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STUDENT REPORT

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Abstract

This thesis studies how social media platforms' structure diabetes-related content and its consequences on public perception and community creation. Using framing theory as a lens, I will investigate several frames to gain a better understanding of how they affect awareness, stigma, and engagement. Instagram, TikTok, and Facebook were examined, focusing on three separate influencers, celebrities, and organisations. This study stresses social media's dual role: as a valuable tool for establishing supportive groups and disseminating essential health information and as a conduit for misinformation.

Methodologically, the study combines interpretive and comparative analyses of diabetes-related posts, focusing on how narratives are constructed and accepted. User interactions and content impact are contextualised using insights from health communication theories such as the Health Belief Model and Social Cognitive Theory. These findings show that, whereas human-interest frames can improve empathy and connection, responsibility frames frequently reinforce stereotypes concerning lifestyle-related diseases such as diabetes.

This study emphasises the need for strategic framing in social media health communication. It calls for collaborations between influencers, celebrities, health organisations, and platforms to promote accurate and empowering narratives. The implications include strengthening public health policies, eliminating disinformation, and using social media to facilitate meaningful dialogue about chronic diseases like diabetes.

1. Introduction

Diabetes is a chronic disease affecting an estimated 828 million people as of 2022, according to findings from the Lancet (Zhou et al., 2024). Aside from affecting the millions of people who live with diabetes, their family, friends, and loved ones are all, to some extent, affected by the disease. Thus, diabetes affects many lives worldwide. In later years, people in low- and middle-income countries have seen the most significant rise in new diabetes cases, compared to high-income countries (Zhou et al., 2024). Moreover, diabetes is one of the leading causes of death, with 31.1 of 100.000 people dying of diabetes-related issues in 2021 in the USA (CDC, 2024). With so many people affected by diabetes, much of the information available can be found in many places; some of this information comes from the different health organisations, hospitals, and online/offline communities that meet and share experiences, and some from social media platforms.

Social media has become increasingly influential in everyday life, with the rise of different social media platforms and content creation and creators used by most companies for marketing (McColman, 2024). However, not all content on social media is for marketing. Celebrities also use social media to connect with their fans, everyday people who want to connect with friends and family, organisations who want to share what they work to achieve, and influencers who have made a career out of sharing information about their lives and what they do (Dollarhide, 2024). Social media has a significant effect on how the world views different things; this became much more evident during COVID-19 when information and misinformation flourished throughout the internet and left many people scared and confused (Jasper & Ronn, 2020) just as COVID-19 other diseases are also influenced by what is being shared on social media, hereunder, diabetes.

This research examines how social media content shapes conversations about diabetes through frames and how these can be interpreted for people with diabetes. By describing diabetes, social media, and influencers and examining additional literature surrounding health communication and diabetes, the framework for the analysis and discussion will be laid, allowing a deeper examination of social media posts about diabetes.

1.1 Diabetes Type 1 vs. Type 2

As mentioned, diabetes is a chronic illness that affects many people worldwide. But what type of chronic disease is it, and what are the different types?

Diabetes is a disease that can affect anyone anywhere and at any stage in their life; what happens when one gets diabetes is that their pancreas either stops working entirely or has a difficult time producing insulin (WHO, 2023). Insulin is a hormone that develops in the pancreas, and it helps the body regulate the glucose levels in the blood. The main symptoms of unregulated diabetes include frequent urination, being very thirsty, blurred vision, being tired, and losing vast amounts of weight unintentionally (WHO, 2023). If experiencing any of these, the person likely has what is referred to as hyperglycaemia or high blood sugar. If not treated or discovered in time, hyperglycaemia can lead to numerous issues later in life, especially nerve and blood vessel damage (WHO, 2023).

Diabetes is a chronic disease that can date back hundreds of years. Some early pioneers in diabetes treatment include Greek physicians Sushruta, Arataeus, and Thomas Willis, who prescribed horseback riding to minimise the need to use the bathroom too often (Mandal, 2009). It was not until 1889 that Joseph von Mering and Oskar Minkowski discovered that the pancreas had a central role in diabetes, and it was not until 1910 that Sir Albert Sharpy-Schafer found that diabetes was the result of lacking insulin (Mandal, 2009). The first indication of medical treatment came from Sir Frederick Grant Banting and Charles Herbert Best in 1921, where they demonstrated that they could reverse induced diabetes in dogs if they gave them an extract from the pancreatic islet of Langerhans of healthy dogs (Mandal, 2009). They furthered their study with the help of chemist James Collip in 1922 when they purified insulin in a way that led to an effective treatment for diabetes. They won the Nobel Prize in 2023 (Mandal, 2009).

In 1936, Sir Harold Percival Himsworth discovered that two types of diabetes can be differentiated. Type 1 Diabetes (T1), often known as the juvenile or childhood-onset type, is characterised by being dependent on insulin injections every day because your pancreas can no longer produce insulin itself. It is also the type where there has yet to be a way to prevent it or the reason that people get it (WHO, 2023). However, it is believed to have something to do with genes and environmental factors (NIDDK, 2024).

Type 2 (T2) diabetes differs from T1 in that the body stops using the insulin it has properly, thus needing help to do so (WHO, 2023). Another aspect where T2 differentiate is that it is preventable with proper exercise and diet. There are signs of what could lead to T2 diabetes, which include being overweight, not getting enough exercise, and genetics. T2 diabetes was referred to as non-insulin dependent and adult-onset, but it is becoming more frequent in young adults and children (WHO, 2023). Generally, for both types of diabetes, is that it must be discovered early on to prevent the damage that diabetes can lead to. Therefore, the patient must take many things into account as they manage their diabetes.

Today, there are many ways to treat diabetes, and it mostly comes down to each person and what works best for them. For people with T1 diabetes, monitoring their blood sugar levels is essential whenever they eat, exercise, go out, and generally do anything. This can be done in multiple ways. Some people use test methods where they prick a hole in their finger and then use a glucose monitor to analyse their levels. Some people have a censor on their arms or legs that constantly checks their blood sugar levels, which they can access from their phones. Some people inject insulin into their stomachs with an insulin pen, and some use a pump that injects it automatically. For T2 people with diabetes, it is also possible to take a pill or get surgery. There has not yet been found a cure for diabetes except for pancreas transplantation, which is a complicated procedure and, therefore, not one that is done very often (Diabetes - Diagnosis and Treatment - Mayo Clinic, 2024). Many factors play a role when someone needs to handle their blood sugar levels, and it has already been mentioned that food and exercise are some of them. In 2018, Clinical Diabetes published a hand-out within which people could see what made their glucose levels rise and fall, including dehydration, stress, pain, menstrual periods, or being sick with the flu or a cold (Clinical Diabetes, 2018). Because of the many factors that can affect diabetes, it is essential for newly diagnosed to have ongoing communication with health personnel and maybe other diabetics who can share their experiences.

1.2 Communication

Communication is a central part of living; whether it is dancing to get a mate's attention like birds do, using different whistles, clicks and pulsed calls like whales do, or using words and body language like people do, communication plays a significant role in how any animal goes about their life. Communication has always been a changing concept for humans, all the way back to the Egyptians (3500 BC), who used symbols to convey their stories (Nguyen, 2021), to today, where one of the most prominent ways of communicating is through social media and electronic devices (Crawford, 2021). Communication also plays a significant role in how people make sense of the world around them; this will be mentioned and explained later.

As mentioned, communication can take many forms. Though we use social media today to share our minds in writing, it has also become a place for sharing pictures, videos, and gifs (short clips without sound), making communication so much more than just what we put in writing. By sharing videos and photos, we can also share our body language and other factors that play into communication.

Communication is also crucial for health issues because how the information is communicated can shape people's reactions. As seen with the COVID-19 vaccine and its promotion, there were many concerns because it came out too fast, had not been appropriately tested, and so on. Here, communication played an enormous role in reassuring people about their decision to get the vaccine because there were many who died from it or was afraid of dying from it (Chou & Budenz, 2020). One of the significant reasons for Covid-19 vaccines to be so unpopular was the information and misinformation that flourished throughout social media. It was challenging because the subject was so emotional to those who had lost relatives and friends during the pandemic (Chou & Budenz, 2020).

Social media play a significant role in communication and how different subjects are viewed; therefore, the next section will go into more detail about social media and social media platforms.

1.2.1 Social Media

Social media started out as a way for people to interact with people, share ideas and information, and generally get in contact with friends and family. The popularity of social media has only grown since 2004, when MySpace was the first network to reach one million monthly users. Today social media has over five billion active users across platforms (Dollarhide, 2024). The term social media was first coined in 1994 in Tokyo (Aichner et al., 2020). Today, 46% of internet users get their news through social media, whereas 40% access new through news websites. These numbers indicate that social media is an essential part of communication and that it is vital for news media to be present on social media to reach a broad audience (Dollarhide, 2024).

Social media is used for a variety of things today. Some platforms are tailored explicitly for hobbyists, and others to people's work lives. It can also be used to share different views on various subjects such as politics, health, etcetera. Because of the many people who now use and have access to social media, it has also become important for governments to include social media as a tool for conveying information, so have health care areas and many others (Dollarhide, 2024). Social media has significantly impacted the world's interconnectedness because of how easy it is to share information worldwide. However, this also comes with some downsides, namely, the spread of misinformation (Dollarhide, 2024). According to Mayo Clinic, social media can negatively impact teens because they are likely to overuse it, which can have less than ideal impacts on their mental health (Dollarhide, 2024). On the other hand, social media has proven to be a valuable tool for businesses because they can use it to reach their consumers and gain more consumers more efficiently than before (Dollarhide, 2024).

There are many social media platforms, and they each have a unique use and way of sharing content. Some can use the same form of sharing, but what is shared can vary from platform to platform. An example of this could be Facebook vs. LinkedIn. Facebook is the most used social media platform (Dollarhide, 2024), mainly used to contact family and friends and post about things you do in your free time (Lin, 2024). LinkedIn is a business platform where people can find new hires or jobs, share their professional accomplishments, and discuss business ideas (Peek, 2020). Even though these two share

content in the same way, they are very different. Therefore, this study will provide some information on each social media platform used to collect the data.

1.2.1.1 Facebook

Facebook started in 2003 when Mark Zuckerberg came up with the idea to make a dating site called "Facemash", where he hacked into Harvard's security network to grant him access to all the people on campus and their pictures, he then uploaded it so people could see each other and decide if they were hot. However, Harvard executives quickly shut this down, which ultimately ended in Zuckerberg being expelled (Bellis, 2024). In 2004, Zuckerberg launched a new website he called "TheFacebook" instead of deciding who was hot and who was not, TheFacebook was meant to be a way for Harvard students to connect more easily. The invention also got Zuckerberg into trouble with some Harvard Seniors who claimed that Zuckerberg had stolen their idea. This dispute, however, was settled out of court, and TheFacebook kept being available.

At first, the only people who could access this website were people enrolled on Harvard University. However, Zuckerberg brought in some fellow students to grow the website to multiple other universities and colleges (Bellis, 2024). Later, in 2004, Sean Parker, founder of Napster, became president of the company and decided to change the site's name to "Facebook". In 2006, Facebook announced that everyone with a valid e-mail address at least 13 years old could use it. It was no longer restricted to university, college, and high school students. By 2009, Facebook had become the most used social network in the world (Bellis, 2024). From there, the website has continued to grow, and as of January 2023, Facebook had just short of three billion users (Dollarhide, 2024). However, in 2023, it was reported that only 33% of teens in the United States of America used Facebook. Instead, they gravitate toward platforms like TikTok and Snapchat (Ponek, 2024). In October 2021, Facebook changed its name to Meta, creating the Metaverse. The company brand was only linked to Facebook and not Instagram and WahtsApp which the company also owns (Stokel-Walker, 2021).

As mentioned, Facebook is widely used to connect with family and friends. Lin (2024) presents a table in which the "percentage of active Facebook users who do the following on the platform" where shows that 72,4% use Facebook to massage friends and family, 63,2% use it to post or share photos or videos, 58,2% use it to keep up to date with

current news and events, 54,7% is used to look for entertaining content, and 53% is used to follow or research brands and products (Lin, 2024). This shows that today, Facebook is used for many things and by many entities. Businesses have seen how important Facebook has become and how fast its influence has grown, which is why around 90% of businesses have a profile on Facebook, so they can share their brands and what they sell and interact with people through an easily accessible platform (Lin, 2024). Facebook has become a significant player in marketing, and businesses must know how to use and navigate Facebook to market themselves and what they sell. The biggest age group that is using Facebook today is from 25-34, and they make up 29.9% of the users, which fits with the age group that grew up with learning what Facebook was and having that as the biggest social media platform (Lin, 2024). With such a significant user platform that aims to make communication easier, it is safe to say that Facebook has had a prominent impact on communication; with it still being the most used platform, it still holds some power over what is shared and discussed in people's lives.

1.2.1.2 Instagram

As mentioned, Meta owns Instagram and Facebook; however, this has not always been the case. Instagram emerged 2010 and rapidly gained popularity in the first three months by hitting one million subscribers (Blystone, 2015). The idea for Instagram started with the 27-year-old Graduate from Standford University, Kevin Systrom. Systrom was working at the travel recommendation startup company Nextstop. Even though Systrom had no coding experience, he quickly learned while working for Nextstop. The first idea for Instagram came through the app called "Burbn", which was a way to rate different whiskeys and bourbon and allowed the users to use a check-in feature to share where they had found this drink that they liked.

The primary thing that set Burbn aside from many other social media startups was its photo-sharing feature because no other app had this type of photo-sharing (Blystone, 2015). In March 2010, Systrom was invited to a party for a startup called "Hunch" in Silicon Valley. During this party, Systrom met two people from Baseline Ventures and Andressen Horowitz and showed them the prototype for his app. Afterwards, they all met for coffee, and it was here that Systrom decided to focus solely on Burbn and quit his job. He managed to raise $500.000 for funding and then hired one of his classmates from

Stanford, Mike Kreiger (Blystone, 2015). After this, they reassessed the app and ultimately focused on photographs taken explicitly on mobile devices. They looked to the app called "Hipstamatic" for the features it applied to photosharing and because of its popularity at the time. However, they soon realised that Hipstamatic lacked the social media-sharing capabilities they were after and saw a potential in making and app that did the same as Hipstamatic and Facebook combined (Blystone, 2015). Following this realisation, they took another look at Burbn. They decided to strip it of all its features except commenting, liking, and sharing photos and renamed Burbn to Instagram, a combination of the words instant and telegram.

The day Instagram was launched to the public, October 6th, 2010, it gained 25.000 users in one day, and by December, the app had been downloaded 100.000 times on IOS phones (Blystone, 2015). Because of its enormous popularity in a relatively short amount of time, many investors became interested in Instagram, and one of Instagram's investors valued the company at around $25 million at the beginning of 2011. Systrom and Kreiger were still set on keeping the company small even though it had attracted many eyes and only had about a dozen people working on it. Jack Dorsey, the co-founder of Twitter, was an acquaintance of Systrom and made it clear that he was interested in buying the company for $500 million worth of stocks, but Systrom declined the offer. In 2012, Instagram had approximately 27 million users; this was also the year when Instagram was released to Android users, where it was downloaded more than one million times on the first day (Blystone, 2015). Systrom and Zuckerberg knew each other throughout the start of Instagram. In April 2012, Zuckerberg offered to buy Instagram for one billion dollars in cash and stock, with the provision that the company would remain managed independently. These terms were accepted, and Facebook bought Instagram (Blystone, 2015).

As of January 2023, Instagram had about two billion active users monthly, making it the 4th biggest social media platform worldwide (Dollarhide, 2024). As mentioned, the uniqueness of merging social media and picture sharing was one of the biggest reasons Instagram became so popular. Today, aside from liking and commenting, one can follow people and post videos and have many more editing options than they did at the beginning. One can add subtitles and different filters to their videos. Instagram has added the opportunity to privately message people and share pictures, videos, and other posts

with friends. Hashtags are also an essential part of Instagram, and they are a way of searching for specific content using just one word or a short phrase. Another one of the most popular features of Instagram is to create "Stories", which are pictures or videos that will disappear after 24 hours (Blystone, 2015).

Unlike Facebook, Instagram is mainly used to post videos, look at entertaining content, and follow brands and products (Lin, 2024). Instagram is also used widely in businesses to direct sales towards a specific target group, advertise their products, explore partnerships to advance their marketing, and set up a shop where purchasing becomes easier for the buyers (Kuligowski, 2018). Instagram thrives on Influencer content, which businesses can use to market their products and get real-time feedback on their brands and products. Many businesses have used Instagram to boost their sales because the influencers can promote different things and make statements about a particular product, influencing the users of Instagram to buy this product (Kuligowski, 2018). Influencers are a big part of social media, and this paper will explore their contribution to social media; however, before that, one more social media platform was used in this study.

