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**#Crunchy: The Construction of Scientific
and Medical Expertise and Knowledge
in the Crunchy Community on TikTok**

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Introduction

In 2020, the world was changed irrevocably in a way that no one could have predicted. Shortly after the dawn of the new decade, reports of a new unknown respiratory virus emerged in China. Cases began to slowly rise in China, and it gradually spread to other countries in limited numbers. Even as China went into lockdown and quarantine, people could not have imagined that this virus would become a global pandemic. Other similar viruses had always been easily contained to their country of origin. This one should have been no different or so we thought. As cases began to spread around the world, people still dismissed the idea of a global pandemic. It was not possible. It would eventually go away, right?

Then, in March 2020, the true severity of the problem became clear. A global pandemic became inevitable. Covid-19 reached every corner of the globe, and cases reached the hundreds of thousands and then millions. The world was turned upside down in a matter of weeks. The entire world shut down. Businesses closed. Companies, organizations, and schools went virtual. Everyone retreated into their homes for what would be almost two years. Masks and social distancing rapidly became the new normal. Lockdown and quarantine remained the norm for a long year until the rolling out of the first Covid-19 vaccines were released in mid-2021. Masking and social distancing remained the standard for two and almost three years.

During the height of the pandemic, discussion of medical and scientific knowledge and processes were brought into the national and global spotlight as people struggled to understand what was happening and how to stay safe. Regular people were forced to content with our ever-evolving understanding of the virus and changing public health protocols. Debates over medical and scientific knowledge quickly became hot button issues. Basic public health measures, like masks, rapidly became intense politicized issues. The implementation of public

health policies to slow the spread of the virus turned from scientific to political questions in many plans. This only intensified as the mRNA vaccines were implemented across the United States and the world. Many people were wary of the vaccination raising issues about its efficacy and safety. Anyone who lived through the Covid-19 pandemic can vividly recall the intense online and media debates over the safety and validity of the Covid-19 vaccines. These debates exploded into extreme political debates.

Throughout the course of the pandemic, the United States constantly struggled with low vaccination rates compared to its neighbors in the rest of the West and global North. As of mid-2023, over three years into the Covid-19 pandemic, over 230 million Americans are considered fully vaccinated against Covid-19. Even though millions of Americans are vaccinated against Covid-19, only 70% of the American population is fully vaccinated (“US Coronavirus Vaccine Tracker | USAFacts” n.d.). Meanwhile other countries, such as New Zealand, managed to achieve extremely high vaccination rates. At one point, 90% of New Zealanders were fully vaccinated against Covid-19 (“90% of Eligible Population Fully Vaccinated; 91 Community Cases; 58 in Hospital; 4 in ICU” n.d.). Intense disinformation and mistrust surrounding the mRNA vaccines plagued the US for several years. The anti-vaccine movement has been a problem in the US for decades (Conis 2013; Goldenberg 2021). For the first time, anti-vaccine ideas and voices were brought prominently into the mainstream in the media and online. It may seem like these ideas appeared out of nowhere born of online disinformation and brain rot from too much social media. They did not appear out of thin air. The US has a long history with distrust surrounding vaccines going back to the 1970s with the first rollout of mass vaccinations (Conis 2013; Goldenberg 2021). These have always existed in some fashion and persisted despite the efforts of generations of public health officials.

We like to assume that everyone is a rational actor, and that with enough proof and evidence, everyone will make the right decision. Yet a significant number of American adults remained steadfast in their opposition against the mRNA vaccines in the face of what most people would consider substantial proof of the vaccines' safety and validity. During the Covid-19 pandemic, anti-vaccine people were often portrayed as insane and delusional. Who would distrust something that has been used safely for decades and with decades of evidence behind them?

Anti-vax people are often portrayed as crazy and unintelligent. They were seen as being unable to comprehend the evidence, staring them dead in the eyes. But these people are not crazy. They are rational actors with the same capacity for logic as anyone else. The only difference between people who are anti-vax and other people is how they understand science, health, and medical knowledge. In their world view, these ideas are completely reasonable. Their ideas are backed up by evidence and proof. Their interpretation is simply different.

In the words of Geertz, we are "animal(s) suspended in webs of significance" that we are ourselves created (Geertz 1973). We are social creatures. Through our interactions, we create social structures that over time come to form the fabric of our world (Durkheim 1895). We live in a world of our own creation. The foundation of our world and institutions that may appear firm and concrete that are in reality malleable. They are social constructions. For different people and groups, the same thing can have vastly different meanings depending on their social reality and what they agree to be true. What one person classifies as evidence may not hold the same significance for another depending on their background and history. The boundaries of science are not as objective and firm as we would like to believe. Like anything else, science, medical, and health knowledge is part of a social system. They are socially constructed like anything else.

Because they are socially constructed, they can be thought of differently. Not everyone understands scientific and health knowledge in the same way. People with anti-vax values are no different than anyone else. They simply have a different concept of what consists of scientific, medical, and health knowledge. Their burden of proof for the safety of vaccines is different. The definition of “science” and substantive evidence is relative. What was considered scientific 100 years ago, 50 years ago, or even 30 years ago is worlds away from our current cultural understanding of science. For instance, Freudian psychoanalysis was the standard approach for psychological treatment up to the 1970s (Whooley 2019). That means a little over 40 years ago Sigmund Freud was our standard for understanding the human mind. Our approaches to science, health, and medicine change dramatically over time and by group.

