals when they have to make decisions (Ulker-Demirel & Ciftci, 2020). Three factors influence the intention of individuals to express a certain behavior: attitude towards the specific behavior, the subjective norms and the perceived behavioral control (Han & Hyun, 2017; Leung, 2019; Yamada & Fu, 2012).

First, attitudes are about the positive or negative behavioral beliefs that the individuals have in their minds about a situation and the particular behavior that they intend to perform (Coudounaris & Sthapit, 2017; Han & Hyun, 2017; Lam & Hs, 2006; Yamada & Fu, 2012). Additionally, the attitude is shaped by biases that are created through the individuals themselves through evaluations that they made about their own experiences or that they have learned through the experiences of others (Coudounaris & Sthapit, 2017; Lam & Hsu, 2006). For example, do individuals see museums that engage in social media as pleasant or unpleasant.

Second, subjective norms are influenced by normative beliefs that are shaped by social pressures and shared beliefs (Ajzen, 1991; Coudounaris & Sthapit, 2017; Han & Hyun, 2017; Lam & Hsu, 2006; Yamada & Fu, 2012). For example, if the friends of an individual think that performing a certain behavior is good, it is more likely that they will also consider performing that behavior. In this case, when friends or family think that visiting a museum is fun and interesting, it is likely that the individual will think the same. Another example is when friends follow the museum on Instagram, the individual might tend to consider following the museum as well.

Third, perceived behavioral control can be described as a factor that is influenced by control beliefs (Coudounaris & Sthapit, 2017; Han & Hyun, 2017; Yamada & Fu, 2012). Control beliefs are about the beliefs of an individual if they see performing that particular behavior as difficult or not (Coudounaris & Sthapit, 2017; Han & Hyun, 2017). For instance, when the individual thinks that visiting the museum is easy for them and that it is something that they might consider. Or when they think that they like the social media page of that museum and intend to follow the museum on social media to stay informed about what the museum offers.

These three factors together will be used to analyze the behavior of the younger generation. According to Garibaldi (2015) museums can attract this age group by engaging them and communicating with them via social media platforms to lead them to consider visiting the museum in their free time. Batat (2020) stresses the same by arguing that “integrating digital tools to enhance the attractiveness of museums among young people” (p. 115) is pivotal. Therefore, museums need to be present on those platforms and show that they are fun and interesting places to visit.

Leung (2019) explored whether and how following the Facebook page of a destination changes the visit intention and travel decisions of tourists based on the theory of planned behavior. This implies that there exists a link between social media usage and the effect that

this can have on the behavior of the visitors of a museum. Besides that, Hughes and Moscardo (2019) argued that especially the younger generations are attracted when museums engage and are present on social media. Additionally, this age group is interested in "sharing museums experiences with like-minded others" (Hughes & Moscardo, 2019, p. 530). For example, with their friends. This relates with the aim of this research, to understand how the presence and usage of an art museum's social media page like Instagram, impacts the behavior of the younger generation by measuring the above-mentioned three factors that together form the behavioral intentions of this age group. Thus, leads this social media usage by museums them to view a museum as an attractive place to visit. Based on this, the first hypothesis is introduced:

H1: Social media usage by art museums has a positive effect on the behavioral intentions of 18-to-35-year-olds.

As the definition of behavioral intentions already implied, the behavioral intentions should result in an actual behavior (Ajzen, 1991; Han & Hyun, 2017; Yamada & Fu, 2012). Thus, there can exist a relation between the visit intention of individuals and their behavioral intentions. For example, when the younger visitors have positive behavioral intentions about visiting a museum, it is more likely that they will actually visit the museum. Lam and Hsu (2006) argued that the visit intention can be influenced by the above described behavioral intentions. Furthermore, Leung (2019) even included the visit intention as an additional factor in their concept of the theory of planned behavior, arguing that the three factors that determine the behavioral intentions of an individual influence their visit intention.

In this context, the visit intention is defined as an individual's intention to visit a museum that uses social media (Han & Hyun, 2007; Leung, 2019; Luo & Ye, 2020).

Based on this, the second hypothesis is introduced:

H2: Positive behavioral intentions towards an art museum that uses social media have a positive effect on the visit intention of 18-to-35-year-olds.

The positivity of behavioral intentions is measured by analyzing the younger generation's behavior towards a social media platform such as Instagram that is used by a museum. The aim is to see, if this social media usage by art museums affects the visit intention of the 18-to-35-year-olds via their behavioral intentions, as well. Adding to this, museums want to attract the younger generations and lead them to consider visiting since less people, especially

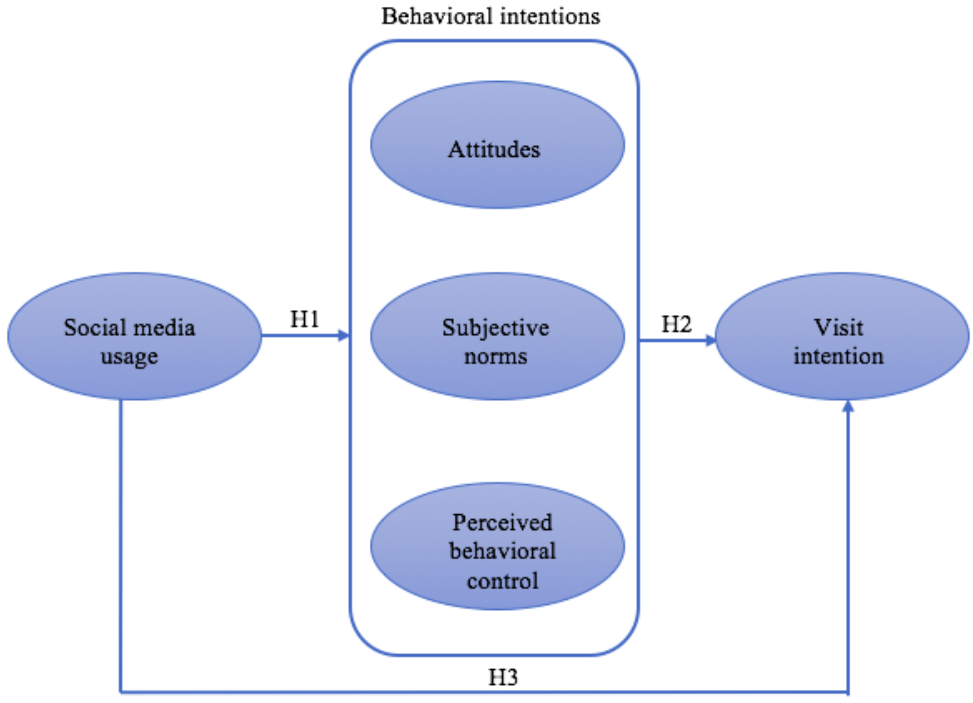
from this age group, tend to visit the museum today (Easson, & Leask, 2020; Gofman et al., 2011; Kotler, 2001; Lazzeretti et al., 2015). According to Batat (2020) and Garibaldi (2015) museums need to integrate, communicate and be present on those platforms in order to attract the younger generations. Therefore, they need to change the behavioral intentions that this age group has towards a museum. Additionally, using social media should also lead them to visit the museum. This leads to the assumption that there exists a direct link between social media usage by museums and the visit intention of the 18-to-35-year-olds, too. Therefore, it can be assumed that when the age group likes the content shared on the social media page of an art museum that this can create an intention to visit. This leads to the third hypothesis:

H3: Social media usage by art museums has a positive effect on the visit intention of the 18-to-35-year-olds.

Conceptual model

Again, this research aims to examine the effect of the use of social media by museums on the behavioral intentions of 18-to-35-year-olds and if this makes them consider visiting museums in their free time. The conceptual model is built on the above presented literature and displayed below (see Figure 1).

Figure 1 *Conceptual model*



Methodology

Research strategy and design

To analyze how the behavior of the younger generation is affected, when a museum uses a social media platform like Instagram, a qualitative and quantitative research are performed. This also increases the generalizability of the research (Justesen & Mik-Meyer, 2012; Symon & Cassell, 2017).

For the qualitative part, a focus group session will be planned to see whether the intended measurement items that are planned to be used during the survey are in line with the goal of this research. According to Justesen and Mik-Meyer (2012) combining a focus group together with a survey is seen as an appropriate method in research. Thus, in the quantitative part of the research, a survey is planned. Here, the aim is to analyze the relationships between the introduced variables from the conceptual model in order to test the hypotheses.

Sample and participants

In both, the qualitative and quantitative research, only participants from the age range of 18-35 years were included since this research was aimed at this age group.

Qualitative research

In the first part of this research, a focus group session with individuals from the interested age group will be performed. The aim is to see whether the intended measurement items that are planned to be used during the survey are in line with the goal of this research.

A focus group session is seen as very useful in getting insights into what a group of people think about a specific topic (Justesen & Mik-Meyer, 2012; Symon & Cassell, 2017). Together they can discuss and talk about the topic (Justesen & Mik-Meyer, 2012). Furthermore, this method is very common in market research and can be seen as a form of brainstorming (Justesen & Mik-Meyer, 2012; Symon & Cassell, 2017). Since this research aims to see if the items for the survey are in line with the topic of this research, this method is seen as most useful for analyzing the thoughts of a group of people from this specific age group.

Procedure

For the focus group session, it was planned to have in total five participants. According to Justesen and Mik-Meyer (2012) there is no fixed group size. However, a too large group might be bad because they can be difficult to handle during the session and a too small group might not give enough results for the topic of research (Justesen & Mik-Meyer, 2012, p.80).

Therefore, five was seen as a sufficient group number. The participants will be invited via a message on Whatsapp or e-mail.

The structure for the focus group session was based on five key questions. This method is called "keys to understanding" and is seen as useful for a focus group session (Symon & Cassell, 2017). The five questions should be structured in the following manner: (1) purpose, (2) comparison, (3) viewpoints, (4) problems and (5) checks (Symon & Cassell, 2017). Therefore, this structure will be applied to the key questions for this focus group session.

First, a short introduction will be given to the participants. Here, "why or why not do you use the social media platform Instagram?" will be asked as an introductory question. After that, the participants will see the Instagram accounts of three Dutch art museums. The Stedelijk Musuem Amsterdam, the Valkhof museum Nijmegen and the Groninger museum. In the following parts of the focus group session, the participants will be encouraged to answer and discuss the five key questions based on their thoughts about the shown Instagram pages. The five key questions for the focus group session are the following:

1. What purpose do you think is served when museums use social media platforms such as Instagram?
2. How do you think does this presence on Instagram by museums and the posting of content relates with what other organizations or institutions do?
3. How do you think people view a museum that uses a social media platform like Instagram?
4. What problems might arise when museums use social media platforms such as Instagram?
5. How would you say the social media usage on Instagram by museums is effective?

After the discussion of those questions, "would the social media usage and presence of museums on a social media platform like Instagram lead you to actually consider visiting a museum?" will be asked as a summarizing question. In a last question, the participants will be asked which presence of the three museums on Instagram they find most appealing. This will help to decide which museum will be displayed during the survey.

Quantitative research

For the quantitative research, an online survey was planned. To measure the social media usage by museums a survey will be made where the 18-to-35-year-olds will be given an example of the Instagram account of a Dutch art museum. This museum will be chosen together with the individuals from the focus group session. The aim is to see what effect the social media

presence of the museum on Instagram has on the behavior and thoughts of the 18-to-35-year-olds.

Measurement instruments

For the survey, all measurement items and scales are based on previous literature. The design of the whole survey can be found in the appendix (see Appendix 2.1).

To measure the social media usage by museums the items from Zollo et al. (2021) were used (see Table 1).

Table 1 *Measurement scale social media usage by museums*

Variable	Original item
Social media usage by museums: An individual's perception of the museums used social media platform (Zollo et al., 2021).	1. Using the museum's social media is fun. 2. Contents shown in the museum's social media seem interesting. 3. The museum's social media enables information sharing with others. 4. Conversation or opinion exchange with others is possible through the museum's social media. 5. It is easy to deliver my opinion through the museum's social media. 6. Contents shown in the museum's social media is the newest information. 7. Using the museum's social media is very trendy. 8. The museum's social media offers customized information search. 9. The museum's social media provides customized service. 10. I would like to pass along information on brand, product, or services from the museum's social media to my friends. 11. I would like to upload contents from the museum's social media on my blog or micro blog.

The items to measure the behavioral intentions of the younger generation will be measured based on the three factors attitude, subjective norms and perceived behavioral control that together form the behavioral intentions. The items to measure the behavioral intentions were taken from Leung (2019) (see Table 2).

Table 2 *Measurement scale behavioral intentions*

Variable	Original item
Attitude: The attitude of an individual towards a museum that uses social media (Leung, 2019).	1. Important-Unimportant 2. Attractive-Unattractive 3. Favorable-Unfavorable

	4. Good-Bad 5. Pleasant-Unpleasant 6. Nice-Awful
Subjective norms: The subjective norms that shape an individual's decision to visit a museum that uses social media (Leung, 2019).	7. Most people who are important to me think I should visit a museum. 8. Most people who are important to me approve of me visiting a museum. 9. Most people who are important to me think it is good for me to visit a museum. 10. Most people like me have visited a museum.
Perceived behavioral control: The perceived behavioral control describes the control beliefs that are related with executing the behavior of an individual such as visiting a museum (Leung, 2019).	11. If I wanted, I could easily visit a museum from now on. 12. I am confident that I can visit a museum. 13. The decision to visit a museum is up to me.

