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## Effective Usage of Instagram as a Food Influencer

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Effective Usage of Instagram as a Food Influencer

By

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This thesis is submitted in partial fulfillment of the requirements for Honors in the Discipline in Communications and the Elizabethtown College Honors Program

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Honors in the Discipline

Effective Usage of Instagram as a Food Influencer

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## **Abstract**

Social media allows individuals to reach publics worldwide within seconds. The risks and benefits of organizations using social media as a tool for promotion has been researched extensively with social networks' growing popularity. In recent years, individual profiles with large followings have been used as opinion leaders and have earned the term influencer. This research examines the engagement of influencer's followers, then analyzes the content with the most engagement. A review of literature and examination of data leads to the thesis of: Due to the rise of social media engagement, it is vital to analyze the content of posts and personalities that elicit this high engagement to determine effective strategies for future influencers.

This content analysis analyzes the top twelve influencers with the Keto Diet as their focus on Instagram. Posts are collected over a three-month time period over the end of the year into the new year. Posts with the highest engagement are evaluated to categorize the content. Four research questions guide this research. Results indicate that posts with videos will get a significant amount more posts. Posts with videos also get more comments, but this is not significant. Meal images, recipe videos and promotional posts will get a significant amount more likes/views while meal images will get a significant amount of likes.

## **Introduction**

Increasingly, social media has become a technique for public relations campaigns. Most companies categorize their social media efforts as a form of public relations due to its nature of interaction between brands and consumers (Johnston & Sheehan, 2020, p. 38). The unique layout of social media platforms and the methods in which they are interacted with, allows organizations to communicate information and ongoing events in real time (Hannon, 2019). Without the lag time of traditional media, social media allows for immediate response and

interaction with publics which in turn can advance the brand. Due to this quick response and reaction time period, the manner and depth of consumer-brand interaction can drastically increase (Schivinski, Christodoulides & Dabrowski, 2016, p. 66). A major contributing factor to this is due to the focus of social media centering around the aspect of conversation. This is a much quicker conversation than traditional media. This increased conversation provided a new platform for organization to facilitate relationship building.

According to Guo and Saxton (2014),

Social media's interactive, decentralized environment offers a low-cost way for organization to mobilize support, foster dialogic interactions with large audiences, and attract attention to issues that might otherwise be ignored by traditional media (p. 58).

Due to this, nonprofit organization and political/advocacy campaigns can use social media as a tool for communicating their messages. Recently, influential profiles have been created to go beyond engagement with their audience and onto persuasion and influence of the choices the audience makes. These influencers on social media platforms are quickly becoming a tool brands and organizations are utilizing to use the appeal of personal interaction and stories to draw others to them. With an increase in the number of social media users, there has also been an increase in the number of influencers sharing their food recipes and nutritional advice (Byrne, Kearney & MacEvelly, 2017). As a result, the role of social influencers to change individual behavior around food choices and diet is growing each day. How are food influencers effective in engaging with their audience? The following research focuses on how the personal aspect of a food influencer can effectively engage with various audiences.

**RQ1:** Will a video get more likes/views than a post without a video?

**RQ2:** Will a video get more comments than a post without a video?

**RQ3:** What specific category of post will get more likes/views?

**RQ4:** What specific category of post will get more comments?

### **Literature Review**

Social media has a decentralized nature. This allows for an environment largely driven by participation of users. This participation is easy for users due to social media's low barriers for entry into the various conversations it hosts (Guo & Saxton, 2017). However, with users' ability to join almost any conversation sent out to the general public, the power and control of the public relations professional now is partially taken over by those users. Controlling the message or the direction of the discussion is a challenge to maintain. With the ease of access to comment directly on a post, or to repost on a personal page then continue a different conversation about the original post, the message can be lost or skewed. This could completely redirect the focus away from the social media campaign message goals. In this sense, the publicity achieved is uncontrolled.

However, there is still power in public relations messages. The difference in an advertisement and a public relations campaign can be seen through the payment of attention. When users of social media see posts are advertisements, they are perceived as untrustworthy and the information may be dismissed. The viewer understands the advertisement has been paid for to be incorporated into their feed (Johnston & Sheehan, 2020). Due to this, a social media campaign often requires the roles of public relations, marketing and advertising to come together to properly convey the organization's messages.

With this ease of use and information distribution, social media has expanded to include a growing user base. According to the Pew Research Center, in August 2006, 11% of United States adults used at least one social media site (2019). By August 2012, the number reached up to 59%

of United States adults. In 2019, the percentage reached 72 %. On Facebook, 74% of users reported as using it daily.

These numbers equate to a steady stream of growing information.

According to Guo and Saxton (2017),

The sheer amount of information made available by social media has resulted in a substantial signal-to-noise problem whereby it is increasingly difficult for the recipients of information to distinguish useful, desirable information (“signals”) from irrelevant information (“noise”) (p. 8).