This project seeks to understand how people with alternative understanding of health and medical knowledge construct their expertise and knowledge. There are many different communities online with alternative conceptions of health and medical knowledge. This project focuses specifically on a group that has deemed themselves as “crunchy.” This community and the associated belief system has existed for decades, but they recently gained popularity or rather infamy on TikTok in the last year. “Crunchy” people are generally hyper health conscious. This takes different forms depending on the person, such as only consuming organic foods and products or using natural remedies to treat illnesses. Some of their views can be extreme, such as being anti-vaccination (Thomas 2011). This community specifically was chosen due to the wealth of textual information available about their worldview online. Since the Covid-19 pandemic has entered its later stages, anti-vax content has become less common and prominent. Anti-vax sentiments are still part of the crunchy belief system for many, so this group was

selected as a case study for people with alternative understandings of science and health knowledge.

This paper focuses on how crunchy members of the crunchy community construct their health and medical expertise and knowledge online. This is accomplished through examining 150 TikTok videos from TikTok creators who identified themselves as crunchy using hashtags. Based on this analysis, I argue that members of the crunchy community on TikTok build their health and medical knowledge through the construction of a hybrid expertise and the use of boundary-work practices. Many people in the online crunchy community are mothers. The expectations placed on mothers by society may play a role in their practices surrounding health and medical knowledge. The following sections explore the history of the construction of lay expertise in sociology and anthropology, the methodologies used to conduct this research, and discuss these findings and their implications.

Literature Review

Approaches to Expertise

Typically when we think about expertise, we view it as this untouchable, unapproachable quality that experts somehow possess. Expertise is a quality that experts have imbuing them with unquestioned authority. This authority allows them to speak upon subjects of their expertise. Their authority is accepted by all. If you question experts, then you are seen as crazy. But why do we have experts? Where does their authority come from? What separates the average person from an expert? When does someone become an expert? How do experts establish and defend their expertise? What makes some experts better than others? When critically examined, the mystique of expertise falls apart.

In reality, expertise, as with any other quality of humans, is a social characteristic. Sociologists and other social scientists have debated how expertise functions socially. They disagree primarily over whether to approach expertise individually or collectively. The first of the major approaches to conceptualizing expertise is the relational approach. As this name would imply, this approach focuses on the relational nature of expertise. In this view, expertise is a social quality that other people assign to an individual (Collins and Evans 2007). Expertise is not a quality of a person but rather a quality that is attributed to them (Collins and Evans 2007). While a person may have extensive training and education that should qualify them as an expert, none of that matters unless other people view them as experts (Collins and Evans 2007). For instance, someone could lack any education or skills of a profession, such as a medical license in the case of doctors, but if they were able to acquire the social qualities of an expert, like a white lab coat, for others to interpret them as an expert then they are one. It is not about their skills or education but how they are interpreted (Collins and Evans 2007). Many social scientists interpret expertise through this lens, but this is not the only way to conceptualize expertise.

The other major approach to expertise is what Collins and Evans (2007) termed their realist approach. Collins and Evans take a very different approach to expertise than the realist approach. They in contrast to the relational approach believe that expertise is a real tangible quality that experts possess. For Collins and Evans, expertise is a skill. Experts build their expertise skills through their education and membership in their field (Collins and Evans 2007). From Collins and Evan's perspective, expertise is still a social quality, but they place the expertise within the individual themselves rather than the group. Experts are made by the process of being part of their group. For example, undergraduates slowly gain expertise in their chosen field by learning what it means to be an expert for their field from their professor and older

students. By the time they graduate, they have become experts in their field at least that is the idea (Collins and Evans 2007). Experts, in a given field, have a particular way of behaving that marks them as experts. By being members of these groups, experts learn how they are expected to walk, talk, and behave. Through this process, they become experts (Collins and Evans 2007). This project relies upon a combination of these two approaches to examine how members of the crunchy community construct and establish their expertise. The crunchy creators are faced with the challenge of getting people to accept their expertise on science and health. They have to build their expertise in one way or another. Other social scientists have further examined how expertise is constructed and used by experts to establish their authority.

Understanding Expertise as a Social Quality

Expertise comes in many different forms. It is not only limited to those who are traditionally perceived as experts, like doctors or scientists. Lay expertise is the credibility and knowledge possessed by regular, average people (Epstein 1995). Since they do not have the typical hallmarks of expertise, such as scientific or medical training, lay experts have to grapple with how to establish their expertise and credibility. They often do this by constructing a type of hybrid expertise. One group who have become skilled at crafting their own expertise and have been studied extensively by researchers are activists (Epstein 1995).

A famous example of this is Steven Epstein's 1995 study of how AIDS activists constructed their lay expertise while advocating for patients' rights in HIV pharmaceutical research in the 1980s. During the early days of HIV research, activists fiercely advocated for patients in clinical research to get more people enrolled in trials and get access to more treatment options. To do this work, activists had to create their own expertise in order to be taken seriously by doctors and scientists (Epstein 1995). They learn how to use the language of doctors and

scientists to give themselves more credibility in spaces where they were outsiders. Activists used four major tactics to build their expertise: acquiring cultural competency, political representation, combining “epistemological and ethical claims making” and taking stances on debates in the field (Epstein 1995). These tactics allowed these activists to build their own expertise to better advocate for those with HIV and AIDS and obtain access to new treatments (Epstein 1995). Similar practices have also been employed by chronically ill patients to also better advocate for patient rights and treatment (Sosnowy 2014). In order to be taken more seriously by doctors and health care providers, average people must take power into their own hands and construct their own expertise.

