

TikTok as a Source of Health Information and Misinformation for Young Women in the United States: Survey Study

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Table of Contents

riginal Manuscript	5
upplementary Files	41
Multimedia Appendixes	42
Multimedia Appendix 1	
Multimedia Appendix 2	

TikTok as a Source of Health Information and Misinformation for Young Women in the United States: Survey Study

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Abstract

Background: TikTok is one of the most-used and fastest-growing social media platforms in the world, and recent reports indicate it has become an increasingly popular source of news and information in the United States. These trends have important implications for public health, as an abundance of health information exists on the platform. Women are among the largest group of TikTok users in the United States and may especially be affected by the dissemination of health information on TikTok. Prior research has shown that women are not only more likely to look for information on the Internet but are also more likely to have their health-related behaviors and perceptions affected by their involvement with social media.

Objective: We conducted a survey of young women in the United States to better understand their use of TikTok for health information, as well as their perceptions of TikTok's health information and health communication sources.

Methods: An online survey of U.S. women aged 18 to 29 (N=1,172) was conducted between April and May of 2023. The sample was recruited from a Qualtrics Research Panel and two public universities in the United States.

Results: The results indicate that the majority of young women in the United States who have used TikTok have gotten health information from the platform either intentionally (65.50%; 672/1026) or unintentionally (92.40%; 948/1026). Age (r(959)=.30, P<.001), education (rho(959)=.10, P=.001), and TikTok intensity (ie, their emotional connectedness to TikTok and TikTok's integration into their daily lives) (r(959)=.32, P<.001) were positively correlated with credibility perceptions of the health information. Nearly the entire sample reported that they think misinformation is prevalent on TikTok to at least some extent (98.15%, 1007/1026), but a third-person effect was found as the young women reported that they believe other people are more susceptible to health misinformation on TikTok than they personally are (t(1025) =21.16, P<.001). Both health professionals and general users were common sources of health information on TikTok, as 93.08% (955/1026) indicated they had gotten health information from a health professional and 93.86% (963/1026) indicated they had gotten health information from a general user. The respondents showed greater preference for health information from health professionals (vs. general users) (t(1025)=23.75, P<.001); respondents also reported getting health information from health professionals more often than from general users (t(1025)=8.13, P<.001) and were more likely to act on health information from health professionals (vs. general users), t(1025)=12.74, P<.001.

Conclusions: The findings suggest health professionals and health communication scholars need to proactively consider TikTok as a platform for disseminating health information to young women. Young women are obtaining health information from TikTok and prefer information from health professionals, making it worthwhile for TikTok to be utilized as a strategic communication tool.

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Results: The results indicate that the majority of young women in the United States who have used TikTok have gotten health information from the platform either intentionally (65.50%; 672/1026) or unintentionally (92.40%; 948/1026). Age (r(959)=.30, P<.001), education (rho(959)=.10, P=.001), and TikTok intensity (ie, their emotional connectedness to TikTok and TikTok's integration into their daily lives) (r(959)=.32, P<.001) were positively correlated with overall credibility perceptions of the health information. Nearly the entire sample reported that they think misinformation is prevalent on TikTok to at least some extent (98.15%, 1007/1026), but a third-person effect was found as the young women reported that they believe other people are more susceptible to health misinformation on TikTok than they personally are (t(1025) = 21.16, P < .001). Both health professionals and general users were common sources of health information on TikTok, as 93.08% (955/1026) indicated they had gotten health information from a health professional, and 93.86% (963/1026) indicated they had gotten health information from a general user. The respondents showed greater preference for health information from health professionals (vs. general users) (t(1025)=23.75, P<.001); respondents also reported getting health information from health professionals more often than from general users (t(1025)=8.13, P<.001) and were more likely to act on health information from health professionals (vs. general users), t(1025)=12.74, P<.001.

Conclusions: The findings suggest health professionals and health communication scholars need to proactively consider TikTok as a platform for disseminating health information to young women. Young women are obtaining health information from TikTok and prefer information from health professionals, making it worthwhile for TikTok to be utilized as a strategic communication tool.

Keywords: credibility perceptions, health information, health misinformation, information

seeking, misinformation perceptions, public health, social media, strategic communication, third-person effect, TikTok

Introduction

As one of the most-used and fastest-growing social media platforms in the world, TikTok has drastically changed American culture [1,2]. The social media platform, which allows users to create and watch short-form videos ranging in length from 15 seconds to 10 minutes, has more than 150 million active users in the United States and is expected to reach 955 million worldwide by 2025 [3,4]. This rapid popularity has caught the attention of health communication scholars and practitioners because the platform is a vehicle for finding and disseminating information, including health-related content [5,6]. According to the Pew Research Center, the number of adults in the U.S. who regularly get news from TikTok has more than tripled (from 3% in 2020 to 10% in 2022). Adults under 30 are the most likely group, with a third (32%) of adults aged 18-29 saying they regularly get their news from TikTok [7].

Americans turned to the Internet to find health information during the COVID-19 pandemic, and medical professionals and health institutes met them on TikTok, delivering pandemic-related information and recommendations [5]. The presence of health-related content has extended beyond COVID-19 and includes a wide range of health topics such as cervical cancer screening, chronic pulmonary obstructive disease, diabetes, mental health, and more [8–11]. Studies examining the engagement of this content (eg, [10,11]) suggest that users like finding health information on the platform. A recent survey of 2,000 Americans conducted by the prescription savings company CharityRx found that one in five Americans turn to TikTok for advice before going to their doctor. Of the participants belonging to Generation Z, specifically, one in three reported getting health information from TikTok [12].

TikTok's concise video format encourages users to convey their message in a brief yet

engaging way, while the relaxed atmosphere and the capacity to engage with viewers facilitate a more intimate and authentic form of communication [13]. These videos may be especially memorable (and thus influential), as viewers can retrieve both visual and verbal information that they have processed and stored while watching [14]. Social media-has the power to spread credible, useful health information [8]. However, recent research has indicated that one in five TikTok videos likely contain misinformation [15], and fact-checking has been found to be uncommon on social media [16]. Consequently, as young women turn to TikTok for health information, they may encounter both the beneficial aspects and drawbacks of this accessible platform. For these reasons, we suggest the need for a better empirical understanding of the extent to which young women are getting health information on TikTok and their associated perceptions and behaviors related to the information they encounter.

In light of the popularity of TikTok, we conducted a survey of young women (assigned "female" sex at birth) in the United States to better understand their use of the social media platform for health information, as well as their perceptions of the platform's health information and related communication sources. We focus on women aged 18-29 for this study because women make up the majority of TikTok users in the United States and because survey data has indicated that 18 to 19-year-olds and 20 to 29-year-olds were identified as the two largest age groups using TikTok during the time period that this study was conducted [17,18]. Furthermore, it has been suggested that women may be especially affected by health information on TikTok. Mainstream news networks (eg, Good Morning America) have anecdotally reported that many young women turn to TikTok for health information and that OBGYNS and other doctors have developed TikTok brands specifically to reach these users (eg, [6]). According to prior research, young women's involvement with social media significantly influences their perceptions and behaviors concerning their health [19], women are more likely to look for health information, including via the Internet

[20,21], and women tend to have a leading role in the majority of decisions for their families' health [22].