Last, the items for visit intention of the younger generation were taken from previous research by Luo and Ye (2020). They are displayed below (see Table 3).

Table 3 *Measurement scale visit intention*

Variable	**Original item**
Visit intention: An indivduals intention to visit a museum that uses social media (Leung, 2019).	1. I intend to visit a museum that uses social media in the future. 2. It is likely that I will visit a museum that uses social media in the future. 3. I plan to visit a museum that uses social media in the future.

All items will be measured by using a 7-point Likert scale.

Procedure

The data for the survey will be collected during a specific period of time. Participants from the age group will receive a link where they can fill in the survey. This link will be sent via different platforms such as Whatsapp, Instagram or e-mail.

The questionnaire will be developed in English since is it expected that people from the age group have sufficient proficiency in understanding the questions. Therefore, the questionnaire will not be translated into Dutch or any other language. Furthermore, most of the data will be collected from students from the Radboud University Nijmegen. Due to their educational background, they are seen as proficient in English.

First, the respondents will be given a short introduction about the aim of the research and if they agree to proceed they will move to the first part of the survey. There, they will see a short video clip that shows the Instagram account of a Dutch art museum. They will be able to look back to that video if needed. Then, the statements for the social media usage by museums are displayed. After that the statements for the behavioral intentions are shown, followed by the statements for the visit intention. Last, some demographic data about the respondents will be collected. In the last slide of the survey, a control variable will be used.

Data analysis and methods

The data from the survey will be analyzed by using multiple regression analysis. The method is aimed at analyzing the relationships between the independent and dependent variables to answer the research question and test the hypotheses (Field, 2018; Hair et al., 2019). This method is seen as appropriate in situations with multiple independent variables (Field, 2018; Hair et al., 2019). The relationship between social media usage by museums and the visit intention might be mediated through the behavioral intentions of the age group since the behavioral intentions can result in an actual behavior (Ajzen, 1991; Han & Hyun, 2017; Lam & Hsu, 2006; Leung, 2019; Yamada & Fu, 2012). Therefore, mediation will be tested by using Sobel's test.

Before performing the regression analysis, reliability and validity will be tested in order to analyze whether the measured constructs fit with what is intended to be measured for this research (Field, 2018). Reliability of the variables will be checked by using Cronbach's alpha. With this, the internal consistency of the variables is tested (Field, 2018; Hair et al., 2019). To check the variables in terms of validity, an exploratory factor analysis will be performed.

Research ethics

This research considered the APA Ethics Code (Smith, 2003). All participants from both, the qualitative and quantitative research, were informed beforehand about the purpose of this research. Furthermore, the participants from the survey and the focus group session were informed beforehand about the expected duration. In all cases, the participation was voluntary and the participants had the right to decline to participate in each of the projects at any point of time. In addition, the participants were asked beforehand for permission to be recorded during the focus group session and to use their answers, including their first names, for this research

project. For the survey, the answers from the participants remained anonymous. In this research no personal information about participants was shared without their clear permission.

Results

In the following parts, the results from both the qualitative analysis and quantitative analysis will be shown.

Focus Group Session

The focus group session took place on 07 October 2021 at 4 pm at the Radboud University Nijmegen. The participants were informed about the topic of this session beforehand. A room was reserved. Drinks and snacks were provided for the participants. In total five present and former students from Radboud University participated in this focus group session. All participants agreed to be recorded during the session and that their first names will be displayed and used as data in this research. Before the start of the session, a short introduction round took place because not all participants did know each other.

Content analysis

To analyze the results from the focus group session, a content analysis was applied since it is seen as an appropriate method for analyzing the results of a focus group (Symon & Cassell, 2017). The five key questions of understanding were used as guidelines during the focus group session. In content analysis the results from the focus group session are analyzed and coded into different thematic groups (Symon & Cassell, 2017). These thematic groups were built upon the measurement items and variables that were intended to be used for the survey. Here, the thoughts of the participants that connected to the intended items were highlighted and put into the table below (see Table 4). The analysis did not use any software and the coding was done by using different colors for each of the measurement items/variables (see Appendix 1.1).

Table 4 *Results focus group session*

Code/variable	**Words/phrases**				
	Dina	**Jennifer**	**Lisa**	**Romy**	**Mandy**
Social media usage by museums	put forth what they have; miss engaging the public through	informing; opening hours; address; promoting;	main purpose “we are the museum”;	showing what they are offering;	museums have a more difficult time to change their

	this medium; wants more information about specific exhibitions; want to get informed about what is going on and participate; maybe they have the perception “just share the art”; attract attention; up to date; experience starts with checking out the museum on Instagram; language; museums sometimes may deal with like more high-level art, timeless art and putting that on a platform translating it to, like Instagram might have some challenges like you wanna do it in such a way that people are interested but can’t vary your content so much because you have this like higher level art pieces; You have the same collection;	trying to tell you about themselves; up to date; size of the museum; language; be careful about what you choose to support as a museum; less flexible; miss the connection between the visitor and the museum	they need to interact more with people; up to date; easier via Instagram than using a website or something, because it is old fashioned and normally it is difficult to just look at it and find an easy way of what they are doing right now and Instagram is then just a quick overview of everything; size of the museum	show a little bit of the aesthetics; different in like style between the three; different color patterns; you do feel different things when you look at them; engagement; up to date; if a museum is active on Instagram it also shows that they are at least a little bit focused on our age group and that they are interested in us as customers as well; they should bring up more content that actually shows people who are visiting; more interaction needed; in stories and stuff you can add competitions,	whole aesthetics and stuff (with trends); up to date; accessible; be reluctant to change the aesthetic of the page; not effective at all; feel like Instagram and platforms like that are only as effective as what the person is interested in; more interaction needed; include fun facts; repost stuff; picture moments

		less flexible; miss connection between the visitor and the museum; educate people; for example that metal head, it could post a photo and say "this was made with this material, with this skillful craft" and then you can appreciate it and think like "I wanna see that."; picture moments		questions and that kind of stuff.	
Behavioral intentions	**Attitudes**	important; more legit; positive thing	nice if the museum is on Instagram in the first place; more legit		
	Subjective norms	when it pops up somehwere in the own environment, rememberable	"If it was more prevalent in my surroundings."		"if it's like more in my environment and I think about it more and also if people around me see it more often then, it might come up in conversations. I feel like I'm mostly influenced by."; "If I see people my age"; "like

				none of the people around me are talking about museums, I cannot really relate to that and not of anything I see on Instagram I can relate with, with regards to this topic. And I feel like if there would indeed be like stranger, even if it's a stranger, but if it peaks my interest then, I am more likely to go."
Perceived behavioral control	if I saw it then I would be like "let's go there next time" because I've seen that it's cool	"you can look up the tag or something and then you can see other people's posts and that might make it more memorable even if you have something in your mind"; "Especially, if you're traveling and you are going to a destination and you wanna do	"If I was wanting to visit I would look it up on Instagram and it would help if they had Instagram that I can look at to see what it is all about"	"When I can first very accessibly see it on Instagram and kind of get used to the idea "okay, I could go there. That looks nice" then I feel like maybe that gap could be smaller for me"

			something more cultural then you may think of a museum and then that's where it can be more effective when you are kind of searching for those sorts of things"			
Visit intention		"I think if I were thinking about what museum to go to, if I couldn't find it on Instagram, the chances that I go there are much lower. Simply, because on Instagram you can tell if the current exhibit or the museum in general are the kind of thing that I wanna see."; group thing; "If it's on Instagram it is way way more likely to consider going there because I can see what it is"	group thing; "I mean for me personally I don't know if social media platform using Instagram would make me visit a museum"; "I think if I did look at it on Instagram and it looked interesting I might actually gonna go. Like if I ever go visit this area I might go there"	group thing	Instagram would help in considering visiting; group thing	"Like I won't go to a museum by myself. I would go like with people who are also interested in it or like who never went but really wanna go"; group thing
Other results	**Own social media usage**	"I use it."; "when I want to find specific things"; "follow like accounts that have to do with conservation or	use it to keep up with people that I know; scroll through and read some random stuff; I try to follow accounts	don't use it because you get a lot of information; at some point it was just so much;	use it to keep up with friends and family; see what other people are doing; to post	"I don't really use it"; keep up with people; "But I don't post. There's nothing I

	topics that I want them to find me and show me what they are doing"; "I try to avoid all the like "buy this, buy that""; "I've started doing more "gyming" and I started following more people who do calisthenics because I want to see more of it in my daily live and start seeing myself as capable of doing it or to see that is viable and that I'm not that far away from it"	where like with people who are doing things that I would never really do; "I follow accounts that do deal a lot with gender, gender topics and stuff. So, I learn a lot about like the whole she/them, he/they topics and I learn a lot about like you know hormone issues and stuff and I also try to follow little bit of things on politics, just to, so I can get more insights"; read like a lot of new information	"I'm not the one posting about my own live"	well stuff that I think are fun, that I did and people would like to see; follow some brands that I like and just check out what they are posting	really like to share with people."; "I don't consciously use it like it's usually when I'm purely bored"; "It's really like for your own education. Broadening of like your own perspective"

For social media usage by museums, the results from the participants show that they see a museum that uses an Instagram account as informative (see Table 4). Besides that, social media usage by museums is seen as up to date and that the museum is interested in individuals from this age group since for them social media is important (see Table 4). All participants argued that the museum misses the connection with the audience and that they miss interaction (see Table 4). It was also found that it might be difficult to change the aesthetics and content of the Instagram page since the museum usually has a specific theme or a specific exhibition (see Table 4).

With the behavioral intentions, in terms of attitude, the participants found it nice when a museum is present on Instagram and that it is something positive (see Table 4). Besides that, it made the museum be seen as more legit (see Table 4). For subjective norms, the results showed that it is important for the participants what happens around them in their environment and if the people around them are interested in museums (see Table 4). For perceived behavioral

control, the results showed that when the participants would like the content that they see, they would intend to visit the museum (see Table 4). Seeing it on Instagram might also make it more accessible for them and it might make it easier for them to decide to visit the museum (see Table 4).

Last, for visit intention, the participants argued that for most of them, seeing a museum on Instagram might affect their visit intention (see Table 4). It was also found that for the participants visiting a museum is a group thing (see Table 4).

During the coding of the results, another theme was identified where the participants share thoughts about their own social media usage (see Table 4). This can be useful in that sense that it shows what content they might value and what their interests are on social media. Most of the participants said that they do not really use Instagram for posting instead many use it to keep up with friends (see Table 4). Others also use it to get themselves informed about content they like and to broaden their own perspective (see Table 4).

Based on the above discussed results from the focus group session the intended measurement items were seen as appropriate for this research. Therefore, this research proceeded with the survey. Together with the members from the focus group, the Instagram account from Stedelijk Museum Amsterdam was found as most appealing. The participants used words such as “professional”, “clear” and “appealing” to describe the museum (see Appendix 1.1). Therefore, this museum was chosen to be displayed during the survey.

Survey

The data collection for the survey started after the focus group session and the evaluation of the results. The data was collected between the months October and November 2021.

Descriptive statistics

In total 99 respondents completed the survey. The statistics for gender and age are displayed in the table below (see Table 5). No one of the participants used the gender box where they could have stated that they do not prefer to say their gender or if they considered themselves as non-binary or third-gender. This research was aimed at individuals that are between 18 and 35 years old. Individuals that did not belong to this age group were automatically forwarded to the end of the survey and their responses were deleted. Most of the respondents had a higher education with 41.4% having obtained a Bachelor’s degree and 47.5%

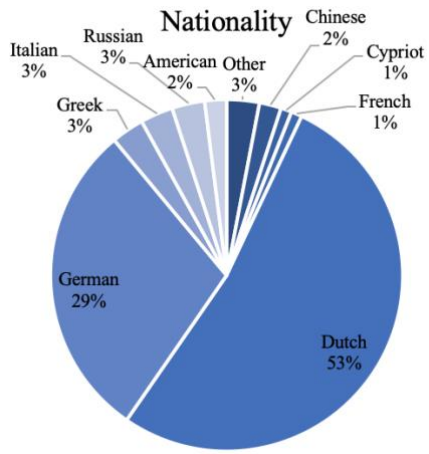
a Master's degree (see Table 5). This outcome occurred because most of the respondents were students.

Table 5 *Descriptive Statistics (N = 99)*

Age group	**Frequency**	**Percentage**
18-25	70	70.7
26-35	29	29.3
Total	**99**	**100.0**
Gender	**Frequency**	**Percentage**
Male	36	36.4
Female	63	64.6
Total	**99**	**100.0**
Highest educational level	**Frequency**	**Percentage**
High School	8	8.1
Bachelor	41	41.4
Master	47	47.5
Other	3	3.0
Total	**99**	**100.0**

The descriptive statistics for nationality are displayed in a pie chart below (see Pie chart 1). Most of the respondents had a German (29%) or Dutch (53%) nationality (see Pie chart 1). Still, 18% of the respondents had a different nationality (see Pie chart 1).

Pie chart 1 descriptive statistics nationality



Factor analysis

An exploratory factor analysis was performed to define the underlying structures of the used variables. It is a useful technique to show that construct validity exists in order to test if the statements from the survey actually represent what this research wants to measure (Field, 2018; Hair et al., 2019). Principal axis factoring was used because with this method a particular item always has a unique part of variance in it (Field, 2018).