1.2.1.3 TikTok

Lastly, the newest of the social media platforms this study will investigate is TikTok. ByteDance, the Chinese company founded in 2012 by Zhang Yiming, released what would lead to TikTok in September 2016 under the name Douyin, which was only accessible to the Chinese population. Douyin allowed people to share short videos featuring music, dancing and lip-syncing (Tidy & Galar, 2020; Paul, 2022). However, in 2017, Yiming and ByteDance wanted to expand Douyin and make it a global platform, so they launched TikTok. Additionally, Yiming bought Musical.ly (another lip-syncing app) for one billion U.S. dollars. This became the main reason for TikTok's rising popularity and ultimately the key to TikTok's success in the United States and across Europe because Musical.ly had opened for integrating a younger user-base (Tidy & Galer, 2020).

The original idea for TikTok was to have a platform where people could express themselves in various creative ways, in the form of short videoclips that would engage the audiences. One of the significant things that set TikTok aside from the numerous other social media platforms was the "For You"- page on their app. ByteDance, with its expertise in Artificial intelligence (AI), could make this "For You" - page by giving users highly

personalised content on their feeds. At this time, no other social media platform had an algorithm that allowed this. However, TikTok's algorithm focuses on content interaction and not follower count, allowing everyone using TikTok to go viral and become influencers when posting there (Paul, 2022).

TikTok relies on one form of content, short user-generated videos that generally do not last much more than 15-60 seconds each. When posting content, one can choose to feature music from a vast library, sound effects, and filters. These things significantly affect the chances of making a viral video (Paul, 2022). Teens and young adults mainly consume TikTok content. It can be anything from music, comedy, or dance that, in one way or another shows something the person is interested in, such as activism, education, health, and misinformation about any of the mentioned topics and more (Tidy & Galar, 2020).

Social media can be vital for marketing one's business; this is also the case with TikTok. TikTok is a platform with many influencers because the algorithm focuses on what is interacted with. Many TikTok influencers have been approached and used to make content for certain businesses around the globe. Given that the user-base for TikTok is somewhat younger than what one would see on Facebook and Instagram, it has allowed companies a new demographic to market their things towards. There are ways in which TikTok has made marketing broader and more easily accessible through ads and by posting collaborative videos with certain brands, such as Nike and Fenty Beauty. Because of the innovative methods of marketing provided by TikTok, it has become a valuable tool for businesses to use (Paul, 2022).

However, TikTok has faced many challenges, especially in the United States. There have been serious concerns about how data privacy has worked and speculations as to whether the Chinese government was using the data stored to spy on its users. Especially notable is when former President Donald Trump tried to ban the app because he feared that there would be national security risks if the app continued to be used (Tidy & Galar, 2020). Since the former president's concerns were voiced, TikTok tried to store the data on U.S. citizens within the United States. Nevertheless, this was not the only backlash TikTok has experienced in the years after its launch. When COVID-19 hit at the beginning of 2020, TikTok quickly became criticised for spreading misinformation about the

pandemic and other political events in that period; this raised concerns about what policies the app had for what content was allowed to be shared (Paul, 2022).

1.2.2 Influencers

Influencers is a new profession that has flourished over the last couple of years. In short, an influencer is "someone who has the power to affect the purchasing decisions of others because of his or her authority, knowledge, position, or relationship" (Hub, 2017). What is seen with influencers is that they often stick to one branch of what they promote, like fashion, travel, gaming, etcetera. Influencers are seen on social media to get a broader audience. Initially, most influencers do not have a broad follower scale; they must build that. As seen with TikTok, how the social media algorithm works has a lot to do with the content people get on their feeds, and most influencers have gained their following by being present on social media, posting about what they find interesting and what others might relate to.

An example could be gamers "who built a following after regularly posting game walk-through content or new video game reviews" (Hub, 2017). When one's social media presence is increased, there is a good chance of getting followers, and these followers put their belief in these people. This leads to influencers affecting followers' spending habits.

Influencers have caught the attention of different brands because they can help create trends that will increase the sales of different products. However, influencers do more than share pictures or videos; they go to events and plan giveaways to gain more followers and fame so they can have more influence on their followers (Hub, 2017). Because influencers do what the name suggests, influences, they have a significant effect on their followers. They can get them to act in specific ways, such as voting or becoming a member of something, if the influencers give out a discount code (Hub, 2017). There are different kinds of influencers; it is crucial to know how to distinguish them from each other to understand what an influencer is. There are many ways to categorise them, mainly based on the number of followers, content type, and level of influence (Hub, 2017). Influencers are divided into four types: Mega Influencers, Macro Influencers, Micro Influencers, and Nano Influencers (Hub, 2017).

Mega influencers are influencers with at least one million followers and are primarily celebrities who gain their followers in ways other than online. These include musicians, actors, athletes, etcetera. Although, there are those who has not gained their following through offline means. PewDiwPie and MrBeast have gained an enormous following through YouTube content, but both are defined as Mega Influencers (Hub, 2017). For these types of influencers to be in a video or them helping other influencers or companies can be expensive, but the importance of being in one's videos, social media accounts, or brands is immense (Hub, 2017).

Macro Influencers have a following between 100.000 and one million. They do not have the same reach as Mega Influencers, but they still have a significant amount. These types tend to be either actors who have not yet made it to the big screen or "successful online experts" (Hub, 2017). This influencer group has an impact on buying habits and raising awareness of certain things. It is also a larger group than the Mega Influencers, so they are likely more willing to work with companies and their brands. However, this group is also the influencer group most associated with fraud because many have gained followers by buying them from other influencers (Hub, 2017).

Micro-influencers have between 10.000 and 100.000 followers; because of the smaller number of followers, their followers engage more with the content. It is common for brands to have a micro-influencer marketing strategy to reach a specific type of audience (Hub, 2017). These influencers consist mainly of everyday people who have gained followers because of the knowledge and interests that their followers share. Relatability is essential and one of the most common attributes for these influencers. With small follower groups, it is easy for the followers to get a sense of reliability from the influencers. This can be interesting for small and big brands because they can benefit from the influence they have on their followers. These influencers work for significantly less than Mega- and macro-influencers (Hub, 2017).

Nano Influencers are the influencers with less than 10.000 followers. They are mainly experts in specialised fields, and their followers are very interested in these specialised fields. These influencers do not engage with companies because they do not have the followers to be consequential. However, if one has a company that specialises in these fields, the influencers can be exciting to them to help with sales (Hub, 2017).

Influencers can create a variety of content, videos, pictures, and audio files are just some of them. All of them are useful ways in which the influencers can expand their following and share their experiences. In health, influencers can be people with the same illnesses or doctors who share about their lives or about different aspect of the illnesses. Influencers posting about health issue can be any of these types of influencers which is why it is vital to get and understanding of them.

1.3 Research Question

Throughout the introduction, two types of diabetes, social media platforms and influencers, have been identified. All of these play a vital role in understanding how I came to the problem formulation:

How do social media platforms use framing to influence conversations about diabetes, and how do these frames affect awareness and community-building?

This question is an important one to ask because, as mentioned, diabetes affects many people, and with social media being a place of constant change, the communication about chronic diseases, hereunder diabetes, constantly changes. For people who are young, newly diagnosed, or seeking some form of community social media, it will be a tool for them to gain more information and find people to whom they can relate. However, as will be discussed, misinformation is also a big issue for social media. It is essential to know what and how the different groups of people or organisations use social media to push conversations and their agenda, especially when looking for information as critical as information about diabetes and other chronic diseases. The research aims to answer this problem formulation to show how framing techniques are used in the digital world, how these frames can be interpreted from the perspective of someone with diabetes, and what they mean for the overall conversation, awareness, and community.

2. Literature Review and Framing Theory

Today, many people interact with each other through social media. Therefore, social media has become an essential communication tool and affects many aspects of communication, including health communication. Because of how platforms such as Facebook, Twitter, Instagram, and TikTok enable their users to engage with topics, social media has helped transform health communication (Chou et al., 2018; Ventola, 2014). Social media has led to an increased interest in studying how social media affects public health communication and framing of health-related topics. For instance, in a research conducted by Kite and colleagues (2019) and in another study by Valenzuela and colleagues (2022), it was found that how health messages are framed has a profound influence on how users engage with the content and the spread of health information, whether it was framed through personal experiences, emotional appeals, or data-driven arguments.

Another aspect of importance when examining health communication on social media is its role in health misinformation and the potential to misrepresent public understanding of health issues. Chou and colleagues (2018) analysed the spread of health misinformation and found that misinformation relating to chronic diseases - such as diabetes - can provoke confusion among the public. These findings highlight the challenges of using social media as a reliable health communication tool. The use of social media can also pose a great tool for people suffering from chronic diseases in the way that they can experience having a community that understands what they are going through and who can help one another. However, this opportunity to share also poses a problem for the rapid spread of misinformation, which, in turn, can lead to harmful health behaviours. The balance between these two is a recurring theme in much health communication literature (Ventola, 2014).

Message framing is essential for health communication because it allows researchers to study how information is presented to emphasise certain aspects instead of others. By exploring the behavioural effects of different framing techniques, Valenzuela and colleagues (2022) demonstrated that frames focusing on human interest, morality, or conflict can significantly affect how users on social media engage with content. Thus, familiarising ourselves with these framing strategies is crucial when examining influential

behaviours that can shape health issues' discourse. In addition, Barbaros (2021) explored what role framing played in vaccination campaigns, which led to the findings that depending on the audience's biases and perceptions, framing can either facilitate or hinder a behavioural change. These and more studies will be examined further later in the literature review.

Understanding how social media can effectively help communicate public health messages is paramount in research by Kite et al. (2019). A model to better understand this is provided in a systematic review of social media effects on public health communication, underscoring the importance of audience distribution and targeted messaging to ensure that health communication efforts resonate with various population groups. The model presented by Kite et al. (2019) is essential for campaigns that aim to address chronic diseases like diabetes because of the impact personalised communication and the use of influential health figures can have. However, as Ventola (2014) notes, it is essential to be aware of the issues with social media because there is a considerable risk of breaches in patient confidentiality and the spread of unverified information.

By examining these key studies and adding additional information, this literature review will focus on the complexities of health communication on social media; this will be done by further examining **health communication** and **framing.**

2.1 Health Communication

This part of the literature review investigates different key health communication theories - hereunder, **Social Cognitive Theory (SCT)**, the **Health Belief Model (HBM)**, and the **Theory of Planning (TPB)**. These theories will be applied to grant a better understanding of the circulation of diabetes-related information on social media and review how this affects broader conversations surrounding chronic conditions. As mentioned earlier, social media has become a powerful platform for health communication, especially concerning chronic conditions. Additionally, I will pull from the data already discussed to uncover some of the issues that can occur with health communication in social media.

The **Social Cognitive Theory (SCT)** was introduced by Bandura (2004) and emphasises the power of observational learning, where individuals pick up new behaviours by watching others, especially in a social context. Further, the theory assumes that people also learn by observing the actions of others and the outcomes of those actions; this process is known as vicarious learning. It is critical for social media studies because this is where individuals are frequently exposed to various behaviours modelled by influencers and what chronically ill people may view as peers.

On social media platforms such as Instagram or TikTok, users can watch influencers do several normal or abnormal tasks, including managing their diabetes, in real time. Though these influencers might not share their daily routines, they can still show how they control their blood sugar levels through diet, exercise, and medication adherence. Bandura (2004) believes that observational learning is strengthened when someone sees others succeed: "Self-efficacy is enhanced when individuals see others succeed through perseverance" (p.147), which means that users of social media may feel more confident in their ability to do something similar, take actions like the influencers to manage their condition because they have seen someone do it successfully and have positive outcomes from it.

Self-efficacy is a central idea within SCT, and it is the belief in the ability to adopt specific behaviours successfully (Bandura, 2004). According to Bandura (2004), self-efficacy determines whether people will attempt a behaviour, how much effort they put into it and how long they will persist in the face of obstacles. Influencers on social media often play a significant role in fostering self-efficacy because they normalise people's challenges and show them practical solutions to them. Bandura writes: "People in high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than threats to be avoided" (Bandura, 2004, p.148). This quote is particularly relevant to this study because social media influencers can help shift users' mindsets from fear or avoidance of disease management to a more active engagement in their health.

However, even as SCT is beneficial for social media studies, such as this, with its modelling and self-efficacy approach, one of its more significant limitations is that the theory has not been extensively tested in the environment of today's social media, which is much more high-paced than when Bandura (2004) published this study. The theory focuses more on scenarios where people observe consistent, repeated behaviours over

time, which does not pair well with the briefer interactions we see on the internet today. These brief interactions imply that the users are often exposed to much content in a short period; this leaves little opportunity to reflect deeply on the content (Valkenburg & Peter, 2013). Bandura (2004) suggests that repetition and reinforcement are essential for behavioural change. Thus, viral content that briefly glimpses into health behaviours may not be as effective in long-term behavioural changes. SCT provides a strong base for understanding how users can learn new health behaviours from influencers on social media. Self-efficacy plays a significant role in deciding if users will adopt this new behaviour because they are encouraged by influencers. However, since the algorithm on social media works to give you more of the content you interact with, it could be argued that the SCT still applies to this study because the algorithm will make sure that the users get content saying the same thing multiple times, thus creating the repetition and reinforcement (Brady et al., 2023).

Another important model is the **Health Belief Model (HBM)**, presented by Champion and Skinner (2008). The HBM focuses on how individuals' perceptions of susceptibility, severity, benefits, and barriers influence their health behaviours. If users on social media see different posts that increase perceived severity, this could be a post informing them that diabetes can lead to heart diseases, encouraging the users to change their health behaviour because they become aware of the risk and its severity. Champion and Skinner (2008) note, "perceived severity combined with perceived susceptibility provides the force that propels people toward taking preventive actions" (p. 50). One major thing that social media influencers do or aim to do is heighten these perceptions and encourage lifestyle changes. However, there are limitations to this model given that it assumes a rational decision-making process, which can be challenging to work with from a social media point of view because what is often posted there is highly emotional and impulse-driven content. Jones et al. (2014) suggest that "peer influence can mediate health behavior, particularly when credible sources are involved" (p. 570), which further reinforces the role of influencers because they are viewed as being credible in shaping health-related behaviours. The model also has its strengths; for instance, it provides a clear understanding of how risk perceptions shape health behaviours, which is helpful when trying to understand and examine social media content's impact on diabetics.

Ajzen (1991) provides the **Theory of Planned Behaviour (TPB),** which focuses on how attitudes, social norms, and perceived behavioural control can affect health behaviours. Ajzen (1991) argues that "intentions to perform behaviors of different kinds can be predicted with high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control" (p. 179). As mentioned, subjective norms on social media are influenced by peer behaviours and influencer endorsements. As with the previous model and theory, the TPB also believes that when users see peers or influencers engaging in specific behaviour, they feel pressure to do the same. The TPB poses the same limitation as seen in Champion and Skinners (2008) because it mainly focuses on rational intention and does not consider newer media's complexities. Noting that Azjen's (1991) text and theory are older than that of Champion and Skinner (2008) and Bandura (2004), it becomes clear that health communication is something that has been studied for a long time and that there is a broad agreement on what factors in when someone changes their health behaviour. What Ajzen (1991) focuses on and what strengthens his theory is that it effectively explains the role of subjective norms and social influence when shaping health behaviours.

One major issue in health communication is the spread of misinformation, which is primarily a problem with social media. Ventola (2014) notes that misinformation spreads quickly on platforms such as Twitter and Facebook and points out that "users often have difficulty distinguishing credible sources from non-credible ones, leading to the spread of inaccurate health information" (p. 493). Furthermore, misinformation is also noted by Barbaros (2022), who highlights that it complicates the management of chronic disease, emphasising that false claims about treatments can lead to harmful health behaviour.

Finally, Jacobs and colleagues (2017) discuss how people use social media to seek health information. Their study demonstrates that social media platforms are key spaces where people actively search for information about chronic diseases. They note that "users engage with health-related content to understand disease management and seek peer support" (Jacobs et al., 2017, p.6). They also highlight that while users may find helpful content, they are equally exposed to misinformation, which can influence their ability to make informed decisions. Furthermore, one of the more crucial points Jacobs et al. (2017) make is that peer support is very important when wanting to change your

health behaviour. However, this study lacks a detailed analysis of how misinformation affects decision-making, meaning that it cannot be seen how misinformation can influence the receiving audience. This is a significant limitation of social media because, as already established, people tend to be influenced by what they see others do. It can still be argued that Jacobs and colleagues' (2017) findings can still be helpful to this study because they open more insight into social media and how behavioural changes happen when influenced there.