Specifically, we first sought to explore how often young women are intentionally and unintentionally getting health information from TikTok and their top reasons for getting health information from the platform. Second, we explored their perceptions of credibility (ie, perceived credibility of TikTok health information overall) and misinformation in relation to the health information they see on TikTok, as well as their frequency of verifying the health information they see. Within this, we asked questions about perceived susceptibility to health misinformation on TikTok to see if a third-person effect might exist. The third-person effect is a communication theory that suggests that people tend to perceive that messages in the media have a greater effect on other people than on themselves [23], which, in the context of misinformation on TikTok, could cause young women to underestimate the potential impact of misinformation on their own healthrelated decisions and behaviors. Third, we explored perceptions and behaviors related to the top two types of sources that share health information on TikTok (health professionals and general users). In terms of perceptions, we examined how often young women get information from these sources, how much they prefer to get information from these sources, and how credible they perceive the information from these sources to be (ie, perceived credibility of TikTok health information from health professionals and perceived credibility of TikTok health information from general users). For behaviors related to these source types, we examined whether they have acted on health information they got from these sources, their likelihood of acting on health information from these sources in the future, and their likelihood of fact-checking information from these sources. In exploring each of these three areas, we also examined whether the women's age, highest level of education, and level of TikTok intensity (defined as their emotional connectedness to TikTok and TikTok's integration into their daily lives) had a relationship with their use of TikTok as

a source of health information.

Altogether, this study seeks to help both health communication researchers and practitioners by illuminating the role that TikTok has had in young women's acquisition of health information in the United States.

Methods

Design and Sample

An online survey of U.S. women (assigned female sex at birth) aged 18 to 29 (*N*=1,172) was conducted between April and May of 2023. While the sample was focused on individuals who were assigned female sex at birth, we also asked about their gender identity (see Table 1). The sample was recruited using a Qualtrics Research Panel, as well as convenience sampling at two public universities in the United States. Respondents recruited via the Qualtrics panel were compensated in agreement with their Qualtrics contract, and the respondents recruited at the universities were compensated with course credit. The Institutional Review Boards (IRB) at the University of (blinded for review) and the University of (blinded for review) approved the study.

Procedure

The study began with an online informed consent form that briefly explained the purpose of the study and gave the survey respondents information about the study's investigator, the expected length of the survey, and how their data would be used (for reporting of aggregate data) and stored (in a password-protected electronic format). Respondents then answered screening questions, and respondents who were not women and not aged 18-29 were excluded from the survey. After passing the eligibility criteria, respondents were asked if they had ever used TikTok to either watch or post videos. The respondents who had used TikTok were then asked about their average amount of use, whether they had ever intentionally used TikTok to look for advice or information about their health or healthcare (and if they had done so in the past three months), and whether they had ever

unintentionally been exposed to health information on TikTok. From there, the questions they saw depended upon whether or not they had ever seen health information (intentionally or unintentionally) on TikTok.

All of the respondents who had ever used TikTok (*n*=1026) responded to items measuring reasons for health-related TikTok use, perceptions of health misinformation on TikTok, use and preference for particular sources (health professionals and general users) of health information on TikTok, perceived credibility of health information from health professionals and general users on TikTok, the likelihood of acting on health information obtained from health professionals and general users on TikTok, and their likelihood of fact-checking health information from health professionals and general users on TikTok.

Respondents who had seen health information on TikTok (*n*=959) additionally responded to items measuring their perceived credibility of the health information they have seen overall on TikTok and their verification of the health information they have seen on TikTok. Respondents who had ever received health information on TikTok from either source of interest (health professionals or general users) were also asked about whether they had acted on health information from those sources.

Lastly, all participants (*n*=1172) responded to items measuring TikTok intensity (ie, the respondents' emotional connectedness to TikTok and TikTok's integration into the respondents' daily lives) and answered demographic questions, including their highest level of education and race/ethnicity.

Measures

Using TikTok as a Health Information Source

Frequency of Use. Respondents were asked if they had ever used TikTok (either to watch or to post videos). The respondents who had used TikTok were asked to indicate their average amount

of use, using the following options: less than once a month, once a month, once a week, a few times a week, once a day, more often than once a day. The respondents who had ever used TikTok were also asked if they had ever used TikTok to look for advice or information about their health or healthcare (selecting "yes" or "no"). Those who selected "yes" were asked how often they intentionally use TikTok to get health information, and all respondents who had ever used TikTok were asked how often they unintentionally get health information on TikTok (hourly, daily, weekly, monthly, less often, or not at all).

Reasons for Health-Related TikTok Use. Respondents indicated their reasons for health-related TikTok use by indicating their level of agreement (1 = strongly disagree and 7 = strongly agree) with 10 different statements (eg, "I like to get health information from TikTok because it can help me to maintain a healthy lifestyle") adapted from prior research [24–26]. The mean and standard deviation of each item is presented in Table 3.

Credibility, Misinformation, and Verification of Health Information on TikTok

Perceived Credibility of TikTok Health Information Overall. Using Flanagin and Metzger's 7-point (1 = not at all, 7 = extremely) scale for media credibility [27], respondents rated how believable, accurate, trustworthy, biased (reverse coded), and complete they perceive health information on TikTok, overall, to be. Specifically, the respondents were asked, "To what degree do you rate the health information provided on TikTok?" The five items were averaged to create a perceived credibility score for each respondent (M=4.48, SD=1.28; Cronbach's α =.90).

Misinformation Perceptions. For perceptions of misinformation, respondents were asked to indicate on a 7-point scale how prevalent they think health misinformation is on TikTok (1 = not prevalent at all, 7 = very prevalent; M=5.14, SD=1.42), how serious they think the impact of health misinformation on TikTok is (1 = not serious at all, 7 = very serious; M=, SD=1.46), and how susceptible they think they are to the influence of health misinformation on TikTok (1 = not

susceptible at all, 7 = very susceptible; M = 4.07, SD = 1.75), (adapted from Chang, 2021). In addition, to explore the possibility of a third-person effect, the respondents were also asked to indicate how susceptible (1 = not susceptible at all, 7 = very susceptible) they think others (eg, the public) (M = 5.26, SD = 1.46) are to the influence of health misinformation on TikTok (adapted from [23]). Participants were also asked about their self-perceived direct experience with health information on TikTok with the following item (adapted from [28]): Have you encountered health misinformation on TikTok in the past? (yes/no/unsure)

Verification of Health Information on TikTok. Using a scale adapted from [27], respondents indicated on a 7-point scale (1 = never, 7 = always) how often they performed six different verification behaviors (eg, "Check to see if the information is current.") when seeing health information on TikTok. The scores for the six items were averaged to create a verification of TikTok health information score for each respondent (M=4.83, SD=1.53; Cronbach's α =.92).

Health Professionals and General Users as Sources of Health Information on TikTok

Source Preferences. Using a 7-point scale (1 = not at all, 7 = very often), respondents indicated how often they get health information from health professionals on TikTok (M=5.04, SD=1.83) and how often they get health information from general users on TikTok (M=4.55, SD=1.89). In addition, using a 7-point scale (1 = don't prefer them at all, 7 = prefer them a lot), respondents were asked to indicate how much they prefer to get health information from health professionals on TikTok (M=5.65, SD=1.75) and how much they prefer to get health information from general users on TikTok (M=4.08, SD=1.96).

Perceived Credibility of TikTok Health Information from Health Professionals and General Users. In addition to measuring the respondents' perceived credibility of TikTok health information overall, we also measured the respondents' perceived credibility of the two sources of interest (health professionals and general users) using Flanagin & Metzger's 7-point scale for media

credibility [27]. Specifically, we asked, "To what degree do you rate the health information provided by *health professionals* (eg, a doctor or nurse) on TikTok?" and "To what degree do you rate the health information provided by *general users* (someone like you) on TikTok?" Respondents rated how believable, accurate, trustworthy, biased (reverse coded), and complete they believe the health information on TikTok is from each of these sources. The scores for each of the five items were averaged for each of the source types, such that each respondent had a score for perceived credibility of TikTok health information from *health professionals* (M=5.16, SD=1.18; Cronbach's α =.90) and perceived credibility of TikTok health information from *general TikTok users* (M=3.95, SD=1.54; Cronbach's α =.94).