A first factor analysis was run with using all items. The outcomes showed that based on an Eigenvalue greater than 1, five factors should be retained. This was in line with the chosen variables since this research focused on five variables. Before a second factor analysis was run, the items for attitude were reverse coded because the values for some of the items were put the other way around during the survey in order to prevent the results from being biased (Hair et al., 2019). Therefore, they had to be reverse coded in order to load all in the same way on their factor. Besides that, the rotation method oblique was used because at least one factor correlation in the factor correlation matrix was larger than 0.30 and this shows that there is enough correlation (Field, 2018).

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were assessed to see if the factor analysis is a sufficient method (Field, 2018; Hair et al., 2019). Both were sufficient. According to Field (2018) the KMO has to be above 0.5 to be considered good and Bartlett's test of sphericity needs a value of $p < 0.001$. The KMO had a value of 0.832 and Bartlett's test of sphericity was significant with $p = 0.000$.

Table 6 *Factor analysis results*

Pattern Matrix					
Item	**Social media usage by museums**	**Behavioral intentions**			**Visit intention**
		Attitude	**Subjective norms**	**Perceived behavioral control**	
Using the museum's social media account looks fun.	**0.360**	0.169	**-0.517**	-0.136	0.106
Contents shown on the museum's social media account seem interesting.	**0.310**	0.142	**-0.650**	-0.169	0.068
The museum's social media account enables information sharing with others.	**0.586**	-0.146	-0.117	0.128	0.138

Conversation or opinion exchange with others is possible through the museum's social media account.	**0.721**	0.008	-0.012	0.179	0.120
It is easy to deliver my opinion through the museum's social media account.	**0.651**	**0.320**	-0.041	0.070	-0.049
Contents shown in the museum's social media account include the newest information.	**0.327**	-0.056	**-0.392**	0.060	0.173
Using the museum's social media account is very trendy.	0.283	0.106	**-0.313**	-0.178	**0.324**
I would like to pass along information on brand, product, or services from the museum's social media account to my friends.	0.134	0.017	**-0.655**	0.013	0.057
I would like to upload contents from the museum's social media account on my own account or blog.	0.012	0.153	**-0.795**	0.035	-0.056
A museum that uses social media is...important-unimportant	-0.058	**0.716**	0.210	-0.035	0.110
A museum that uses social media is...attractive-unattractive	0.032	**0.899**	0.023	0.012	0.011
A museum that uses social media is... favorable-unfavorable	-0.003	**0.722**	-0.223	0.062	-0.116
A museum that uses social media is… good-bad	0.051	**0.735**	-0.182	0.024	0.091
A museum that uses social media is… pleasant-unpleasant	0.099	**0.711**	-0.103	0.080	0.022
A museum that uses social media is… nice-awful	-0.013	**0.770**	-0.166	0.140	0.025
Most people who are important to me think I should visit a museum that uses social media.	-0.160	0.126	**-0.519**	0.135	**0.314**
Most people who are important to me approve me visiting a museum that uses social media.	-0.080	-0.106	**-0.328**	**0.426**	**0.305**
Most people who are important to me think it is good for me to visit a museum that uses social media.	-0.210	0.069	**-0.566**	**0.356**	0.266
	-0.046	0.045	-0.102	0.169	**0.548**

Most people like me have visited a museum that uses social media.					
If I wanted, I could easily visit a museum that uses social media from now on.	-0.044	0.136	-0.180	**0.640**	0.133
I am confident that I can visit a museum that uses social media.	0.073	0.210	0.005	**0.749**	0.049
The decision to visit a museum that uses social media is up to me.	**0.349**	0.012	0.206	**0.755**	-0.011
I intend to visit a museum that uses social media in the future.	0.066	0.049	0.046	-0.081	**0.953**
It is likely that I will visit a museum that uses social media in the future.	0.092	-0.045	0.042	0.024	**0.902**
I plan to visit a museum that uses social media in the future.	-0.020	0.102	0.036	0.043	**0.843**
Eigenvalues	1.672	2.624	1.170	2.038	10.935
% of variance	6.688	10.496	4.681	8.151	43.740
Cronbach's alpha	0.898	0.918	0.844	0.844	0.931

Note: factor loadings above 0.30 appear in bold

The outcomes from the pattern matrix are displayed in the table above (see Table 6). Loadings above 0.30 are seen as sufficient for indicating that the item loads enough on the particular factor (Field, 2018; Hair et al., 2019). Therefore, these loadings are highlighted in bold (see Table 6).

Summarizing the results for social media usage by museums, expect for three items, all load higher than 0.30 on the factor (see Table 6). For attitude, all items had sufficient loadings of 0.711 or higher (see Table 6). The loadings of the items for subjective norms were all negative and except for one, all loadings were higher than 0.30 (see Table 6). The items for perceived behavioral control had sufficient loadings of 0.640 or higher (see Table 6). Last, the three items for visit in intention had all high loadings of 0.843 or higher (see Table 6).

Even though some cross-loadings occurred, they were taken into account (see Table 6). However, none of the items were deleted because they were already used in previous literature and seen as substantial for this research.

Reliability analysis

A reliability analysis was performed to show that consistency exists by using Cronbach's alphas (Field, 2018; Hair et al., 2019). Cronbach's alphas should be between the value of 0.7 and 0.8 in order to be seen as appropriate (Field, 2018). The Cronbach's alphas for the factors were all sufficiently high (see Table 6). Therefore, the reliability of the factors was seen as sufficient.

Regression analysis

A multiple regression analysis was performed to test the hypotheses of this research. A multiple regression analysis measures the effect of more than one independent variable on a dependent variable (Field, 2018; Hair et al., 2019). Since this research had more than one independent variable the method was seen as appropriate. For testing the different relationships between the variables more than one regression analysis was performed. Besides that, a regression analysis is seen as useful in predicting causal relationships (Field, 2018). Based on the proposed conceptual model of this research this technique is seen as appropriate. Besides that, Sobel's test was applied to check if mediation exists (Field, 2018).

In a first step, the multiple regression analysis was performed by using the PROCESS tool by Hayes in SPSS. Here, the three variables that together form the behavioral intentions were used as mediators. Social media usage by museums was used as independent variable and visit intention as the dependent variable.

Then, a regression analysis for each relationship between all variables was performed in order to check the assumptions. Doing this allowed for deeper outcomes in terms of the effects for each relationship which is not provided by the PROCESS tool from Hayes. Here, three regression analyses were performed with social media usage by museums as independent variable and attitude, subjective norms and perceived behavioral control as dependent variables. Next, a second regression analysis was performed with hierarchical regression where first, the effect of social media usage by museums on visit intention was analyzed. In a second step, the effect of social media usage and the three behavioral intentions variables of attitude, subjective norms and perceived behavioral control were added to the model.

With the results from these analyses, the assumptions for doing a regression analysis were checked. First, the assumption for homoscedasticity was checked by making a scatterplot and looking at the residuals (Field, 2018; Hair et al., 2019). The plots show that there exists for each checked relationship a pattern and therefore, homoscedasticity is given (see Appendix

2.2). Besides that, the scatterplots were used to show that linearity exists (Field, 2018). The output shows that in all scatterplots a clear line can be identified and this indicates that linearity is given (see Appendix 2.2). For multicollinearity the tolerance values and the VIF were checked. The tolerance values are good when they are almost 1 and the VIF should be lower than 10 (Field, 2018; Hair et al., 2019). The results show that the assumption is met (see Appendix 2.3). To check for normality a p-p plot was made (Field, 2018). The results show that all relationships have a normal distribution (see Appendix 2.4). Last, the independence of residuals was checked by looking at the Durbin Watson statistic which needs a value that is close to 2 (Field, 2018). The results are all close to 2 (see Appendix 2.5). With subjective norms as dependent variable and social media usage by museums as independent variable, the Durbin Watson statistic had a value of 1.513 which was still seen as sufficient and close to the appropriate value of 2 (see Appendix 2.5).

After checking the assumptions, the results from the regression analysis were analyzed. The results are displayed in the table below (see Table 7).

Table 7 *Results regression analysis*

Path a: (DV = attitude)				
	B	SE(B)	β	*95% CI (Lower, Upper)*
R^2 = 0.2780, F (1, 97) = 23.9332, p = 0.0000				
IV = social media usage by museums	0.4768*	0.0975	0.5272	0.2833, 0.6702
Path a: (DV = subjective norms)				
	B	SE(B)	β	*95% CI (Lower, Upper)*
R^2 = 0.3915, F (1, 97) = 38.4078, p = 0.0000				
IV = social media usage by museums	0.7562*	0.1220	0.6257	0.5140, 0.9983
Path a: (DV = perceived behavioral control)				
	B	SE(B)	β	*95% CI (Lower, Upper)*
R^2 = 0.2010, F (1, 97) = 9.7997, p = 0.0023				
IV = social media usage by museums	0.3709**	0.1185	0.4484	0.1357, 0.6060
Path b and c': (DV = visit intention)				
	B	SE(B)	β	*95% CI (Lower, Upper)*
R^2 = 0.5464, F (4, 94) = 18.2461, p = 0.0000				

IV = social media usage by museums	0.2281**	0.1202	0.2108	-0.0106, 0.4667
IV = attitude	-0.0054****	0.1211	-0.0045	-0.2458, 0.2351
IV = subjective norms	0.4489*	0.1064	0.5013	0.2375, 0.6602
IV = perceived behavioral control	0.1747****	0.1250	0.1336	-0.0735, 0.4230
Path c: (visit intention)				
	B	SE(B)	*β*	*95% CI (Lower, Upper)*
R^2 = 0.3387, F (1, 97) = 28.4241, p = 0.0000				
IV = social media usage by museums	0.6297*	0.1181	0.5820	0.3953, 0.8641

Note: * p < 0.001, ** p < 0.05, *** p < 0.10, **** p > 0.10

H1: Social media usage by art museums has a positive effect on the behavioral intentions of 18-to-35-year-olds.

The effect of social media usage by museums on the behavioral intentions was significant for all three behavioral intention variables and therefore, H1 is supported. The effect of social media usage on attitude had a p-value of p < 0.001 and a positive β of 0.5272 (see Table 7). The effect of subjective norms was positive as well with a β of 0.6257 and p < 0.001 (see Table 7). Social media usage by museums had a positive effect on perceived behavioral control as well with a β of 0.3709 and a p-value of p < 0.05 (see Table 7).

H2: Positive behavioral intentions towards an art museum have a positive effect on the visit intention of 18-to-35-year-olds.

The second hypothesis is only partially supported because the results for attitude and perceived behavioral control had non-significant results (see Table 7). Only the results for subjective norms were significant with p < 0.001 (see Table 7). Furthermore, subjective norms had a positive β with 0.5013, indicating a positive effect on visit intention (see Table 7).

H3: Social media usage by art museums has a positive effect on the visit intention of the 18-to-35-year-olds.

The results show that the effect of social media usage by museums on the visit intention is significant with p < 0.001 (see Table 7). A β of 0.5820 indicates that a positive effect exists (see Table 7). Therefore, this hypothesis is supported.

During the analysis it was also tested if mediation exists. For this, the PROCESS tool by Hayes was used and Sobel's test was performed. The results from the analysis in PROCESS are shown in the Appendix (see Appendix 2.6). Sobel's test is seen as an appropriate method to report for mediation (Field, 2018). The t-values for the a and b paths of the relationships between the variables were used for the calculation. Each variable for the behavioral intentions was tested separately for mediation. If the value is significant an above the critical value of +/- 1.96 it can be argued that mediation exists (Preacher & Hayes, 2004). By using the t-values the results showed that there exists an indirect effect for subjective norms on the relationship between social media usage by museums and visit intention. For the indirect effect of subjective norms Sobel's test has a value of 3.487 with $p < 0.001$. Therefore, this shows that mediation exists. For the other mediators no significant results were found. Besides that, looking at the confidence intervals of the indirect effect in PROCESS the same conclusion can be drawn (see Appendix 2.6). When the confidence intervals of the bootstrapping do not contain a zero level then it can be assumed that mediation exists (Field, 2018). Since both, the indirect and direct effect are significant it can be concluded that partial and not full mediation exists (Field, 2018; Hair et al., 2019). To also test for partial mediation the indirect effect is divided by the total effect (Field, 2018). Since for attitude and perceived behavioral control no significant results exist, this was only done with subjective norms as mediator. Thus, the value for subjective norms of 0.3394 was divided by the total effect that had a value of 0.6297 (see Appendix 2.6). The result had a value of 0.5390. This is larger than 0.25 indicating that partial mediation with the subjective norms as mediator exists.

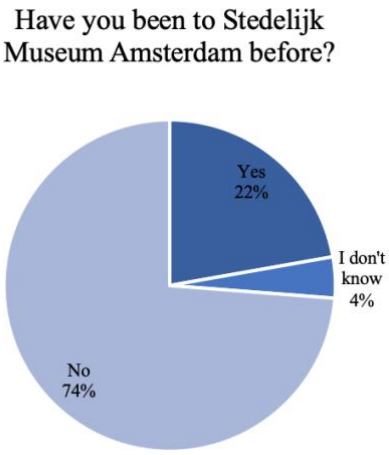
Control variable

After the decision was made to display Stedelijk Museum Amsterdam in the survey, the question "have you been to Stedelijk Museum Amsterdam before?" was used as a control variable and displayed at the end of the survey. The pie chart below displays the data from the survey (see Pie chart 2). A partial correlation analysis was conducted to test if a relationship between the other variables and the control variable exists (Field, 2018). Before performing the analysis in SPSS it was checked if the assumptions were met. Linearity and normality were needed (Field, 2018). They were already checked during the assumption testing of the regression analysis and seen as approved.