These signals come in the same form as individuals sharing personal posts. These are brief updates and messages the organizations send to their followers. These organizations can continue to post and share, but there is a limited amount of attention from the viewers. Due to this attention deficit, organizations specify their messages and aspire to develop on relationship nurturing. Relationship nurturing occurs when the organization initiates and continues to participate in conversations with various publics (Pressgrove & McKeever, 2016). Once connections are established, the organization attempts to expand the current involvement of their publics into a long-term relationship. Through this relationship, the organization has the attention of that public and can solicit for opportunities to take action and support the organization’s efforts.

Guo and Saxton (2017) claim that the public’s attention is a prerequisite for any social change. Only after attention is given, can the desired action even be contemplated by the viewer. Because of this qualification, attention is an immediate measure for the effectiveness of an organization’s social media usage. Organizations are sharing these posts with the end goal to bring awareness to their mission. This awareness can then develop into relationships within the community and inspire those members to respond to the organizations’ call to action.

### **Publics/ Public Attention**



With a proper social media plan, the platform can be used to reach carefully targeted mass audiences. A public, any group of people with a shared interest, is made up of several audiences. To be strategic with their social media usage, organizations should know their targeted publics and know what motivates them. The issue of attention has been shown to be an underlying issue with social media. This is mainly because the achievement of a social media campaign is dependent on their desired public giving attention to the message organizations are communicating (Guo & Saxton, 2017). This loyalty concept could translate to profile followers. In order for social media posts to be seen, the posts must appear in viewers social media feeds. If an individual follows the organization's account, the posts made will appear in their feed. However, following a page does not guarantee proper attention will be given to it. On social media, attention can translate as engagement.

Engagement on social media comes in the form of sharing, liking, commenting and retweeting (Guo & Saxton, 2017). The level of engagement can be analyzed through these interactions the public shows the organization online. Some of these methods of engagement show a higher level of attention, time and thought put into the post. For example, viewers can "like" posts without reading the caption or even interpreting the image. However, if a viewer leaves a comment, this is engagement with the conversation the organization has started. The extent to which viewers "like" or comment is an indicator of if the post has been interpreted. The quantitative number of these methods of engagement is dependent on the size of the audience, how often posts made, and what each post is actually saying (Guo & Saxton, 2017).

This level of analyzing the public's attention is especially critical for advocacy organizations. An individual's attention is often the first step before any more tangible outcomes can occur. The attention of the government and the media can be even more difficult to achieve

than gaining the attention of community members. These groups can only give attention and resources to a finite number of issues, message and organization. These are also large publics with their own gathering of publics. If the government or the media give attention, time and possible share a nonprofit organization's, this may expand the broad audience that gives attention and becomes aware of the nonprofit's goals and mission.

According to Guo and Saxton (2017), "public attention is a necessary step for achieving social outcomes because attention is the gateway for organization to convince, connect, counteract, recruit and mobilize" (p. 9). This is why especially nonprofit organizations need the attention aspect for their social media effort to be effective.

### **Design and Production**

Attention deficiency requires the content organizations publish on social media to have an effective design that can be interpreted and internalized by the audience. The platform of social media itself targets users' compliance with what is desired from creators of the platform. These platforms use persuasive design to manipulate user behavior (Vasudevan, 2020). The entire layout of a social media platform is designed to be user-friendly. With this ease of use and maneuverability, users feel comfortable to interact with the information. This interaction is then sent through algorithms to allow the platform to sort through information and predict what information the user will interact with most (Vasudevan, 2020).

This leads to self-effects. This is the impact of the message, emotion, attitude and behavior of the message creator themselves (Valkenburg, 2017). These are often more powerfully seen online. This may be more concentrated online due to the anticipated usefulness the viewer determines the message is. If a message is more useful in terms of a viewer's perspective for future discussions with friends and relatives, they will internalize it more. This

could inspire them to pass along this information or to add their own input and join the conversation.

The audience who views a message, gives it attention, then joins the conversation of the message, or passes it along to other are called active publics (Johnston & Sheehan, 2020). For example, a group of local environmentalists who might join together to oppose an oil company from drilling in their community. For a nonprofit organization seeking action from their audience, this is the public that is most important to focus on. There are different types of posts that serve different purposes to generate different outcomes. To activate this public, organizations should design their posts to evoke conversation (Guo and Saxton, 2017).

With a persuasive, compelling design, the emotional response of the viewer can be leveraged. This response can generate attention and viewing time on a specific post or message. To determine what evokes these emotional responses is done through testing. With the quick response times of social media, this trial and error can be repeated until a public is understood by the organization. Color is often a tool used by designers of social media posts to gain the emotional responses of their viewers (Vasudevan, 2020). Certain colors evoke certain emotional responses and when needing to deliver an effective message to an audience with limited attention, emotion is a strong variable to use.

### **Influencers**

When analyzing a crowd of people, someone who is trying to be influential can be easily identified. There is a clear difference between someone speaking out to the crowd, as opposed to someone trying to listen, or someone who is simply trying to move past the person trying to gain their attention. On social media, finding an influencer requires looking for other factors than simply speaking out in the crowd, because everyone who participates in publishing posts would

then have to be classified as an influencer. All posts are speaking out, and the users of social media could be considered a type of crowd.