Acting on Health Information. Respondents' likelihood to act on health information was measured with items adapted from [29]. Using a 7-point scale (1 = not at all likely, 7 = extremely likely), respondents indicated how likely they are to act on health information from a health professional on TikTok (M=4.50, SD=1.79) and from a general user on TikTok (M=3.96, SD=1.89). Respondents were also asked whether they ever have acted on health information provided on TikTok by a health professional or general user.

Fact-Checking Information. Respondents were asked, on a scale of 1 (not at all likely) to 7 (very likely), to rate how likely they are to fact-check health information on TikTok from a health professional (*M*=4.88, *SD*=1.80) and general user (*M*=5.37, *SD*=1.83), respectively.

Audience Characteristics

TikTok Intensity. Scores for TikTok intensity were created using an adapted form of [30]'s scale for Facebook Intensity. The scale was created to measure how emotionally connected participants are to the social media platform, as well as the extent to which the platform is part of their everyday lives. This TikTok-modified version of the scale asked respondents to rate their agreement(1 = strongly disagree, 7 = strongly agree) with the following six items: 1) TikTok is part of

my everyday life, 2) I am proud to tell people I'm on TikTok, 3) TikTok has become part of my daily routine, 4) I feel out of touch when I haven't logged into TikTok for a while, 5) I feel I am part of the TikTok community, and 6) I would be sorry if TikTok shut down. The scores of the six items were averaged to create TikTok intensity scores for each respondent who had reported ever having used TikTok (M=4.91, SD=1.49; Cronbach's $\alpha=.90$).

The full survey questionnaire, as well as descriptive statistics for each variable across the student and Qualtrics samples, can be found in this article's multimedia appendices.

Data Analysis

Statistical analyses were performed using SPSS 29.0. Descriptive analyses were conducted to describe the respondents' frequency of TikTok use, frequency of intentional and unintentional exposure to health information on TikTok, reasons for health-related TikTok use, beliefs about encountering health misinformation, perceptions of misinformation on TikTok, frequency of performing verification behaviors on TikTok, frequency and preferences related to getting health information from health professionals and general users on TikTok, and frequency of acting on TikTok health information.

Bivariate correlational analyses were conducted to examine the relationships that credibility perceptions (perceived credibility of TikTok health information overall, perceived credibility of TikTok health information from health professionals, and perceived credibility of TikTok health information from general users), misinformation perceptions, verification behaviors, likelihood of acting on TikTok health information, and likelihood of fact-checking TikTok health information had with the respondents' age, highest level of education, and level of TikTok intensity. In addition, bivariate correlational analyses were conducted to examine the relationship between respondents' perceived credibility of TikTok health information overall and their likelihood of acting on the health information. For these correlational analyses, a correlation was considered weak if the correlation

coefficient was between -.4 and .4. A correlation was considered moderate if the correlation coefficient was between -.8 and -.4 or .4 and .8. A correlation was considered strong if the correlation coefficient was between -1 and -.8 or .8 and 1.

Lastly, paired samples t-tests were conducted to observe the statistical difference between respondents' perceived susceptibility of health misinformation on TikTok for themselves vs. for others, frequency of getting health information on TikTok from health professionals vs. general users, preference for getting health information on TikTok from health professionals vs. general users, perceived credibility of TikTok health information from health professionals vs. general users, likelihood of acting on TikTok health information from health professionals vs. general users, and likelihood of fact-checking TikTok health information from a health professional vs. a general user.

Results

A total of 1,172 qualified responses were collected, with the average age of the sample being 22.82 (SD=3.15). A little more than half of the participants came from the Qualtrics panel (n=636, 54.30%), and the rest were recruited through the universities (n=536, 45.70%). The majority of the sample identified as White (n=910, 77.65%), and most of the sample reported having used TikTok (n=1026, 87.54%). Of the respondents who had used TikTok, approximately half reported using TikTok more often than once a day (n=615, 52.5%). Further demographic information is included in Table 1, and the full list of demographic questions can be found in Multimedia Appendix

Table 1. Respondent Demographics (N=1172)

Race		n (%)
	White	910 (77.65%)
	Black or African American	117 (9.98%)
	Asian or Pacific Islander	16 (1.37%)
	Native Hawaiian or Pacific Islander	57 (4.86%)
	American Indian or Alaska Native	3 (.26%)

1.

	Other		53 (4.52%)		
	Prefer not to answer		16 (1.37%)		
Ethnicity					
	Not Spanish/Hispanic/Latina		919 (78.41%)		
	Mexican, Mexican American Chicana	or	109 (9.30%)		
	Puerto Rican		11 (9.39%)		
	Cuban		13 (1.11%)		
	Other Spanish/Hispanic/Latina		98 (8.36%)		
	Prefer not to answer		22 (1.88%)		
Education					
	Less than high school High school graduate	or	17 (1.45%)		
	equivalent(eg, GED)		207 (17.66%)		
	Some college		509 (43.43%)		
	2-year degree		90 (7.68%)		
	4-year degree		224 (19.11%)		
	Professional or master's degree		68 (5.80%)		
	Doctorate		57 (4.86%)		
Self-Identified	d Gender				
	Woman		1154 (98.46%)		
	Transgender		4 (.34%)		
	Non-Binary		11 (.94%)		
	Gender Fluid		2 (.17%)		
	Other		1 (.09%)		
Frequency of TikTok Use					
	Never		146 (12.46%)		
	Less than once a month		58 (4.95%)		
	Once a month		50 (4.27%)		
	Once a week		60 (5.12%)		
	A few times a week		108 (9.22%)		
	Once a day		135 (11.52%)		
	More often than once a day		615 (52.47%)		

Using TikTok as a Health Information Source

Frequency of Use

Of the 1,026 respondents who had used TikTok before, 672 (65.50%) reported that they had intentionally used TikTok to look for advice or information about their health or healthcare, while 948 (92.40%) reported that they had unintentionally received health information or advice on TikTok. A total of 582 respondents (56.73% of the respondents who had ever used TikTok) reported

having intentionally used TikTok to look for advice or information about their health or healthcare in the last three months. A breakdown of the frequency of intentional and unintentional exposure to health information on TikTok is provided in Table 2.

Table 2. Frequency of Using TikTok Intentionally and Unintentionally as a Source of Health Info Among Respondents Who Had Ever Used TikTok (*n*=1026)

Info Among Respondents Who Had Eve	er Used TikTok (n=1026)
Question and responses	n (%)
Frequency of Intentional Use of TikTol	t to Get Health Information
Hourly	29 (2.83%)
Daily	108 (10.53%)
Weekly	143 (13.94%)
Monthly	168 (16.37%)
Less often	190 (18.52%)
Not at all	388 (37.82%)
Frequency of Unintentional Exposure	to Health Information on TikTok
Hourly	38 (3.7%)
Daily	232 (22.61%)
Weekly	363 (35.38%)
Monthly	172 (16.76%)
Less often	143 (13.94%)
Not at all	78 (7.6%)

Reasons for Health-Related TikTok Use

Of the ten reasons presented for health-related TikTok use, getting advice from others with the same disease or health condition (M=5.29, SD=1.54), receiving social support from others (M=5.29, SD=1.57), and gaining knowledge about a disease they had been diagnosed with (M=5.01, SD=1.59) were the most agreed upon reasons. The least agreed-upon reason for health-related TikTok use was communicating with physicians (M=4.06, SD=1.86). Table 3 shows the means and standard deviation for each of the ten reasons.