The results from the partial correlation analysis show that when controlling for the control variable all other variables have a positive and significant correlation (see Appendix

2.7). However, the values of the correlations between the variables do not change at all or display only a very small change (see Appendix 2.7). This result can indicate that the control variable does not affect the other variables and their outcomes. Therefore, the control variable did not provide any useful statistical results for this research. Nevertheless, it was found interesting to see how many of the respondents have been to Stedelijk Museum Amsterdam before or not.

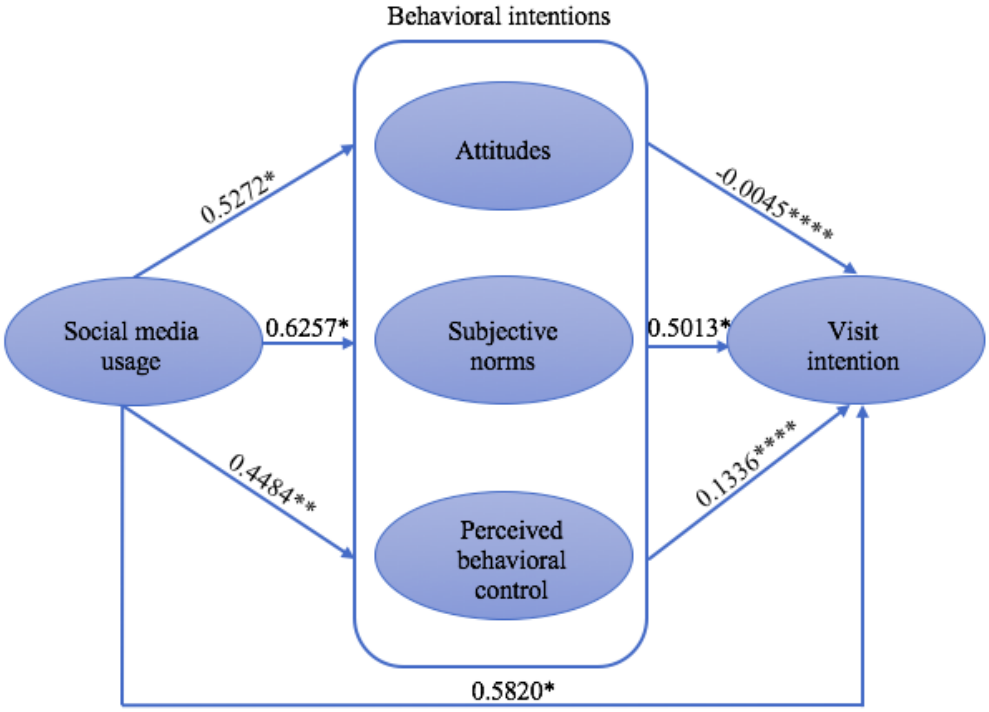
Pie chart 2 *control variable*



Final conceptual model

In the figure below the final conceptual model is displayed including the relationships between the variables, their significance level and their β (see Figure 2). Hypothesis 1 and hypothesis 3 were supported by the results from the regression analysis whereas hypothesis 2 was only partially supported.

Figure 2 *Final conceptual model*



Note: * p < 0.001, ** p < 0.05, *** p < 0.10, **** p > 0.10

Discussion

This research aimed to examine if the use of social media by museums influences the behavioral intentions of the 18-to-35-year-olds and if this makes them consider visiting a museum in their free time. Art museums were used as a reference category for this research.

During the focus group session, it was found that the participants overall see a museum that is present on social as up to date and not as old fashioned (see Table 4). In that sense, museums can be able to change the traditional view that especially younger generations might have in their minds when they have a social media account. Besides that, a presence on social media offers an individual the opportunity to learn and inform themselves about the museum (see Table 4). For example, they can easily do this by searching for this museum on Instagram. There, they can also check if they like the content of the museum and what the museum offers before deciding to visit it. Furthermore, it was argued that museums compared to, for example, brands are less flexible in changing their content on social media (see Table 4). The example of a sneaker brand was named because they can launch a new sneaker every month and be more

flexible in changing their content. For a museum, this might be more difficult since they might not be able to change, for example, their exhibition every month. Therefore, it is important that they are creative in capturing the interests of their possible visitors. This might also be of need because usually a person that visited a museum will not visit it again in the next week or month (see Appendix 1.1). Therefore, museums need to reach out to new potential visitors. In general, the participants stressed that it is important to them that the museum reaches out to them and not the other way around (see Appendix 1.1). The participants felt that right now they have to approach the museum. For example, the museum can reach out to them on social media via advertisements where they raise awareness. During the focus group session, it was discussed that the participants from the age group miss the interaction and engagement of the museum with the audience (see Table 4). This can also be related to the reaching out part. As Manna and Palumbo already (2018) highlighted, individuals from this age group want to feel engaged and seek interaction. From the results from the focus group session, this was an important factor for the participants and they felt that all three of the shown museums missed this in their presence on social media. An example of the Radboud University Nijmegen was named because on their Instagram account they sometimes create posts where they tell a story about a student or staff member. The participants liked the idea and this was seen as something that museums could do to engage people from the general public (see Appendix 1.1). With this individuals from the age group can relate themselves more with the museum and their visitors since it was argued that they sometimes cannot relate themselves with the museum. By telling stories about other visitors the possible audiences can learn about the experience that the museum offers and if it peaks their interest. In the literature review part it was also highlighted that visitors today seek an experience and that they want to be entertained (Alcaraz et al., 2009; Easson & Leask, 2020; Manna & Palumbo, 2018). According to the results from the focus group session, this seeking for an experience starts with looking for it and the presence on social media can be the first step in this experience (see Appendix 1.1). Thus, the experience starts with the representation of the museum on Instagram. Besides that, other solutions for museums and their social media presence were discussed such as making Instagram stories where the museum can add competitions or ask questions to engage the audience (see Appendix 1.1). By doing so, the museum can make their account more interactive. Another idea was to make a post of an information card from a painting and the followers have to guess from which piece this might be or by making posts with little fun facts (see Appendix 1.1). This again can create more interaction with the audience on Instagram. In addition, this can offer an experience to the audience on Instagram.

With the results from the survey and the regression analysis, the hypotheses were tested and hypothesis 1 and hypothesis 3 were significant (see Table 7).

The items from the variable social media usage by museums, stating that a museum that uses social media is very trendy, also related to what was said during the focus group session. There, the participants defined a museum that uses social media as up to date (see Table 4). This also relates to their attitudes about a museum that uses social media. In addition, social media usage had a positive effect on subjectives norms. In both results, from the focus group session and the survey, it was highlighted that individuals from this age group are influenced by their personal environemnt. Last, social media usage by museums had a positive and significant effect on perceived behavioral control (see Table 7). That was also found during the focus group session, where some of the participants argued that if they liked the social media account, they might consider visiting the museum (see Table 4). The social media usage by museums had a positive effect on all three behavioral intentions.

Hypothesis 2 was only partially supported because only subjective norms had a positive and significant effect on the visit intention. This was an unexpected result since previous literature argued that the behavioral intentions result in an actual behavior. Therefore, it was expected that the effect for attitude and perceived behavioral control on visit intention would be significant as well. The argumentation for why subjective norms have a positive and significant effect on the visit intention of 18-to-35-year-olds can be that during the focus group session it was already found that the personal environment of the individuals is important to them (see Table 4). Thus, when, for example, their friends are interested in visiting museums or if they perceive visiting a museum as something positive, the individual is more inclined to also consider visiting the museum. Therefore, it can be argued that the thoughts of friends and family influence the behavior of this age group. This also shows that younger generations base their decisions on others. Besides that, during the focus group session it was also found that visiting a museum is a group thing for the age group (see Table 4). Thus, they would not consider visiting a museum alone. This can also be connected to the partial mediation result since it shows that there exists an indirect effect of social media usage by museums on visit intention through subjective norms. However, none of the items measured visiting a museum together with friends or family. This might have been an interesting addition, to analyze the behavior of the age group and could be considered for further research

Hypothesis 3 was supported, indicating that social media usage by art museums has a positive effect on the visit intention of the 18-to-35-year-olds (see Table 7). This result shows

that a museums presence on social media can lead to a visit intention of the age group. Furthermore, it shows how important social media is today and that museums need to make use of social media in order to attract their visitors.

Concluding, the results from both the qualitative and quantitative research support the aim of this research. Even though hypothesis 2 was only partially significant. The results show that the traditional view in the minds of the age group is changing and that the younger generations indeed see a museum that uses social media as more up to date. In addition, it can be argued that social media usage by museums can influence the behavior of the younger generations.

Conclusion

Based on the results and the discussion above, this research found that the social media usage by museums influences the behavioral intentions of 18-to-35-year-olds. In addition, it was found that the social media usage by museums has a posotive and direct effect on their visit intention. For the behavioral intentions, only subjectives norms had a posotive and significant effect on the visit intention of the age group. Besides that, a partial mediation effect of social media usage by museums on the visit intention of the age group through subjective norms was found, indicating that there exists an indirect effect.

In terms of art museums the results show that the social media usage by museums affect the visit intention of the younger generations. Additionally, a presence on social media is crucial for museums today and social media can be seen as useful tool to attract this age group. Furthermore, this research found evidence that social media has a positive effect on the behavior of the younger generations. Museums who make use of social media can be able to change the traditional view that the younger generations have in their minds. This can lead towards positive behavioral intentions. By doing so, the museums might even be able to make the age group consider visiting the museum.

Limiations of the research project and further research

Some limitations were found within this research. First, during the focus group session it was already mentioned that all of the participants had a higher educational background, either bachelor or master level. This was also found in the descriptive statistics of the survey. Here, it

might be interesting to see further research about individuals with other educational backgrounds and how the results might differ.

Second, most of the respondents were from the Netherlands or Germany. Thus, they had a Western cultural mindset. This might affect the results. Analyzing, for example, the behavior of an Asian culture might lead to different results.

Third, the type of museum might lead to different results. This research focused on art museums. During the focus group session, it was already argued that participants missed the engagement part, especially in art museums. Since it is not allowed to, for example, touch the art pieces it can make them less participative. A scientific museum such as the NEMO museum in Amsterdam was seen as more participative. For example, visitors can there participate in scientific experiments. Therefore, such a museum might get a higher result for visit intention compared to an art museum. Also, when social media is used by the museum because a scientific museum might have more options in terms of interaction or engagement with the possible audiences.

Fourth, the size of the museum in terms of their followers on Instagram might affect how possible visitors view the museum. Stedelijk Museum Amsterdam has a large follower base. The museum is located in Amsterdam where many tourists visit the city and also many international students or international employees live there. For example, this research did not use the well-known Rijksmuseum in Amsterdam because it is a very famous museum and this could have biased the results. In addition, the size of the museum itself might also affect how the social media page looks because smaller ones might not have the time or funds to take care of the Instagram page. This was also discussed during the focus group session (see Appendix 1.1). Therefore, analyzing a museum that has less followers or is located in a less known region might create other interesting results.

Fifth, during the focus group session it was found that the personal enviroment can influence their decision-making and their behavior towards a museum. In order to show up in the personal environment of the age group, museums could make use of influencer marketing. Many individuals from this age group follow influencers on social media and they might be influenced by things that these influencers are promoting. It is still a very new topic. There exists an article by Leung et al. (2022) where it is argued that influencers can influence their followers behavior. Additionally, individuals that follow an influencer might feel connected to what they do and seeing them visit a musuem might lead them to visit a museum. Therefore, this might be an interesting topic for further research as well.

Last, the digital environment is fast changing (van Bommel et al., 2014). Therefore, one social media platform might be prominent right now but not anymore five years from now. It is important that researchers and organizations, including cultural institutions, are aware of this. For example, at the moment the social media platform TikTok is very trending and many organizations also make use of it by creating video content. Therefore, it is important to keep up with the trends and changes.

Implications

This research holds some practical implications that museums can make use of. First, Instagram can be a cheap tool for museums in order to attract younger generations and to raise awareness. The results from the focus group session showed that for the younger generations an appealing social media account can create an interest for visiting the museum.

Second, also other social institutions different from museums might profit from the outcomes of this research since the results showed that social media has a strong impact on the behavior and the intentions of the specific age group.

Third, during the focus group session it was argued that museums should make use of targeted ads. They were seen as a useful tool to reach out to possible visitors (see Appendix 1.1). Furthermore, they can reach a wider audience by using targeted ads (see Appendix 1.1). With targeted ads museums can pop up in the feed of a social media user and might attract their attention. Through this, they can also attract possible visitors.

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Appendix

Appendix 1.0 Qualitative part

Appendix 1.1 Transcript focus group session

AUDIO recording focus group session / 07.10.2021 / 4pm / Duration recording: 58:22

The whole focus group session was a bit longer than the recording and the transcript below because some of the participants did not know each other and we had a short introduction round.

	Code/Variable	Colors
	Social media usage by museums	**BLUE**
Behavior	**Attitudes**	**ORANGE**
	Subjective norms	**YELLOW**
	Perceived behavioral control	**RED**
	Visit intention	**GREEN**
Others	**Own social media usage**	**PURPLE**
	Targeted ads	**GREY**

INTRODUCTION

Me: Okay, so as you can see our topic today is social media usage by museums. I'm Katja and I'm doing my master thesis in Marketing at the Radboud and this is just a short overview about what we're going to do. We'll have a short introduction. Then, I'm going to show you some examples. Then, we start with main questions that I actually need for this focus group session and then we'll have a short wrap-up.