According to Rodríguez-Vidal, Gonzalo, Plaza & Sánchez, “an influencer is a person who has the capacity to have an effect on the character, development, or behavior of someone or something” (p. 675). This ability to impact others can be used as a tool for organizations to promote their messages and branding. In this case, the crowd could be millions of people at a single time, so the influence of these individuals is much less limited. With this broad spread of audience, geography is no longer a limiting factor for consumer behavior (Johnstone & Lindh, 2018). Online communities provide portals to instantaneously learn about various products and services. Influencers can then join these communities and engage with others to promote what they want. If a community doesn't already exist for the specific niche the influencer is targeting, they can rally support from their followers and start their own community.

This task can be difficult, especially with attention being so demanded from multiple other directions.

According to Rodríguez -Vidal et al. (2019),

There are three properties an influencer must fulfill. They must have credibility inside the group, are capable of being persuasive with other people (even if some disagreement occurs), and they can introduce new ideas that other components of the group support (p. 675).

Influencers must be liked in their community, but also present themselves as credible sources to get recommendations, products and services from. To make their approach more impactful, influencers may rely on influence mechanisms. These mechanisms are most seen when product packaging uses character marketing among young children (Smit, 2020). This type of marketing could be effective because of the underlying parasocial relationship that is formed. Children see these characters on packages, television, or social media and form an attachment and begin to

identify with that character. In the example of influencers, the influencer takes the place of the animated character. This is more so targeted at older children who then build these parasocial relationships with the influencer. The child begins to identify with the influencer and become attracted to their lifestyle, fashion, brands, etc. (Smit, 2020). Meanwhile, the influencer may know absolutely nothing about this person except they follow their page. In the child's world, the influencer is a "relevant author" (Rodríguez-Vidal et al., 2019). The influencer is trustworthy and has strong opinions on whatever topic they are focusing on. With this parasocial relationship and the influencers attractive lifestyle, they have the power to strongly support or completely turn people away from entire companies and products.

What a consumer buys can bring a sense of identity, and items bought can be because of consumers seeking a sense of identity. When tapped into this group of people who all follow and support the influencer who is supporting something specific, there is a sense of belonging (Johnstone & Lindh, 2018). An influencer's community becomes part of a subculture. It is in this community influencer and consumer can converse. Suggestions, views, comments, and likes related to products, lifestyles, clothing, etc. gives a feeling of credibility to the community. The community begins a culture of online "experts" (Johnstone and Lindh, 2018). With the influencer as a highly respected "expert" their page can become a form of microcelebrity activism. According to Tufekci (2013), "This is where individuals use social media to engage in a presentation of themselves to garner public attention to their cause or product (p. 850). This attention is gained and maintained through content posted about personal testimonies, advocacy for their niche topic, and engaging content overall. Sharing personal stories and feelings, online relationships can develop stronger and quicker (Pilgrim & Bohnet-Joschko, 2019). Followers can identify with this relationship and adjust their norms to match the influencers, placing their trust

and personal interests in alignment. To the influencer, the audience can become a fanbase (Tufekci, 2013). Much like a celebrity engaging with a crowd, the influencer can engage with their fans in a self-preserved manner, carefully choosing and constructing how they are presented.

With built-up trust, influencers can then encourage followers to use certain products through branding and personal opinions (Johnstone & Lindh, 2018). The influencer is targeting the followers inner value system and trying to direct them in the direction they are promoting. A national panel indicated that 85% of 12-17-year-olds spend about three hours per day on social networks (Pilgrim & Bohnet-Joschko, 2019). With all this time spent on social media, there is so much exposure time to influences. Currently more than one third of 14-17-year-olds are deliberately looking for products and services on influencers' accounts (Pilgrim & Bohnet-Joschko, 2019). Through social media, influencers can mediate between brand and consumer, adding to their value to brands (Johnstone & Lindh, 2018). Often influencers must publish positive endorsements for brands over a long term to fully gain followers support for that product (Smit, 2020).

Food is something all consumers must engage with, even on the basic level of simply surviving. As advertisements have grown and become popular, consumers can recognize the effort and goal is to persuade them. However, with social media and vlogs, this promotion of products, specifically food, can be integrated in easily (Smit, 2020). Without the recognition of a noticeable advertisement, children may not identify the product placement as a type of advertising for it. This recognition of an advertisement is the first prerequisite to critically processes and advertisement. In a social media setting where the recognition does not occur, it is less likely children will be defensive against the persuasive appeals.

Food and fitness are topics that have large communities of followers. This desire of people to see this content drives many influencers to focus on these topics. With a community of support waiting online, followers rely less on their self-motivation, and instead turn to social media (Leskin, 2019). On these platforms there are personable faces sharing intimate parts of their trials and successes with health and wellness. People are craving the ability to identify with someone else's story, personality and ultimate success or progress. People aren't looking for an organization to make promises of products working, but instead want to see the product tested and rated by someone they trust. Social media is a reliable platform to turn to because it allows reactive and immediate interactions and relationships (Leskin, 2019).