Thus, the SCT, HBM, and TPB all provide information that can help us understand how diabetes-related information circulates on social media and how it influences users. As mentioned, they all present similar findings but from different aspects. This is important to note because it shows that there are many ways to view health communication and to understand that it is a complicated area of research. However, with the help of these theories and models, this research can add more insight into the awareness of these different methods of changing behaviours and how they are used and received on social media. Below, a more detailed review of detailed health communication surrounding diabetes and social media will be given.

2.1.1 Health Communication and Chronic Diseases

Using communication technologies and social media in diabetes care has grown significantly. One of the things offered by this is new opportunities for patient engagement and self-management. This part of the review will examine different studies highlighting the impact of technologies that can help self-management, face-to-face communication, and the impact of misinformation in general and how they all relate to diabetes.

Digital tools and communication technology are essential when discussing improvements in healthcare involvement for people with chronic conditions like diabetes. According to a systematic review, self-management and patient participation are made easier by technologies such as apps, SMS reminders, and other digital platforms. These also establish virtual support networks, allowing people to check their blood sugar levels and seek medical help online. These kinds of networks encourage people to take better

care of themselves. Sutcliffe et al. (2011) highlight the importance of these tools, pointing out their beneficial short-term effects while admitting that more study is necessary to comprehend long-term efficacy fully. Further supported these resources, which include mobile apps and telehealth services, have been linked to better blood sugar management and general well-being among chronically ill people. However, the inconsistent implementation and evaluation among research is a constraint, even with the wide range of data evaluated. To fully utilize the potential of these technologies, Greenwood et al. (2017) emphasize the necessity of consistent procedures. These two studies are critical when analysing how diabetes treatment is portrayed on social media because the accuracy and quality of content frequently vary.

The rapid distribution of information on networks such as Twitter creates opportunities and health communication issues. A study of tweets about antibiotic found that using social media can be a troublesome tool for health communication because social media struggles with the amount of misinformation. Scanfeld et al. (2010) underline the dual character of social media, pointing out how it allows both information exchange and the spread of misinformation. While their research focuses primarily on antibiotics, the findings are crucial for understanding the repercussions of diabetes-related disinformation on social media. It is essential to be aware of misinformation and its damage to health communication.

When tackling the emotional issues associated with chronic illnesses, it is vital to incorporate human connection into the digital world because people will react more positively and stronger to another human, telling them how they act or what could be beneficial to do, rather than an unknown entity. A randomised controlled experiment found that web-based cognitive behavioural therapy combined with face-to-face encounters outperformed independent digital technologies. Høifødt et al. (2013) apply mental health principles to diabetes care, highlighting the importance of professional advice and digital interventions for managing chronic illness's psychological and physical elements.

Clear and effective communication plays a crucial role in improving health outcomes and ensuring cohesive treatment plans, especially for older adults managing chronic conditions like diabetes. Sharkiya (2020) highlights the challenges older individuals often face when navigating digital tools and underscores the importance of

providing accessible and easily understandable content. While the study's scope is limited, it draws attention to potential communication gaps on social media. It stresses the need to tailor information to meet the diverse needs of different audiences, particularly older populations.

Furthermore, clear communication is the focus of Macdonald and colleagues' (2013) study which found that insights for encouraging involvement and self-management can also be gained from the dynamics of nurse-patient contact. This makes clear communication crucial for health communication. Furthermore, this study demonstrates how medical practitioners might modify their approaches to empower patients; this idea can also be applied to social media sites. By implementing comparable communication tactics, social media can foster supportive environments for people with chronic diseases.

Together these studies emphasise the growing importance of using digital tools and social media in diabetes treatment. Digital platforms provide beneficial chances for community building and peer support, which can have more impact than encounters with medical experts. Nevertheless, face-to-face communication is essential for making patients feel supported and accountable for treating their diseases. The following research builds on these studies by examining some of the complexities of social media and the potential for interaction combined with obstacles, including misinformation and inconsistent material quality. The following section will go deeper into these dynamics, emphasising the implications of social media for diabetes-related health communication.

2.1.2 Social Media and Health Communication

The role of social media in health communication has become increasingly eminent over the past 20 years. In recent years, platforms like TikTok, Facebook, and Instagram have been utilised to engage broad audiences with health information. Even though these platforms pose great opportunities for sharing health messages, they work as a double-edged sword because they also present challenges in the form of misinformation. The

following studies explore the strengths and limitations of social media as a tool for health communication.

Social media platforms present potential and difficulties for health communication but have become effective tools. For example, TikTok's algorithm favours viral content, which helps to engage younger audiences and spread messages quickly. However, studies on TikTok content related to vaccines have shown that this same feature also makes it possible for misinformation to spread quickly (Basch et al., 2021). Although the platform's brief video format makes it difficult to communicate complex information, it also offers a chance to deliver fact-checked, powerful health messages successfully. Other platforms like Facebook and Instagram further highlight how social media can encourage health-related communication, especially among younger audiences. These platforms use influencers, peer networks, and customised material to promote interaction. According to studies, adolescents and young adults are more likely to be interested in relatable and engaging forms (Wong et al., 2014). Since many users only connect with content passively, it is still difficult to translate this interaction into long-lasting behavioural change.

Health influencers on Instagram play a pivotal role in shaping public perceptions. Their ability to create visually appealing and relatable content effectively raises health awareness, though concerns about misinformation persist (Picazo-Sánchez et al., 2022). The trust audiences place in influencers often depends on their perceived authenticity and expertise in their respective fields. Influencers can play a valuable role in health communication but also present risks, mainly when pseudoscientific claims are involved. Picazo-Sánchez and colleagues (2022) emphasise the importance of careful regulation to maximize the benefits of influencer-driven health messaging while minimising the spread of misinformation. During the COVID-19 epidemic, social media sites like Facebook, Instagram, Reddit, and TikTok showed that they could provide up-to-date and interactive health information. Because of their worldwide reach, social media platforms are valuable instruments for public health planning. However, the speed at which misinformation is spreading shows how important it is for social media companies and health authorities to work together and guarantee the dependability and correctness of shared content (Eghtesadi & Florea, 2020).

Social networking sites have demonstrated the potential to promote changes in behaviour related to health, primarily through online accountability and peer support. These platforms can have a positive effect on the management of chronic illnesses by encouraging self-care and motivation. Expert supervision is significant in online health settings because, without supervision, some communities might not benefit from the positive effects that social media platforms can have (Yang, 2017).

Thus, social media sites like Facebook, Instagram, and TikTok present new opportunities for health communication, including reaching a larger audience quickly. However, they also present difficulties, especially when it comes to misinformation. To fully utilise social media's potential for health messages, working with medical professionals and using peer-supported, controlled networks are crucial. These insights provide a foundation for understanding the dynamics of social media and health communication, guiding this study's subsequent methodology and analysis.

2.2. Framing Theory

Framing theory is paramount to this research because it will help to uncover how people on social media frame health issues and chronic diseases. Thus, this section will delve deeper into my understanding of framing and look at various materials that can help uncover how frames are used in health communication.

One of the earliest definitions of framing comes from Goffman (1974), who describes frames as structures that help people "locate, perceive identify, and label" (Goffman, 1974) events and experiences. In other words, Goffman (1974) viewed frames as a guide to understanding how individuals interpret social realities. Many scholars have defined framing as both older and new. Barbaros (2021) views framing as a technique used to influence behaviour within an audience. She looked at health communication and how different frames could impact the patients. Valenzuela et al. (2022) defined framing as a method to tailor messages by emphasising specific perspectives, and Kahneman and Tversky (1981) defined framing as a process in which information is presented. These definitions are slightly different, but they all connect around the same central idea that Goffman (1974) presented. They have added more to and explored it in different areas. Based on this, I view frames as a lens through which people experience the world, a lens

through which different inputs can influence, and that ultimately works to shape one's reality.

Kahneman and Tversky (1981) explored how framing can affect decision-making. They found that people are more sensitive to the prospect of losses than gains, which challenged the traditional theory that people make rational decisions to maximise utility. With this, the theory of gain and loss frames was discovered. Because gain and loss frames are influential in public health communication, a more detailed explanation will be given of each:

2.2.1 Gain Frame

In their work, Kahneman and Tversky (1981) presented a group of people with different decision-making scenarios in which they primarily framed the choices as either gain or loss. They made the scenario so that one group would be presented with the gain-framed question and the other with the same scenario but with the loss-framed question. One of the decisions the gain-framed group was presented with had the sentence: "There is a 90% chance of saving 200 lives". The group would favour this decision because it was framed as saving lives, i.e. in a positive way (Kahneman & Tversky, 1981). According to the findings made by this process, they concluded that gain-framed messages tended to promote risk-reluctant behaviour because people wanted to ensure that they achieved a positive outcome (Kahneman & Tversky, 1981). Gain-frames in health communication are often used to prevent certain behaviours because they highlight the positives of taking action. An example could be how they tell people that quitting smoking will increase their life expectancy.

2.2.2 Loss Frame

As opposed to the gain-frame group, the loss-frame was given the same scenario but worded differently, so instead of emphasising how many would be saved, Kahneman and Tversky (1981) framed the sentence as: "There is a 10% chance of losing 200 lives," the group presented with this outcome were not as likely to comply with it because of the difference in how the sentence was framed, showing them that this group were more likely to engage in risk-seeking behaviour where they would avoid loss. In health

communication, loss-frames have also proved useful, as they emphasise the dangers of not taking action, thus encouraging people to take action. This can be seen in how people are told that failing to exercise increases their risk of heart disease. One of the key insights of this study was that people are more motivated to avoid loss than to achieve gains of the same magnitude (Kahneman & Tversky, 1982).

However, these studies did have challenges given that every situation/question they gave the participants was hypothetical, so there were no real consequences for the participants or anyone else. Moreover, the study was relatively binary in its approach. The study may have issues oversimplifying the surrounding challenges of decision-making. The question about how this would play out in real-life conditions cannot be answered. However, by having such a controlled environment for the decision-making, they could see the isolated effects of the framing, and by simplifying the scenarios, they could make the experiments relevant to much broader contexts, such as economics, health communication, and behavioural psychology. In this research, it was found pertinent to gather a greater understanding of the gain and loss frame because they are often used in health communication; looking into them specifically is helpful to gain a footing for the analysis.

Later studies found that in health communication, both frames can be useful in different ways, but they are dependent on the context. An example is that gain-frames have proven to work better in promoting preventive actions, such as vaccines. In contrast, loss-frames have proven more effective in encouraging diagnostic behaviours, such as cancer screening (Gallagher & Updegraff, 2012).

However, since the internet and social media are newer than when Goffman (1974) published his book and when Kahneman and Tversky (1981) published their work, it is essential to consider more recent studies, where the internet is considered a big part of social interaction and frames in health communication.

2.2.3 Framing in Health Communication

Since framing helps shape how health concerns are presented and interpreted, it is essential to health communication. Social media creates a more interactive dynamic than traditional media. In traditional media, the consumers usually take in information without interacting. Social media allows users to actively co-create frames, providing the opportunity to affect how people view health concerns. Hussain (2022) examined how social media framing helps health communication by qualitatively analysing captions with pictures on Tumblr. The findings demonstrate how patients can develop a sense of community and soften stigma by sharing their experiences with different illnesses.

In contrast to traditional media's approach, framing techniques made collaboratively by creator and user enable people to connect and share through their experiences. Despite the strengths of this study, Hussain's (2022) focus on Tumblr limits its generalisability across platforms, and the lack of differentiation between type 1 and type 2 diabetes may overlook nuances in stigma and stereotypes. However, the research remains valuable for understanding how framing can address stigma and shape social conversations around diabetes, offering critical insights for this study.

Building on the significance of framing, Barbaros (2021) investigated how health messaging influences behaviour through gain and loss frames. By exposing participants to framed messages about chronic disease management and vaccination, the study assessed behavioural intentions, showing that risk-focused frames —highlighting potential adverse outcomes like complications from diabetes— can drive proactive health behaviours. This aligns with Hussain's (2022) findings, as social media narratives often emphasize risks, increasing public awareness of health conditions. However, Barbaros's study also highlights limitations inherent in self-reported data, such as social desirability bias (Podsakoff et al., 2003) and the intention-behaviour gap (Sheeran, 2002), where reported intentions may not align with actual actions. Despite these challenges, the experimental design provides valuable insights into how framing can influence health behaviour, making it a key reference for analysing diabetes-related content on social media.

Further extending the discussion on framing, Valenzuela et al. (2022) examined how different frames —such as human interest, conflict, and morality frames— affect user

engagement on social media. Their large-scale survey found that human interest frames, which use personal stories and emotional appeals, were particularly effective at encouraging likes, shares, and comments. This engagement data demonstrates how framing affects user interactions, offering valuable insights for health communicators. However, because the study focuses on short-term engagement, it does not address questions concerning the long-term viability of behaviour change. Despite this, the study provides practical advice for using frames to increase participation, which can be helpful for influencers, non-governmental organisations, and diabetes-focused health programs.

Together, these studies shows the importance of framing in health communication. Each provides a unique perspective, whether it is on frame co-creation, the impact of gain and loss frames, or the efficacy of emotional appeals. This study aims to expand on them while keeping the limits in mind. The definition of framing mainly used to guide this study is a mix of the ones mentioned earlier and comes together to define frames as a lens through which people experience the world, a lens that different inputs can influence and that ultimately helps shape one's reality. This viewpoint is critical for understanding how social media might influence public attitudes and behaviours regarding diabetes. This disorder affects millions worldwide and is increasingly discussed in the digital domain.

2.3 Health Communication and Framing

This literature review shows that framing theory and health communication are complex and that many components influence these perceptions. For this study, frame theory is central because it explains how frames work in general and health communication. The focus on gain and loss frames is paramount to the study because it shows that in health communication, there are specific frames that are useful if one wants to alter the health behaviour of another person; this gives me something specific to look for when analysing the data and grants insights into why this could work on the receiver of the content. Furthermore, one of the crucial things to note about health communication is the influence the content can have on chronically ill people; a key aspect of this study is

misinformation. It is something I, through this literature review, have become more aware of and will consider while searching for and analysing the data.

Health communication is used very differently across platforms, and based on who uses it, this is significant to this study as it will investigate both professionals within health communication and non-professionals who share more about their own experiences. When analysing these different groups, it is essential to consider that there might be different ways they communicate their knowledge and how they try to convince the receiver of specific things. It is also worth noting that many of the studies find that face-to-face communication with chronically ill people is the most influential if one wishes to see any behavioural changes. Framing theories suggest that social media is an empowering place because of how people can interact and how impactful shared experiences can be, which is a significant aspect of the aim of this study and part of how I came to the problem formulation: ***How do social media platforms use framing to influence conversations about diabetes, and how do these frames affect awareness and community-building?***

To guide this study, how social media is seen as something that impacts the receivers both negatively and positively will be considered.

As the study expands, consider the following questions:

- *How would these frames influence you?*
- *Would you blindly trust the content shared on social media about chronic diseases? Why/Why not?*
- *And what positive/negative impacts can social media have on health communication?*

I will present the methods used in the following section to conduct the study and get a clearer view of the questions posed.

3. Method

For this paper, I have chosen to use interpretive and comparative methods to help answer the problem formulation. I have chosen these two because they offer ways to study and understand complex phenomena. The interpretive analysis uncovers the meanings,

perspectives, and contexts behind human experiences. At the same time, a comparative analysis draws broader conclusions by identifying similarities and differences. These two methods offer approaches for investigating nuanced topics and balancing understandings with cross-contextual examination. I have chosen to make a qualitative study as it allows me to be more in-depth with my data and uncover more profound meanings.

3.1 Methodology

This research embraces assumptions that align with social constructivism, which is the belief that our understanding of reality is constructed through language and communication. Therefore, social constructivism argues that there is no objective truth to reality, but rather, it views reality as a product of human interaction (Littlejohn & Foss, 2009a). Littlejohn and Foss (2009a) state that "social realities are continuously constructed, sustained, and altered through communication processes" This means that reality is shaped by how society collectively understands the world around them and that reality is not one fixed thing but something that changes according to time, place, and culture. With the introduction of social media and how easy it has become for people to communicate worldwide, engagement in a collective truth is more significant than previously. For example, in 2020, when COVID-19 hit, and it was named Corona, the collective reality towards Corona went from parties and beer to installing a more fear-based reality around the word. With Corona, it became increasingly evident that the agreed-upon truth significantly impacts how something is perceived, especially in health communication.