So, let's start with a short introduction. My topic is social media usage museums. Basically, in my research I focus on younger generations that are or could be possible visitors of museums and they consists of an age group between 18 and 35-year-olds. And I know that you all fit ins this range. And previous research found that especially this age group is missing in museums. Especially nowadays and with this research I want to see if they traditional view of museums changes when museums engage in social media and when people actually see, okay they might be less traditional then we think because most people think about a museum like in this age they think about a museum that they visited during their childhood like during high school or whatever. It is usually part of it that you go to a museum. And the focus in my research is on Instagram because organizations and brands can post visual content on Instagram and museums, especially art museums have a lot of visual content and they can actually make use of this content sharing. And then finally I want to see if the social media usage by museums leads to a change in the mind and the behavioral intentions of the younger generations. Which brings me to the first item or logo (showing the logo of Instagram). I think everybody knows this. If not, please say so and we have like a kind of a short

introductory question: Why or why not do you use the social media platform Instagram? You can think about it a second. But I think I would really like to start with Lisa because I know that you don't use it.

Lisa: Yeah, I don't use it because you get a lot of information and then you see all the links that friends tag and at some point, it was just so much and I'm not the one posting about my own live. It is more for me to read like for example LinkedIn has a lot of research information. So, that's what I'm using but for the rest I'm really into it.

Me: Maybe, what about you Jennifer?

Jennifer: Yeah, I also don't really use Instagram. So, I don't post on Instagram really and I do look at Instagram but not often and I only use it to keep up with people that I know and sometimes I like scroll through and read some random stuff and then I'm done.

Dina: Yeah, I use it. I find that Instagram is very, like if you actually look at it, it's very business oriented and that's something that for the most part I dislike but use this particular aspect when I want to find specific things. So, for example, I don't follow museums per se but I follow like accounts that have to do with conservation or topics that I want them to find me and show me what they are doing. At the same time, I try to avoid all the like "buy this, buy that". So, my use is mainly like, there are certain accounts and institutes and stuff that I want to find their news and that's where I see what they're doing in simple terms.

Me: What about you Mandy?

Mandy: I don't really use it. Like I'm on it and I just keep up with people that I'm interested in like friends and people that I met years ago, who are back in their own countries. But I don't post. There's nothing I really like to share with people.

Me: So, you actually look more for content?

Mandy: Yeah, definitely. Also, it's just like I don't consciously use it like it's usually when I'm purely bored. But that's most of it.

Romy: Yeah, for me it's little bit the same. I just use it to keep up with friends and family and just see what other people are doing and also to post well stuff that I think are fun, that I did and people would like to see. But not in any professional manner or anything. I also follow some brands that I like and just check out what they are posting and that kind of stuff.

Jennifer: When I think about it, I do use it for another reason actually. So, I try to follow accounts where like with people who are doing things that I would never really do. It's kind of weird and a little random. But for example, I follow a photographer who takes pictures of like really obese people. So, then I can see, you know. So, that it becomes more normal like okay like it's crab that fat exists and these people have a right to feel beautiful and like it's nice that they are doing this. And then, for example I follow accounts that do deal a lot with gender, gender topics and stuff. So, I learn a lot about like the whole she/them, he/they topics and I learn a lot about like you know hormone issues and stuff and I also try to follow little bit of things on politics, just to, so I can get more insights. That's true. So, when I do look at my Instagram I do read like a lot of new information actually, cause I try to follow like accounts that are just kind of out there. So, I can get content that I'm not really used to get in. So, yeah.

Me: So, it's not like you use it for yourself for posting and stuff.

Jennifer: No.

Mandy: It's really like for your own education. Broadening of like your own perspective.

Jennifer: Yeah, exactly.

Mandy: Do you feel like it helped you to become, like I mean not necessarily that you close minded, but like help.

Jennifer: Yeah, I think it did.

Mandy: Cool.

Me: Yeah, that's really cool.

Dina: Backing up on that, I can also add that for example, recently I've started doing more "gyming" and I started following more people who do calisthenics because I want to see more of it in my daily live and start seeing myself as capable of doing it or to see that is viable and that I'm not that far away from it. So, I also use it for that.

Me: That's really cool and helpful.

Dina: Yeah.

Me: Anyone who wants to add something or should we move on?

Mandy: If you want a cool calisthenics account, I'm also into that. Little T Fitness, I don't know under which name she goes but she's a gym shark athlete and she does a lot of backflips and she has like really fun challenges for mobility and flexibility.

Me: No worries. Take your time.

Dina: Thank you.

Me: So, let's slowly move to the next slide.

EXAMPLES MUSEUM INSTA ACCOUNTS

Me: So, in the next slide I'll show you some examples of three Dutch museums that are on Instagram. We have the Stedelijk Museum Amsterdam, het Valkhof Museum in Nijmegen en het Groninger Museum in Groningen. Just take a look at them because the next questions are actually about those accounts and what you think of these. Do you need a minute or something to look at it? I mean I can also go back to them. Should I move on or?

Jennifer: Sure.

MAIN PART QUESTION 1

Me: Great. So, the first question that we actually start with is: What purpose do you think is served when museums use social media platforms such as Instagram? You can just speak up.

Dina: So, when I look at these three. Uhm, it seems as if they are trying to simply put forth what they have. You know. Like this is the art that we have in there and the Groninger Museum probably also a couple of staff members there. But I think that the purpose be a bit more like this (points at the shown accounts) but also engaging the public through this medium. I didn't see any photos that do that. So, if you compare this to like brands for example, it's not the same but still a brand, every six photos will have something like maybe a competition or a question where they can engage you or like next Monday we have this on and I would expect a museum would say, you know, next Monday we have this exhibit coming bla bla bla. And it would be nice if I saw more of that where I also can get informed about what is going on and participate. So, I think this should be a purpose of museums on Instagram as well. But I didn't see anything of this on these images.

Me: Yeah, but that's a nice idea. I really like that. So, who wants to go next?

Lisa: Yeah, I guess the main purpose is first of all, well we are the museum. This is us kind of. And yeah as you said they need to interact more with people. Because, of course it is a platform for more young people at least they get to show themselves. But then they also need to interact and draw them to the museum.

Me: Yeah, that sounds good.

Romy: Yeah, I think maybe additionally, they just, next to showing what they are offering in the museums as art, maybe they also show a little bit of the aesthetics. So, what feeling would you get when going to this museum. Cause, I did see it different in like style between the three of them.

Me: I can go back if you want to.

Romy: Some, you just see a different color patterns and that kind of stuff. So, you do feel different things when you look at them. So, that is also a purpose.

Me: What about you two, Mandy, Jennifer, anything to add?

Mandy: I very much agree with everything that's been said on the other side of the table.

Me: Sounds good.

Jennifer: I think the other purpose is just for information wise because you can see for example on the Amsterdam one it says their times when they are open. And also has their address on all of them (all the 3 accounts). So, one of the main purposes is to get information out there.

Me: I mean it might also be nice if you see that the other ones like saved stories.

Jennifer: Yeah, I like that.

Me: Then you can always look back to something that you might be interested in.

Jennifer: Yeah, this one is so easy (points at Stedelijk Museum Amsterdam) like you can see staff pic(k)s, learn. This one's just like a lot of stuff (Groninger museum)

Dina: I've been on Instagram for more than three year and I still haven't figured out to create a story guys.

Jennifer: Maybe that's museum het Valkhof there. They can't figure it out.

Me: They have the same issue. Should we move to the next one?

Jennifer: Yeah.

MAIN PART QUESTION 2

Me: The second one is, how do you think does this presence on Instagram by museums and the posting of content relates with what other organizations or institutions do? Like, think about brands that come to your mind or we can also take fitness influencers.

Jennifer: I think it relates in like promoting.

Dina: I see more as like, if I compare the two, I guess lets say brands or fitness influencers they have something to sell. So, it is very pure to them that they are trying to sell it. So, they are trying to find strategies to make you pay attention to it and also being engaged. Whereas I think museums might not see it as – well it is a product that they sell but maybe they have the perception "just share the art". But you also have to approach it a little bit as "I have a thing to sell to you", you know and you need to attract attention and make people pay attention. So, by comparison I think that museums would be compared by people to other things that do attract attention.

Mandy: I feel like mostly organizations go more easily with trends like. Maybe you see like all these beige, soft, rosy colors and stuff. And I feel like museums have a more difficult time to change their whole aesthetics and stuff. While just a bag brand who sells those can just take more currently aesthetic pictures that people are searching for and then can get more attention.

Lisa: Yeah. (Agreed on the things said.)

Jennifer: I also think that their presence on Instagram and their content relates to other organizations in a way that organizations are trying to tell you about themselves as well and I think museums, they are also trying to tell you what about themselves.

Me: And I mean if you think about other brands, the museum maybe not sell something like if you think about H&M but they want to get people to come visit. So, actually they also want to attract with posting.

Romy: Yeah, I currently work at an MBO school and I'm doing their social media right now and I think their strategy is more like getting to know the company. So, what are we doing and what can it offer for you. They are not necessarily trying to sell something, because yeah it is a service company. So, you can't really show products

and say like buy this. So, you have to engage a little bit more and just tell them why would you want to go there and stuff. This could be the same with museums.

Me: Somebody else? Should we move on?

Others: Yeah.

MAIN PART QUESTION 3

Me: Then, we move to the third one. How do you think people view a museum that uses a social media platform like Instagram?

Jennifer: Up to date.

Others: Agree.

Me: I mean you can also think of other people or about yourself. How do you view a museum?

Dina: I definitely think it's a positive thing. I think if I were thinking about what museum to go to, if I couldn't find it on Instagram, the chances that I go there are much lower. Simply, because on Instagram you can tell if the current exhibit or the museum in general are the kind of thing that I wanna see. So, I think it, yeah, up to date is the best way to describe it.

Mandy: Also, very accessible. Like I feel for me at least. For me, I have never as a kid been really interested in like artsy stuff and because like there was never something like I couldn't draw or I was never like the artsy kid. So, for me to be interested in that like it was nice if other people could do it but I was more into sports or like languages. That gap got kind of wider the longer I did not go or looked at things and like when I feel like oh I kind of maybe wanna go there it just feels so overwhelming like I don't know any of the names of the people who made those artworks and it kind of feels like a base step to learn about those kind of things. So, when I see some of my friends who are into arts and that kind of things more. Then like "oh wow" it kind of looks like very aesthetic and sometimes it look a little bit stock up maybe. So, then I feel like it might not really be for me. But I feel like when I can first very accessibly see it on Instagram and kind of get used to the idea "okay, I could go there. That looks nice" then I feel like maybe that gap could be smaller for me. But then again, I need to start following it and…

Others: Yeah…

Lisa: I also think that it is easier via Instagram than using a website or something, because I mean it is old fashioned and normally it is difficult to just look at it and find an easy way of what they are doing right now and Instagram is then just a quick overview of everything. So, I think that's easier.

Me: So, easier, accessible, up to date…

Dina: I think also there is a little bit of uhm like. When we choose an experience such as an museum we do it because we want like a longer experience, right? Like an artsy experience or whatever tag you put on it. So, just if I say I wanna go to a museum today, I'm already predisposed to do like starting such an experience and the experience starts from me thinking about it and me looking for it. So, I think especially for museums or say like you wanna do bungee jumping, you would check it out first and see I wanna go with this company, they do this and that, you know what I mean? So, the experience starts already when you check it out. So, for the museum this is more important.

Me: So, the online presence and the presence on social media is important.

Dina: It is like the beginning of that.

Romy: Yeah, I also think that if a company or museum is active on Instagram it also shows that they are at least a little bit focused on our age group and that they are interested in us as customers as well. So, it shows that as well.

Jennifer: I think it also shows that I guess how bigger the museum they are because I feel like smaller museums wouldn't really have maybe the time or funds or I don't know. They wouldn't really think to do that. Maybe. Especially, how the page looks, you know what I mean.

Dina: It makes it seen more legit.

Jennifer: Yeah. Exactly.

Me: Great. Anything to add? Otherwise we move on to the fourth one.

MAIN PART QUESTION 4

Me: What problems might arise when museums use social media platforms such as Instagram? If any.

Lisa: Well, I think the first, or if it's a problem I don't know, but you see differences in how big the museum is. So, I mean, bigger ones will attract more young people, I guess, then those smaller ones, because they don't look too nice on Instagram. So, I think there is a some point it will produce a bias in which museum will actually attract younger people.

Me: I mean as I think…was it you or you (pointing at Dina & Jennifer), I can't remember. One of you said that you also need someone who does this marketing, you know. Like the smaller museums maybe don't care. I think it was Jennifer. The smaller museums maybe not care so much about their Instagram account. So, maybe the bigger ones they really have one person or one staff that really uses the social media platforms every day and posts content or engages with people.

Jennifer: Maybe it's not that they don't care but that they don't have like the capacity to do it.

Me: I mean if I go back, you see for example the Valkhof museum only has around 3.000 followers and when you then for example look at Stedelijk museum and Groninger museum.

Jennifer: And you also see that these (Groninger and Stedelijk) are both in English. So, they are kind of more international.

Me: Yeah, so maybe that's also a thing that they should think about. Maybe doing it in English to also attract people that don't come from this area.

Dina: Well, I think the following may also be very much influences by the population in those cities and their interests. If I didn't come to Nijmegen I wouldn't know the Valkhof museum. But if I would live in Amsterdam I'll know the Stedelijk museum. But yeah, the English element could definitely help.