Table 3. Reasons for Health-Related TikTok Use Among Respondents Who Had Ever Used TikTok (n=1026)

Reason	Level of Agreement, M(SD)	
I like to get health information from TikTok because		
It can help me to maintain a healthy lifestyle.	4.92 (1.60)	
It can help me determine whether I need to see a doctor.	4.81 (1.67)	
It can provide me with more information after I've seen my doctor.	4.65 (1.72)	
It can help me find different options for treatment or maintenance of my health condition(s).	4.79 (1.65)	

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	I can gain knowledge about a disease I've been diagnosed with.	5.01 (1.59)
	I can obtain advice from other patients with the same disease or health condition as me.	5.29 (1.54)
	I can receive social support from others.	5.29 (1.57)
	I can communicate with physicians.	4.06 (1.86)
	I can interact in real time with TikTok users.	4.59 (1.81)
	I can obtain immediate health information and make use of it.	4.53 (1.71)

Note. Respondents indicated level of agreement using a 7-point scale (1 = strongly disagree, 7 = strongly agree)

Credibility, Misinformation, and Verification of Health Information on TikTok

Perceived Credibility of TikTok Health Information Overall

Respondents who had ever gotten health-related advice or information intentionally or unintentionally from TikTok (n=959) indicated their perceived credibility of health information on TikTok overall (ie, health information from any source on TikTok). With a mean of 4.48 (SD=1.28) on a 7-point scale, the credibility perceptions were moderate. A positive correlation was found (r(959)=.30, P<.001) between perceived credibility of health information on TikTok overall and the respondents' age. Older participants tended to perceive the content as more credible. A positive correlation was also found (r(959)=.10, P=.001) between perceived credibility of health information on TikTok overall and the respondents' highest level of education, with respondents with greater education tending to rate the health information on TikTok as more credible. There was a positive correlation (r(959)=.32, P<.001) between TikTok intensity and perceived credibility of TikTok health information overall. Respondents with higher TikTok intensity scores tended to have greater perceived credibility of health information on TikTok overall.

Misinformation Perceptions

About half (563, 54.87%) of the respondents who had used TikTok indicated that they believe they have personally encountered health misinformation on the platform at some point, and only 1.85% (n=19) of the sample stated that they think health misinformation is not prevalent at all on TikTok. Table 4 shows the levels of perceived prevalence, severity, and susceptibility of health

misinformation on TikTok reported by the respondents who had used TikTok.

Table 4. Perceived Prevalence, Seriousness, and Susceptibility of Health Misinformation on TikTok Among Respondents Who Had Ever Used TikTok (n=1026)

Question	M(SD)			
How prevalent is health misinformation on TikTok?	5.14 (1.42)			
How serious do you think the impact of health misinformation on TikTok is?	5.57 (1.46)			
How susceptible are you to the influence of health misinformation on TikTok?	4.07 (1.75)			
How susceptible are other people to the influence of health misinformation on TikTok? 5.26 (1.46)				
Note. Respondents indicated their level of agreement using a 7-point scale prevalent/serious/susceptible, 7 = very prevalent/serious/susceptible)	(1 = not at all			

There was a weak but significant negative correlation between age and perceived seriousness of health misinformation on social media, r(1026) =-.07, P=.04. There was not a significant relationship between age and perceived prevalence, r(1026) =-.06, P=.05, or perceived susceptibility, r(1026) =-.02, P=.50. There was not a significant relationship between the respondents' highest level of education and perceived prevalence, rho(1026) =-.008, P=.81, perceived seriousness, rho(1026) =.01, P=.66, or perceived susceptibility of health misinformation on TikTok, rho(1026) =.04, P=.17.

There was a weak but significant positive relationship between respondents' TikTok intensity scores and perceived seriousness, rho(1026) = .07, P=.02, and perceived susceptibility, rho(1026) = .07, P=.02, such that respondents with high TikTok intensity scores tended to perceive greater seriousness and susceptibility of health misinformation on TikTok. There was not a significant relationship between TikTok intensity scores and perceived prevalence of health misinformation on TikTok, rho(1026) = .03, P=.29.

The results also showed respondents perceive other people (M=5.26, SD=1.46) as more susceptible to health misinformation on TikTok than they personally are (M=4.07, SD=1.75), t(1025) =21.16, P<.001.

Verification of Health Information on TikTok

About half of the respondents who had ever gotten health-related advice or information

(intentionally or unintentionally) from TikTok (*n*=959) indicated that they perform the six different verification behaviors at least most of the time. The most frequently used form of verification was considering whether the information represented was opinion or fact and the least frequently used form of verification was verifying the TikTok users' qualifications or credentials. Table 5 shows the respondents' frequency of each verification behavior.

There was a weak but significant positive correlation found between the respondents' age and their likelihood of verifying TikTok health information, r(959)=.20, P<.001, as well as between the respondents' highest level of education and their likelihood of verifying TikTok health information, rho(959)=.09, P<.001. A weak but significant positive relationship existed between respondents' TikTok intensity scores and the likelihood of verifying TikTok health information, r(959)=.21, P<.001. Participants with high TikTok intensity scores were more likely to verify the health information.

Table 5. Verification of TikTok Health Information Among Participants Who Had Intentional or Unintentional Exposure to Health Information on TikTok (n=959)

Verification Behavior			n (%)				
	Never	Almost never	Rarely	About half of the time	Most of the time	Almost always	Always
Verify the TikTok users' qualifications or credentials.	121 (12.62%)	68 (7.09%)	89 (9.28%)	131 (13.66%)	193 (20.13%)	178 (18.56%)	179 (18.67%)
Consider the TikTok users' goals/ objectives for posting information online.	74 (7.72%)	87 (9.07%)	70 (7.30%)	165 (17.21%)	208 (21.69%)	199 (20.75%)	156 (16.27%)
Check to see if the information is current.	72 (7.51%)	61 (6.36%)	66 (6.88%)	143 (14.91%)	223 (23.25%)	198 (20.65%)	196 (20.44%)
Seek out other sources to validate the information.	63 (6.57%)	52 (5.42%)	76 (7.92%)	121 (12.62%)	200 (20.86%)	221 (23.04%)	226(23.57%)
Consider whether the information represented is opinion or fact.	53 (5.53%)	50 (5.21%)	49 (5.11%)	125 (13.03%)	199 (20.75%)	251 (26.17%)	232 (24.19%)
Check to see that the information is complete and comprehensive.	73 (7.61%)	55 (5.74%)	65 (6.78%)	148 (15.43%)	193 (20.13%)	225 (23.46%)	200 (20.86%)

Note. Participants were asked to indicate how often they do each of the following behaviors when seeing health information on TikTok.

Health Professionals and General Users as Sources of Health Information on TikTok

Source Preferences

Of the respondents who had ever used TikTok, 955 (93.08%) indicated they had gotten

health information from a health professional on the platform, while 963 (93.86%) indicated they had gotten health information from a general user on the platform. That said, respondents reported getting health information from health professionals on TikTok (M=5.04, SD=1.83) significantly more often than they get health information from general users on TikTok (M=4.55, SD=1.89), t(1025)=8.13, P<.001. This was in line with their preferences for health information sources, as respondents' preference for getting health information from health professionals (M 5.65, SD=1.75) was significantly greater than their preference for getting health information from general users (M=4.08, SD=1.96), t(1025)=23.75, P<.001.

Perceived Credibility of TikTok Health Information from Health Professionals and General Users

Respondents' perceived health information from *health professionals* on TikTok (M=5.16, SD=1.18) to be significantly more credible than health information provided by *general users* on TikTok (M=3.95, SD=1.54), t(958)=26.737, P<.001.

Acting on Health Information

Of the respondents who had received health information from a health professional on TikTok (n=955), 43.35% (n=414) reported that they had acted on health information they got from a health professional on TikTok. In comparison, 37.80% (n=364) of the respondents who had received health information from a general user on TikTok (n=963) reported that they had acted on health information they got on TikTok from a general user. When asked about their likelihood of acting on health information on TikTok in the future, the respondents' likelihood of acting on health information from a health professional on TikTok (M=4.50, SD=1.79) was significantly higher than their likelihood of acting on health info a general user on TikTok (M=3.96, SD=1.89), t(1025)=12.74, P<.001.

Likewise, the respondents' perceived credibility of TikTok health information *overall* was positively correlated with their likelihood to act on the health information. Respondents who

perceived health information on TikTok *overall* as credible were more likely to act on health information they saw from a health professional on TikTok (r(959)=.47, P<.001) and from a general user on TikTok (r(959)=.53, P<.001).