Other researchers have further expanded on these ideas by exploring how experts defend their expertise and authority. While we often like to think about fields like science and medicine as objective and far removed from bias, in reality our understandings of science and medicine are cultural constructions. The cultural understanding of science and medicine has changed considerably over the centuries (Gieryn 1983). Science was once very different. Scientists had to work to establish their practices as the empirical and objective field that we know today (Gieryn 1983). They had to define the acceptable boundaries of science. These boundaries were defined through what Thomas Gieryn (1985) calls “boundary-work.” Boundary-work is based on scientists’ “attribution of selected characteristics to the instruction of science....for purposes of constructing a social boundary that distinguishes some intellectual activities as non-science” (Gieryn 1983, 782). Scientists use different social mechanisms to establish what is science and what is not (Gieryn 1983). Boundary work is not only limited to scientists defending the boundaries of respectable science. It allows members of a group to socially define their

ideologies. Science is only one of many ideologies that may utilize boundary-work to set themselves apart from others (Gieryn 1983).

Anti-Vaccine Expertise

Little direct research has been conducted on the crunchy community, or other similar communities. However, significant research has been done on the anti-vaccine movement in various respects. Since anti-vaccine sentiments are a common part of the crunchy community, this research will be discussed. There is some possible overlap between the crunchy community and the anti-vaccine movement, which will be explored further in this project.

Many historians and social scientists have conducted research on the growing anti-vaccine movement in the industrialized West, particularly in the last several years. The anti-vaccine movement was brought into the national and even global spotlight during the Covid-19 pandemic. It is no secret that anti-vaccine sentiments exploded during the Covid-19 pandemic. As of May 2023, a staggering 36% of Americans believed that the risks of the Covid-19 vaccines outweigh the potential benefits (Nadeem 2023). But the anti-vaccine movement began long before the Covid-19 pandemic and hesitancy surrounding the Covid-19 vaccines. The issue is also much more complex than it first appears.

Vaccine hesitancy did not emerge out of thin air in 2020. Vaccine hesitancy is a historical problem beginning in the 1960s during the social climate of the patients' rights and women's rights movement. Researcher Maya Goldenberg (2021) traces the roots of the modern anti-vaccine movement to those movements of the Civil Rights Era, establishing the norm of patient's autonomy and the questioning of traditional medical/scientific authority. These movements "not the centuries-old religious opposition to vaccination, [that] form the basis of today's anti-vaccination movement in the US " (Goldenberg 2021, 6). This led to some to begin

to question traditional medical wisdom on the reliability of vaccines, especially mothers (Goldenberg 2021).

For decades, the general approach to increasing vaccination rates was rooted in the gendered expectations of women in their role as mothers. Public health officials at times deliberately targeted mothers to convince them to vaccinate their children. This framed women who vaccinated their children as good and conversely women who did not or could not as neglectful (Conis 2013). This assigned morale value to mothers' decisions to vaccinate their children. Vaccination was framed as a "gendered civic responsibility" that played into existing gender norms (Conis 2013, 415), and made vaccination primarily a mother's responsibility (Conis 2013). As the feminist's movement led women to begin questioning traditional medical authority, this eventually extended to vaccines. Multiple anti-vaccine movements emerged in the 1970s and 1980s with mothers at the helm (Conis 2013). In the 1980s, attitudes began to shift towards child protection and moved towards political conservatism. These attitudes eventually trickled down into the modern anti-vax movement that we see today (Conis 2013).

The ideas of patient autonomy and informed consent extend into how to parents make health decision for their children. In her 2016 book *Calling the Shots*, Jennifer Reich explores the factors behind why parents choose not to vaccinate their children. Anti-vax parents are typically portrayed as ignorant and crazy. In reality, these parents are making perfectly logical decisions from their own perspective, and disconnects in how healthcare approaches vaccination results in some parents opposing vaccines (Reich 2016). These parents are not making black and white decisions. It is more complicated than it appears initially (Reich 2016).

Many parents, and anti-vax parents, view themselves as experts on their own children. They know their children best, and so they are the best to make healthcare decisions for them.

Culture expects children to know everything about their children to make the best choices for them as individuals (Reich 2016). This culture of individualism naturally extends to the realm of healthcare. Public health directives then expect parents to accept vaccines “based on the general recommendation of scientists” (Reich 2016, 69) while they are still expected to make healthcare decisions based on individual risk assessment for their children (Reich 2016). This disconnect results in some parents questioning guidance on vaccines. Anti-vax parents still view vaccination through the lens of individual risk assessment. Informed consent and patient autonomy are the bedrocks of American healthcare reinforcing this individualist approach. This individualist approach is at odds with the generalist approach to vaccines (Reich 2016). This results in the two rival expectations causing tension. Science’s collective approach often cannot address parents’ individual concerns about their children (Reich 2016).

Anti-vax parents view each of their children as unique individuals. They will make decisions based on their child’s individual history and circumstances. For many parents, the possible risk of a vaccine outweighs the possible risk of encountering a rare disease (Reich 2016). For instance, as most would not expect, many parents will not reject all vaccines or vaccines for all their children. Reich found that many parents will consent to the tetanus vaccine because of the high risk of tetanus. If infected, most people will suffer severe consequences. The vaccine only protects the individual (Reich 2016). She also encountered parents who would selectively vaccinate their children (Reich 2016). For example, one parent vaccinated her daughter with Downs Syndrome but not her other children, because her daughter was at greater risk from most diseases than most children due to her condition. She assessed her childrens’ individual risk while deciding whether to vaccinate or not (Reich 2016).