In this study, I will focus on diabetes and how it is shown on social media. When people with diabetes share their experiences on social media platforms, they contribute to shaping how diabetes is understood and responded to by society. As Pricope (2020) explains, "media channels act as spaces for the construction of collective realities, where shared experiences can lead to a redefinition of social knowledge". Because of this, people who use social media become active participants in creating and contesting society and the narratives society has towards different things, including diabetes, as already discussed in the literature review, where it could be seen that social media has a significant effect on health communication.

There are two key aspects connected to social constructivism: language and communication. Both are seen a lot in how people interact on social media because of the captions and posts they write and how they use videos to communicate on other levels than language. Littlejohn and Foss (2009b) note that "language organizes experiences into meaningful units and allows us to construct knowledge". This means that the way we talk about our experiences and the language we use not only shapes how others hear our stories but also shapes our knowledge about the experience. For diabetes, language is important because when using phrases that are clouded by stereotypes or stigmas - such as having diabetes is the patients' fault for not taking good enough care of themselves - it shapes the general view of people who have diabetes. The framing of the stereotype given before is likely to reinforce the perception of personal responsibility and shape the public's attitude. These implications influence how people with and without diabetes perceive the illness, its causes and the social implications.

The other aspect of social constructivism is communication, which is essential for maintaining and evolving the constructed realities. Communication is not constant, and dialogue keeps changing, especially on social media. Communication helps to reshape the perception of reality. Littlejohn and Foss (2009a) explain that "reality is not fixed; rather, it is produced and reproduced through interaction". This aspect is especially relevant in this study because it helps better understand how the discourse on diabetes constantly evolves. When analysing social media, as I have mentioned, it is of utmost importance to be aware that the posts can constantly change. The interactions with the posts are almost certain to change from when I collected the data to when this is read. Furthermore, the constant change in how diabetes has been perceived and dealt with is a relevant example of what Littlejohn and Foss (2009a) emphasised in the previous quote.

From an epistemological perspective, it is emphasised that knowledge is socially constructed and subject to interpretation based on the context. This perspective allows me to study how different understandings of diabetes are created and how they circulate on social media. I recognise that the knowledge about diabetes, not from a medical point of view, is not fixed but shaped by dynamics within our cultural and social world (Littlejohn & Foss, 2009b). I must be clear that, medically, there are facts about diabetes. These are not what I view as being up for interpretation, but rather the view towards the illness, the seriousness of it, how it affects people, and what people diagnosed with it can

achieve, experience and endure. In this study, I will focus on analysing how language, images, videos, and shared experiences on social media contribute to public knowledge about diabetes and how these can be viewed from a diabetic's point of view.

From an ontological perspective, social constructivism suggests that reality is not objective but rather co-created by the people who engage with it. From this view, reality is an ongoing social process influenced by many factors, such as shared beliefs and cultural narratives (Andrews, 2012). Because I will focus on how different social media users portray diabetes, how it shapes reality when people interact with it, and how they interact with it, the ontological perspective is essential to include because it aligns well with the base ideas for this study. When examining these portrayals of diabetes on social media, I explore how social media fosters the dynamic construction of the reality surrounding diabetes, which ultimately can contribute to how diabetes is understood and experienced.

Ultimately, social constructivism will be used in this paper to provide a framework where I can explore how diabetes is discussed on social media. Focusing on the language used and other means of communication can provide me with a better understanding of the societal view on diabetes, what implications are in the language and communication and how they shape the reality constructed about diabetes. Because I use social constructivism to explore the conversation around diabetes, I have used qualitative research methods to conduct my analysis.

3.2 Research Design

Qualitative research seeks to explore complex, subjective experiences through contextual data; it focuses on what is written or said and not on the number of participants but their individual experiences (Creswell & Poth, 2017). The qualitative approach allows me to be more flexible because it can adapt methods as themes and capture more nuanced information than a quantitative approach allows.

However, the qualitative approach cannot speak of a subject generally because it works with limited data compared to a quantitative approach (Creswell & Poth, 2017). It will also be difficult for any other scholar to replicate this study because it would require the scholar to have the same worldview as I do, to be diabetic, and generally have the same

profile, personally and professionally, as I do. With that said, it is not that the study cannot be replicated, but there will always be a possibility that the findings will not be the same. Given that I am diabetic, it allows me to view the posts through the lens of someone to whom these posts are targeted.

This study aims to examine the frames presented on social media that shape the reality of how diabetes is understood; this will be done through the data I have collected, which consists of nine different posts, three from Facebook, three from Instagram, and three from TikTok. This will be done through framing devices and an interpretive analysis, where pictures, videos, and writing will all be examined closely. I have chosen to do this study because, as a person with diabetes, I am affected by how people talk about diabetes and the stereotypes and stigmas I meet whenever I tell people I'm diabetic. I have observed a rising focus from various users on social media on how people with diabetes are perceived and the general lack of knowledge of the disease if one does not know anyone with it.

For this study, I have chosen to rely on abductive reasoning for the analysis. Abductive reasoning has been explained as the "middle ground between deductive and inductive methods" (Thomspon, 2022). The deductive method starts from a theory standpoint and seeks to test that theory, whereas the inductive builds a theory based on the analysed data. In contrast, abductive methods seek a more reasonable explanation of the data with room for surprises (Thompson, 2022). "Abductive reasoning allows researchers to move beyond the data to propose hypotheses that account for anomalies, surprises, or patterns that do not fit the existing theoretical landscape" (Thompson, 2022). By using abductive reasoning for this study, I will be allowed not only to detect the patterns in the language and communication I discover but also to look further than that and explore the data more deeply. The process used for abductive reasoning involves continuously going back and forth between the data and the theory to understand certain phenomena better.

Furthermore, abductive reasoning is expanded by Rinehart's (2020) work. In this work, Rinehart (2020) notes that abductive reasoning "is essential for making sense of data that does not fit within established theories or frameworks." meaning that it will allow me to go beyond what theories may already exist so that they are not restricted by theories or frameworks that other scholars have already made. For instance, I might learn

through my analysis that specific trends exist within different ethnic groups or between genders. The abductive reasoning would allow me to document and explore them further to see if any explanations exist for these trends being only within a particular group of individuals.

In this study, I will use abductive reasoning throughout my analysis to avoid being restricted by pre-existing data and explore the different social media trends regarding diabetes that may surface during my data collection and analysis. Both Thompson (2022) and Rinehart (2020) emphasise that abductive reasoning is flexible and helps constantly refine understandings. From a social constructivist view, abductive reasoning is a good fit because both are flexible towards the idea that the world is constantly changing and that the data recovered in a qualitative study can include various outcomes that can affect people's understanding of society.

In alignment with my abductive reasoning, I have chosen an interpretive analysis method to investigate the frames of diabetes used on social media and how they shape the reality around diabetes. Interpretive analysis allows me to be flexible in data collection. It allows me to adjust my research based on what I discover in my analysis and go back and forth between my theory, literature, and analysis. Using an interpretive analysis method also allows me to uncover different trends within the themes, patterns or sentiments used when posting about diabetes; it will also uncover if there are differences in these trends from country to country since the data, I have collected includes posts made by UK users, US users, and Danish users. By viewing the intentions of the data, I will be able to gain an understanding of how diabetes is talked about on social media. With that understanding, I can look more deeply into the experiences and deeper meanings of the data. The interpretive analysis identifies how people make sense of their experiences and what underlying aspects shape someone's understanding.

Moreover, I have chosen this study based on my experiences in my nine years since being diagnosed with diabetes. When I was first diagnosed, it was challenging to find information about it, and the focus on the illness from the Danish government was minimal. In recent years, the Danish government and Diabetesforeningen have worked more closely together to better the lives of those living with it. Additionally, the spread of people being vocal about their illness has also spiked in recent years; if I sought out people who talked about diabetes, I would mainly find it in designated groups and not someone

posting a video for all the world to see. I think the rise in the number of people who are more open about it is a positive evolution. However, getting caught up in a video that says to do three simple things to eliminate your autoimmune illness is also something I have become very critical towards because I know that there are much misinformation out there. This is why I believe this study is important, and in my initial brainstorming phase, I found very little research on this specific approach. The lack of it led me to initiate this study because, as a diabetic, I find it extremely important to investigate how diabetes is framed. After all, it has such an impact on what is believed about the illness.

The nature of a qualitative study has some weaknesses that I and the reader should be aware of. One is that a qualitative study cannot be remade with the expectation that the findings will be identical. I will argue that because I am diabetic, my view on the data may reveal findings that a person without diabetes might not have put any importance into or found. I will keep my personal experience in mind throughout the study, but I will also rely on the most logical and reasonable findings I uncover through the study. Moreover, as I focus on written material, videos, and photos in different posts and how the language all works together to create a narrative, my analysis will be qualitative, allowing me to work more on the data I have found.

With the data being from three different social media platforms and the people who have shared the data being from different countries, I will also focus on the differences between the platforms and how the people and organisations write and share about diabetes. This will be done by looking back at the analysis of the different data to discover if there are similarities in posts on the same media or in the same country and how that differs from one of the other platforms and countries.

3.3 Data Collection

To gain a broad view of how diabetes is discussed on social media, three social media platforms have been used, i.e. Facebook, Instagram, and TikTok, and three posts have been selected from each platform, resulting in nine sources for the analysis. The chosen data consists of videos (shorts and reels) and pictures posted on social media.

The posts were chosen based on their content; when finding the data, I went to each platform and typed "Diabetes" into the search bar. By doing so, I ensured that I would find data related to diabetes mentioned in the text (caption) for the picture, video, or hashtags. I also chose that each post I wanted to include in this study had at least 1.000 likes, to ensure that the posts were seen and interacted with by a larger group of people. This is because when someone interacts with content, it gains popularity and is more likely to be seen by others (Laura, 2019). Because of this, choosing content with a certain number of likes is important because the more likes it has, the more people are likely to see it and be influenced by it.

The most important criterion I set was that the users must have diabetes themselves or be very close to their lives. This would make them more believable as a source of information and more likely to influence their followers' views on the illness while being less likely to share misinformation since it is something they have close to themselves. Another one of the primary criteria I used for the data was that it was from different kinds of social media users. I focused on three types: celebrities, influencers, and organisations and chose one post for each social media platform. I have chosen to do so to gain a more varied pool of information on how diabetes is viewed on social media by different people and organisations who hold the power to influence people's views.

As defined earlier, influencers are everyday people who can influence their followers' opinions, buying habits, and behaviour. Earlier, I mentioned that influencers can be celebrities still making their big break as actors, musicians, and the like. In this paper, I have chosen to focus on influencers who are not trying to become Hollywood stars but whose fame is solely from posting content on social media. I have made this decision because I knew that for this paper, I would like to include celebrities, i.e. actors, musicians, athletes, models, etc. because celebrities have a particular impact on how their fans view the world and form opinions. Lastly, I chose non-governmental organisations (NGOs), because these often have ties to health professionals and what they post is very rarely misinformation. I also chose these because they do not directly tie to politics; thus, there is no politically biased agenda. This is not to say that the NGOs do not work with different or multiple governments, but more to avoid politics to cloud their posts and how they frame their content. When working with content on social media, it is essential to acknowledge that social media presence, may not be restricted to one platform. They may

use multiple social media platforms and post the same or different content on each. I have only chosen to work with the content from one of these platforms, and I will go into more detail about which of the user's posts I have chosen and why.

Furthermore, all the posts are from 2022-2024; with such a narrow timeframe, the findings will be more contemporary than if I had chosen posts from the 2010s. This choice was also made based on the available content from the years before. Because I was diagnosed nine years ago, I know that the amount of content on social media and the focus on it was scarce back then compared to what it is now; plus, at least in Denmark, there has been a rising focus on how diabetes is talked about in more recent years. Because of this, I have chosen to work with contemporary data, although another reason is that contemporary data shows what is said about the topic today and how that is received, and since I am interested in how the data is framed and interpreting how that can be viewed, analysing contemporary data will show the current view that is influencing people now.

Some notable things I discovered while searching for the data was that for Facebook, when using the search word, posts I had interacted with, either on groups or organisations, or posts I had made were the first to come up with. This means I had to scroll down quite a bit to get to data unaffected by my interactions. I used data I had not interacted with previously because I wanted to avoid clouding my analysis. After all, when I interact with something on Facebook, it is because I think it was an important message they sent or it was from a closed group that only consists of people in Denmark with T1 diabetes, which I did not include in this study for ethical reasons. Another notable thing was that on Instagram and TikTok when searching for diabetes, many videos from fitness instructors or people in medical cloaks came up with titles like "This is what you can do to reverse your diabetes", which is interesting to note because there is little to no way of telling if these people are medical professionals, but they exhume authority and knowledge by putting on the cloak; since the users who post things like this does not have diabetes themselves, their content has not been included in this study. However, this is another essential thing to examine in further studies.

The following table shows the different celebrities, influencers, and organisations I chose from the platforms. In my analysis, I started with Instagram and analysed the celebrities, influencers, and organisations. Then, I moved on to TikTok and finally Facebook. In the comparison, I was not restricted by the table, but I looked at the

celebrities first to examine any differences and similarities. When I found similarities that did not fit inside this table, I looked beyond the constraints of who and where the posts were and more into the overall intention of each post.

	Instagram	TikTok	Facebook
Celebrity	Roxy Horner	Nick Jonas	Kasper Dolberg
Influencer	Type1amy	Clutzychick	Clinton Svatos
Organisation	Beyondtype1	Diabetesforeningen	World Health Organisation (WHO)

The posts and some information about the users who have posted them will be given below. The first post is from Instagram. It was posted on March 25th, 2023, by model Roxy Horner (@roxyhorner). The post https://www.instagram.com/p/CqN3buqNo-0/?img_index=1 has 9.703 likes and 197 comments and consists of two pictures and a caption (see Appendix 1). Horner has more than 263.000 followers on Instagram, meaning her content is viewed by many people, which is one of the reasons I chose her content for this study. Horner is a British model who debuted in British Vogue when she was 17. She has modelled for multiple big brands and been a part of a larger modelling agency; besides this, she has starred in a few films. She was diagnosed with diabetes back in 2021 after collapsing during the Brit Awards, which was hosted by her boyfriend and father of her newborn, Jack Whitehall (Neog, 2023). I chose her content because she is still new to having diabetes. However, also because she is famous among models, and being a model with diabetes goes against some of the stereotypes about the illness, so I found her contribution to the conversation about diabetes interesting and deemed that it could start many conversations. When broadening my search about Horner, I found that most articles and such written about her were either very focused on her diabetes or her relationship with her Boyfriend, who

is a successful comedian. Horner has other accounts than her Instagram, and she is also present on Facebook and X, which is a sign that she does not only post on Instagram but also on others, which means she reaches a broader audience.

The second post from Instagram is from influencer "type1amy", who posted a video about things she still struggles with as a person with diabetes on April 30th, 2024. The post https://www.instagram.com/p/C6ZBSmIR18P/ has 2.037 likes and 78 comments and consists of short videos put together into one video with text on every new clip in the video (see Appendix 2). Type1amy has more than 65.300 followers on Instagram, and according to her content, she has had diabetes for five years, which was one of the reasons I chose her content. By choosing someone who has had it for more than a couple of years and with her name, she frequently posts about being diabetic and some of the things that it entails. Type1amy is an influencer and is active on other social media. From a quick Google search, I saw that she has profiles on most social media platforms, including but not limited to Facebook, TikTok, and X. With such a broad presence on social media, I deemed her content useful because it reaches a broad audience across the different platforms, and likely has an influence on many of the people watching her content on these different platforms. According to her Instagram page, she is a "digital creator", and in her section about herself, she writes that she is "here to inspire diabetes positivity" (Amy | T1D (@Type1amy), 2020).

The third post from Instagram is from the organisation Beyondtype1, which is part of an organisation with a profile called "Beyondtype2". The post https://www.instagram.com/p/C9vDBOXi1ec/ was posted on the 22nd of July 2024. It has 8.635 likes and 418 comments. It consists of a video showing different people with diabetes doing everyday tasks, and the first text reads, "wait i thought diabetics couldn't-" (Beyond Type 1, 2020). Beyond Type 1 is an organisation that aims to change what it means to live with diabetes. It is a nonprofit organisation founded in 2015 and has since evolved into creating Beyond Type 2. Both post information about diabetes focusing on "education, advocacy and the pathway to cures for type 1 diabetes" (About Beyond Type 1, 2022). Beyondtype1 has profiles on most social media websites, ensuring its content is widely shared and known to help reach the most people. I chose this organisation because of what it stands for and its content. From the videos and pictures I viewed during my search, I found many informative posts with many likes. I chose these specific posts

because they were about showing people who do not have diabetes that people with diabetes can do the same things as any other person.