Age was weakly positively correlated with their likelihood of acting on health advice found on TikTok both from a health professional (r(1026)=.11, P<.001) and general user (r(1026)=.23, P<.001). Likewise, education was weakly positively correlated with their likelihood of acting on health information found on TikTok both from a health professional (rho(1026)=.09, P=.003) and general user (rho(1026)=.08, P=.01).

There was a significant positive relationship between TikTok intensity and their likelihood of acting on health information from health professionals on TikTok, r(1026)=.41, P<.001. Likewise, there was a significant positive relationship between TikTok intensity and likelihood of acting on health information from general users on TikTok, r(1026)=.39, P<.001. Respondents with higher TikTok intensity scores tended to be more likely to act on health information from both health professionals and general users on TikTok.

Fact-Checking Information

There was a statistically significant difference in the respondents' likelihood of fact-checking health information on TikTok from a health professional vs. a general user. The likelihood of fact-checking health information from a general user(M=5.37, SD=1.83) was higher than the likelihood of fact-checking health information from a health professional (M=4.88, SD=1.80), t(1025)=9.71, P<.001.

Age was weakly positively correlated with their likelihood of fact-checking TikTok health information both from a health professional (r(1026)=.18, P<.001) and from a general user (r(1026)=.07, P=.02). Education was also weakly positively correlated with their likelihood of fact-checking TikTok health information from a health professional (rho(1026)=.11, P<.001), but

education was not correlated with their likelihood of fact-checking TikTok health information for a general user (rho(1026) = .04, P=.26).

There was a significant but weak positive relationship between TikTok intensity and their likelihood of fact-checking TikTok health information from both health professionals, r(1026)=.07, P=.03, and from general users on TikTok, r(1026)=.10, P=.002. Respondents with higher TikTok intensity scores tended to be more likely to fact-check health information from both health professionals and general users on TikTok.

Discussion

TikTok has generated substantial attention due to recent reports suggesting its emergence as a significant source of information for many Americans [7]. For some users, TikTok has replaced traditional news networks and widely used search engines such as Google [31]. Given this emergence of TikTok as an information source and the presence of health information available on the platform [5,6], we surveyed 1,172 women between the ages of 18 and 29 to understand their use of TikTok as a source of health information. Of the total respondents, 1,026 had used TikTok in some capacity.

The findings provide evidence that TikTok has become a source of health information for young women in the United States. More than half of the respondents who had ever used TikTok (672/1026, 65.50%) reported that they had intentionally used TikTok to look for advice or information about their health or healthcare, and nearly the entire sample of TikTok users (948/1026, 92.40%) reported having unintentionally gotten health information on TikTok. The popularity of health-related hashtags on TikTok (eg, as of November 2023, #medicaltiktok and #healthtok have 7.6 billion and 2.4 billion views, respectively) has illuminated some of TikTok's popularity as a commonly searched platform for information related to health, but the findings of this study provide a greater empirical understanding of the extent to which young women actually

obtain health information from the platform.

TikTok's popularity as a source of health information may, in part, be the result of how technology has influenced human beings' desire for immediate information. Rather than having to wait for a doctor's appointment to ask about one's symptoms or health condition, an individual can take to the Internet (eg, TikTok) and find information in a matter of minutes [12]. This phenomenon of individuals seeking immediate information has important implications for health professionals. By knowing that individuals turn to platforms like TikTok to find health information, health professionals can proactively create content so that credible health information is available when users go to find it. Social media was heavily relied upon for health information during the COVID-19 pandemic [16], and since then, social media, and TikTok specifically, have been recommended as a tool for health promotion [5,32,33]. Given that TikTok is easily accessible and allows anyone to consume information without judgment, it may especially be helpful for accessing populations with barriers to care and for communicating about taboo or stigmatized topics that users may be less comfortable asking about in a traditional setting [6,34].

To better understand why young women are using TikTok as a source of health information, we asked about their agreement with various reasons for health-related TikTok use. Our findings showed that the most agreed-upon reasons were getting advice from others with the same disease or health condition, receiving social support from others, and gaining knowledge about a disease they had been diagnosed with. In an examination of how the current digital landscape has affected Americans' consumer behavior, CharityRx found "relatability to a shared personal experience" to be a top reason why people go to health influencers for information [12]. In addition to TikTok having the ability to provide immediate information to users' health inquiries, it also has the capacity to help users locate other people who are similar to them. This may be especially relevant for women. As women have experienced gender bias and poorer treatment in healthcare settings ([35,36]), it's

possible that they may be especially motivated to seek social support and health information from others. Prior research has also indicated that social support is especially beneficial for women [37]. When individuals perceive similarity to a source of information, this can cause the message recipient to feel a stronger sense of connection with the message, which can have important implications in terms of the effects of a message [38]. Perceiving similarity to a source of information can also enhance a user's perceptions of the message and overall acceptance [39]. In terms of getting a further understanding of young women's motivations for using TikTok as a source of health information, future research could examine what topics (eg, health conditions) young women are most interested in and likely to search.

Given the potential for misinformation to rapidly pervade the social media landscape, it has been recommended that experts in medical science, public health, and social sciences collaborate to better understand health misinformation on social media, including its reach and influence [40]. Our findings help show the degree to which young women on TikTok perceive an issue of misinformation and to what extent they try to verify/fact-check the information they consume. In first examining perceived credibility of TikTok health information overall, we found that credibility perceptions were moderate among the respondents who had reported ever having gotten healthrelated advice or information (intentionally or unintentionally) from TikTok. Notably, health information on TikTok was perceived to be more credible as the participants were older, more educated, and had higher TikTok intensity scores (ie, were more emotionally connected to TikTok and had greater integration of TikTok into their daily lives). While our findings are able to show these positive correlations, we do not know whether or not the information they are seeing on TikTok (and thus reflecting on when indicating their credibility perceptions) truly is credible. It may be the case that older age, higher levels of education, and more experience with TikTok lead to following more credible users and being delivered more credible content via the TikTok algorithm. In

this case, the content may truly be more credible for these users (leading to their greater perceptions of credibility). Future research could explore whether this is the case.

Nearly all of the participants indicated that they believe misinformation is prevalent on TikTok to at least some extent. This may be the result of mainstream news commonly communicating that misinformation is a problem on social media, including TikTok (eg, [15]). A great deal of health misinformation reached social media users during the COVID-19 pandemic [8]. It is possible that respondents in this study were among those users or that they heard about this problematic phenomenon. Despite nearly all participants stating that they think misinformation is prevalent on TikTok, though, only about half of the participants indicated that they believe they have personally encountered health misinformation on TikTok at some point. This discrepancy could be the result of a few things. It could be that the users know there is a misinformation epidemic but have not been exposed to misinformation because of their commitment to only following credible users (thus leading the TikTok algorithm to feed them more credible content). However, given the large amounts of misinformation that have been identified on the platform [15,41,42] and Americans' inability to identify most forms of misinformation [43-45], it is more likely that this discrepancy is the result of some respondents not having recognized that they have been exposed to health misinformation. This possibility is further supported by our results that showed respondents perceive other people as more susceptible to health misinformation on TikTok than they personally are. This finding demonstrates what appears to be a "third-person effect," in which the young women perceive that media messages have a greater influence on others than on themselves [23]. As evidence of a third-person effect was provided by the results (with respondents perceiving that other people are more susceptible to health misinformation on TikTok than they are), this evidence of a third-person effect could further suggest the idea that some of the respondents are naive about their susceptibility to misinformation.