Jennifer: I mean even Groninger is in English.

Me: I didn't think that.

Dina: But Groningen is pretty big city. It's just that no one from the south goes there. But if you already live there then it is pretty big.

Romy: There are a lot of students there.

Jennifer: There are.

Dina: Many Germans.

Me: Yeah, it's due to the border.

Jennifer: Another problem that I could see is that sometimes like on Instagram or on the internet in general like people tend to hide behind the internet. And so maybe if a museum decides to for example the Valkhof museum said "save the red forest" or something and someone might feel offended by this. That could be kind of a problem. It's not a problem but sometimes you might have to be careful about like about what you choose to support as a museum.

Dina: But that's a challenge that anyone has.

Mandy: It's about knowing how to do it right.

Me: So maybe it would have been better if they would not have stated in their front page. Maybe somewhere in a story but maybe not that obvious.

Jennifer: I mean I think it's fine.

Mandy: You might be reluctant to change the aesthetic of the page. Kind of. Like if the museum if very focused on like, I don't know, archeology. If they are focused on one thing then maybe if they display a lot of pictures of one certain piece that gains a lot of attraction then maybe when it's time to change some pieces they might hold on to that piece a bit too long.

Me: Instead of moving on to something else.

Mandy: Yeah. To try something else or maybe to include some other pieces.

Dina: I think what you're saying is about the fact, museums sometimes may deal with like more high-level art, timeless art and putting that on a platform translating it to like Instagram might have some challenges, like you wanna do it in such a way that people are interested but can't vary your content so much because you have this like higher level art pieces.

Me: I mean they could like when they get a new collection.

Dina: Yeah, they can. But I don't know…

Me: I get your point. It might be difficult to change it when you have only one collection and it doesn't change, you can only use the content that comes from this collection.

Dina: Yeah, and you have to be more creative to, you know, for example, you could post like "what's coming up" and stuff like that. Maybe it's not as easy because you are not like a Sneaker brand. You're not dropping new sneakers every second week. You have the same collection.

Me: So, it might be that they are less flexible than brands.

Others: Agree.

Me: Should we move on?

MAIN PART QUESTION 5

Me: So, we have the last main question. How would you say the social media usage on Instagram by museums is effective? When you think about what we talked before like attracting others. You want to start Mandy?

Mandy: Well, as far as I have noticed, to me it's not effective at all. I feel like Instagram and platforms like that are only as effective as what the person is interested in. Like for example, I believe that with TikTok or something. You only see what you wanna see and if never search for any content that's even related to this, I won't ever see it. And also, me seeing a story on someone's Instagram saying like "I went to this museum" I'm like nice, good for you. It's not like I'm going to search for it and being interested in.

Lisa: I think for some people it might help because if you never look for it but then in this moment it might come along and then someone might think "well let's check it out" but otherwise if you have website you won't look at it at all. Only if you maybe someone was there. But on Instagram that is easier.

Me: What do you think Jennifer?

Jennifer: I mean I think it might be, I don't really know how to measure the effectiveness in this sense, but it's nice if the museum is on Instagram in the first place anyway. So, if someone does go there like Mandy said they can tag it or something and then it stays in basically Instagram. So, for example if someone wants to decide which museum they wanna go to or Dina said like you can just see a Snapshot, you can even look up the tag or something and then you can see other people's posts and that might make it more memorable even if you have something in

your mind. Especially, if you're traveling and you are going to a destination and you wanna do something more cultural then you may think of a museum and then that's where it can be more effective when you are kind of searching for those sorts of things.

Me: What about you Dina?

Dina: I was thinking that I'm surprised that I haven't had like any targeted ads for museums.

Others: Agree.

Dina: Because for example I am somebody that follows a lot of art accounts. I follow like sketch accounts and drawing and stuff and well it would be very easy. I'm mean how the hell do I get targeted when I search for a dress once and I see it every second day. But I follow three different art accounts and I don't get targeted as going to a museum. I wish I would. I think there need be more work to be done in terms of that. Because I may even have looked up like a museum in Rotterdam because I was interested in going but I never saw it pop up again in my feed. So, I would like that to happen. But yeah.

Me: To get this reminder actually?

Dina: Yeah, but I think that's a bigger investment because you have to pay for targeted ads.

Me: But maybe, especially, those bigger museums like Stedelijk or Groninger museum they could maybe think about things like that. You want to add something Romy?

Romy: Yeah, I was also thinking about the targeting ads thing. So, they have the potential to reach a lot of possible customers if they decide doing that. And with the followers you have, I don't think that there is going to be a growth in your revenue or anything. So, that is where the targeted ads are for.

Me: So, they should definitely think about that.

Dina: Yeah, because I can imagine that people who follow the museum either have considered going there and didn't go or did it and did go. Once you have been to a museum then I guess you're not likely to again next month. So, you do need to reach new potential visitors.

Me: That sounds good. Anything to add?

FINAL PART

Me: Then we move on to the, it's kind of a wrap up already, so we went faster than I expected and it's kind of a last question. Would the social media usage and presence of museums on a social media platform like Instagram lead you to actually consider visiting a museum? If not, how could they do better? So, maybe if about what we thought about earlier, like the ads, they could use like a business account and pay for ads to remind people. But what do you think about the first question? So, if you see a museum would you like to visit it? If you like the content.

Mandy: I think if I see it more often it wouldn't be such a distant thing and I would get more used to it and not think it's for only old and stuck up people, who are really into art. So, if it's like more in my environment and I think about it more and also if people around me see it more often then, it might come up in conversations. I feel like I'm mostly influenced by. Like I won't go to a museum by myself. I would go like with people who are also interested in it or like who never went but really wanna go. But since talking about museums is not really something that popping up now and then in a conversation, like this is a focus group, otherwise I would have never spoken about this. So, like I guess if it becomes more mainstream or something, like a trend "go to museums, read books" and stuff. Then, I guess I would be more likely to visit a museum. When it never shows up anywhere in my environment and people are not talking about it, then, I feel like, also a bit hesitant to bring it up myself, because if I'm not really interest in or hesitant to go, then, why would this person wanna go with me.

Romy: Yeah, and as a person that likes to visit museums very often, if anyone is here today but normally I don't do that. If I was wanting to visit I would look it up on Instagram and it would help if they had Instagram that I can look at to see what it is all about. I think it would help me in considering visiting.

Me: So, if you for example like the content and you think like "wow, that looks nice" you would go there?

Romy: Yeah.

Me: But I mean like also when you said - yesterday we visited the Rijksmuseum – I wouldn't go alone. It's more like a group thing.

Others: Agree.

Jennifer: Well, I mean for me personally I don't know if social media platform using Instagram would make me visit a museum. For example, I did visit a museum in London when I was by myself and it was the Modern Art Museum but it was because I was like "well, I'm not doing anything today and it is free to visit and I was like why not" so I checked it out. There were some cool things but I never actively was like look it up on Instagram and when I got there I didn't even think about Instagram, just walked around and checked it out. So, then I also went to another museum, the Van Gogh Museum in Amsterdam but I went because we had some friends visiting and they wanted to go but I never even thought about Instagram. So, I don't think it would for me influence considering visiting.

Me: If you're on Instagram just imagine you get like one of the accounts is shown to you on would you then consider it if you like the content?

Jennifer: That's true, yeah. I think if I did look at it on Instagram and it looked interesting I might actually gonna go. Like if I ever go visit this area I might go there. So, that's true.

Dina: Yeah. It's definitely that it would. If it's on Instagram it is way way more likely to consider going there because I can see what it is. For example, like there is a vegan bar somewhere in Amsterdam and somebody went there, someone I know. And I don't know how I know him but I found it and clicked it. I have vegan friends, so, I was like "hm, interesting place". Now I follow it and whenever me and my best friend, who is vegetarian, we'll go to Amsterdam, I'll be like "that place". So, in the same way I think if I saw like, I've been interested to go to the Kunsthal Museum Rotterdam, the modern museum I think or something like that. If I saw it then I would be like "let's go there next time" because I've seen that it's cool.

Me: But not like if you get the ad or something or don't see it with friends, you would not consider it. But if you really see such as account and think like "I like it" you would consider it?

Dina: Then, I would remember it instead of thinking like "museums" it wouldn't cross my mind, it would cross my mind.

Jennifer: Yeah, exactly what Mandy said earlier. If it was more prevalent in my surroundings.

Mandy: Like now you consciously have to make the decision "let's think about museums". I mean like on Instagram I'm not consciously looking at dresses or something but I still see them and I think "I'm so short". You know but it like it pops up. And I am interested in some dresses, I just don't buy them. Like for museums I feel like that might be the same and I feel like they are not at all effective in capturing new live.

Lisa: Yeah, it is like the other way around. Now, you have to approach the museum.

Many & Others: Exactly.

Me: They should be much more reaching out to.

Others: Agree.

Me: Especially, to the ones that use Instagram for example and they should reach out to them via ads or something.

Dina: I think if the purpose of using Instagram is to get more visitors, then yeah this would I like. Because as I said before nobody follows an account of a museum unless they already have an explicit intention to go. So, you're not growing your visitors.

Me: So, reaching out is very important.

Others: Agree.

Mandy: I feel like Instagram is also very much about connecting, so I feel like maybe yes to targeted ads but also just on their accounts like someone said before. If there is more interaction between like the followers and things, then it might become a trending hashtag or something, like you know.

Others: Yeah.

Mandy: I feel like society right now is just riding on all these trend waves and I feel like it's really easy to go like viral with something right now. Especially on TikTok. It reaches a lot of people.

Dina: I'm not on TikTok. Sorry.

Me: Me neither.

Mandy: I heard that some people just randomly reach like a million views or something. And I think if that is possible for like ordinary people that just do a little dance because it is trending, then, why not for something like this as well.

Dina: Actually, this is irrelevant but I was watching a video about TikTok and their algorithm has a beauty bias, so, the people who go viral are people who are conventionally attractive because you know, anybody can do a dance but like who's gonna go viral, the attractive ones. But they have it explicitly. Like they promote those.

Jennifer: Interesting.

Me: I didn't knew that.

Mandy: I also know that people in bikinis attract way more. Like they promote them more. And usually like if it's sunny it gets way more promoted then when it is cloudy or whatever. I saw a documentary on this.

SHOWING THE ACCOUNTS AGAIN

Me: I think I'm just showing you one time again, before we finish everything. I'm just going to show you the Dutch museums again.

Is there anything else that comes to your mind?

Mandy: Why did you choose to show these?

Me: I actually wanted to choose the Rijksmuseum but I wasn't allowed to choose it by my supervisor because he said it is too popular. That people might be biased. Because these ones are actually more local ones. Like the National Gallery in London. These are very popular places.

Dina: Is there anybody who goes to museums and goes then like "hm, yeah, yeah, you know what this is all about" but you're only pretending?

Mandy: When I think about all these people watching these things, I feel like they have wine in their hands and like toast with like an expensive cheese or something and they are like "I feel like the artist tried to explain this and this and I feel like his emotional state" and I'm just like wow lines, looks difficult.

Romy: Yesterday, I already told you that (looks at me), there was this guy that was looking at a painting in the Rijksmuseum and he was looking at it for like five minutes and he said "I can just feel that it's quiet".

Others: Laughing.

Romy: I had to try not to laugh.

Dina: I don't know. You feel like out of place in such a situation but I have a perverse motive to go and find these people and stand next to them. I'm like listen to them and laugh.

Me: But if you see this (pointing at the accounts on the slide) do you think you feel more connected to a museum when you see them on Instagram? And don't think about them with the wine glass and the cheese or not? How do you think about that?

Mandy: I don't necessarily find this very accessible because of my bias.

Romy: Maybe they should bring up more content that actually shows people who are visiting.

Mandy: Exactly.

Jennifer: Yeah.

Lisa: Definitely.

Mandy: If I see people my age.

Romy: Like if I see it like they would do it a little bit, it's good content.

Dina: I think that this lady (points at the account of Stedelijk Museum) is probably the artist. That was my first thought. What you said (Romy) is missing for me in all three (accounts) of them. Because I saw this woman (Stedelijk Museum) and thought that she was the artist and those people (Groninger Museum) are probably staff of the museum and I don't see anybody enjoying themselves in the museum.

Me: So, you miss the connection actually to the visitor and the museum.

Dina and Jennifer: Yeah.

Mandy: Just kind of the feel maybe. Like I don't need to see every piece pic on my screen but like maybe just if there is like, I don't know, an impressive hallway or something where some people are standing and it's just kind of like a diverse group of people standing there. Then, I'm like "well that's interesting", you know. Like I don't even have to see the piece clearly. Just if it looks niece and it feels accessible then, it's like "okay, I mean that's not that scary".

Dina: Actually, I thought of a good example. There is this thing in Amsterdam. I don't know the name but it's a science museum.

Me: Sorry for interrupting you. But is it Nemo?

Dina: Yeah.

Mandy: I've been there.

Others: Agree.

Dina: You know, it has a lot of both history but also places where you can do science experiments. And I think I feel like, when I was in there, there were a lot of photos of children and parents playing on the experiments and that immediately, this playful feeling like "I can go in there and put some things in a tube and try". There is like this action element. And you see the people and engage with them and having fun. So, definitely photos with people.

Others: Agree.

Mandy: Making it more relatable, family friendly. I feel like zoos also kind of like, well not exactly museums, but like I mean it is not like you can necessarily pet the bear like it's more something to watch but I feel like people are more inclined to go to the zoo than people would be inclined to go to a museum. Like if I think about a date day or something I would be like "we can go to a zoo. I wanna see a Zebra". It's not that I'm necessarily think like "let's go to this exact museum because there is this piece I wanna see".