Research Methodology & Design

As previously discussed, the primary methodology for this research was an ethnography of how the “crunchy” community on TikTok constructs and presents their health knowledge through their online content. Data was collected from video content published by TikTok creators who self-identify as members of the crunchy community. This data was then analyzed for common themes and patterns. A sample of 150 TikTok videos from a potential pool of 56 TikTok creators, who identified as part of the crunchy community. This section will outline the methodology and design used in this project and present the sample of research texts.

What is TikTok?

Since the Covid-19 pandemic, no app has risen to greater prominence is video-based social media platform TikTok. TikTok began its life as the Chinese app Musical.ly in 2014 created by the Chinese tech company Byte Dance. In 2016, Byte Dance created another similar application in China called Douyin. It gained millions of users within a year of its launch. Eventually, Byte Dance wanted to expand into the global market. In 2018, Musical.ly was absorbed and the app TikTok as we know it today was born (Tidy and Smith Galer 2020). This section will briefly explain TikTok as a platform and its various features. This explanation is drawn from the researcher’s familiarity with the app from personal and research use. All of this information can be learned by using the app and engaging with content.

TikTok is well known for its viral short-form video content typically set to the viral song or sounds of the moment. These videos often consist of different popular dances and lip syncing, but this content only scratches the surface of the mountain of the content available on TikTok. As previously mentioned, TikTok’s primary feature is allowing users to publish short videos of all kinds. Most videos are less than one minute but may be as long as three minutes or even up to ten minutes. TikTok users can create videos with their own audio, or music, but perhaps TikTok’s

most unique feature is allowing users to set their videos to music or audio created by others. This allows users to, for example, easily set a video to a song of their choice, but this feature also allows users to use popular audios to create their own version of the content. This commonly results in some audios becoming shared memes, jokes, and trends. TikTok's audio tracking feature allows users to easily view all the videos created that use the same song and audio. Some songs and audios can be used potentially thousands or even millions of times in different user's videos.

As a part of their video content, TikTok, like other social media apps, allows users to add captions and hashtags to make their videos stand out to viewers. From the typical users' perspective, like other similar platforms, TikTok gives users the ability to like, comment on, share, and favorite videos from other videos. These features allow users to engage with other user's content. In addition to these basic features, TikTok allows users to follow any creator of their choice. Users can also like and reply to other user's comments. This also includes a video's creator. Comments liked by a video's creator are also specifically labeled by the app for users to see. Most of these features are standard on most social media apps and platforms. Another important component of the platform is that videos are posted publicly. Videos are not typically private or restricted although this feature is available. It is rarely used.

TikTok's most prominent feature is its algorithm. Unlike most other social media platforms, TikTok user's social media feeds are not limited to only creators that use followers or users who know offline. TikTok has two separate video feeds. One is restricted to creators that users follow. The primary feed is called the "For You Page" (FYP). An algorithm based on what content users interact with and how users interact with that content (likes, comments, etc.) determines what videos will appear on a user's FYP (Smith 2021). This results in users

encountering content more organically than they would on other platforms. TikTok collects data on its users to curate the content that will appear on their FYP. Each user has a unique FYP based on what they interact with. The algorithm as a result tends to limit the kind of content a user is shown. This creates what many TikTok users colloquially referred to as the “sides” of TikTok. The structure of the TikTok algorithm produces distinctive “sides” of the TikTok community. TikTok users regularly refer to their part of TikTok by these videos, such as the “gay side of TikTok” or “Booktok” for the book loving community. The different sides of the TikTok may or may not overlap. This further restricts the content that users are exposed to. TikTok’s unique structure has the potential to introduce users to a wide variety of content that they would have not seen otherwise but also limits what shows up in their feed. The app also includes a search feature for finding videos by topic.

TikTok is still a relatively new platform. Academics have only begun to scratch the surface of the wealth of social science that is available on TikTok. Only a few select academics have turned their investigator lens. TikTok was selected as the platform for this research because it is a relatively young platform. The researcher hoped to shed new light on the academic understanding of the crunchy community and other similar communities. Additionally, TikTok was chosen for its ease of access. Unlike most other social media platforms, TikTok is primarily public. TikTok creators typically do not create solely content for their family and friends offline. TikTok offers almost no way to restrict access to content, like a private Facebook group or private Instagram. TikTok videos, especially for creators with more followers, create content for public compensation. This makes collecting content from TikTok relatively easy, requiring no deception because all content is publicly visible. The publicness of TikTok does create privacy concerns for researchers. Due to the ease of finding content on TikTok and its public nature, the

research has chosen to paraphrase rather than directly quote sampled content for the sake of users' privacy.

Data Collection

The challenge of collecting data for this project was to identify TikTok creators who were a part of the crunchy community. Fortunately, the mechanics of TikTok helped to streamline this process. TikTok creators can use hashtags to categorize their content. This hashtag system was used to find creators who identified as “crunchy.” If a creator used the hashtag #crunchy or another variation, such as #crunchymom or #crunchylifestyle, they were then included in the pool of creators whose content would potentially be sampled for this project. This was done to ensure that the included creators identified as part of the crunchy community.