### **Instagram**

With many platforms to choose from, Instagram is often where influencers focus most of their efforts. For the specific topics of food and fitness, visuals and videos are imperative, and Instagram's platform is visual driven. Aside from the ease of visual sharing, Instagram also allows for seamless interaction, conversation and paid collaborations. With many other social platform options to choose from (i.e., YouTube, Snapchat, TikTok) influencers continue to work through Instagram (Leskin, 2019). Personal stories paired with photos of meals, videos of workout routines, lifestyle videos and much more allow influencers to use Instagram as a business opportunity. When users go onto Instagram, they are quick to notice popular influencers promoting quick fixes to daily problems. Food decisions are often one of those problems they are looking to solve. Organizations notice this and are keen to pay popular influencers to promote quick pills, teas, meal replacers and other weight loss remedies that are not credible or healthy.

### **Food on Social Media**

With an increase in the number of social media users, there has also been an increase in the number of influencers sharing their food recipes and nutritional advice (Byrne et al., 2017). As a result, the role of social influencers to change individual behavior around food choices and diet is growing each day. Sharing of true nutritional information can be beneficially to the users, but an intense focus on food can also bring about some negatives. One negative is the type of food being promoted. Organizations are aware of this susceptibility of followers to listen to their trusted influencers. Inevitably some organizations are not producing healthy or reliable foods. This can lead to influencers promoting unhealthy drinks, teas, pills and diets that are not maintainable or true, and foods high in sugar, fat and salt (Smit, 2020).

With this hyper focus on food, consumers can fall into an unhealthy obsession with focusing on their food intake and body image. While promoting foods, influencers often take an angle of the healthy body these foods can support. According to Pilgrim and Bohnet-Joschko (2019), “Influencers suggest a dependence on happiness, well-being, health and beauty” (p. 1). Following this logic, only those who can create a body shaped through control and discipline can feel healthy and beautiful. When following an influencer, the individual is already identifying with that person and in some way may want to emulate what that influencer is doing. There is a relationship of the follower comparing themselves with the influencers on important qualities (Ferguson, 2013).

Dedicated to their favorite influencers, followers want to participate in what the influencer offers and recommends with aspirations of looking and feeling as good as the influencers presents on social media. When that cannot be attained, there is body dissatisfaction (Ferguson, 2013). This involves subjective disapproval of one’s own body shape or form and the belief that it is unattractive to others. If this dissatisfaction is ongoing, this can be a risk for the



development of serious eating disorders. In the case of children, unhealthy dietary behaviors are often linked to food marketing (Smit, 2020). Unhealthy eating habits starting in childhood are very problematic because these habits often carry into adulthood. This is very problematic because habitual unhealthy behaviors during childhood and adolescence are often carried into adulthood (Pilgrim & Bohnet-Joschko, 2019).

This cultural desire to look attractive has led to trends such as *fitspiration* and *thinspiration*. Fitspiration is a recent trend designed to motivate people to eat healthy and exercise (Holland & Tiggemann, 2017). In these posts, often only one type of body type (lean and toned) is promoted. These posts promote the *look* of health rather than true health through diet and exercise. For most, these idealistic images posted are unattainable. Thinspiration includes guilt-inducing messages regarding weight and extends to include other indicators of disordered eating. When followers are bombarded with these posts, compulsive exercise, dietary restrictions and unhealthy weight loss behaviors could become problematic.

Adolescents with eating disorders is ongoing and has become a public health concern (Pilgrim & Bohnet-Joschko, 2019). The adolescent age group is seeking identity and these influencers provide a sense of self and direction. This creates a relationship of dependency between influencer and follower. Influencers gain the trust and friendship of their followers by designing body-shape focused visual content (Pilgrim & Bohnet-Joschko, 2019). To achieve this body shape determined to be ideal, diet and exercise are identified as variables that need to be monitored and controlled.

Pilgrim and Bohnet-Joschko (2019) argued,

By consuming dietary supplements and wearing tight-fitting branded sportswear, influencers promise a simplified way of optimizing one's appearance as the key to happiness (p. 1).

Social media influencers continue this push on food and body image without much restriction. Traditional media has many restrictions on food directed at children. Some outlets have food advertising completely banned. However, these social platforms are still largely unregulated in how and what food is promoted (Smit, 2020, p. 3). Byrne et al., (2017) found that 59% of adults followed social influencers. While 32% said social influencers motivated them to make healthier food choices, 41% said they are motivated sometimes. The highest influence on food choice for 49% of this sample was word-of-mouth recommendation. This data indicates the persuasive power influencers have over their publics, especially impressionable youth viewers. For a sustainable health program to be successful, influencers need to know the truth about what they are promoting and need to understand how to engage on the social platform to minimize the negative outcomes of conversation about food. This requires a thorough understanding of the social context that minors engage with (Pilgrim and Bohnet-Joschko, 2019).