The first post from TikTok is a video by musician/actor Nick Jonas. The video describes the most common signs of diabetes before diagnosis and has more than 175.700 likes and 1188 comments. The video was posted on November 13th, 2022 (TikTok - NickJonas, 2024). Nick Jonas is primarily famous for the band The Jonas Brothers, which he and his brothers started in 2005 (Lyttle, 2023). He has also acted for Disney Channel in the movie Camp Rock, and he and his brothers are touring the world in 2024-2025 (THE TOUR | Official Website | Jonas Brothers, 2023). Aside from that, Nick Jonas is also the poster boy for Dexcom. This company makes technology for people with diabetes more manageable to handle daily and works closely with beyondtype1 to spread awareness (Meis, 2022). Nick Jonas was diagnosed with diabetes at age 13 and has since then continued to work in music with his brothers and by himself. He is active on various social media, where he is not shy about posting about being diabetic. I chose to include his content in my study because Jonas is very open about his diabetes and has had it for many years. He also had a big fanbase, which helped his content reach out to many people with diabetes and without. This is an essential aspect because when reaching more people than only the ones who are diabetic, he helps spread awareness for people who do not have it close to their lives, thus helping create a narrative for non-diabetics as well. Moreover, Nick Jonas does a lot of collaboration with different organisation. However, these collaborations are not too evident on TikTok; here, he mostly posts about his life as a musician, the tours he is on, and some about diabetes. I did not choose one of his other accounts because it was interesting that he does not post that much on TikTok, so I investigated what he shares on this platform. Moreover, when collecting data, it was difficult to find celebrities on TikTok who shared about their diabetes since influencers mostly use the platform.

The second post from TikTok is from "clutzychick", who posted a video made to a popular where the lyrics were changed to fit that she and her friends in the video have diabetes. The video [https://www.tiktok.com/@clutzychick/video/7222327730816175366?q=diabetes&t=17 30471181364](https://www.tiktok.com/@clutzychick/video/7222327730816175366?q=diabetes&t=1730471181364) was posted on March the 15th, 2023 and has more than 91.200 likes and 487 comments. Clutzychick started posting videos on TikTok and YouTube in 2022, and

she solely posts videos about what it is like living with diabetes. She has since opened her website selling diabetes accessories in cooperation with Dexcom (About Me!, 2024). She uses many different social media platforms; thus, her content gets out to many people for them to see and be inspired by. Because she only posts about diabetes, there is a chance that her content will not reach nondiabetics. However, I still chose that she would be a good fit for my study because there were so many videos to choose from with a significant number of likes. The reason I chose this exact video was because of the caption "Can anyone spare a pancreas? 😂 💉 " (TikTok - Clutzychick, 2024), and the invitation it gives for her followers to interact with her content and what that might do to the conversation about diabetes.

The third post from TikTok is a video by the Danish organisation Diabetesforeningen. The post is in Danish, and I will use the original text from the video in its original language. The video https://www.tiktok.com/@diabetesforeningen/video/7094125384869940485 was posted on May 5th, 2022, with 3998 likes and 215 comments. The video shows the most common symptoms of diabetes, pointed out by the organisation's head of research. Diabetesforeningen is a Danish nonprofit organisation aiming to detect, prevent, and cure diabetes. Diabetesforningen was founded in 1940 and has since 1992 been in close cooperation with the Danish royal family. For people in Denmark, this is the go-to organisation for familiarising themselves when diagnosed (Historien, 2024). I have chosen this organisation to broaden the horizon of the study not only to be US and UK-based but also to take a smaller country. I chose this specific video because it fitted the criteria I had put forth, but also because the content of the video was interesting in the sense that it does not only aim to reach people with diabetes but also non-diabetics. Hence, they know what to look for if they suspect something is wrong. Diabetesforeningen is also present on Facebook, X, and Instagram. Most of their posts on Facebook are community-related, and Instagram is mainly used for the same things as Facebook but also for commercials.

For Facebook, the first post I have chosen to include in this study is a post by famous Danish soccer player Kasper Dolberg. The post is about his partnership with Danish company Novo Nordisk and how he can still live with diabetes. It was posted on

November 20th, 2022, with more than 3.100 likes and 53 comments. The post https://www.facebook.com/kasperdolbergofficial/posts/pfbid0moEL4kFmAdKxkuwud hbpYfyhaXc4V0SEA6wCKpnktfL4jeK2XgTpW46y6Q5QeHENl consists of some text and a picture of him. Dolberg was diagnosed in 2021 after complaining about feeling tired and constantly low on energy. His diagnosis has been followed closely by parents whose kids have diabetes because the kids view him as an icon of his soccer career, and having someone famous with diabetes can be crucial for kids with diabetes (Dolberg Taler Om Sin Diabetes: "Det Var et Chok for Mig," 2024). Dolberg is active on multiple social media, where he does not hide the fact that he has diabetes. I chose Dolberg because he is such an icon for kids, and seeing someone so active who lives with diabetes allows him to influence the conversation about the disease. I chose this specific post because it mentions the world diabetes day.

Secondly, from Facebook, I found a video of a father and his daughter, where the father helps her change the sensor she has on her arm. The daughter is not posting this video, but her father, presumably because she is too young to be on social media. The video https://www.facebook.com/reel/517973076982489 was posted about a year ago. However, Facebook will not let me access the exact time when the video was posted, but from the comments, I can deduce that it was posted about a year ago. The video has more than 454.000 likes and 5.600 comments. It was posted by Clinton Svatos, a digital creator and influencer (Clinton Svatos, 2023). He has a profile on almost all social media platforms and posts the same content. He is also a father to a girl with diabetes and often posts about choosing decorations for her sensor. I chose this because it showed a child with diabetes, and to cover various age groups, I deemed that this would be a good addition to my study and help me answer my problem formulation.

Lastly, the third post from Facebook is from WHO (World Health Organization), which posted a picture on August 9th 2024, showing the causes that diabetes can have if not treated https://www.facebook.com/WHO/posts/pfbid024ihgmMhSGBHdRAgJ4LczV8tYYoE8 7xhBrTiGyuc3jPtMsfUGXrod5jELYCCtktD5l. The post has more than 1.100 likes and 417 comments. WHO is one of the world's leading health organisations, with more than 8000 professionals working together to coordinate the world's response to health emergencies such as COVID-19. They connect people worldwide and work "to give everyone an equal

chance at a safe and healthy life." (Who We Are, 2016). WHO was founded in 1948 and has since developed into 194 member countries. It has become one of the largest health organisations in the world (About WHO, 2024). I have chosen this organisation because of its impact on the world, its credibility, and its vastness. With so many member countries, their input is reachable around the globe to many people, both with and without diabetes. Because of their strong presence throughout time, their influence on how different diseases are viewed is essential. Like many others, they are also active on many different social media platforms so that they can spread their content wide and fast.

To sum up, I have chosen these posts because they impact the conversation about diabetes and because I want to uncover these conversations and their impacts. I have chosen this amount because I believe it will offer me a clearer understanding and give me numerous inputs to consider. However, I acknowledge that this study could have examined more posts across other platforms with more time and collaboration with other scholars. The choice of platforms can be found in the introduction, where I accounted for the number of users each platform had and how big they were globally. I chose these because people of various ages, cultural backgrounds, and genders widely use them.

Furthermore, the ethical consideration I put into the data collection mainly consists of not using the followers', people who commented on the posts, real names. They will be referred to by different random names, which I came up with because even though they comment on something posted online, it is still vital to protect their identity. This is not the same for the people and organisations who share the content. Lindlof and Taylor (2011) argue that consent is a given when someone posts something on social media. They are aware that many people will view this content and use it for studies, which is why the ethical implications and the question of consent become minimal in these kinds of studies.

3.3 Method of Analysis

As mentioned, I have chosen to use two methods for my analysis. First, I will use an interpretive analysis to understand each social media post better, what frames they use, how these posts can be interpreted, and what the comment section can say about the

conversation surrounding diabetes. Then, I will compare my findings by examining the differences and similarities between influencers, celebrities, and organisations. I will also examine if there are any other similarities or differences across the different posts, not based on what kind of sender they have.

3.3.1 Interpretive Analysis

To answer the research question, I have chosen an interpretive analysis method. It is a qualitative method to uncover how individuals understand and interpret their experiences. Interpretive analysis emphasises subjective meanings and seeks to reveal insights beyond the surface description. One of the key figures in populating this approach was Jonathan A. Smith, primarily known for Interpretive Phenomenological Analysis (IPA), which became fundamental in psychology because it could help researchers study personal experience (Smith & Osborn, 2004).

The focus of this study lies in health communication and framing. With that focus, interpretive analysis can be very effective because, when paired with framing theory, it can provide a method for analysing social media and complex topics, such as diabetes. As mentioned earlier, Erving Goffman introduced framing theory (1974) and has since been expanded on by multiple scholars. Framing theory will be used in this study to identify the different frames found on social media regarding diabetes, to grant me insight into the deeper meanings of these frames and to analyse how someone with diabetes can interpret them.

There are several key steps when conducting an interpretive analysis. First, I collected the data (Smith & Osborn, 2004) by setting specific criteria for the posts I wanted to include. Then, after familiarising myself with the data, I deduced which could be used in my study by looking at how relevant they would be if they talked about diabetes enough and if there were any complications in using them. From that, I ended up with the nine I described previously. When familiarising myself with the data, I examined the organisations, celebrities, and influencers, looking into where they are active and how many followers they have, and looked closer to the data itself to gain an initial idea of any themes, emotions, frames, and expressions within. The third step in the process was extensive notetaking. After familiarising myself with each post, I took a more critical look

at each of them to find the different frames, see how they used their captions, pictures/videos, and how people reacted by looking into the comment section. I then noted what I found and how I would interpret these findings. I also noted down the frames I saw in each post, and if I saw more than one, I noted them and revisited them once I saw which one was most dominant or which one the comments had reacted to. Most frames I found were based on empowerment, and I found a few using gain and loss frames. These can reflect how diabetes is portrayed and discussed in these forums.

Once I had completed the extensive notetaking, I could move on to the more interpretive part of the analysis. Here, I applied two lenses: the "empathetic hermeneutic" approach and the "questioning hermeneutic" approach (Smith & Osborn, 2004). The first approach involves understanding the participant's (the users) intended meaning of their posts, themes, and frames. Allowing me to connect personally with each user's perspective and explore how and why they used these specific themes and frames (Smith & Osborn, 2004). Simultaneously, I will employ the second approach, which allows me to critically examine potential biases, assumptions, or broader cultural meanings implicit within the data (Smith & Osborn, 2004).

When I examined these frames, I could contextualise the data considering larger social, cultural, or political forces that might shape individual perspectives. Lastly, the interpretive analysis is combined to create a coherent story linking specific expressions and more general social trends (Smith & Osborn, 2004). For instance, a frame that depicts diabetes as "manageable" might reinforce certain beliefs about health responsibility, potentially affecting the public attitude towards diabetes. Because I am diabetic, the analysis will be based on my experience and interpretations. It means I have a more personal, insightful, and nuanced view of the data and can draw on my experiences when analysing the material. I need to ensure the readers that my emotions will be considered throughout the study so as not to cloud my findings.

3.3.2 Comparative Analysis

A comparative analysis is described by Bryman (2016) as an approach that is mainly used in social sciences to compare phenomena across different contexts. The primary objective

of this analysis method is to find the differences and similarities to gain a deeper insight into what factors can influence specific phenomena.

In this research, the comparative analysis will be conducted after the initial analysis to uncover if there were any connections or prominent similarities that were not found in the interpretive analyses. The comparison will be used to compare the posts beyond the table given earlier and across in different ways to see if there are similarities or differences between influencers, celebrities and organisations. Instead of only focusing on the different platforms, the comparative analysis will be used to look further into the different framing tools used by the content creators.

4. Analysis

The analysis will focus on the frames and how this can be interpreted by someone with diabetes. There will be paid attention to the posts' language and picture/video to examine how these posts shape the general conversation about diabetes. The analysis will be conducted by focusing on the different platforms through an interpretive analysis method, then a section with a comparative analysis where the focus is on comparing the celebrities, influencers, and organisations and examining if there are any places where these entities differ or coincide. Lastly, the problem formulation will be answered through the findings of these two analyses.

In recent years, Instagram has been a platform used to share photos, and it has adopted more features, hereunder to the opportunity to share short videos with one's friends, making it easy to consume much content quickly.

4.1 Instagram

4.1.1 Roxy Horner

The model, Roxy Horner, has had diabetes since 2021. She mainly posts about her modelling job, her family, and her life with diabetes. The following analysis will show that

there seems to be a disconnect between what Horner writes and how she frames it. Horner's posts start by addressing the diabetes community: "Shoutout to all my T1 family!" (Appendix, 1, l.1). Specifying what audience, it is she wants to appeal to with this post and cutting out most of the people not affected by diabetes, because they would likely not be interested in reading more of the caption because it is not directed towards them. However, the picture she uses in this post could spark some interest because it is not expected to see someone inject themselves on social media, so it could work to spike people's curiosity if they have not seen this before. Horner also ends the post by commenting on her clothes, "… spring looks like it's finally here and I'm wearing the new @frenchconnection jumper that's making me happy 🌸" (Appendix, 1, ll.6-7). Thus, it caught some attention from followers of this brand of clothes and gave the brand some commercials by tagging them directly.

Even though Horner's caption text and her frame can contradict, the overall tone of the caption is very positive. Horner uses smileys, and the phrases she uses read as someone who has a positive outlook on the world: "but that's okay 😊" (Appendix, 1, l.3), "I'm smiling because…." (Appendix, 1, l.5), "I still have so much to be grateful for…" (Appendix, 1, l.6), to mention a few. Writing in such a positive way gives the reader a feeling that this is an overall happy person who faces each day with a smile. The positivity is reflected in the first picture she posts with the caption where she is smiling while injecting her medicine. However, the caption's primary focus is the struggles of having diabetes. Horner writes, "Can't seem to get my glucose levels down today…" (Appendix, 1, l.1) and "…whilst my diabetes is giving me a physical headache and making me feel sick today…" (Appendix, 1, ll.5-6). These sentences show something different from being this happy and grateful person; they show a person still struggling with diabetes. The intention behind talking about the struggle she is experiencing the day the posts were made could be to show her diabetic followers that even if she has bad days with it, that is okay. Because of the tone and the picture of her smiling, it could be seen as her masking how it feels to have days where one's blood sugar is not cooperating, thus creating a masking frame. When having high blood sugar levels and the physical headache Horner mentions, it is normal to have difficulties going about one's day as usual, much less with a smile. Because of this, it could seem like what Horner is showing, and the tone of her

language does not coincide with what she might feel. Creating a disconnect which people with diabetes are likely to pick up on and influence them to put on the same mask and try to smile through it, diminishing how real the struggle of having diabetes is.

How Horner frames this post would indicate that she values likes over the information she gives about diabetes. Horner can be seen as being strong because it can be challenging to do everyday day things with diabetes: "We don't always get it right, some days are harder than others but that's okay 😊 if we are trying our best then that's all we can do 💁 " (Appendix, 1, ll.3-4). The intention behind writing this could be to show people with diabetes that even though one is having a day with uncontrollable blood sugar, they can still get through it because if Horner can, so can others. Because of this, it can be said that Horner uses an empowerment frame when discussing diabetes. She shows it as a struggle that can be faced and must be faced head-on every day. Using this frame can cause people with diabetes to view themselves in a different light and change the lens they use when thinking or talking about diabetes, which could, in turn, help change the public view and conversation about it. However, with the language and the frame not corresponding, there is a possibility that the post will be viewed more as a way to relate to her followers instead of showing her struggle because neither of her pictures gives any indication that her blood sugar levels are high, aside from her taking insulin. However, taking insulin does not directly indicate having levels that are so high that one would feel sick.

Overall, the post from Horner reveals a disconnect between what she writes and how she frames it. One's blood sugar levels can not deviate too much from the normal without one being able to feel it. The margin for when one's blood sugar is within the desired spectrum is not very high. It does not take too much to deviate from the normal levels. I was told when I first got diagnosed that my blood sugar should be between 4.0 and 9.0, and after a few years, they changed it to 4.0-7.0, which would mean that my levels that were fine five years ago would be too high today, and it would be necessary to inject insulin. The point is that being unable to see Horner's blood sugar levels makes her post less credible. This raises the question, why would she lie about her levels? One reason could be that she is trying to relate more to her diabetic followers or gain more sympathy from her overall fanbase. With that question comes another one: why would she not lie?

One reason for this could be that Horner does not see a point in lying about her numbers when she is having a rough day, and that she, like many other people, seeks the support of others who know how it feels.