Jennifer: I think it's also important what kind of museum. For example, modern art is really not my thing. I went to that special art museum to like kind of push my boundaries. But normally I'm like "pff, modern art". But like the national history museum which like you mentioned or the science museum, that's more like "that's cool", you know.

Me: Yeah, I mean you can do stuff there. But maybe that's also difficult for especially art museums to, you know, reach out to people because you can't touch the old paintings.

Jennifer: Yeah. And on top of that like just natural science is kind of more relatable, I feel like, because you can imagine it and you can, you know, like art it's hard to imagine.

Dina: But it just occurred to me that there is also a role that this kind of museums have as opposed like to science or zoos, because they can educate people like for example the bias that you have, that impression that people are like this, it comes from somewhere and you don't understand before going there and what you are going to experience. Like I went to the Rijksmuseum and I remember standing in front of that big painting with the girl and I had read about it. So, I could see in it like the beautiful light that falls on the girl and how skillful this painting was done to highlight her and I could appreciate it but without that knowledge I wouldn't know "I can go and see that" and how this painter managed to make the clouds or like the Italian country side looks that way. You don't know until you go there. So, an account like that (points at Valkhof) will help you. Like, for example that metal head, it could post a photo and say "this was made with this material, with this skillful craft" and then you can appreciate it and think like "I wanna see that".

Mandy: It might also be funnier like interact or something. I don't know if they like – as I said I'm not a museum goer – but do they have like – zoos have it – next to their piece an information card?

Me: Yeah, usually they have.

Mandy: It would be fun for those to maybe like make a picture of that and let the followers like guess from which piece is this or making like these little fun facts.

Others: Like that. Agree.

Mandy: Because you had the fun fact in your head and then you will be like "I appreciate that" (points at Dina).

Dina: This is a really nice idea.

Jennifer: I like it too.

Me: Because my next question would have been, if you could think about what they can do better – the art museums compared to for example the science museum in Amsterdam. If there is anything else that you can think about? I like Mandy's idea.

Others: Agree.

Mandy: Please hire me.

Others: Laughing.

Me: Can you think about something else? That they could do.

Romy: I think more interaction. Also, in stories and stuff you can add competitions, questions and that kind of stuff. I think that this could help with interaction with others.

Mandy: I don't know if they repost stuff in their stories but like if someone tags them then they might, especially from different diverse audiences, share it.

Me: They can spread the information.

Mandy: And also, when people are visiting they might like ask them or have like picture moments or something. For example, a school trip group they might have like a memory thing there and they can also post that on Instagram and they have extra advertisement. For free.

Others: Agree.

Dina: Picture moments is a great idea. Because it reminds me of, I don't know if you guys this Instagram account Humans of New York. He is a photographer. He takes photos of people and shares their stories and it's really captivating. Of course, they are really long stories but you see a person's face and then you can read their story. It's really nice and in a museum that provided that visitors' content they could be photographed and ask them "what motivated you to come here?". And then boom. You have something that potential visitors like to see.

Mandy: I can relate to that.

Others: Agree.

Mandy: I feel like that's what we miss most.

Me: That you can't relate with them and the people that visit?

Jennifer: Yeah.

Mandy: Yeah, because like none of the people around me are talking about museums, I cannot really relate to that and not of anything I see on Instagram I can relate with, with regards to this topic. And I feel like if there would indeed be like stranger, even if it's a stranger, but if it peaks my interest then, I am more likely to go.

Me: They do it at the university's Instagram page. They sometimes post pictures of people and tell their story.

Mandy: But I really like that.

Me: I like that, too.

Others: Yeah. Agree.

Mandy: I always read like the international stories because I find it really interesting how people experience a country that I feel comfortable with. And then, like – totally off topic, I'm so sorry – but I was in the gym the other day and like this girl randomly starts talking to me and I needed to change some weights and stuff and then, she came from like South Africa, I don't know where, but a different continent, and we started talking about like family life and stuff and I was like "wow" because to her everyone here seemed so cool and individualistic and I'm like "oh, sorry".

LAST QUESTION (MIGHT ALSO BE USEFUL FOR MY CHOICE IN THE SURVEY)

Me: Now, I think if you want, just if you would see one of these museums, is there one where you say I like this page most? Is there a page that feels most appealing to you? If you would see this page, would you consider visiting it?

Romy: I think I would choose Stedelijk Museum Amsterdam because it just looks more attractive to me and more clear. They have like a clear plan it seems like. Like the color scheme that they use and it looks just very professional.

Lisa: And it also says "welcome"

Jennifer: I noticed that too.

Me: So, very open, aesthetic…

Romy: Yeah.

Jennifer: Yeah. I would actually choose Stedelijlk as well, because it says "welcome". The colors are very like pop out. So, it's easy to grab the attention. Also, I like that it says "we are open" and they have the hours on it because I'm constantly looking for the opening hours. So, that's really nice.

Dina: My reason for picking this one is – and I have things that I dislike about each one of them – but the Stedelijk Museum has the one thing that I think is important, the "learn" story. So, you can learn about, it says like about art. That's cool. I don't just wanna go to the museum to learn about the art, tell me now. I would click on that and I that's the main reason why a would probably pick this because I would learn what they have before going there.
Me: What about you Mandy?
Mandy: Well, I would not visit but I do like the layout of their page most. Because like those colors. Like the effect that they saved their stories. I find that very clear and appealing and indeed the learn thing, that would be really nice and I would click on that. Aesthetic wise I think I would go for like the middle one (Valkhof Museum), because I really like popping colors and stuff. And I feel like the other is a little bit to dim for me maybe and also, I'm mostly surrounded by a bit more gloomy and going for the more poppy colors would be out of my comfort zone.
Me: I'm mean also maybe with the "learn" part with the Stedelijk Museum maybe it's also somehow that they try to connect with people.
Dina: Educate. Because it is part of their work.
Mandy: I like that it's a choice, because we're all, from a university, we're all pretty high educated but I mean like, I don't think if my parent would ever go to a museum like this, that they would be interested necessarily in learn about things beforehand. And I like that it is an option to learn about it and not a must do.
Jennifer: I mean these look really cool, too. But it's just that it doesn't, you like actually have to really look into it and with this you know immediately what it is.
Mandy: I feel like that one (Groninger Museum) is a little bit messy.
Jennifer: Agrees.
Mandy: Like it feels like something I would do when I have time. I mean like I don't know how to make those things colorful and neat, you know. But it would probably look like that.
Dina: To be honest, I think the person who created this page has an understanding of how a page should look because you not just post individual things and these two suffer from bad creativity (the Grononger and Valkhof).
Mandy: I feel like this one (Groninger) is the worst.
Dina: The worst. What I dislike about that one (Groningen) is that it feels like they are trying to say "this is who we are". I think these are staff members and down there you see "Groningen" and like that's cool but I wanna know what you have and what you would like to share with me and the greater public. The learn ability is most important for me. I don't care if you are from Groningen and that you do this. I wanna learn what you can tell me.
Mandy: And also, maybe the aesthetics. Like I don't see clear aesthetic there. I only see grey, white, black pieces. I don't see only fluid ones and there are randomly two people on your page. Like "what is this?". I would like to see maybe more of a theme going on. It doesn't have to be the exact same color scheme but you can make choices and I think they made not the most optimal choices for an attractive page.
Dina: Actually, I will follow the Valkhof museum now.
Me: That's nice to hear. If you don't have anything to add. I think we can wrap it up.
Jennifer: Did you mention what page you would choose (asks Lisa)?
Lisa: I would also choose Stedelijk, because it is the most clear and easy to go through one.
Me: Great. Thank you all.
ENDING OF THE RECORDING

Appendix 2.0 Quantitative part

Appendix 2.1 Questionnaire design

The questionnaire for the survey was designed via Qualtrics.

Dear participant,

Thank you for your interest in filling in this survey.

My name is Katja Heijmans. I am a Master student in Marketing at the Radboud University Nijmegen. This survey is part of my master thesis. My research is about social media usage by museums and the influence that this can have on the behavior of possible visitors that are 18 to 35 years old. It will only take approximately 5-10 minutes. Your answers will remain completely anonymous and will only be used for my master thesis.

If you have any questions or issues, do not hesitate to send me an e-mail to katja.heijmans@ru.nl.

Again, thank you very much for your participation in my research. By clicking on the arrow below, you agree to proceed to the survey.

INTRO

In the video clip below you will see a short outline of the Instagram account of Stedelijk Museum Amsterdam. Please look at it carefully.

Answer the following parts of this survey based on your thoughts about this shown social media account of a Dutch museum.

video clip from the Instagram account of Stedelijk museum Amsterdam

Social Media Usage by museum (measured on a 7-point Likert scale from strongly disagree to strongly agree)

After seeing the Instagram account of Stedelijk Museum Amsterdam, please rate the following statements on how much they apply to you.

Q1 Using the museum's social media account looks fun.

Q2 Contents shown on the museum's social media account seem interesting.

Q3 The museum's social media account enables information sharing with others.

Q4 Conversation or opinion exchange with others is possible through the museum's social media account.

Q5 It is easy to deliver my opinion through the museum's social media account.

Q6 Contents shown in the museum's social media account include the newest information.

Q7 Using the museum's social media account is very trendy.

Q8 I would like to pass along information on brand, product, or services from the museum's social media account to my friends.

Q9 I would like to upload contents from the museum's social media account on my own account or blog.

Behavioral intentions

If you think about Stedelijk Museum Amsterdam and their social media account on Instagram that you saw in the begin of this survey. Please rate the following words on how much they apply to your thoughts about a museum that is present on and uses social media.

Attitudes (measured on a 7-point Likert scale)

A museum that uses social media is...
Q10 Important…Unimportant
Q11 Attractive…Unattractive
Q12 Unfavorable…Favorable
Q13 Bad… Good
Q14 Pleasant…Unpleasant
Q15 Nice…Awful

Subjective Norms (measured on a 7-point Likert scale from strongly disagree to strongly agree)

The following statements are about your thoughts, behavior and intension that you have in mind when you see a museum that uses social media and is present on a platform like Instagram.

Q16 Most people who are important to me think I should visit a museum that uses social media.
Q17 Most people who are important to me approve me visiting a museum that uses social media.
Q18 Most people who are important to me think it is good for me to visit a museum that uses social media.
Q19 Most people like me have visited a museum that uses social media.

Perceived behavioral control (measured on a 7-point Likert scale from strongly disagree to strongly agree)

Q20 If I wanted, I could easily visit a museum that uses social media from now on.
Q21 I am confident that I can visit a museum that uses social media.
Q22 The decision to visit a museum that uses social media is up to me.

Visit Intention (measured on a 7-point Likert scale from strongly disagree to strongly agree)

Next, the following statements are about your intention to visit a museum that uses social media.

Q23 I intend to visit a museum that uses social media in the future.
Q24 It is likely that I will visit a museum that uses social media in the future.
Q25 I plan to visit a museum that uses social media in the future.

Demographics

Almost done!

In this part of the survey some general information is needed.

Q26 Are you:

- Male
- Female
- Non-binary / third gender
- Prefer not to say

Q27 Are you:

- Under 18
- 18 – 25
- 26 – 35
- 36 or older

Q28 Please state your nationality: _____

Q29 Please state the highest educational level that you obtained:

- Less than high school
- High school
- Bachelor
- Master
- Ph.D.
- Prefer not to say
- Other

I would like to end this survey with a last question.

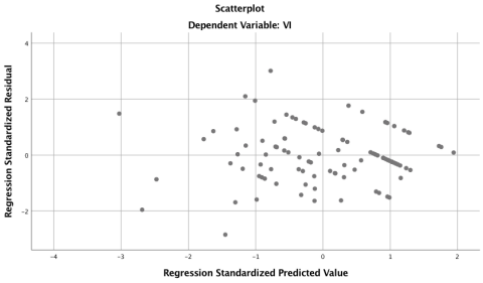
Q30 Have you been to Stedelijk Museum Amsterdam before?