### **Evaluation**

Consumption is the minimum level of engagement and refers to consumers passively consuming brand-related media without participating. This would be a consumer seeing a picture of Nike shoes. Moving from this stage of observation is a consumer who contributes to media. This would be a consumer “liking” the photo of the Nike shoes. This stage does not include any actual creation, only participation in media previously created by the organization. The next level of engagement is creating brand-related content. This involves consumers creating and publishing content related to the brand. This would be a consumer uploading a photo of them wearing Nike shoes. This is the strongest level of online brand-related engagement because this content the consumer produced may then be an additional stimulus for further consumption and conversation about the brand (Schivinski et al., 2016).

Schriner et al. (2017) argue “measurement must focus on ‘conversation’ and ‘communities,’ not just ‘coverage’”(p. 5). This measurement in the form of social media engagement is categorized as outputs and outtakes. There are three categories of results in this engagement measurement: outputs, outtakes and outcomes. Outputs are the processes to distribute messages. This is the number of communicative strategies used to communicate an organization’s message. For example, this is the number of events held each year and the number of participants at each event. In terms of social media, this could be the number of posts made in a time span of a month.

An outcome is the measure of change in the targeted audience’s thought process and behavior. The outcomes are to support the organization’s overall goals and objectives, as opposed to the objectives set specifically for the public relations campaign. At this stage, there are five levels of change to measure: awareness, knowledge, attitude, opinion and behavior levels (Schriner et al., 2017).

Extensive planning and preparation go into a public relations campaign. However, for the campaign to be successful in effectively communicating the message to an audience, the audience must engage with the campaign. To evoke this engagement, the organization, social media strategies, and responsive changes made based on evaluation must be done.

### **Methodology**

To test the research questions, a sample of Instagram posts were collected from December 1, 2020 to February 28, 2021. This time period was chosen to include the transition into the new year. Transitioning into a new year, millions of people resolve to increase their exercise and focus on their nutrition (Kassirer & Angell, 1998). In 2020, the most popular resolutions were to exercise more at 50%, save money at 49%, and eat healthier at 43% (New

Year's Resolution Statistics, 2021). This shift in focus to nutrition and fitness leads to more people looking for information about healthy diets and nutritional information, making Keto influencers' pages more likely to be sought out.

Keto Diet influencers were chosen because of the popularity of the Keto Diet and the high level of informational content those influencers post on social media. Low carbohydrate diets are growing in popularity for the general public (Evans, 2018). A ketogenic diet restricts the intake of carbohydrates, typically less than 30 grams a day. Many of those who follow a ketogenic diet report weight loss (Evans, 2018). Influencer accounts were chosen in December 2020 based on which eleven accounts had the highest number of followers. This study aimed to measure engagement with content, so accounts with more than 30,000 followers were chosen. Guo and Saxton (2017) hypothesized the level of attention received on social media, has a positive relationship with the number of followers that individual has. All followers from all accounts total to just under 3.2 million followers. The average number of followers for the top Keto Diet influencers at the time of this study is 286,000. The Keto Diet influencer with the highest number of followers had 520,000, while the lowest had 42,900. Brand and company specific accounts were excluded. Only personal influencers were included.

All posts were collected from December 1, 2020 to February 28, 2021. This totaled to 989 posts by eleven different influencers. Information collected for each post included, name of influencer, date of the post, whether the post included a video, the number of likes/views the post received, the number of comments for each post, and which category of content the post fell into. For this study, a like and a view are counted as equivalent because Instagram analytics provides them as one in the same. This organization style and choice of variables was created from a foundation of the research of Pilgrim and Bohney-Joschko (2019). A post was categorized as any

content the influencer published to their Instagram page under their influencer profile name. Likes consisted of the number of times an Instagram profile double tapped the post to “love” it. Instagram only allows one like per profile engaging with the post. Comments included all comments published under the posted content. This includes any responses the influencer made back to comments or made themselves. No comments were excluded. Guo and Saxton’s (2017) research discusses the difficulties of an organization gaining the attention of their audience on social media . Their methodology focuses on the number of posts and number of comments each organization publishes, as well as the differing levels of attention given to a photo and a video. This was the framework for this study and its focus on engagement.

All the data were then combined and sorted into an Excel spreadsheet to show the total number of likes and comments each post received related to the various variables (Pilgrim & Bohnet-Joschko, 2019). Using Tableau, each variable of like and comment was compared against the type of content posted (i.e., recipe video, meal post and personal input) (Trisnawarman, et al., 2019). Once all data was analyzed and tables were created, one-way ANOVA analysis was used to determine the significant difference between groups.

### **Findings**

In all, 989 posts were categorized and analyzed related to Instagram Keto Diet influencers with 30,000 followers or more. Of those 989 posts, descriptive statistics show that 671 posts were without video, while 318 posts contained video (See Table 1). Descriptive statistics also show that when posts were categorized by type that meal post, recipe video, and personal content were more often posted than giveaway, political, or posts labelled other. ( See Table 2

RQ1 asked whether a post with a video would get more likes/views than a post without a video. Table 3 shows that posts with videos received more likes/views than posts without. A one-way ANOVA test was used to compare the effect of the type of post on the number of likes/views. Results show that there was a significant effect of videos getting more likes/views at  $p > .05$  level for the three conditions [ $F(1, 987) = 198.206, p = .000$ ]. (See Table 3).