The main data collection for this project consisted of collecting and recording information from crunchy TikToks from the creators identified as members of the crunchy community. To aid in this goal, the researcher created a dummy TikTok account. Due to TikTok's algorithm, account data will impact what appears on the user's FYP. The researcher used this account to identify crunchy creators and then follow them. The researcher then utilized the following page to find content for the purpose of data collection. Videos were included in the sample if they discussed health and wellness. Certain topics were deliberately avoided due to their complexity, such as pregnancy and raising children. These topics may warrant future research. Once around 50 creators who identified as part of the crunchy community, the researcher sampled 150 videos.

An online Redcap survey was used to aid in recording video and creator information. The video was first transcribed and then, the following information about the video was collected: video caption, top 5 comments, hashtags, number of likes, number of comments, and number of

favorites. The researcher also recorded whether a sound or audio was used, usage of outside clips, usage of common memes/jokes, and if the video was a stitch. After recording the information about the video, the researcher also collected information about the video's creator, including their username, gender, age, race, number of followers, number of likes, whether they had a link in their profile description, whether they had children, and whether the creator had a homestead, farm, or garden. Characteristics of the creators, such as age and race, were identified based on the visual assessment due to the nature of this research methodology. It is only possible to make this identification visually, and to reduce possible bias, categories were kept as broad as possible.

Research Sample

What does it mean to be “crunchy”?

To the average person, the term “crunchy” may seem a little unusual. What does it mean when someone calls themselves “crunchy.” The crunchy umbrella includes many things from diet to parenting styles but generally being crunchy is a lifestyle. As one self-described crunchy blogger explained in a 2011 blog post, being crunchy is “someone who doesn't just go with mainstream ideas and philosophies simply because everyone else does' ' (cite). Crunchy people go against the grain and forge their own path. They are well-known for “researching their hearts out” (Thomas 2011). They are independent thinkers and look for their own answers. Crunchy people are also committed to living a more natural lifestyle. In the same blog post, the blogger provides some common practices among crunchy people including: eating organic foods, home birth, chemical free products, avoiding plastics, alternative medicine, and none/selective/delayed vaccination (Thomas 2011). People who identify as crunchy are committed to natural and healthy living. While these beliefs seem harmless, these ideas can be taken to an extreme with

some crunchy people holding anti-vaccine and anti-mainstream medicine views. This will be explored in greater detail later.

Research Sample

As previously discussed a total of 150 individual TikTok videos were included in the research sample for this project. The users who created these TikTok videos self-identified as members of the crunchy community. This was determined by the creators' use of the crunchy hashtag or some variation of it. The sampled videos are in some way related to the topic of health or wellness. Topics, such as parenting or wellness, were deliberately excluded due to their added complexity. Videos were sampled between May 2023 and June 2023. Information was collected on each video sampled and the creators of each video. This section will present the descriptive statistics for both the videos sampled and the videos' creators. It is important to note that some creators appear in the sample multiple times.

TikTok Creator Sample

Videos were sampled from a total of 39 individual TikTok creators. Some creators were included in the sample multiple times. All these creators used the crunchy hashtag or a variation in at least one of their videos. This section includes the descriptive statistics of the creators sampled. The descriptive statistics for the sampled TikTok creator are shown below in Figure 1.

Gender	
Woman	39 (100%)
Man	0 (0%)
Non-binary	0 (0%)
Age	
20s	20 (51%)
30s	18 (46%)
40s to 50s	1 (3%)
Race/Ethnicity	
White/European Descent	38 (97%)

POC	1 (3%)
Account Statics	
Average Number of Followers	95,082
Maximum Number of Followers	550,800
Minimum Number of Followers	429
Average Number of Likes	1,775,762
Has children?	
Yes	32 (82%)
No	7 (18%)
Has homestead, farm, or a garden?	
Yes	6 (15%)
No	33 (85%)
Has in link account bio?	
Yes	34 (87%)
No	5 (13%)

Figure 1. TikTok Creator Sample

The TikTok Creators included in the sample were white women in their 20s and 30s. As a note, the demographic information of these creators is based on the assessment of the researcher. Creators rarely include this information on their public profiles. All sampled creators were women, or female-presenting. No male crunchy creators were encountered by the researcher. Most creators were in their 20s and 30s (97%). Most creators appeared to be Caucasian, or of European descent (97%). The average number of followers, among the creators, was 95,082. The maximum number of followers was 550,800. The minimum number of followers was 429. TikTok, in addition to follower count, provides the lifetime number of likes that an account has received on all of their videos. Among the creators sampled, the average number of total likes was 1,775,762 likes. Most creators (82%) were parents. Only 15% of creators had a homestead, farm, or a garden. TikTok also gives creators the option to include a link in their account biography. Many creators use this link to connect their account to online stores or sponsored

products. The majority of creators (87%) included a link in their account biography. This practice is fairly content on TikTok for larger accounts. Many creators will link to their other social media platforms, such as Instagram. They may also link to online stores or other businesses if they are endorsing certain products.

Video Sample

A total of 150 videos on health topics were sampled from crunchy creators. The descriptive statistics were collected in addition to their textual data. The descriptive statistics are shown in Figure 2.