The most common form of verification (to verify the accuracy of the health information found on TikTok) was considering whether the information presented was opinion or fact. The least frequently reported form of verification was verifying the TikTok users' qualifications or credentials. Age, education, and TikTok intensity were each found to have a weak positive correlation with the likelihood of verifying TikTok health information. Participants who were older, more educated, or had higher TikTok intensity scores were more likely to verify health information on TikTok. As discussed above, these demographics (age, education, and TikTok intensity) were also found to each be positively correlated with perceived credibility of TikTok health information overall. Thus, as both credibility perceptions and verification of the information both increase with age, education, and TikTok intensity, perhaps these users truly are seeing more credible content and appropriately perceiving it to be credible. Future research should further explore these relationships, as this is beyond the scope of this study. In prior research, fact-checking has typically been found to not be very common on social media. In Neely et al.'s (2021) survey of American's reliance on social media during the COVID-19 pandemic, it was found that three-quarters of those surveyed had relied on social media to some extent to stay informed about the pandemic, but the majority of them were unlikely to fact-check the information they found.

Lastly, this study investigated young women's perceptions and behaviors related to the top two types of sources that share health information on TikTok: health professionals and general users. Prior research has identified that health professionals and general users are two of the most prevalent sources on TikTok communicating health information [10,11], and our findings indicate that young women are getting health information on TikTok from each of these two source types. Of the respondents who had used TikTok, a majority indicated that they had gotten health information both from a health professional on the platform (955/1026, 93.08%) and from a general user on the platform (963/1026, 93.86%). Given that the respondents' top reasons for health-related TikTok use

were getting advice from others with the same disease or health condition, receiving social support from others, and gaining knowledge about a disease they had been diagnosed with, it is reasonable that the respondents would perceive both health professionals and general users as valuable sources of information. Prior research exploring the effects of communication sources on social media (eg, [9]) has explained that both expert-type and peer-type sources provide value. While health professionals have formal training and credentialed experience, general users (eg, peers) can have a form of "experiential credibility" from their own personal experiences (like that of living with a particular health condition) [9,27]. While most of the respondents had gotten health information from each of the two source types, preference for getting health information from a health professional was significantly greater than preference for getting health information from general users (t(1025)=23.75, P<.001), and in line with their preferences, the young women reported getting health information from health professionals on TikTok significantly more often than they reported getting health information from general users on TikTok (t(1025)=8.13, P<.001). As medical professionals and health institutes delivered COVID-19-related information during the pandemic [5], it was found that Americans who used social media as a source of COVID-19 information expanded their social media networks to include credible sources (eg, medical institutions and scientific sources) [16]. Additionally, CharityRx's survey found "medical accreditation and certification" to be the top reported reason why people go to influencers for health information [12]. Together, the prior and present findings seem to indicate a preference for seeing health professionals share information on platforms like TikTok. However, it is important to recognize that both of the common source types — health professionals and general users — are providing health information to these users.

Our findings showed that perceived credibility of TikTok health information from health professionals was significantly higher than perceived credibility of TikTok health information from

general users (t(958)=26.737, P<.001). This is promising for health professionals who choose to invest in creating a TikTok presence, as studies have shown that online information is more likely to be attended to when it is perceived as credible [46]. There was also a significant difference in the young women's likelihood of acting on health information from a health professional versus a general user on TikTok, with their likelihood of acting on the information being greater when the information was from a health professional (t(1025) = 12.74, P<.001). As the respondents had greater perceived credibility of TikTok health information from health professionals (vs. general users), it is logical that they would also be more likely to act on health information from them, given that credibility perceptions enhance the likelihood of persuasion [47,48], including in the context of social media messaging [49]. We found that of the respondents who had received health information from a health professional on TikTok, 43.35% (414/955) of them reported that they had acted on health information they got from a health professional on TikTok. In comparison, 37.80% (364/963) of the respondents who had received health information from a general user on TikTok reported that they had acted on health information they got on TikTok from a general user. The respondents' perceived credibility of health information on TikTok overall was found to be positively correlated with their likelihood of acting on health information from both of the source types, which is in alignment with the relationship between credibility perceptions and persuasive effects [47,48]. On the one hand, these findings are promising in the sense that young women perceive health professionals on TikTok to be more credible and are more influenced by them, further suggesting that it is worthwhile for health professionals to use TikTok as a strategic communication tool. On the other hand, this could mean that young women are more susceptible to being influenced by individuals who give the impression of being qualified health professionals. Medical professionals sometimes give information that is outside of their scope of expertise [50], and uncredentialed users are often confused for credentialed health professionals [51]. Furthermore, it's important to

note that medical credentials and titles vary. A search of the hashtag #womenshealth on TikTok results in videos from a number of different types of health professionals, including nurses, nurse practitioners, OB-GYNs, medical doctors (with MD or DO credentials), midwives, and more, and as prior research has shown that many individuals do not understand medical roles and titles or how to differentiate between them [52], this could have profound implications. It's also important to note that anyone on TikTok can present themselves as though they have the necessary credentials for the information they are sharing (eg, adding credentials to their username, presenting themselves with a formal title, wearing a lab coat or scrubs, communicating information in a persuadable manner). An authoritative title, on its own, can be enough to get an individual's attention and generate respect [53]. Therefore, with anyone being able to add credentials to their TikTok username, this could be problematic, especially given that credibility is hard to distinguish on social media. Users are more likely to rely on heuristic cues (like the titles included in one's username) to determine a user's credibility [9,54]. The findings discussed above also showed that the least frequently reported form of information verification was verifying the TikTok users' qualifications or credentials, further illustrating that this could be vastly problematic.

The study's findings showed that the young women in our study are more likely to fact-check information from a general user than they are to fact-check information from a health professional. Again, this is promising in terms of the fact that content from general users may be more likely to include misinformation, but this could be problematic if the credibility cues of a health professional lead users to automatically assume they can believe and trust any of the information. It would be worthwhile for future research to investigate this further, uncovering whether users trust misinformation from health professionals on TikTok simply because of the creators' credentials.

We also found that both age and education are positively correlated with young women's likelihood of acting on health information found on TikTok — both from a health professional and

from a general user. However, these correlations were quite weak. A stronger positive correlation was found between the users' emotional connection to TikTok (ie, TikTok intensity) and their likelihood of acting on health information from both health professionals and general users. It may be logical to assume users who heavily engage more with TikTok will have a greater propensity to act on the information they receive. Social influence theory suggests that individuals are influenced by those around them [55]. This may extend to the online environment, such that as TikTok becomes more integrated into one's life, it is more likely to affect their behaviors.

Limitations

The findings of this survey research should be interpreted in light of some limitations. Firstly, the sample of survey respondents was recruited through convenience sampling methods. While the sample is only a segment of the total population, we tried to ensure we had a large sample that was representative of the population of interest (women aged 18-29 throughout the United States) by utilizing both Qualtrics and two large public universities to recruit individuals who fit the sample parameters. This study does not discuss differences between those recruited from the universities and those recruited from the Qualtrics sample, but our article's multimedia appendix (Multimedia Appendix 2) for this article does provide descriptive statistics for each variable across each sample as a means of allowing for some comparison between the two. In addition, we made sure to include the respondents' highest level of education as a variable in this study to see how education is associated with the variables of interest in this study, which can help to provide some understanding of how one's educational experience might be related to their use and perceptions of TikTok health information. Secondly, as this study relies on self-reporting from the survey respondents, there is a chance that the results do not truly capture the real behaviors of the respondents. As we asked questions about fact-checking of online information (behaviors that individuals likely know they should be doing), they may have answered some questions in a more

socially desirable or acceptable manner (ie, what they expect would be an "appropriate" response) rather than being truthful in their responses. Hopefully, though, as participants knew that their responses would be anonymous, this helped to lessen social desirability bias. Lastly, this study focused on young women as the population of interest for this study. This narrow focus allows us to better understand the implications of TikTok use for this demographic, but it is also important to explore other population's behaviors and perceptions.