RQ2 asked whether posts with a video would get more comments than a post without a video. Table 4 shows that posts with a video do get more comments. A one-way ANOVA test was used to compare the effect of video on comments. Results show there was not a significant effect at the  $p > .05$  level for the three conditions [ $F(1, 987) = 1.381, p = .240$ ]. (See Table 4).

RQ3 asked what specific category of post will get more likes/views. Table 5 shows three categories show significant amount of likes. A one-way ANOVA test was used to compare the effect of content on likes. Results show at the  $p > .05$  level there is significance effect for meal posts [ $F(2, 5120) = 10.467, p = .000$ ], personal posts [ $F(2, 159) = 4.982, p = .008$ ], and recipe videos [ $F(2, 131) = 4.839, p = .009$ ]. (See Table 5).

RQ4 asked what specific category of post would get more comments. Table 6 shows that while meal posts received 512 comments, the most of any category, none of the categories were significant.

## Discussion

These results provide intriguing findings which could be useful beyond the world of the Keto Diet. These findings expand into how organizations and individuals can engage with their desired audiences on social media platforms, specifically Instagram. When looking at engagement through likes, meal images are what people respond to most. Influencers seem to know these types of posts accrue the most engagement because 512 of the 989 total posts were

meal images. Personal content received the lowest amount of average likes out of the three categories: meal image, recipe video or personal content.

Meal images seem to be what people engage with most. These posts have the highest average like count per post. For the purpose of this study, a like and a view for a video are considered synonymous. Since this audience is specifically interested in food and diet, a meal image showing them exactly how to make Keto Diet food was predicted to be one of the main reasons for following that page. Of the three categories highlighted, recipe videos received the highest number of average comments per post, though it was not significant.

Personal content was received an average of 150 comments per post. This is above the average amount of meal images (37.38), but below recipe videos (183). This seems to encourage mild engagement with the audience but does not support RQ2. These influencers are specifically for the Keto Diet, so the primary goal of the profile is for Keto Diet-related content. However, an influencer is a provider of the personal interaction the audience does not receive from an organization. This is their unique role. The findings show, personal content is not the main source of content this audience is looking to engage with in the form of likes and comments.

No significant findings for comments made to any one specific type of post was found. This may be because liking a post is easier than taking the time to write out a comment.

Influencers are a tool used to engage with a specific audience and their posted content needs to be on brand and balanced to continuously engage with their audience. The influencers studied here have the highest follower count, so this is an attraction for others to follow. Then, the influencer needs to maintain those followers with their content. These findings show this content should primarily be meal posts showing exactly how to make certain meals and snacks

that follow the Keto Diet. Intermixed, but a much less total percentage of posts should consist of personal content and recipe videos.

### **Limitations and Future Research**

There are some limitations to this research. More influencers with varying levels of follower counts could be studied. This study only researches the top eleven influencers based on follower count. These influencers selected are also only Keto Diet influencers, so other topics influencers are prominent in should be studied. This study focused only on Instagram, so research into Facebook, Twitter and other social media platforms should be done. Also, this study was conducted during COVID-19, so this may have impacted engagement levels due to quarantine regulations. This may have caused higher engagement because people are quarantined to their homes and many restaurants and dine in places have restrictions.

Future research into influencers should look at the other categories' influencers are strongly used in. This future research should look into the relationship's companies develop with influencers and how that impacts the audiences' view on the influencer and on the organization. Since this study focused on the top eleven influencers, further research into smaller influencers would show how these influencers engage with a smaller audience and maintain their relationships with that audience. This research should also extend to include Facebook and Twitter, as these are also major outlets influencers are potent in.

### **Conclusion**

Influencers are an integral part of communication efforts for nutritional information and diet resources. Instagram's ability to engage with a large variety of geographically diverse audiences allow influencers to have two-way communication and instant feedback from their followers. As social media grows, organizations and specific topics are utilizing influencers to



promote their mission, so research to understand how to be effective in this promotion is vital to obtain max efficiency. This led to the thesis of: Due to the rise of social media engagement, it is vital to analyze the content of posts and personalities that elicit this high engagement to determine effective strategies for future influencers. This thesis inspired four research questions which guided this study. From this study's findings, the use of recipe videos results in the highest level of engagement through likes and comments on an influencer's Instagram page. This engagement is important as a measure of the attention each post receives by the audience. Although this is true for the time period of this study, influencers need to continuously monitor their audience engagement and stay up to date on the trends and shifts in social media and culture.