Video Statistics	
Average Number of Likes	10,049
Average Number of Comments	137
Average Number of Favorites	830
Uses audio or sound?	
Yes	101 (68%)
No	48 (32%)
Use outside clip?	
Yes	2 (1%)
No	147 (99%)
Use common meme/jokes?	
Yes	5 (3%)
No	142 (97%)
Video Stitch?	
Yes	0 (0%)
No	150 (100%)

Figure 2. Video Descriptive Statistics

Out of the 150 videos, the average number of likes were 10,049 likes. The average number of comments were 136 comments. The number of users who favorite is visible on each video with the numbers of likes and comments. The average number of favorites were 830. As previously discussed, TikTok allows videos to use songs or audios created by other creators in their videos. Most creators (68%) choose to use songs or audios in their videos. TikTok creators

can also use outside clips in their videos. Only 1% of the creators decided to use outside clips in their videos. Many TikTok creators use commonly established jokes, references, and memes for their videos based on popular videos or trends. Only 3% of creators used common jokes or memes in their videos. TikTok allows users to “stitch” videos from other users. This feature allows a creator to respond to another creator’s video. No creators in the video samples stitched another creator’s videos.

Data Analysis & Findings

Data Analysis Methodologies

After data collection was completed, the textual data (i.e. video transcripts, user comments, hashtags, etc.) was analyzed using the qualitative coding software MaxQDA. MaxQDA was used to better organize codes and the large amount of textual data collected from each video sampled. The software was also used to link the textual data with its demographic information. Using MaxQDA, the researcher coded and analyzed the textual data for each TikTok video for emerging common themes and how creators and viewers interact via the videos’ comment sections. The findings of this analysis are presented below.

Findings

Of all the topics discussed by the crunchy creators were those of non-toxic living and diet, specifically the type and quality of what they were consuming. Crunchy creators were heavily focused on remaining supposed toxins from all aspects from their and their family’s lives. Many creators decried the evils of so-called “toxic” products and would then offer more “natural” alternatives. For instance, several creators were concerned about fluoride in toothpaste and as an additive in tap water. Crunchy creators invest a significant amount of time and effort in identifying and eliminating toxic elements from their homes and lives. With this hyper-focus on

toxins came a focus on monitoring their diet and food consumption. Most of the content observed by the researcher was focused on either toxins or diet or sometimes both. Several creators created content offering advice to their followers about what to eat and what not to eat. Many creators espoused the evils of “inflammatory” oils or the toxins in certain types of foods. Creators provided strict guidelines for how to eat in accordance with the crunchy lifestyle. Some common themes among the foods demonized by some creators were processed ingredients and ones containing toxins. Other creators highlighted the amazing health benefits of their organic and natural diet, like balancing your hormones or boosting immune function. Overall, creators focused on how to live a more natural and toxin free life.

In offering advice for how their followers could achieve a more non-toxic and natural lifestyle, creators emphasized the importance of developing an individual’s expertise and knowledge to improve their health and life. Creators focused on an individual’s personal agency and knowledge. They recommended their followers engage in their own research and observation. For instance, a few creators highlighted reading product labels and closely inspecting products’ ingredients before purchasing to ensure that they met their crunchy standards. One creator even described crunchy people along the lines of “the people who are obsessed with reading food labels.” These practices emphasize the power of the individual to make informed decisions about their health and diet.

Accompanying the crunchy creators’ guides to natural and non-toxic living was an undercurrent of distrust of traditional systems of authority and knowledge. Many creators decried the types of toxins that companies allow to be put in their products. They theorize why “they” would want toxins in our products, especially food and water. Several creators expressed an explicit and intense distrust of government and healthcare systems and sometimes private

companies. For example, a few creators joked about their brain-washed doctors. Others joked about how anyone could believe those “lies.” This distrust for some extended to holding anti-vaccine sentiments. Many were happy to create openly anti-vaccine content. These beliefs were not uncommon or hidden to identify. Some creators even seemingly expressed pride in their anti-vax beliefs by mocking those who believed the “lies.”

At the heart of these ideas is the interaction between the crunchy creators and their followers. Creators worked to establish rapport and build trust with their audience. Through their videos, creators exchange information with their viewers. The majority of videos sampled were some sort of review or a creator offering advice to their followers. They want to offer their audience a guide for how to live the crunchy lifestyle. As creators were offering advice, their followers were also seeking out their advice and knowledge. This is evident through their comments. Most of the comments on the crunchy creators’ videos were in some way asking for a creator’s advice and help. For example, viewers may ask creators for product recommendations or other types of help from creators. TikTok allows creators to respond and interact with viewers in their comment sections by liking comments (it is relevant to note that TikTok identifies comments that are liked by a video’s creator) and responding to comments with their own comment or a video reply. Many creators engaged with viewers in their comments by replying to and liking popular comments, even if there were only a few comments on their video. The comment section served as an important place for creators and their viewers and followers to interact.

In presenting their advice and expertise on health topics, crunchy creators crafted a carefully constructed type of knowledge and expertise. Creators used a type of expertise based on a combination of their own personal and bodily experience and pseudo-scientific knowledge

with little reference to any outside sources. In using their own bodily and personal experience to construct their health expertise, creators often used their own personal experiences as the basis for their advice in videos. Sometimes creators also seemingly offered themselves as an exemplar of the crunchy lifestyle, like if you follow these steps, you will be like me. If it works for one creator, then it should work for everyone, right?

The other component of their expertise that creators relied upon was their use of pseudo-scientific language and knowledge. Many creators would use this type of language to justify why people should follow their advice. For instance, in a video in which a creator explains her crunchy diet for a day, she cites the many health benefits of the foods, such as balancing hormones or improving digestion. Creators relied significantly on this pseudo-scientific language while almost never citing any outside sources. A few creators did directly cite some articles or scientific studies, but these references were very rare. Despite this, they still depended on the expertise of traditional health and scientific sources, even while some creators claimed to distrust these authorities.