Conclusions and Practical Implications

This study provides a greater understanding of the extent to which TikTok is serving as a source of health information for young women in the United States. With nearly all of the young women in this study having been exposed to health information on TikTok, and more than half of them (582/1026, 56.73%) having actively sought health-related information on the platform in the last three months, it is imperative for health professionals and health communication scholars to prioritize the consideration of TikTok as a platform that is influencing health information acquisition and dissemination in the United States. While the popularity and accessibility of TikTok may change, short-form video social media sites are likely to remain a common form of communication [56].

The findings of this study illustrate the potential value that TikTok can have for disseminating health information to an audience of young women. As the respondents of this survey reported a preference for information from health professionals and were more likely to act on the information from these sources, it is worthwhile for health professionals to use TikTok to disseminate health information to this audience, especially given the large number of women on the platform and prior research illustrating that social media significantly influences women's health-related behaviors and perceptions [17,19]. In doing so, health professionals may want to consider how they can align their content with young women's most common motivations for using TikTok as a source of health information, which we found to be getting advice from others with the same disease or health

condition, receiving social support from others, and gaining knowledge about a disease they had been diagnosed with. Given that young women want advice and support from others who are experiencing similar health conditions, it may be useful for health professionals to consider working with individuals who are willing to share their personal experience with a condition. Incorporating the stories of patients and other experienced individuals who have similar characteristics to those searching for information on TikTok could be especially influential for increasing attention and engagement to health information on TikTok.

Furthermore, given that our findings indicate young women have a preference for obtaining health information on TikTok from health professionals and that they are less likely to fact-check information from these sources, it is imperative that future initiatives address the proliferation of individuals sharing information beyond their scope of expertise and the problem of social media users confusing uncredentialed users as credentialed health professionals [50,51]. Future researchers and practitioners should also work on media literacy and education initiatives, given the third-person effect found in this research. It appears that young women know misinformation is an issue on TikTok but that they may not be recognizing that they have been exposed to misinformation and that they perceive themselves as less susceptible. It may be beneficial for future interventions to address this perception and help young women to have better recognition of when they are being exposed to health misinformation.

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Conflicts of Interest

None declared.

References

- 1. Dellatto M. TikTok Hits 1 Billion Monthly Active Users. Forbes. Available from: https://www.forbes.com/sites/marisadellatto/2021/09/27/tiktok-hits-1-billion-monthly-active-users/ [accessed Nov 2, 2023]
- 2. Willingham A, Asmelash L, Andrew S. The biggest ways TikTok has changed American culture. CNN. 2023. Available from: https://www.cnn.com/2023/04/02/us/tiktok-american-culture-effects-cec/index.html [accessed Nov 2, 2023]
- 3. Shepardson D. TikTok hits 150 mln U.S. monthly users, up from 100 million in 2020 | Reuters. Reuters. 2023. Available from: https://www.reuters.com/technology/tiktok-tell-congress-it-has-150-million-monthly-active-us-users-2023-03-20/ [accessed Nov 2, 2023]
- 4. Yuen M. TikTok users worldwide (2020-2025). Insider Intelligence. Available from: https://www.insiderintelligence.com/charts/global-tiktok-user-stats/ [accessed May 10, 2023]
- 5. Comp G, Dyer S, Gottlieb M. Is TikTok the next social media frontier for medicine? AEM Education and Training Wiley-Blackwell; 2021;5(3).
- 6. Kindelan K. Women turn to TikTok for health information and OBGYNs are there to meet them. Good Morning America. 2020. Available from: https://www.goodmorningamerica.com/wellness/story/women-turn-tiktok-health-information-obgyns-meet-68824442 [accessed Nov 2, 2023]
- 7. Matsa KE. More Americans are getting news on TikTok, bucking the trend on other social media sites. Pew Research Center. Available from: https://www.pewresearch.org/short-reads/2022/10/21/more-americans-are-getting-news-on-tiktok-bucking-the-trend-on-other-social-media-sites/ [accessed Oct 30, 2023]
- 8. Basch CH, Hillyer GC, Jaime C. COVID-19 on TikTok: harnessing an emerging social media platform to convey important public health messages. International Journal of Adolescent Medicine and Health De Gruyter; 2022 Oct 1;34(5):367–369. doi: 10.1515/ijamh-2020-0111
- 9. Kirkpatrick CE, Lawrie LL. Can Videos on TikTok Improve Pap Smear Attitudes and Intentions? Effects of Source and Autonomy Support in Short-Form Health Videos. Health Communication Routledge; 2023;0(0):1–13. PMID:37691164
- 10. Kong W, Song S, Zhao YC, Zhu Q, Sha L. TikTok as a Health Information Source: Assessment of the Quality of Information in Diabetes-Related Videos. Journal of Medical Internet Research 2021 Sep 1;23(9):e30409. doi: 10.2196/30409
- 11. Song S, Xue X, Zhao YC, Li J, Zhu Q, Zhao M. Short-video apps as a health information source for chronic obstructive pulmonary disease: information quality assessment of TikTok videos. Journal of medical Internet research JMIR Publications Inc., Toronto, Canada; 2021;23(12):e28318.
- 12. CharityRx. The Shifting Role of Influence and Authority in the Rx Drug & Health Supplement Market. CharityRx Blog. 2022. Available from: https://www.charityrx.com/blog/the-shifting-role-of-influence-and-authority-in-the-rx-drug-health-supplement-market/ [accessed Nov 2, 2023]
- 13. Montenegro L. The Rise Of Short-Form Video: TikTok Is Changing The Game. Forbes.

Available from: https://www.forbes.com/sites/forbesagencycouncil/2021/08/27/the-rise-of-short-form-video-tiktok-is-changing-the-game/?sh=78ccf7c15083 [accessed Nov 2, 2023]

- 14. Paivio A. Imagery and Verbal Processes. New York: Psychology Press; 2013. doi: 10.4324/9781315798868ISBN:978-1-315-79886-8
- 15. Brewster J, Arvanitis L, Pavilonis V, Wang M. Misinformation Monitor: September 2022. NewsGuard. 2022. Available from: https://www.newsguardtech.com/misinformation-monitor/september-2022 [accessed Nov 2, 2023]
- 16. Neely S, Eldredge C, Sanders R. Health Information Seeking Behaviors on Social Media During the COVID-19 Pandemic Among American Social Networking Site Users: Survey Study. Journal of Medical Internet Research 2021 Jun 11;23(6):e29802. doi: 10.2196/29802
- 17. Ceci L. U.S. TikTok audience by gender 2023. Statista. 2023. Available from: https://www.statista.com/statistics/1398182/tiktok-us-audience-by-gender/ [accessed Nov 2, 2023]
- 18. Ceci L. U.S. TikTok users by age 2022. Statista. 2023. Available from: https://www.statista.com/statistics/1095186/tiktok-us-users-age/ [accessed Nov 2, 2023]
- 19. Davies C, Mann A. Factors influencing women to accept diet and exercise messages on social media during COVID-19 lockdowns: A qualitative application of the health belief model. Health Marketing Quarterly Routledge; 2023 Oct 2;40(4):415–433. PMID:37021625
- 20. Dluhos-Sebesto C, Jethwa TE, Bertasi TGO, Bertasi RAO, Nishi LYM, Pantin SAL, Argenio SL, Shahsamand A, Omololu A, Pujalte GGA. Women's Health Information Survey: Common Health Concerns and Trusted Sources of Health Information Among Different Populations of Female Patients. Womens Health Rep (New Rochelle) 2021 Jun 1;2(1):173–181. PMID:34235504
- 21. Manierre MJ. Gaps in knowledge: tracking and explaining gender differences in health information seeking. Soc Sci Med 2015 Mar;128:151–158. PMID:25618604
- 22. U.S. Department of Labor. General Facts on Women and Job Based Health. 2018. Available from: https://www.dol.gov/sites/dolgov/files/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/women-and-job-based-health.pdf
- 23. van der Meer TGLA, Brosius A, Hameleers M. The Role of Media Use and Misinformation Perceptions in Optimistic Bias and Third-person Perceptions in Times of High Media Dependency: Evidence from Four Countries in the First Stage of the COVID-19 Pandemic. Mass Communication and Society Routledge; 2023 May 4;26(3):438–462. doi: 10.1080/15205436.2022.2039202
- 24. Caiata-Zufferey M, Abraham A, Sommerhalder K, Schulz PJ. Online Health Information Seeking in the Context of the Medical Consultation in Switzerland. Qual Health Res SAGE Publications Inc; 2010 Aug 1;20(8):1050–1061. doi: 10.1177/1049732310368404
- 25. Huo J, Desai R, Hong Y-R, Turner K, Mainous AG, Bian J. Use of Social Media in Health Communication: Findings From the Health Information National Trends Survey 2013, 2014, and