Many of the comments show that her intention of creating awareness and showing her fans that she, too, can struggle has been received positively. The majority of the comments are people sharing their struggles with diabetes or praising her for being so open about it and for sharing her struggles. Showing that this post creates a safe place for people to talk about diabetes in ways where they do not feel judged by stereotypes or any stigmas surrounding diabetes. Seeing as the comments are very supportive, the intention behind the post corresponds with how it was received (Roxy, (@roxyhorner)). These comments also show the incredible support one can get on social media when posting about diabetes. This could be explained by the fact that people who follow influencers or celebrities are inclined to believe them regardless of their influence, especially regarding health issues because this is such an emotional topic (Picazo-Sánchez et al., 2022).

The following section shows that Type1amy takes a different approach to connecting with her followers and how she frames diabetes.

4.1.2 Type1amy

Type1amy is an Influencer who only posts about diabetes and has her own company selling diabetes equipment such as stickers. The video Type1amy posted has a negative frame, because she focuses on what she has lost by getting diabetes. This can damage the followers because they can become aware of issues they had not thought of before. In this post, Type1amy shows a video of her doing different things, such as making coffee, being at the gym, eating out, and eating at home (Appendix 2). Whenever the video clips to a new small video, a new text fits with what the captions say. Being an influencer who only posts about diabetes means that her target audience, and likely most of her audience, are people who either have diabetes or people close to someone with diabetes. She has included some hashtags so that more people will see her post. She is a micro-influencer; therefore, when she shares something, it is to gain more followers, become more prominent, and spread more awareness of diabetes and the company she runs.

Type1amy's caption and her video creates a disconnect because she does not show the bad feelings she writes about. In the post, she shares some of the things she still struggles with five years after her diagnosis. By doing so, Type1amy creates a space where it is safe to share these struggles while showing newly diagnosed that these struggles are standard even for someone who has dealt with diabetes for multiple years. Thus, the intention behind the post is to create awareness and to help people who are struggling with some issues related to diabetes to see that they are not alone in their struggles and that it is okay to struggle. One of the things that she mentions she struggles with is "massive anxiety and stress from high blood sugar" (Appendix 2, l.2). In the video where this sentence is connected, it shows that she is at the gym working out. This could be seen as her way of showing how she deals with anxiety and stress and a way to lower her blood sugar levels. However, it does not show her feeling bad. It does not show the anxiety or stress on her face or body language. Not showing the audience these feelings can be Type1amy choosing not to expose herself entirely to her followers. Because of that, there is a disconnect between her intention and what she conveys in her video. She downplays her feelings, which could influence her followers to believe that they should not show up when they are struggling but rather bottle it up and work out and figure out their way of dealing with it.

Furthermore, sharing what she struggles with can adversely affect her followers. Type1amy writes that she refuses "to eat out with friends for dinner so then I don't have to worry about my blood sugar" (Appendix 2, l.6). By sharing that she lets her diabetes control her life, she also shows her followers that it is okay to let it control your life, instead of empowering them to do what they like even though they must deal with this. Instead of showing ways to deal with diabetes and incorporate it into one's life, Type1amy shows that you should change your life to fit with your diabetes. For newly diagnosed, this post can be problematic to come about because it does not show that diabetes is manageable but rather that it controls your life. This is something I have seen many newly diagnosed people struggle with while mentoring them. However, it is also something my doctors told me to be aware of when I was first diagnosed because viewing diabetes as something that controls one's life can be mentally exhausting and feeling a need to alienate oneself from friends and family. Viewing diabetes as something that controls one's life sets a negative tone for how people talk about it. When an influencer shows this view, it will likely affect

her followers into sharing her opinion on diabetes. However, this post can also be a helping hand because many people with diabetes know that we all have days where everything about the diagnosis is negative, and it does feel like it controls us. A post like this can help see that people with diabetes are not alone in their fights and struggles with the disease.

Loss and gain frames can be very impactful when talking about health because of people's emotional reactions regarding health issues. Type1amy uses one of these frames to connect to her followers more emotionally. The language used and the way she shows herself in most of the clips in the video aligns with a loss frame because she talks about the things that she has lost: she has not felt safe to go out and eat with her friends, she has lost a sense of safety and instead gotten to feel stress and anxiety, and she has lost her energy to do what she usually did before she got diagnosed. This can all be seen from the struggles she presents and how she talks about them in her post (Appendix 2, ll.1-6). She puts a very negative spin on these things because she views them as negative gains or losses she deals with daily. As mentioned earlier, this is a very effective frame because health is a very emotional subject; thus, using this frame also creates a community or an opportunity for her followers to be emotional about their diabetes and their experiences. The comments make it clear that the emotional effect of using a loss frame has been very effective because many people are sharing their struggles, thanking her for sharing hers, informing that they have experienced mental relief from reading this because they became aware that they struggle with many of the same things. One person commented that "I had it when i was 5 now I'm 25 and I've been type 1 from the past 20 years and I realised i relate to all of these 🥺" (*Amy | T1D (@type1amy)*). Commenting that this person just now realised that they relate to all these things can be evidence that this post has a negative effect on the followers. However, there is no way to know if this person has felt worse since realising this or if their emotional state has stayed the same. Another notable thing about this comment is that the person uses a sad smiley at the end, indicating that they are sad that they just realised this, which could indicate that they have been emotionally affected by the post.

This post adds to the conversation about diabetes by framing diabetes as people who have lost things and as victims of an uncontrollable disease. By framing it like this,

Type1amy's followers are likely to view themselves more as victims and as someone who has suffered a significant mental loss. The public view on diabetes can be affected by this because if more people start to act like they are victims, people will likely start to treat them like that and feel more sorry for them. This view on people with diabetes will not be very favourable for the diabetes community because it will change people's perspective on them and view them as people who may not be able to live, work, or function in society. Beyondtype1 offers different frames that are more focused on encouraging people with diabetes to view their illness in a different light.

4.1.3 Beyondtype1

Beyondtype1 is an organisation that wants to make life easier for diabetics and help them through their posts. The selected post from Beyondtype1 shows that they want to encourage and make people with diabetes feel empowered through their frames, but they risk downplaying the seriousness of the condition. Beyondtype1 often collaborates with different people, both influencers and more traditionally famous people like Nick Jonas. Most of their posts are about spreading awareness about diabetes and helping people with diabetes deal better with their illness. In this post, they collaborate with a family with type 1 diabetes, the Kruegers. This post seems to share some awareness but more to show that having diabetes does not have to stop one from living. The caption starts by being very supportive of diabetics and how it can feel to deal with diabetes. "If you're feeling discouraged or need a little reminder of allllllll the things you CAN do, the Kruegers (a family of 6 T1Ds) are an inspiring example! 💛" (Appendix 3, ll.1-2). By emphasising **can** and **all**, Beyondtype1 draws attention to the fact that there are many things one can do with diabetes. It also works as an encouragement for people with diabetes because it makes them consider some things they can still do. This becomes clearer in the second part of the caption as Beyondtype1 asks their followers to share their experiences with what they have been told they could not do because of their diabetes (Appendix 3, ll.3-4). By doing this, they engage their followers to consider some of the things they have overcome and some of the stereotypes and stigmas they disprove daily.

Beyondtype1 uses an encouragement frame to show their followers that people with diabetes can do many different things. However, they risk oversimplifying the illness. The video works to amplify this encouragement by showing the Krueger family doing different things, such as eating doughnuts, getting tattoos, enjoying happy hour, having kids, and getting their dream job (Appendix 3). They show that all these everyday life things are something people with diabetes do not have to avoid or cut out of their lives just because of the diabetes. Moreover, the video starts with seeing one of the family members holding some doughnuts with the text "wait i thought diabetics couldn't-" (Appendix 3) and then goes through all these different scenarios, ending with a clip of two of the girls in the family and the text "nope! We just need insulin to do it :)" (Appendix 3). By asking all these questions while showing that they can and ending the video by answering that they can do all of this, they need something extra, sends a powerful message to other diabetics to not be limited or controlled by their diabetes because all they need to do to experience and do all these things is to take some insulin. Thus, they downplay how difficult diabetes can be.

While the normalisation and encouragement frames are positive and can foster positivity for Beyondtype1's followers, there is a risk of downplaying. Downplaying diabetes can have different outcomes because, on the one hand, it makes diabetes seem way more manageable, which can be a positive thing for diabetics to see. However, it can also make diabetes seem easy and less severe than it is, and the people seeing this can start viewing diabetes as an illness that is not that serious and dangerous because it is only taking insulin. If people with diabetes can live everyday life, why is there focus on helping them? As a person with diabetes, I do not see it this way because I know that it is not only taking insulin but that there are many other aspects one needs to consider. However, a person who does not know anything about diabetes might start viewing diabetes as less severe, which could, in turn, be dangerous for conversations about the illness. If people who do not have diabetes and maybe do not know much about it start viewing diabetes like this, it will hinder the development of how people talk about it because diabetes will lose its importance. Thus, this post can be very helpful and positive, but it can also have some downsides that would be good to consider when posting health-related content.

Connecting with their followers is something Beyondtype1 uses in an impactful way because they nudge people to reflect on their battles won. When beyondtype1 asks their followers to interact with this post, they also ask them to consider their victories and positive experiences that they have had. This can be very positive because it can create a sense of community and add more to an empowerment frame, which can also be seen in the first part of the caption. Talking about and getting people to talk about what they have overcome makes people with diabetes seem like warriors who continuously fight against the stigmatisation and stereotypes that are put on them by society and people who do not know much about diabetes. The response to the question and the frame is overwhelmingly positive. Many comments are people sharing their experiences and how they have overcome people saying they could not do this or that (Beyond Type 1, 2020). To read this as a person with diabetes has a powerful impact and does make one feel empowered to overcome some things one faces. This is one of the things that social media is suitable for: creating a sense of community and sharing and supporting each other. Especially when it comes to health issues because it is something that people often are very emotional about and get significantly affected by when they see online if they can relate to it.

The analysis has shown different uses of frames on Instagram, all of which are working to try to connect with followers.

4.1.4 Diabetes Frames on Instagram

On Instagram, Horner, Type1amy, and Beyondtype1 engage with the diabetes community using distinct frames that reflect their roles as a celebrity, an influencer, and an organisation. Horner uses both masking and empowerment frames in her post. By openly sharing her struggles while maintaining a positive tone, she portrays diabetes as something that can be overcome if people mask how, it is making them feel. At the same time, Horner frames people with diabetes as resilient people who overcome challenges daily. By balancing these two in her posts, she aims to become more relatable to her followers, but it may downplay the real hardships of managing diabetes.

Type1amy adopts a loss frame for her post by focusing on the emotional toll and limitation diabetes brings. She shows a vulnerability that fosters an emotional connection

to her followers by doing so. However, it risks encouraging a victim mentality and influences the perception of diabetes as a condition that limits life severely.

Lastly, Beyondtype1 employs an empowerment frame in their post to show the Krueger family and all they have done. This emphasises resilience and what diabetics can do with proper management. By showcasing the Kruegers doing everyday activities, they aim to inspire their followers and foster community. However, by using these frames, they risk oversimplifying diabetes, potentially leading non-diabetics to underestimate the challenges that come with it.

These approaches demonstrate how Horner blends positivity with personal struggles, how Type1amy emphasises vulnerability, and how Beyondtype1 focus on empowerment and community, each contributing to shaping public understanding of diabetes through their different messages and how they are framed.

TikTok is a relatively new platform, and many of the users are younger people who make dance videos and people who use it to express themselves creatively. It has also become a place where influencers can thrive because their content does not need to be long and can reach many people quickly.

4.2 TikTok

4.2.1 Nick Jonas

Nick Jonas is an American songwriter, musician, and actor whose posts on social media are a mix of diabetes-related posts and posts related to his work. In the post, Jonas uses his status as a celebrity to spread awareness of diabetes, but the post does not inspire action. As mentioned earlier, Nick Jonas collaborates with different diabetes-related organisations.

Jonas uses his celebrity status and the platform to reach a younger audience. In this post, Jonas films himself looking at the camera while listing symptoms he showed before getting diagnosed (Appendix 4). The symptoms show up to the beat of the intro to the popular song "Eye of the Tiger". By choosing this song, he already frames people with diabetes as warriors because this song is often associated with people in movies having

their big fight after training for a long time. However, because he does not talk or show anything but himself and these symptoms in the video, he does not play more into a warrior frame. Instead, as the video proceeds, Jonas continues to look into the camera with a somewhat concerned look on his face, showing a more parental side of him. Jonas wants to create awareness around diabetes, especially the symptoms often ignored in the early stages of the illness. Jonas creates a more parental frame than a warrior frame with this message and how he looks concerned when looking at the camera/the audience. He wants to ensure these symptoms are not overlooked or taken lightly if people experience them. This frame could work well on the target group for TikTok because it is primarily young adults and teenagers who use this app, and listening to a role model instead of one's parents might be more effective for this age group.

Given how TikTok's algorithm works, it can be difficult for its users to share content that will have a long-lasting effect on the viewers. TikTok also allows you to write a short caption for your video. These are often not as noticeable as the video itself. However, Jonas also writes about these "4 signs that I was living with Type 1 diabetes: …" (Appendix 4, l.1). Adding some hashtags can ensure the message gets out to as many people as possible. He also adds Beyondtype1, showing that this post collaborates with them to spread awareness. Helping organisations like this also shows that Beyondtype1 knows how to reach their target audiences, and that Jonas helps show that he is as committed to the cause as well. However, the video is only 11 seconds, which is typical for TikTok because most apps are about sharing content as fast as possible so the audience can consume as much content as possible in a small amount of time. As can be seen, it takes more than one post to change their behaviour. However, with how TikTok's algorithm works, there is a chance that the people seeing this on their FYP (For You Page) will see content that matches this, which could make them think more about diabetes and whether they have it.

Nick Jonas's post gives his followers a strong sense of community because he shares his diabetes openly. The conversation about diabetes can be shifted or nudged by celebrities sharing their views and just by sharing that they have it. Because Jonas is famous, so it is easy for many people to mirror themselves and find similarities, especially if they are fans. Thus, by just sharing that he has diabetes, he already nudges the conversation because he makes his fans more interested in the illness, and if they have it

themselves, he becomes more relatable. Jonas does not try to share any positivity or negativity through this post. However, he tries to keep it neutral, thus not changing much regarding stereotypes or stigmas surrounding diabetes. However, looking at the comments, it becomes evident that many people have taken his sharing positively. There are many comments about how important his work is for awareness, and some comments from people who are worried that they might have diabetes because they can recognise some of these symptoms (*TikTok - NickJonas*, 2024). When people have commented about this, it is empowering to see the comments with people trying to help them, telling them where to seek information. This post also speaks to the feeling of community, which can be very helpful and impactful for people with illnesses. Another way to strengthen the sense of community is through light-hearted jokes and trending songs, as seen in Clutzychick's post.

4.2.2 Clutzychick

Clutzychick is an influencer who posts mainly about her diabetes, often with help from other diabetics. This post focuses on the invisibility of diabetes and, through humour, aims to normalise diabetes, though this approach may risk removing the seriousness of the disease. For this post, Clutzychick uses a song from the comedy duo "Sugarcoatedsisters", where they have taken a popular song and changed the lyrics to fit the one with diabetes: because of the song lyrics, Clutzychick does not need to use any text in the video because all she wants to say with the video can be said through this song. The video shows her and her friends showing their different diabetes tech and medicine. The video changes the clip whenever there is a new line in the song. Using a song from this specific duo ensures that this influencer spreads their video widely across the platform because this duo makes much content. Many people with diabetes or bipolar disorder listen to this duo since they can mirror themselves in their songs.

By connecting what they show and how the song lyrics go, she sends a strong message about one of the issues that people with diabetes face: invisibility. One of the notable things in this video is that in the first three clips, the diabetes tech can be seen; they have it on their stomach or in their hands (Appendix 5). Thus, creating awareness

about diabetes and showing the audience that they have it, where they put it, and what type of technology they use. However, the third clip in the video shows two boys with no visible diabetes tools. In this clip, the song goes, "But even with nothing on, I'm diabetic" (Appendix 5, lyrics ll.3-4). Drawing attention to the invisibility of diabetes, they show the audience that diabetes cannot always be seen but that it does not take away the diabetes just because it is not visible right away. This is an important message to send to both people with diabetes, especially to non-diabetics, because it shows that even though someone may look like any other person, they can still deal and struggle with diabetes. While this is an important message, they also show how different people with diabetes can look, that it is not only people who are overweight who can have diabetes but that it looks different on everyone. Thus, Clutzychick uses a normalisation frame by showing how normal they look and that either with visible or non-visible diabetes tools, they are just people who must wear some extra accessories.