Discussion

Do Your Research

One of the main challenges faced by crunchy creators is convincing people to believe them. The crunchy community is ridiculed and mocked on many other parts of the platform. They need to convince their viewers and followers that they are trustworthy and that is why what they are saying is true. Most creators based their content on explaining how to live a crunchy lifestyle and why people should be crunchy. They are then faced with the issue of needing to convince viewers that they are an authority on how to live a healthy lifestyle. They combat this problem by establishing a type of hybrid expertise. They create this hybrid expertise by firstly,

building their cultural competency and then, using themselves as examples of the benefits of the crunchy lifestyle. This allows crunchy creators to establish expertise and authority.

The first way that crunchy creators build their expertise is by building their cultural competency. They learn how to talk the talk. They learn the typical language and terminology to discuss health and wellness topics. They use language used by doctors and researchers despite their common mistrust of the government, corporations, and healthcare system. For instance, one creator uses words like “developmental neurotoxins” and “intellectual capacity” while discussing the issue of heavy-metal exposure. She uses scientific language and sometimes data (this is fairly rare) to justify her points while in other videos voicing explicit distrust of the medical establishment. Most creators engaged in similar discursive practices this language gives them authority and makes them appear more convincing. At times, their content can sound highly compelling. If you watch it for long enough, it starts to sound plausible. This is similar to the AIDS activists of the AIDS epidemic, who use their cultural competency to better advocate for patients’ needs (Epstein 1995; Sosnowy 2014).

Where the members of the crunchy community diverge from previously studied groups is how they rely on their own personal and bodily experience to convince people to live a crunchy lifestyle. They in essence offer themselves as exemplars of the crunchy lifestyle. If you follow their advice and use the same products, then you should be able to achieve the same results. They sometimes even make these claims explicit. For instance, one creator wrote “When I healed my kid’s disabilities through detoxing.” “You feel sick all the time. That was me for years and if you follow me, I tell you how I healed myself,” said another creator. Their own bodies serve as examples of why people should live a crunchy lifestyle. This hybrid expertise allows these

creators to establish themselves as authorities on health living and wellness and to convince more people to be crunchy.

Crunchy Moms of TikTok

Overwhelmingly, one of the most prominent parts of the crunchy community on TikTok was mothers. The majority of the creators in the sample had children (82%). Many creators also explicitly identified themselves as mothers through their use of hashtags or other references to this part of their identity in their profiles. The prominence of mothers within the crunchy community was unexpected. The researcher had to add parenthood as a criterion after the start of data collection started. Based on the presence of mothers within the community, there may be a connection between being crunchy and gender expectation similar to motherhood and being anti-vax.

Previous research has shown the firm connection between gender, motherhood, and vaccination (Goldenberg 2021; Conis 2013). The anti-vax movement is not a modern issue. The movement has its origins in the feminist's movement and the patients' rights movement of the 1970s (Goldenberg 2021; Conis 2013). Society places the expectations on women to be good mothers and to be the primary caregivers for their children (Goldenberg 2021; Conis 2013). Vaccination campaigns of the 1970s explicitly targeted mothers as a means to vaccinate their children. Morale value was assigned to women based on whether or not they vaccinated their children (Goldenberg 2021; Conis 2013). This puts pressure on mothers. The Civil Rights movement established the expectation of patient autonomy and informed consent. This is at odds with the generalists approach of vaccination public health policies (Goldenberg 2021; Conis 2013). For some parents, especially mothers, this disconnect leads to them questioning the safety of vaccination. Science and medicine cannot meet these parents' needs for an individualized

assessment of their children's needs (Goldenberg 2021; Conis 2013). Mothers, in particular, due to societal expectations are pressured into trying to figure out what is best for their children.

I argue that these same expectations create a similar pressure for crunchy moms. Many mothers were hypervigilant about what they and their children were consuming and the products that they were using. They also, similarly to the anti-vax mothers, emphasized the importance of doing your own research. They implored others to do their own research to do better for their children. Creators also offered their followers advice on what would be safe for their children.

A few mothers also seemed to express guilt over what other people were doing to their children by trusting the mainstream. Many creators expressed an explicit distrust of the government, corporations, and the healthcare system. They decided on people who simply trusted what they were given. "We can trust the food or water. We are being lied to and forced to slave away," one commenter wrote. "Why is everyone so quick to just trust what they're told?" another user wrote. This assigns a moral value to their behavior. In their view, being a good mom is about making sure your children are safe and protected. They accomplished this through their crunchy lifestyle.

As few mothers even joked about how much they focused on their children. They were primarily focused on their children's behavior and diet and less so than their own. "It's too late for me, but they still have a chance," one commenter joked. Another user created a video showing her eating fast food with a text about how she only let her kids eat organic and toxin free food. She was making fun of her own double standard. This reveals the importance that these parents place on ensuring that their children are living a healthy lifestyle.

#Crunchy #Scrunchy

TikTok is rife with a massive variety of different online communities. The crunchy community is only one of many. The nature of TikTok's algorithm requires creators to use a variety of different techniques and labels in order to establish their community. Crunchy creators engage in boundary-work in order to define their community and establish themselves as part of this community. One of the major ways that creators do this through their use of hashtags. Crunchy creators use a large variety of different hashtags to identify such as: #crunchy, #crunchytok, and #crunchylife. Crunchy mom creators also used their own series of hashtags. Creators also discursively defined being crunchy through their practices in their content. According to some creators, being crunchy included practices like eating organic foods, using natural remedies, reading food labels, and doing research. This would help creators find like-minded people.