## Appendix

**Table 1: Video or Post**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Post  | 671       | 67.8    | 67.8          | 67.8               |
|       | Video | 318       | 32.2    | 32.2          | 100.0              |
|       | Total | 989       | 100.0   | 100.0         |                    |

**Table 2. Category of Post or Video**

|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Meal Post    | 515       | 52.1    | 52.1          | 52.1               |
|       | Recipe Video | 234       | 23.7    | 23.7          | 75.7               |
|       | Personal     | 162       | 16.4    | 16.4          | 92.1               |
|       | Promotional  | 34        | 3.4     | 3.4           | 95.6               |
|       | Other        | 22        | 2.2     | 2.2           | 97.8               |
|       | Giveaway     | 14        | 1.4     | 1.4           | 99.2               |
|       | Political    | 8         | .8      | .8            | 100.0              |
|       | Total        | 989       | 100.0   | 100.0         |                    |

**Table 3. Significant Difference of Posts with and without Video vs. Likes/Views**

|                | Sum of Squares   | df  | Mean Square     | F       | Sig. |
|----------------|------------------|-----|-----------------|---------|------|
| Between Groups | 38261027731.105  | 1   | 38261027731.105 | 198.206 | .000 |
| Within Groups  | 190526911423.947 | 987 | 193036384.421   |         |      |
| Total          | 228787939155.052 | 988 |                 |         |      |

**Table 4. Significant Difference of Posts with and without Video vs. Comments**

|                | Sum of Squares | df  | Mean Square | F     | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 619495.365     | 1   | 619495.365  | 1.381 | .240 |
| Within Groups  | 442896809.887  | 987 | 448730.304  |       |      |
| Total          | 443516305.252  | 988 |             |       |      |

**Table 5. Significant Difference of Likes Compared to Type of Post**

|                    |                | Sum of Squares | df  | Mean Square   | F      | Sig. |
|--------------------|----------------|----------------|-----|---------------|--------|------|
| Other_Likes        | Between Groups | 12598872.104   | 1   | 12598872.104  | 2.885  | .105 |
|                    | Within Groups  | 87333111.714   | 20  | 4366655.586   |        |      |
|                    | Total          | 99931983.818   | 21  |               |        |      |
| Meal_Post_Likes    | Between Groups | 26634940.928   | 2   | 13317470.464  | 10.467 | .000 |
|                    | Within Groups  | 651404124.948  | 512 | 1272273.682   |        |      |
|                    | Total          | 678039065.876  | 514 |               |        |      |
| Personal_Likes     | Between Groups | 649095095.859  | 2   | 324547547.930 | 4.982  | .008 |
|                    | Within Groups  | 10357256344.09 | 159 | 65139977.007  |        |      |
|                    | Total          | 11006351439.95 | 161 |               |        |      |
| Promotional_Likes  | Between Groups | 81232173.284   | 1   | 81232173.284  | 3.352  | .076 |
|                    | Within Groups  | 775473239.657  | 32  | 24233538.739  |        |      |
|                    | Total          | 856705412.941  | 33  |               |        |      |
| Recipe_Video_Likes | Between Groups | 6765729453.949 | 2   | 3382864726.97 | 4.839  | .009 |
|                    | Within Groups  | 161502547155.1 | 231 | 699145225.780 |        |      |
|                    | Total          | 168268276609.1 | 233 |               |        |      |

**Table 6. Significant Difference of Comments Compared to Type of Post**

|                      |                | Sum of<br>Squares | df  | Mean Square | F     | Sig. |
|----------------------|----------------|-------------------|-----|-------------|-------|------|
| Other_Comments       | Between Groups | 164.162           | 1   | 164.162     | .042  | .840 |
|                      | Within Groups  | 78484.429         | 20  | 3924.221    |       |      |
|                      | Total          | 78648.591         | 21  |             |       |      |
| Meal_Post_Comments   | Between Groups | 6193.994          | 2   | 3096.997    | 1.896 | .151 |
|                      | Within Groups  | 836454.926        | 512 | 1633.701    |       |      |
|                      | Total          | 842648.920        | 514 |             |       |      |
| Personal_Comments    | Between Groups | 215851.094        | 2   | 107925.547  | 1.596 | .206 |
|                      | Within Groups  | 10752910.215      | 159 | 67628.366   |       |      |
|                      | Total          | 10968761.309      | 161 |             |       |      |
| Promotional_Comments | Between Groups | 6368.492          | 1   | 6368.492    | .179  | .675 |
|                      | Within Groups  | 1102599.508       | 31  | 35567.726   |       |      |
|                      | Total          | 1108968.000       | 32  |             |       |      |
| Recipe_Comments      | Between Groups | 740419.520        | 2   | 370209.760  | 2.792 | .063 |
|                      | Within Groups  | 30625858.019      | 231 | 132579.472  |       |      |
|                      | Total          | 31366277.538      | 233 |             |       |      |

### References

Byrne, E., Kearney, J., & MacEvilly, C. (2017). The Role of Influencer Marketing and Social Influencers in Public Health. *Proceedings of the Nutrition Society*, 76(OCE3).

<https://doi.org/10.1017/S0029665117001768>

Demographics of Social Media Users and Adoption in the United States. (2020, June 05).