Joking about something as serious as diabetes can make the sense of community stronger, but it can also diminish some of the serious issues that come with diabetes. The post intends to spread awareness. With the help of the song and by showing different people, Clutzychick makes sure that the video will be relatable to many people and reach many users. The dancing and the happiness shown in the video can empower people with diabetes because it helps create an everyday world and view of diabetes. However, by looking happy and dancing around, they could also seem somewhat flippant, which could cause the followers to view diabetes as something less serious. The caption for the video reads, "Can anyone spare a pancreas? 😂💉 " (Appendix 5, l.1). By making a joking comment, Clutzychick interacts with her followers and feeds this flippant way of viewing diabetes. This can make the conversation about diabetes suffer some because seeing people viewing it as a joke might influence people to take it less seriously. However, it can also work as a break from the seriousness of diabetes and let people take a little mental break from being caught up in thinking about all the consequences diabetes can bring and all the things one needs to worry about daily.

The comments for the video show that many people go along with jokingly asking for a pancreas by either asking themselves or telling Clutzychick that she cannot have theirs because it does not work either. This shows that the diabetes community is very

welcoming towards making jokes about their illness and that it can be a good break from reality (TikTok - Clutzychick, 2023). As a person with diabetes, a new pancreas is something I have thought about and how nice it would be. The comments for this video show that it is expected to think of getting one and that people with diabetes on TikTok can be very supportive and enjoy having people post about diabetes. On the contrary, Diabetesforeningen does not use jokes or this light-heartedness in their post.

4.2.3 Diabetesforeningen

Diabetesforeningen is a Danish non-governmental organisation that works to make life more manageable for those with diabetes. Their posts on social media are about different facts on diabetes, and some show their different collaboration partners. For this post, Diabetesforeningen tries to inform people. However, the response to the post shows that it has inflicted fear among the people who have seen it. This video resembles Nick Jonas's; it also shows a list of the symptoms of undiagnosed diabetes. With Diabetesforeningen choosing to have their head of research present this, their content becomes reliable in a way that influencers and celebrities may not show. For TikTok, reliability is critical because, as mentioned earlier, misinformation flourishes on platforms such as TikTok because there is nothing put in place to ensure that misinformation is minimised. In their post, Diabetesforeningen also aims for the typical age group using TikTok by using emojis instead of writing genitalia, attempting to be more relatable and not scare teenagers who think talking about genitals is embarrassing (Appendix 6). Emojis are a good tool because they can relay messages without using words. Being present on TikTok Diabetesforeningen ensures that their content hits various age groups because they can share content with a younger audience here. Since type 1 diabetes is often diagnosed before age 14 (*Type 1 Diabetes - Symptoms and Causes*, 2024), using TikTok ensures that a younger audience also sees their messages. Diabetesforeningen intends to spread awareness about the often-ignored symptoms of diabetes so that more people can get diagnosed earlier and avoid the consequences undiscovered diabetes can bring.

Diabetesforeningen frames diabetes as something that should be taken seriously. The way Diabetesforeningen frames its video is parental, with an older woman standing

and lecturing about something serious while keeping eye contact with the camera. This frame can be beneficial in showing the seriousness. However, for the younger audience, this might not be as impactful as if it were a celebrity or someone the audience could relate to more. In many ways, when seeing this video, it could just as well be one parent telling you something important, and that might not give at least the younger audience any incentive to stay and watch the full video.

However, using the parental frame and emphasising the seriousness of diabetes risks spreading panic and inducing anxiety among the viewers. The comments for this post show something I, as a person with diabetes, had not initially thought of. The comment section is filled with people being scared that they have diabetes and slightly panicking about this fact (TikTok - Diabetesforeningen, 2022). As someone with diabetes, I interpreted the video as about awareness and information. However, the comments show that it is received as a scare campaign because so many people start realising that they have some of these symptoms and get scared that they may have diabetes. As a diabetic viewing this, I find the message of spreading awareness to be positive. I view it in an empowering way because it shows how much awareness I have developed on social media, from when I was diagnosed to now.

Nevertheless, I can see through the lens of a person without diabetes that this could be scary to see on social media, especially if you have some of these symptoms. The comments show that people perceive diabetes as something to be afraid of because they will lose their health and know that there will be consequences to having a chronic disease. For these people, the frame could be seen as a scare frame, where Diabetesforeningen tries to scare them into going to the doctor or showing them the scary truth about now knowing. Because Diabetesforeningen writes in the video "Har du diabetes uden at vide det?" (do you have diabetes without knowing?) (Appendix 6). This question hanging over the video could easily be perceived as scary and has made people think more about their health.

The posts on TikTok have shown that there are many ways to approach talking about diabetes online and that what might be intended is not always what followers pick up on.

4.2.4 Diabetes Frames on TikTok

The framing seen on TikTok through these posts plays a vital role in shaping the conversation about diabetes, influencing how TikTok users perceive and discuss it. Nick Jonas's post employs a parental frame to raise awareness about type 1 diabetes by using his celebrity status and collaborating with Beyond Type 1. Through this, Jonas also connects with a broad audience and encourages awareness. Using a neutral tone, Jonas fosters a safe environment for his followers to discuss their diabetes and symptoms.

Clutzychick uses a normalisation frame to highlight the diversity of diabetes experiences. Through humour, comedy music, and a light-hearted caption, she showcases visible and invisible diabetes tools, getting rid of misconceptions and reframing diabetes to a manageable condition. Clutzychicks' approach may risk downplaying the seriousness of diabetes for non-diabetic viewers; it manages to resonate with the diabetes community, building a sense of solidarity and promoting normalcy.

Lastly, Diabetesforeningen adopts a parental frame with an authoritative tone and credible presentation, using emojis to engage TikTok's younger audience. However, their question about having diabetes without knowing it introduces a scare frame, which causes anxiety among the viewers who recognise the symptoms but have not been diagnosed with diabetes. The post highlights the fine line between raising awareness and unintentionally causing alarm because, for a person with diabetes, it can be viewed as empowering to see this focus on the condition.

Together, these frames shape the conversation about diabetes on social media by fostering community, empowering people with diabetes, and sparking awareness and concern. Varied approaches reflect the complex balance between making diabetes relatable, educating the public, and addressing potential misconceptions or fears.

Another influential media platform is Facebook, which is widely used to create communities and share information with friends and family.

4.3 Facebook

4.3.1 Kasper Dolberg

Kasper Dolberg is a professional Danish soccer player who was diagnosed with diabetes a few years back. His posts on social media mainly consist of soccer-related posts and a few diabetes-related ones. This post about diabetes focuses on his active lifestyle and ends up diminishing some of the seriousness of diabetes. In this post, Dolberg is very forward in his collaboration with Novo Nordisk and this post is made with them. While this can overshadow his opinions because it is commercial, the post focuses more on his experience with diabetes, and the partnership is a secondary aspect of the post. Dolberg shares what his and Novo Nordisk's intention with the post is: "I've teamed up with @NovoNordisk to create awareness about Type 1 diabetes" (Appendix 7, l.3). By doing this, there is no way around what it is Dolberg wants to achieve with the post. Even though Dolberg makes several remarks about this being commercialised content, he does not mention any of Novo Nordisk's products; he only mentions the company itself. Thus, he is commercialising the company but does not do anything other than mention that they should do that. Instead, he focuses on spreading awareness and sharing his views on diabetes.

Different stereotypes about diabetes are something most diabetics have heard and had to deal with; showing something outside of the stereotype can be a powerful tool. Since Dolberg is a famous soccer player, he has already broken some stereotypes about diabetes. Moreover, mentioning how he lives his life, "despite being diagnosed with this chronic disease it's still possible to live a perfectly normal and active life – just like I do." (Appendix 7, ll.4-5), can resonate with the people seeing this and empower them to believe that they can live just as actively. Thus, Dolberg uses an empowerment frame to support his followers and their struggles with diabetes. However, if one sees this post and does not know that he plays soccer at a high national and international level, they will not understand what he means by leading an active life. Therefore, this post does not reach people who do not follow soccer because he does not indicate what kind of active lifestyle he has. Given that Dolberg is a famous soccer player, he could rely on that fact for people to know about his lifestyle because he has not become famous by being on social media

but from a more traditional aspect. Relying solely on his fame for his sport may limit the number of people who see and are affected by this post. This post also sends another important message: even though someone has diabetes, they can still be professional athletes and follow their dreams, which is strengthened by the frame of empowerment. It is empowering to see a role model like this keep his position on the Danish national soccer team and continue living his dream even after getting diagnosed.

Denmark is not a big country, and writing in Danish alienates most of the world's population. One of the most notable things about this post is that he writes in English, which his international fame can explain. He has fans in different parts of the world. However, looking at Novo Nordisk's Facebook page, I see that they post only in English (*Facebook - Novo Nordisk*, 2023). Maybe Dolberg was instructed to write this post in English by them. But with his international fanbase, it could also be explained by that. Using his non-native language can risk cutting off his younger fans in Denmark because they might not know English yet. There are ways around this. Facebook has a translation option, and the children most likely have parents or other people who can understand and translate it. The use of English in the post also ensures that it gets wider attention because his international fans will be able to understand and more inclined to interact with it when the post is in English instead of Danish.

Using an empowerment frame mainly positively affects those reading them and contributes to a sense of community. However, the risk of diminishing diabetes when using these frames exists. From the comments on the post, it reached a broad audience. The comments are mainly in Danish, but some are in English and other languages (*Dolberg Taler Om Sin Diabetes: "Det Var et Chok for Mig,"* 2024). Most of the comments are about how important it is that he shares things about diabetes, and many people generally support him in different ways. Thus, the conversation around diabetes can be shaped by this post to show how worldwide diabetes is and empower people with diabetes to follow their dreams and feel supported. The post also deals with stereotypes, as mentioned, because there is no doubt that Dolberg was overweight when he was diagnosed and has lived a life striving to be a professional soccer player. The likelihood of him having led an unhealthy and non-active lifestyle is almost impossible.

Empowerment is also a dominant frame in the post from Clinton Svatos, who also adds a normalisation frame to show how he and his daughter deal with her diabetes.

4.3.2 Clinton Svatos

Clinton Svatos is a content creator who posts about many different things. One of these things is posts with his daughter about how they deal with the everyday things people with diabetes go through. The post uses empowerment and normalisation frames to show other diabetics how to have fun in dealing with diabetes but risks downplaying the seriousness of diabetes by doing so. In this post, the father of the person with diabetes is sharing the content, but she is in the video and presumably has agreed to share this content. This video intends to spread some awareness but mostly to normalise and show diabetes as something personal and fun. The caption for the video reads, "Picking out Stickers/Tape for her Dexcom CGM" (Appendix 8, l.1). The video shows them trying to look at different stickers until they find one she likes. By showing this, Svatos shows that he is a very supportive father and that his child does have some control over her diabetes because she can choose to personalise with any sticker, they have that she would like for the next couple of days until they must change the Dexcom. Svatos and his daughter, thus, send a message of control and show that they can have fun while deciding these things.

The mix of seriousness in seeing what happens in the video and the joking way they go about it can cause the seriousness to be downplayed. The video has a popular sound clip that takes some of the seriousness down. Not that the video does not show the seriousness, because it does show a person with diabetes and tools to help. But by playing an upbeat sound clip, they foster this more fun aspect of diabetes. All the things mentioned so far play into a frame of control, showing that some aspects of diabetes are controllable, that it can be fun to pick out these stickers and that they can serve as an expression of oneself. Another big part of this video is their facial expressions; Svatos is excited about every sticker, while the daughter looks utterly unamused by all but the last (Appendix 8). Showing a video with this much emotion amplifies the frame of the video because it can be seen how vital this one controllable thing is for the daughter. However, the amusement shown in the video can also have the effect of downplaying the seriousness of diabetes. Even though they are open about her having it and showing visible proof, joking around and having fun with it can work to downplay some of the seriousness. When

looking at the comments for the video, overall, the comments are upbeat; people sharing how happy they are with the Dexcom, how happy they are that Svatos and his daughter can have fun with it, and just sharing that they have diabetes (*Clinton Svatos*, 2023). This shows that their fun is not received as downplaying but as a positive thing to find fun in the struggles.

Misinformation is a big social media issue, which can quickly become harmful to what the post is trying to do. One of the comments made for this video shows one of the ways that misinformation can be shared; the person writes, "Its too young to have diabetic ..just try Lowcarb/keto.diet to reversed Diabetic ." (*Clinton Svatos*, 2023) this comment got a lot of reactions and comments. The spelling and grammar are not perfect, which makes this comment less believable. However, based on the reactions it has generated, people have started to pay attention to it. This can be dangerous because most diabetics know that there is no way to reverse type 1 diabetes, but there is always a hope that someday there might be. This way of sharing misinformation can be very impactful because the person does not need to post something on their page and hope it will be seen but uses a viral video to share misinformation, ensuring that many people will read it. This specific comment is not something I would interpret as damaging for people with diabetes because of how it is written. However, some people may find it believable, which can lead to beliefs that diabetes is something you can reverse by changing your diet.

Jokes and empowerment are set aside in WHO's post to show the more serious aspects of diabetes.

4.3.3 World Health Organisation (WHO)

World Health Organization is an organisation that deals with anything health-related worldwide. Many posts are about illnesses or other health matters, and some are about diabetes. Through a fear-based gain frame, the post spikes some anxiety among the followers but also a conversation not related to diabetes. The WHO Focuses on what can happen if diabetes goes untreated in their post. With this post, they could be trying to spread awareness and show the dire consequences untreated diabetes can have. However, it can also be seen as a scare campaign because it focuses on some scary issues for most

people. This post has a serious tone; they use short sentences and bold text to emphasise the importance of their message and bullet points to draw attention to these specific outcomes. This all plays into the frame that WHO uses. The frame could both be seen as a gain frame. However, also as a loss frame because of the language used for the different outcomes, "👁️blindness ❗kidney failure 🫀 heart attacks 🧠 stroke 🦵 lower limb amputation" (Appendix 9, ll.2-6), shows the audience what consequences you can gain. However, it can also be seen as a loss frame because they tell people with diabetes that they will lose their eyesight and so on if they are not treated. The strongest of the two in this post is the gain frame because it shows people all the badness they will gain if they do not take their medicine. A gain frame has proven to be very useful in health communication because of the emotional aspects that especially chronic diseases foster.

Fear frames can be a potent tool when discussing health because they are very emotional. The WHO uses this frame to induce fear in the audience, nudging them to get tested and treated. This can be a powerful incentive for people to do something about their diabetes. However, it may also paralyse them with that fear to the point where they are too scared to eat or live a more normal life because they are too scared that all these things might happen. The picture for this post emphasises the complications and shows what parts of the body are affected by these complications. Installing this fear within people can be a good incentive for people to take more care of their diabetes and show the seriousness of diabetes.

Fear can also cause anxiety and cause people to focus more on the fear itself than what the post is about. Fear can affect a conversation in multiple ways. As someone with diabetes, seeing this post has made me think more about all the outcomes that can happen, but even more so, it made me get anxious and mad at myself when my blood sugar is high. Therefore, it can be dangerous to implement this fear in people with diabetes. The conversation could be affected to be controlled by anxiety, but it will not show diabetes as something normal or flippant. The comments for this post show a bit of a different picture; most of them are not about diabetes but about vaccines and COVID-19 (*Facebook - World Health Organization*, 2023). Many people have used this post to voice their dissatisfaction with WHO and with many other health-related issues, making this post a generator for misinformation and not a positive place for people with diabetes

to gain a community or see the diabetes community supporting each other. Because of the nature of the comments, this post becomes less about diabetes. It gets forgotten in the comments, making diabetes seem less critical than COVID-19 and vaccinations, which can be harmful to the conversation about diabetes because it shows that it will get overlooked for the sake of other health issues. As seen earlier, this is not the case because many people are also diagnosed every year with diabetes, and there has not been a cure or a vaccination that helps with it the same way as there has been with COVID-19. Though there is a diabetes treatment, many will still suffer these complications because blood sugar levels are not something you can always control 100%.

These Facebook posts have all shown very different frames and approaches to sharing about diabetes and show that the outcomes from the followers are influenced by how they frame their posts.

4.3.4 Diabetes Frames on Facebook

The Facebook posts address diabetes by using different frames, each playing a role in shaping how diabetes is conversed about. Dolberg uses an empowerment frame that shows that diabetes does not have to limit one's potential. Because Dolberg is a famous soccer player, his posts challenge the stereotype about diabetes and show that even athletes with active lifestyles can develop diabetes. The comments in the post-show that Dolberg's followers gain this sense of community from him sharing this about his life.