While working to define the boundaries of being crunchy, they also demonized mainstream healthcare practices and products. As previously discussed, creators expressed an intense distrust of the government, corporations, and healthcare systems. They questioned anymore could blindly trust what they were given. "You're amazing! Don't trust the government!" commented one user. "When you are a Christian, who uses natural medicine, and eats organic food," wrote another creator. Comments and content like this firmly establishes what it means to be crunchy. It allows creators to define the boundaries of their community.

Interestingly, creators outside of the main part of the main part of the crunchy community used the same practices and labels to define their own community. These people used the label "scrunchie" rather than crunchy. They separated themselves from the crunchy community by demonizing some of their behavior but supporting others. They decried some of the more extreme crunchy behaviors but retained the practices that they liked to define themselves as less

extreme but still health conscious. In one video, a creator explained which crunchy practices that she liked, but emphasized her belief in science and support of vaccines.

Selling the Lifestyle

It is important to note that these practices used by crunchy creators could be interpreted as the creators using masks to adjust their social performance to align with crunchy values to sell products to their creators (Goffman 1959). Most creators (87%) had links in their account biographies. Typically, these links are to online businesses or companies who pay creators to promote their products. Many creators made content promoting different crunchy products. A few were also business owners promoting their own products. This analysis is beyond the scope of this project, but could be an avenue for future research.

Conclusion

The Covid-19 pandemic changed our world forever. It brought many things bubbling to the surface including exposing the shaky foundations of our scientific institutions. We like to believe that science is concrete, objective, and empirical. It is free from bias and gives us the truth. In reality, science like anything else in our society is relative. We live in a social world, and with that comes social constructions. Through our social interactions, we form the foundations of our social structure. This forms the bedrock of all our institutions (Geertz 1973; Durkheim 1895), including science and medicine. They too are social constructions. The definition of science has changed over the course of the last several centuries. Doctors and scientists have had to work for centuries to make science into the ivory tower that we know today (Gieryn 1983). That does not mean that everyone buys into this construction of science. The definition of science and substantive proof can hold vastly different meanings for different people and groups. The contention surrounding the Covid-19 vaccines brought this idea into the national spotlight as

people across the US and globally battled over the efficacy and safety of the new mRNA vaccines. Different people had different ideas of what reasonable proof was.

The pandemic exposed the reality of the social construction of scientific and medical knowledge. This offers a wealth of topics for the social sciences to explore. This project sought to understand how one group, the crunchy community on TikTok, with alternative ideas and beliefs about science and medicine construct their expertise and knowledge. This project explored this by analyzing 150 TikTok from creators who identified as crunchy and exploring how they presented their knowledge and expertise. This research builds on the previous study of how lay people construct their expertise.

It was found that members of the crunchy community build their expertise and knowledge through the construction of a hybrid expertise and the use of boundary work. This hybrid expertise is constructed by learning the language and terminology used by doctors and researchers to give themselves credibility and validity in their videos. They also based their expertise in their own personal experience. Creators offer themselves as exemplars of the crunchy lifestyle. If you follow their advice, then you too can achieve all the same benefits. There may also be a connection between gender, motherhood, and the crunchy community. Many members of the crunchy community are mothers. The expectations placed on mothers by society may play a role in their practices surrounding health and medical knowledge.

This research provides insight into how groups with alternative beliefs construct and present their expertise and knowledge. The Covid-19 pandemic revealed the harsh consequences of these types of beliefs, so it is vital that we understand how to construct their knowledge. This project also offers some insight into how people are engaging with these topics on TikTok. TikTok is an ever-evolving platform. It is important to understand how knowledge and meaning

is being generated on the platform. Its full potential has yet to be fully explored by the social sciences. This research may also offer an example for how to conduct research effectively on the platform.

Directions for Future Research

For potential future research, these findings offer several interesting avenues that may warrant further study. Firstly, TikTok is a relatively new platform. More research should be done into its potential as a place for the creation of meaning and community building. TikTok allows users to interact in many different ways. These features provide many different potential areas for research. Secondly, more research could be done to explore the relationship between the crunchy lifestyle, gender, and motherhood. Gender and parenthood appeared to play a significant part in the identity of many creators. It was not discussed at length in this paper, but many of these creators also engaged in other alternative practices, such as homeschooling and homesteading. They were also typically conservative and at times religiously. More research could potentially be done on the relationship between these practices and individualism.

Finally, more research may be done on the role of economics and capitalism in the crunchy community and on TikTok in general. It was found that the majority of crunchy creators included a link in their profile biographies. This is typically done by creators for economic incentives. Creators may link to their own businesses if they have them or to companies whose products they are recommending. It is relatively common for companies to provide TikTok creators with free products or money in exchange for videos or positive reviews. More research could be done to investigate how this may impact creators' content not only in the crunchy community but other communities on TikTok. It could also be interesting to explore how this

impacts the perceived relationship between creators and their viewers and followers. This research provides a wealth of directions for future research.

Limitations

It is important to discuss that the creators included in this sample were primarily heterosexual, white women. No men or male-presenting creators were included in the sample at all. This limits the generalizability of these findings. This could potentially be a byproduct of the members of the crunchy community and the types of people who typically engage in these practices. It could be interesting to investigate whether these practices hold true across different demographics, such as race and gender. These patterns could change across groups. This may warrant future research.

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