Retrieved October 15, 2020, from <https://www.pewresearch.org/internet/fact-sheet/social-media/>

Elms, A. C. (1966). Influence of fantasy ability on attitude change through role playing. *Journal of Personality and Social Psychology*, 4, 36–43. <https://doi.org/10.1037/h0023509>

Evans, M. (2018). Keto diets: good, bad or ugly? *The Journal of Physiology*, 596(19), 4561–4561. <https://doi.org/10.1113/JP276703>

Ferguson, C. J. (2013). In the eye of the beholder: Thin-ideal media affects some, but not most, viewers in a meta- analytic review of *body dissatisfaction* in women and men. *Psychology Of Popular Media Culture*, 2, 20-37.

Guo, C., & Saxton, G. (2014). Tweeting Social Change: How Social Media Are Changing Nonprofit Advocacy. *Nonprofit and Voluntary Sector Quarterly*, 43(1), 57–79. <https://doi.org/10.1177/0899764012471585>

Guo, C., & Saxton, G. (2017). Speaking and Being Heard: How Nonprofit Advocacy Organizations Gain Attention on Social Media. *Nonprofit and Voluntary Sector Quarterly*, 47(1), 5–26. <https://doi.org/10.1177/0899764017713724>

Holland, G., & Tiggemann, M. (2017). "Strong beats skinny every time": Disordered eating and compulsive exercise in women who post fitspiration on Instagram. *The International journal of eating disorders*, 50(1), 76–79. <https://doi.org/10.1002/eat.22559>

Johnston, J., & Sheehan, M. (2020, July 16). Public Relations: Theory and Practice. Retrieved October 15, 2020, from <https://books.google.com/books?id=dSfxDwAAQBAJ>

Johnstone, L., & Lindh, C. (2018). The sustainability-age dilemma: A theory of (un)planned behavior via influencers. *Journal of Consumer Behavior*, 17(1), e127–e139. <https://doi.org/10.1002/cb.1693>

Keith Hannon Discusses Positive Uses Of Social Media. (2019, August 14). Prendismo, LLC,.)

Leskin, P. (2019, September 06). Personal trainers and health nuts are cashing in working as influencers as people flock to Instagram for fitness inspiration. Retrieved October 05, 2020, from <https://www.businessinsider.com>.

New year's Resolution statistics (2021). (2021, February 15). Retrieved April 07, 2021, from <https://discoverhappyhabits.com>.

Outreach Strategies For Rural-Based Nonprofits. (2016). *Nonprofit Communications Report*, 14(1), 5. <https://doi-org.proxy-etown.klnpa.org/10.1002/npcr.30310>

Pressgrove, G. N., & McKeever, B. W. (2016). Nonprofit relationship management: Extending the organization-public relationship to loyalty and behaviors. *Journal of Public relations Research*, 28(3/4), 193-211. <https://doi-org.proxy-etown.klnpa.org>.

Pilgrim, K., Bohnet-Joschko, S. Selling health and happiness how influencers communicate on Instagram about dieting and exercise: mixed methods research. *BMC Public Health* 19, 1054 (2019). <https://doi.org/10.1186/s12889-019-7387-8>

Rodríguez-Vidal, J., Gonzalo, J., Plaza, L., & Sánchez, H. (2019). Automatic detection of influencers in social networks: Authority versus domain signals. *Journal of the Association for Information Science and Technology*, 70(7), 675–684. <https://doi.org/10.1002/asi.24156>

- Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring Consumers' Engagement With Brand-Related Social-Media Content: Development and Validation of a Scale that Identifies Levels of Social-Media Engagement with Brands. *Journal of Advertising Research, 56*(1), 64–80. <https://doi.org/10.2501/JAR-2016-004>
- Schriner, M., Swenson, R., & Gilkerson, N. (2017, June). Outputs or Outcomes? Assessing Public Relations Evaluation Practices In Award-Winning PR Campaigns. Retrieved October 15, 2020, from [https://epublications.marquette.edu/comm\\_fac/474/](https://epublications.marquette.edu/comm_fac/474/)
- Smit, B. (2020). The Impact of Social Media Influencers on Children's Dietary Behaviors. *Frontiers in Psychology, 10*, 2975–2975. <https://doi.org/10.3389/fpsyg.2019.02975>
- Trisnawarman, D., Rusdi, Z., & Farid. (2019). Participatory GIS for collaborative decision making development of village resource potential. *IOP Conference Series. Materials Science and Engineering, 508*(1), 12117–. <https://doi.org/10.1088/1757-899X/508/1/012117>
- Tufekci, Z. (2013). Not This One: Social Movements, the Attention Economy, and Microcelebrity Networked Activism. *American Behavioral Scientist, 57*(7), 848–870. <https://doi.org/10.1177/0002764213479369>
- Valkenburg, P. (2017). Understanding Self-Effects in Social Media. *Human Communication Research, 43*(4), 477–490. <https://doi.org/10.1111/hcre.12113>
- Vasudevan, K. (2020). Design of Communication: Two Contexts for Understanding How Design Shapes Digital Media. *Journalism & Mass Communication Quarterly, 97*(2), 453-468. <https://doi-org.proxy-etown.klnpa.org>.