Similarly, Svatos and his daughter employ a control frame to normalise diabetes through sharing a light-hearted video. By emphasising her freedom in choosing her stickers, they showcase moments of personalisation and the small joys in diabetes management. Their approach promotes positivity and humanises diabetes, making it relatable and less intimidating for the audience.

The WHO adopts a fear-based gain frame to emphasise the severe consequences of untreated diabetes. The post seeks to create urgency and prompt action using bold text, bullet points, and visuals. While this approach can motivate people, it risks inducing anxiety or guilt among people with diabetes, potentially hindering constructive engagement. The comments for this post deviate from the intended message and start

discussing vaccines and COVID instead, thus overshadowing diabetes. The shift highlights the challenge of maintaining focus and fighting misinformation in online health communication.

These examples demonstrate how framing strategies shape public conversations about diabetes. Positive frames can inspire, connect, and normalise the illness, while fear-based frames must be carefully balanced to avoid alienating or overwhelming the audience. Lastly, framing and audience engagement meshing reveal the complexities of fostering meaningful dialogue and fighting misinformation.

The following will compare what has been discovered throughout the interpretive analysis. It will examine the findings based on the frames across platforms and entities.

4.4 Comparing Frames and Findings

This part of the analysis will view the findings across Instagram, TikTok, and Facebook to discover the different and similar frames used by the influencers, the celebrities, and the organisations. The various and similar effects the posts have had on community building will also be examined through this comparison.

Across the different platforms, the influencers all have the same goal: to spread awareness. The approach used by Clutzychick and Clinton Svatos towards this goal is to make light-hearted videos that show the fun that one can still have with diabetes. Their video also includes jokes or fun behaviour to strengthen their normalisation and control frames. Each uses these frames to show how life with diabetes can be made easier and that it is possible to live a fun and everyday life with diabetes. However, Type1amy shows something entirely different; in her video, she uses a loss frame to draw attention to all the things her diabetes keeps her from doing. The mix of these frames can positively affect the conversation about diabetes because while Clutzychick and Svatos both show an everyday life that's easy to overcome, Type1amy mentions all the things that can be difficult to deal with diabetes. Thus, Type1amy levels the impression of diabetes out when looking at these three influencers because she does not only show the positives and the fun, she could still have but focuses more on some of the issues that are normal to experience. All the influencers have gotten positive comments on their videos, showing

that the diabetes community reacts to this kind of content and is happy to share their own experiences and have someone share theirs so that the followers know that they are not alone in dealing with these struggles or trying to have fun and normalise diabetes. Thus, the influencers choose different approaches and frames to spread this awareness, influencing their followers and the diabetes community.

By using frames, celebrities get the attention of their followers, but in different ways. Horner uses a masking and empowerment frame to show her followers that they need to mask their bad days but that they are still warriors for dealing with diabetes. Jonas uses a parental frame to get the younger audience's attention on TikTok and to get them to pay attention to the symptoms. Dolberg uses an empowerment frame to show that one can still live their dream life with diabetes. Horner and Dolberg's approaches are very similar. They use positivity to empower and create these frames for their followers, thus becoming role models for other diabetes. However, they do not show the hardship of having diabetes. Horner mentions it, but the hardship gets underplayed because of the disconnect from what she writes and what she shows. Dolberg does not mention the hardships at all. Thus, their frames play into a less serious conversation about diabetes.

In contrast, Jonas shows the seriousness of diabetes more through his video; however, because of the length and limited opportunity to influence his followers to go and do something about it can make it difficult to affect his followers. Thus, the celebrities all reach their followers in different ways and help the diabetes community by being more visible to people without diabetes. However, they do not show how severe and complicated diabetes can be to deal with, which can simplify the conversation about diabetes because non-diabetics will not see the hardships of it from looking at celebrities.

Lastly, Diabetesforeningen and WHO both use or are viewed as using a fear approach when framing diabetes because they both focus on what one can lose/gain if they are not treated and how that shows. There can be drawn many similarities between Nick Jonas and Diabetesforeningen because both posts are about the symptoms shown before one gets diagnosed. However, Diabetesforeningen shows it in a way that is more impactful for the audience because it induces more fear than Nick Jonas does. WHO uses fear to show what can happen to people if they are not diagnosed early, showing that they have the same goal as Diabetesforeningen and a similar approach. Each of them has decided to focus on two different things: the symptoms and the outcomes. It could be

argued that they both impact communication in these ways. However, Diabetesforeningen's reactions are more affected by what their head of research points out in the video than by what WHO points out will happen. The comment section for WHO quickly focuses on COVID-19 and vaccinations and removes the focus from diabetes. At the same time, Diabetesforeningen's comment section shows more panic about having diabetes without knowing.

Beyondtype1 have chosen a different approach; they decided to focus on what diabetics could do, having a more empowering approach to diabetes and sharing facts about it in a similar way to that of the influencers. By showing what people can do and engaging with their followers, they create a safe space for the community to talk about their experiences and learn from each other. WHO and Diabetesforeningen do not have this positive focus, which frames diabetes as something perilous and something that will negatively affect your life. For non-diabetics, these two can be very fear-inducing, whereas beyondtype1 shows that it is still manageable to live a more normal life.

The interpretive and comparative analysis findings will be presented in the next section, where the problem formulation will be answered.

4.5 Findings from the Analysis

The analyses show how influencers, celebrities, and organisations employ different framing strategies to shape the conversation about diabetes through the social media platforms Instagram, TikTok, and Facebook.

The influencers analysed in this research use varying frames to spread awareness, hereunder normalisation, control, and loss. Each offers unique perspectives on the condition. While Svatos and Clutzychick highlight the fun and manageable aspects of living with diabetes, Type1amy uses the same frame as Diabetesforeningen and WHO to show the more complicated aspects. The celebrities utilise frames focusing on positivity, empowerment, and education to engage their followers. Dolberg and Horner downplay the seriousness of the condition by oversimplifying it. At the same time, Jonas puts more focus on the symptoms and engages in a more serious conversation about diabetes, like that of Diabetesforeningen and WHO. These two organisations use fear-based frames to

draw focus to the consequences of diabetes, which can be anxiety-inducing but still impactful. Thus, the Diabetesforeningen's video is more impactful than Jonas' because they induce fear that could implore people to get tested. Lastly, Beyondtype1 uses frames like the ones the influencers used to empower the community and spread positivity. Thus, these diverse approaches underscore the complex dynamics of how diabetes is portrayed online.

One of the most interesting findings during the analysis was how Diabetesforeningen was not interpreted to use fear-based framing techniques. However, because of how people reacted to the post, it seemed they had. And the fear overshadowed the actual intention of the post. This shows that even if someone tries to frame something in a certain way, how the audience reacts is just as crucial for what they are trying to say as the frame is. And it was not something I thought I would encounter through this research. However, by seeing how the people who commented were affected by this post, I also saw the importance of framing and how easily a post and its frame can be affected by its audience.

Therefore, to answer the problem: ***How do social media platforms use framing to influence conversations about diabetes, and how do these frames affect awareness and community-building?*** Social media platforms use framing techniques focused on empowerment, control, and fear to influence the conversation surrounding diabetes. By using empowerment frameworks, Dolberg and BeyondType1 help diabetics become more resilient and optimistic while also encouraging people to talk about their experiences. Svatos and Clutzychick use control frames to normalise diabetes while highlighting individual autonomy creating understanding and supportive surroundings. The Fear-based frames employed by Diabetesforeningen and the WHO highlight the seriousness of untreated diabetes. However, they can also overwhelm or alienate audiences, raising the possibility of fear or misguided conversations. Most posts centre around creating a community, though the posts using fear frames are more likely to alienate their target audience, thus the community. However, because of the issues that the positivity can give in terms of downplaying the seriousness of the disease, a combination of these approaches and balance between the frames are needed to create a better ground for community-building and pave the way for more beneficial communication for people with diabetes concerning their health.

5. Discussion

This part of the paper will discuss the findings from the analysis and how they align and differ from the findings of similar studies covered in the literature review. From the literature review and the analysis, I found three main points that stand out: The effectiveness of framing strategies, the impact of community building, and positivity and urgency. In all of these, the audience interactions will also be discussed. Lastly, the future directions and some of the challenges of social media in health communication will be discussed.

5.1 The Effectiveness of Framing Strategies

From the posts analysed in this research, three main frames were found: empowerment, normalisation, and fear, which were used to impact the target audience in different ways and direct the conversation around diabetes differently. Approaching diabetes communication aligns with Bandura's (2004) work on social cognitive theory and the theory of planned behaviour as covered by Ajzen (1991), as the empowerment and normalisation frames offer a space where people with diabetes can share and engage in communities they identify with.

The two frames, as seen, are used mainly by influencers and celebrities, which, on the one hand, can positively impact people with diabetes because they can identify with these role models and not feel so alone in their diabetes. On the other hand, these two groups can spread misinformation very quickly. This was not the case in this study, which can be explained by the criteria for who was chosen. When someone has diabetes, the likelihood of them sharing misinformation is lower because this is something that affects them as well and not just any group of people but a group that they are affected by, too. However, none of the influencers or celebrities are medical professionals, so what they share could not be factual. This can be a problem when dealing with a chronic disease because, as I have learned, no two people with diabetes have diabetes in the same way.

After all, it is affected by many outside things. So, having influencers and celebrities share about their diabetes can be helpful to diabetics and the conversation. However, it is essential to remember that what they share is not necessarily how diabetes works for everyone.

Self-efficacy and social reinforcement are two main takeaways from Bandura's (2004) work. For this research, it can be seen that these two play an important role on social media because when looking at the different comments throughout the analysis, it could be seen that people were positively affected by influencers and celebrities sharing about their own experiences and telling their target audiences to be more aware of certain things. It could be argued that Diabetesforeningen and BeyondType1 also had an impact in this way because Diabetesforeningen got people to react to their health, and BeyondType1 used everyday people to show the many things' people with diabetes can do.

However, Diabetesforeningen was perceived to used fear in their framing, as WHO which can be a helpful tool to get people to change their behaviour and get their point across strongly; this approach follows the health belief model (Jones et al., 2014). In this model, perceived severity and susceptibility are critical to motivating behaviour, which in the case of Diabetesforeningen can be said to have been effective given the comments because people had such strong reactions and commented asking for what they should do with these symptoms. However, Kahnemann and Tversky (1981) and Gallagher and Updegraff (2016) both highlighted that with fear-based messaging, there is a considerable risk of inducing anxiety and leaving people feeling overwhelmed. From the analysis, it could be seen that this was the case with both Diabetesforeningen and WHO because both comment sections showed signs of anxiety and people being afraid of what to do. In the WHO post, people quickly changed the focus away from diabetes to something that could also quickly induce anxiety, COVID-19. Thus, it can be argued that these findings align with what has previously been. However, some things do not. Beyondtype1 does not use fear-based framing to get their points across, which leaves them with a much more positive comment section and effect on their target audience.

5.2 Impact on Community Building

It can be seen through the analysis that the influencers all create some community by using different frames. Hussain (2022) observed that the visual narratives on social media can help decrease stigmas and promote a sense of belonging. Two of the celebrities, Dolberg and Horner, the influencers, and BeyondType1 all use the visual aspect of their post to show how normal diabetes is and to show that it is nothing to be ashamed of, aligning well with Hussain (2022). However, Diabetesforeningen and WHO use visuals to punctuate their posts and draw more attention to the dangerous aspects of diabetes. The contrast can help to create a more realistic view of diabetes. However, it does not have a positive effect on the conversation about diabetes because they manage to show it as something to be afraid of and do not show people that it is something everyone can get. On the one hand, it can be good to contrast this empowering community with one that focuses more on the danger. However, as already covered, the focus on the dangerous aspect can also leave people anxious, and anxiety may not be the best emotion to create a community around because it will likely just feed the anxious people to become even more afraid of their illness and quality of life.

One of the ways to create a community where there is room for both can be seen in Eghtesadi and Florea's (2020) study. They recommended that organisations use the same tools as other groups posting on social media to be more relatable and have their target audience engage more. In this research, it can be seen that BeyondType1 cooperates with a family of diabetics, and their comment sections are filled with empowering comments and a community supporting one another, even when some of the comments are about struggles and fears. Thus, it can be argued that Diabetesforeningen and WHO could benefit from collaboration with influencers or celebrities to engage more with their communities and create a better community.

5.3 Positivity and Urgency

A significant challenge I uncovered in this research is balancing positivity and urgency in diabetes narratives. Two influencers, Svatos and Clutzychick, and two celebrities, Horner

and Dolberg, manage through their posts to simplify diabetes because they want to keep a positive outlook and the empowerment and normalisation frames. The positivity seen in these posts can damage the diabetes conversation because it risks downplaying the seriousness of the disease. On the one hand, being positive gives people with diabetes the empowerment they may need occasionally. However, on the other hand, for non-diabetics, it shows diabetes as something that is not that difficult to deal with and may influence the conversation around diabetes in a way that socially it is viewed to be less critical. Basch and colleagues (2021) raised concerns about the oversimplification of health issues and the spread of misinformation on social media platforms, especially TikTok.

In this research, there were no implications of misinformation on TikTok; instead, it was in the comments on Facebook. That is not to say that there is no misinformation on TikTok. However, it is more a sign that the different platforms need to be researched more regarding health communication because many aspects influence how people interact on social media. In this research, the urgency was not evident in most posts. Only Diabetesforeningen, WHO, and Nick Jonas spoke about the urgency of diabetes and getting diagnosed early. The difference in how they did it showed that people would react to it differently. The urgency in Diabetesforeningen's post spread more panic than Nick Jonas's. On the one hand, Diabetesforeningens post most likely spread enough urgency through fear to get people to act on these symptoms. On the other hand, it could just as likely have induced so much anxiety in the target audience that they would be too scared to find out if their symptoms were diabetes. Nick Jonas's' post showed the same, but because of who he is and his status with people, his post might not be as likely to get people to act on these symptoms.

This analysis only analysed a fraction of the diabetes-related posts from social media platforms. Thus, it cannot point to any generalisation. However, it can say something about the different tools that could be important to look for in future studies. The findings from this research align with what has already been discovered when other scholars have looked at health communication on social media. However, the findings also expand on some of the ideas from previous studies by illustrating how framing strategies on social media influence public perception and behaviour regarding diabetes. Prior studies suggest that human-interest frames and visually engaging content

effectively promote social-emotional connections and foster awareness (Wong et al., 2014; Picazo-Sánchez et al., 2022). This research corroborates these insights, showing how empowerment frames used by these entities help foster resilience and community support. The interesting finding from Diabetesforeningen's post is that the audience's perception influenced the post to be perceived as using fear-based framing. This is built on what Yang (2017) found about the importance of community dynamics and support in shaping health behaviours.

5.4 Future Directions

As seen through this research, social media presents a valuable tool for health communication in some aspects, but it is not without challenges that cannot be ignored. This is why the need for adapting health communication to the specific needs and perceptions of the target audiences, as highlighted by Jacobs et al. (2017), is prominent for future diabetes campaigns but also for influencers and celebrities to pay attention to because if they want to inspire a sense of community they need to know how to interact with chronically ill people. Thus, for future research in diabetes communication, examining each platform and each group that shares content could shed light on what tools are needed to create a beneficial way to communicate health challenges on social media.

6. Conclusion

Diabetes is a chronic disease that affects millions of people worldwide, not only the people who have it but also their families and communities. The widespread impact of diabetes shows a need for clear and effective communication to spread awareness, build understanding, and support communities. Social media plays a key role in shaping how people view and talk about diabetes because it is a significant platform for sharing information and thoughts.

Given the significant impact of diabetes, this study highlights the importance of a balanced approach to framing health communication. Empowerment and normalisation frames foster community and reduce stigma, while fear-based frames are particularly effective in creating urgency and driving behavioural change. However, emphasising too much positivity can oversimplify the seriousness of diabetes, and fear can alienate the target audiences. Tailored messaging, considering platform dynamics, audience demographics, and cultural sensitivity, can ease these challenges, creating more inclusive and impactful narratives.

By addressing the widespread effect of diabetes and the challenges of misinformation, this study highlights the potential of social media to raise awareness and foster a sense of solidarity among those affected by diabetes. By balancing informative, supportive, and urgent messaging, influencers, celebrities, and organisations can craft narratives that enhance awareness, promote change, and build stronger, more inclusive communities for diabetics worldwide.

By answering the problem formulation, thus discovering that social media use different frames and how these frames impact conversations and community-building, people with diabetes may have to consider alternative places or platforms to find their information about diabetes while considering what platforms to use and which entities to listen to. However, they would have to seek information elsewhere or from different platforms to gain a broader view of diabetes and not just view it through one lens.

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