- Yes
- I don't know
- No

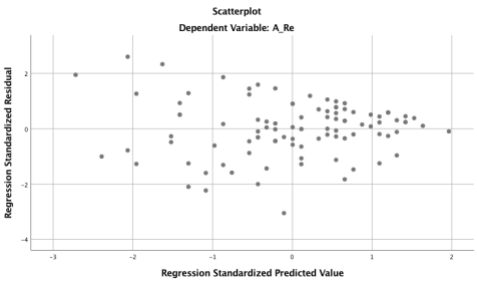
Appendix 2.2 Regression analysis SPSS – Scatterplot

(DV = dependent variable)

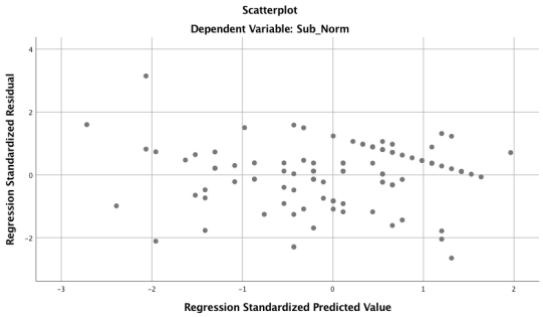
DV: Visit intention



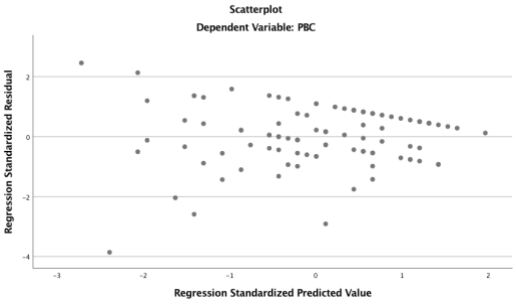
DV: attitudes



DV: subjective norms



DV: perceived behavioral control



Appendix 2.3 Regression analysis SPSS – Multicollinearity

1. Dependent variable: perceived behavioral control

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4,394	,366		11,992	,000	3,667	5,122					
	SMU	,371	,075	,448	4,940	,000	,222	,520	,448	,448	,448	1,000	1,000

a. Dependent Variable: PBC

2. Dependent variable: subjective norms

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,190	,467		2,548	,012	,263	2,118					
	SMU	,756	,096	,626	7,900	,000	,566	,946	,626	,626	,626	1,000	1,000

a. Dependent Variable: Sub_Norm

3. Dependent variable: attitudes

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3,678	,381		9,659	,000	2,922	4,434					
	SMU	,477	,078	,527	6,111	,000	,322	,632	,527	,527	,527	1,000	1,000

a. Dependent Variable: A_Re

4. Dependent variable: Visit intention

Coefficients[a]

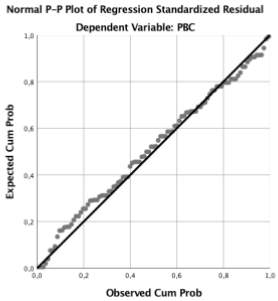
Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95,0% Confidence Interval for B Lower Bound	95,0% Confidence Interval for B Upper Bound	Correlations Zero-order	Correlations Partial	Correlations Part	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	2,340	,436		5,367	,000	1,475	3,206					
	SMU	,630	,089	,582	7,049	,000	,452	,807	,582	,582	,582	1,000	1,000
2	(Constant)	1,058	,644		1,642	,104	-,221	2,337					
	SMU	,228	,102	,211	2,236	,028	,026	,431	,582	,225	,155	,543	1,841
	A_Re	-,005	,103	-,004	-,052	,959	-,210	,199	,414	-,005	-,004	,651	1,537
	Sub_Norm	,449	,090	,501	5,000	,000	,271	,627	,710	,458	,347	,480	2,084
	PBC	,175	,116	,134	1,508	,135	-,055	,405	,522	,154	,105	,615	1,626

a. Dependent Variable: VI

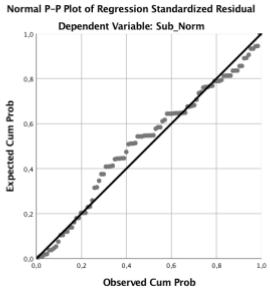
Appendix 2.4 Regression analysis SPSS – Normal distribution (p-p plot)

(DV = dependent variable)

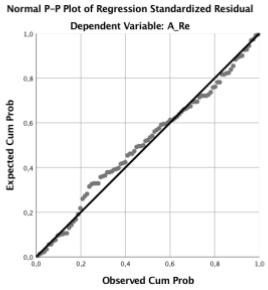
DV: perceived behavioral control



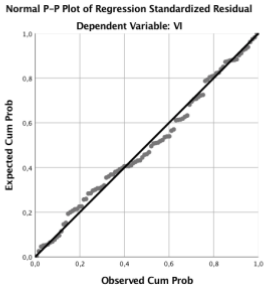
DV: subjective norms



DV: attitudes



DV: visit intention



Appendix 2.5 Regression analysis SPSS – Model summary & Durbin Watson

1. Dependent variable: perceived behavioral control

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	Change Statistics F Change	Change Statistics df1	Change Statistics df2	Change Statistics Sig. F Change	Durbin-Watson
1	,448[a]	,201	,193	,75857	,201	24,408	1	97	,000	1,863

a. Predictors: (Constant), SMU

b. Dependent Variable: PBC

2. Dependent variable: subjective norms

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,626[a]	,392	,385	,96719	,392	62,413	1	97	,000	1,513

a. Predictors: (Constant), SMU
b. Dependent Variable: Sub_Norm

3. Dependent variable: attitudes

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,527[a]	,278	,271	,78831	,278	37,347	1	97	,000	1,920

a. Predictors: (Constant), SMU
b. Dependent Variable: A_Re

4. Dependent variable: visit intention

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,582[a]	,339	,332	,90272	,339	49,688	1	97	,000	
2	,739[b]	,546	,527	,75953	,208	14,340	3	94	,000	1,799

a. Predictors: (Constant), SMU
b. Predictors: (Constant), SMU, PBC, A_Re, Sub_Norm
c. Dependent Variable: VI

Appendix 2.6 PROCESS tool by Hayes SPSS output

Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.5 *****************

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

****
Model : 4
Y : VI = visit intention
X : SMU = social media usage
M1 : A_Re = attitudes
M2 : Sub_Norm = subjective norms
M3 : PBC = perceived behavioral control

Sample
Size: 99

****
OUTCOME VARIABLE:
A_Re

Model Summary

R	R-sq	MSE	F(HC3)	df1	df2	p
,5272	,2780	,6214	23,9332	1,0000	97,0000	,0000

Model

	coeff	se(HC3)	t	p	LLCI	ULCI
constant	3,6780	,5146	7,1472	,0000	2,6566	4,6994
SMU	,4768	,0975	4,8922	,0000	,2833	,6702

Standardized coefficients

	coeff
SMU	,5272

Covariance matrix of regression parameter estimates:

	constant	SMU
constant	,2648	-,0497
SMU	-,0497	,0095

****

OUTCOME VARIABLE:
Sub_Norm

Model Summary

R	R-sq	MSE	F(HC3)	df1	df2	p
,6257	,3915	,9354	38,4078	1,0000	97,0000	,0000

Model

	coeff	se(HC3)	t	p	LLCI	ULCI
constant	1,1903	,6141	1,9383	,0555	-,0285	2,4091
SMU	,7562	,1220	6,1974	,0000	,5140	,9983

Standardized coefficients

	coeff
SMU	,6257

Covariance matrix of regression parameter estimates:

	constant	SMU
constant	,3771	-,0740
SMU	-,0740	,0149

****

OUTCOME VARIABLE:
PBC

Model Summary

R	R-sq	MSE	F(HC3)	df1	df2	p
,4484	,2010	,5754	9,7997	1,0000	97,0000	,0023

Model

	coeff	se(HC3)	t	p	LLCI	ULCI
constant	4,3943	,6153	7,1419	,0000	3,1731	5,6154
SMU	,3709	,1185	3,1304	,0023	,1357	,6060

Standardized coefficients

	coeff
SMU	,4484

Covariance matrix of regression parameter estimates:

	constant	SMU

constant	,3786	-,0725
SMU	-,0725	,0140

****
OUTCOME VARIABLE:
VI

Model Summary

R	R-sq	MSE	F(HC3)	df1	df2	p
,7392	,5464	,5769	18,2461	4,0000	94,0000	,0000

Model

	coeff	se(HC3)	t	p	LLCI	ULCI
constant	1,0578	,8175	1,2939	,1989	-,5654	2,6810
SMU	,2281	,1202	1,8971	,0609	-,0106	,4667
A_Re	-,0054	,1211	-,0442	,9648	-,2458	,2351
Sub_Norm	,4489	,1064	4,2174	,0001	,2375	,6602
PBC	,1747	,1250	1,3978	,1655	-,0735	,4230

Standardized coefficients

	coeff
SMU	,2108
A_Re	-,0045
Sub_Norm	,5013
PBC	,1336

Covariance matrix of regression parameter estimates:

	constant	SMU	A_Re	Sub_Norm	PBC
constant	,6683	-,0020	-,0475	,0096	-,0647
SMU	-,0020	,0145	-,0062	-,0053	-,0011
A_Re	-,0475	-,0062	,0147	-,0018	-,0004
Sub_Norm	,0096	-,0053	-,0018	,0113	-,0048
PBC	-,0647	-,0011	-,0004	-,0048	,0156

Test(s) of X by M interaction:

	F(HC3)	df1	df2	p
M1*X	,1421	1,0000	93,0000	,7071
M2*X	,6205	1,0000	93,0000	,4329
M3*X	,0008	1,0000	93,0000	,9773

********** TOTAL EFFECT MODEL **********
OUTCOME VARIABLE:
VI

Model Summary

R	R-sq	MSE	F(HC3)	df1	df2	p
,5820	,3387	,8149	28,4241	1,0000	97,0000	,0000

Model

	coeff	se(HC3)	t	p	LLCI	ULCI
constant	2,3403	,6159	3,7995	,0003	1,1178	3,5627
SMU	,6297	,1181	5,3314	,0000	,3953	,8641

Standardized coefficients

	coeff
SMU	,5820

Covariance matrix of regression parameter estimates:

	constant	SMU
constant	,3794	-,0721
SMU	-,0721	,0140

********** CORRELATIONS BETWEEN MODEL RESIDUALS **********

	A_Re	Sub_Norm	PBC	VI
A_Re	1,0000	,2437	,2865	,0000
Sub_Norm	,2437	1,0000	,4432	,0000
PBC	,2865	,4432	1,0000	,0000
VI	,0000	,0000	,0000	1,0000

********** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **********

Total effect of X on Y

Effect	se(HC3)	t	p	LLCI	ULCI	c_ps	c_cs
,6297	,1181	5,3314	,0000	,3953	,8641	,5702	,5820

Direct effect of X on Y

Effect	se(HC3)	t	p	LLCI	ULCI	c'_ps	c'_cs
,2281	,1202	1,8971	,0609	-,0106	,4667	,2065	,2108

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,4017	,0870	,2226	,5633
A_Re	-,0026	,0577	-,1266	,1070
Sub_Norm	,3394	,0909	,1707	,5246
PBC	,0648	,0419	-,0184	,1509
(C1)	-,3420	,1203	-,5836	-,1125
(C2)	-,0674	,0755	-,2215	,0843
(C3)	,2746	,1109	,0714	,5094

Partially standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,3637	,0658	,2195	,4833
A_Re	-,0023	,0534	-,1158	,1025
Sub_Norm	,3073	,0670	,1756	,4365
PBC	,0587	,0391	-,0163	,1419
(C1)	-,3096	,0971	-,4945	-,1125
(C2)	-,0610	,0697	-,2058	,0784
(C3)	,2486	,0892	,0729	,4256

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,3712	,0698	,2152	,4894
A_Re	-,0024	,0534	-,1147	,1031
Sub_Norm	,3137	,0717	,1735	,4541
PBC	,0599	,0383	-,0165	,1378
(C1)	-,3161	,0995	-,5008	-,1123
(C2)	-,0623	,0692	-,2016	,0793
(C3)	,2538	,0939	,0717	,4410

Specific indirect effect contrast definition(s):

(C1)	A_Re	minus	Sub_Norm

(C2) A_Re minus PBC
(C3) Sub_Norm minus PBC

********** ANALYSIS NOTES AND ERRORS **********

Level of confidence for all confidence intervals in output:
95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

------ END MATRIX -----

Appendix 2.7 Control variable – Pearson partial correlation SPSS output

Correlations

Control Variables			VI	SMU	A_Re	Sub_Norm	PBC	Have you been to Stedelijk Museum Amsterdam before?
-none-[a]	VI	Correlation	1,000	,582	,414	,710	,522	-,084
		Significance (2-tailed)	.	,000	,000	,000	,000	,409
		df	0	97	97	97	97	97
	SMU	Correlation	,582	1,000	,527	,626	,448	-,024
		Significance (2-tailed)	,000	.	,000	,000	,000	,813
		df	97	0	97	97	97	97
	A_Re	Correlation	,414	,527	1,000	,491	,454	,005
		Significance (2-tailed)	,000	,000	.	,000	,000	,960
		df	97	97	0	97	97	97
	Sub_Norm	Correlation	,710	,626	,491	1,000	,590	-,072
		Significance (2-tailed)	,000	,000	,000	.	,000	,477
		df	97	97	97	0	97	97
	PBC	Correlation	,522	,448	,454	,590	1,000	,004
		Significance (2-tailed)	,000	,000	,000	,000	.	,971
		df	97	97	97	97	0	97
	Have you been to Stedelijk Museum Amsterdam before?	Correlation	-,084	-,024	,005	-,072	,004	1,000
		Significance (2-tailed)	,409	,813	,960	,477	,971	.
		df	97	97	97	97	97	0
Have you been to Stedelijk Museum Amsterdam before?	VI	Correlation	1,000	,582	,416	,708	,524	
		Significance (2-tailed)	.	,000	,000	,000	,000	
		df	0	96	96	96	96	
	SMU	Correlation	,582	1,000	,528	,626	,449	
		Significance (2-tailed)	,000	.	,000	,000	,000	
		df	96	0	96	96	96	
	A_Re	Correlation	,416	,528	1,000	,493	,454	
		Significance (2-tailed)	,000	,000	.	,000	,000	
		df	96	96	0	96	96	
	Sub_Norm	Correlation	,708	,626	,493	1,000	,591	
		Significance (2-tailed)	,000	,000	,000	.	,000	
		df	96	96	96	0	96	
	PBC	Correlation	,524	,449	,454	,591	1,000	
		Significance (2-tailed)	,000	,000	,000	,000	.	
		df	96	96	96	96	0	

a. Cells contain zero-order (Pearson) correlations.