- 2017. Cancer Control SAGE Publications Inc; 2019 Jan 1;26(1):1073274819841442. doi: 10.1177/1073274819841442
- 26. Jia X, Pang Y, Liu LS. Online Health Information Seeking Behavior: A Systematic Review. Healthcare (Basel) 2021 Dec 16;9(12):1740. PMID:34946466
- 27. Flanagin AJ, Metzger MJ. Perceptions of Internet Information Credibility. Journalism & Mass Communication Quarterly SAGE Publications Inc; 2000 Sep 1;77(3):515–540. doi: 10.1177/107769900007700304
- 28. Chang C. Fake News: Audience Perceptions and Concerted Coping Strategies. Digital Journalism Routledge; 2021 May 28;9(5):636–659. doi: 10.1080/21670811.2021.1923403
- 29. Hu Y, Shyam Sundar S. Effects of Online Health Sources on Credibility and Behavioral Intentions. Communication Research SAGE Publications Inc; 2010 Feb 1;37(1):105–132. doi: 10.1177/0093650209351512
- 30. Ellison NB, Steinfield C, Lampe C. The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites. Journal of Computer-Mediated Communication 2007 Jul 1;12(4):1143–1168. doi: 10.1111/j.1083-6101.2007.00367.x
- 31. Perez S. Google exec suggests Instagram and TikTok are eating into Google's core products, Search and Maps. TechCrunch. 2022. Available from: https://techcrunch.com/2022/07/12/google-exec-suggests-instagram-and-tiktok-are-eating-into-googles-core-products-search-and-maps/ [accessed Nov 3, 2023]
- 32. De Vere Hunt I, Linos E. Social Media for Public Health: Framework for Social Media–Based Public Health Campaigns. J Med Internet Res 2022 Dec 14;24(12):e42179. doi: 10.2196/42179
- 33. MacKinnon KR, Kia H, Lacombe-Duncan A. Examining TikTok's potential for community-engaged digital knowledge mobilization with equity-seeking groups. Journal of medical Internet research JMIR Publications Inc., Toronto, Canada; 2021;23(12):e30315.
- 34. Gordon D. 33% Of Gen Zers Trust TikTok More Than Doctors, New Survey Shows. Forbes. 2022. Available from: https://www.forbes.com/sites/debgordon/2022/12/20/33-of-gen-zers-trust-tiktok-more-than-doctors-new-survey-shows/?sh=2f5770e6c7b2 [accessed Apr 29, 2023]
- 35. Samulowitz A, Gremyr I, Eriksson E, Hensing G. "Brave Men" and "Emotional Women": A Theory-Guided Literature Review on Gender Bias in Health Care and Gendered Norms towards Patients with Chronic Pain. Pain Research and Management Hindawi; 2018 Feb 25;2018:e6358624. doi: 10.1155/2018/6358624
- 36. Govender V, Penn-Kekana L. Gender biases and discrimination: a review of health care interpersonal interactions. Global Public Health Taylor & Francis; 2008 Apr 1;3(sup1):90–103. PMID:19288345
- 37. Milner A, Krnjacki L, LaMontagne AD. Age and gender differences in the influence of social support on mental health: a longitudinal fixed-effects analysis using 13 annual waves of the HILDA cohort. Public Health 2016 Nov 1;140:172–178. doi: 10.1016/j.puhe.2016.06.029
- 38. KELMAN HC. PROCESSES OF OPINION CHANGE*. Public Opinion Quarterly 1961 Jan

- 1;25(1):57-78. doi: 10.1086/266996
- 39. Andsager JL, Bemker V, Choi H-L, Torwel V. Perceived Similarity of Exemplar Traits and Behavior: Effects on Message Evaluation. Communication Research SAGE Publications Inc; 2006 Feb 1;33(1):3–18. doi: 10.1177/0093650205283099
- 40. Chou W-YS, Oh A, Klein WMP. Addressing Health-Related Misinformation on Social Media. JAMA 2018 Dec 18;320(23):2417–2418. doi: 10.1001/jama.2018.16865
- 41. O'Sullivan NJ, Nason G, Manecksha RP, O'Kelly F. The unintentional spread of misinformation on 'TikTok'; A paediatric urological perspective. Journal of Pediatric Urology 2022 Jun 1;18(3):371–375. doi: 10.1016/j.jpurol.2022.03.001
- 42. Basch CH, Meleo-Erwin Z, Fera J, Jaime C, Basch CE. A global pandemic in the time of viral memes: COVID-19 vaccine misinformation and disinformation on TikTok. Human Vaccines & Immunotherapeutics Taylor & Francis; 2021 Aug 3;17(8):2373–2377. PMID:33764283
- 43. KFF. Poll: Most Americans Encounter Health Misinformation, and Most Aren't Sure Whether It's True or False. KFF. Available from: https://www.kff.org/coronavirus-covid-19/press-release/poll-most-americans-encounter-health-misinformation-and-most-arent-sure-whether-its-true-or-false/ [accessed Nov 3, 2023]
- 44. Lyons BA, Montgomery JM, Guess AM, Nyhan B, Reifler J. Overconfidence in news judgments is associated with false news susceptibility. Proc Natl Acad Sci U S A 2021 Jun 8;118(23):e2019527118. PMID:34074757
- 45. Scheufele DA, Krause NM. Science audiences, misinformation, and fake news. Proceedings of the National Academy of Sciences Proceedings of the National Academy of Sciences; 2019 Apr 16;116(16):7662–7669. doi: 10.1073/pnas.1805871115
- 46. Metzger MJ, Flanagin AJ. Using Web 2.0 Technologies to Enhance Evidence-Based Medical Information. Journal of Health Communication Taylor & Francis; 2011 Jul 29;16(sup1):45–58. PMID:21843095
- 47. Dong Z. How to persuade adolescents to use nutrition labels: effects of health consciousness, argument quality, and source credibility. Asian Journal of Communication Routledge; 2015 Jan 2;25(1):84–101. doi: 10.1080/01292986.2014.989241
- 48. Eagly AH, Wood W, Chaiken S. Causal inferences about communicators and their effect on opinion change. Journal of Personality and Social Psychology US: American Psychological Association; 1978;36(4):424–435. doi: 10.1037/0022-3514.36.4.424
- 49. Dockter CE, Lee S, Boman CD, Hinnant A, Cameron GT. The Impact of Retransmission and Modality on Communicating Health Research Findings via Social Media. Health Communication Routledge; 2021 Aug 24;36(10):1231–1241. PMID:32268798
- 50. Vorias T. Beware of TikTok's medical "experts." The Michigan Daily. 2021. Available from: http://www.michigandaily.com/opinion/columns/beware-of-tiktoks-medical-experts/ [accessed Nov 12, 2023]
- 51. Sung M. On TikTok, mental health creators are confused for therapists. That's a serious problem.

Mashable. 2021. Available from: https://mashable.com/article/tiktok-mental-health-therapist-psychology [accessed Nov 12, 2023]

- 52. Hause E, Praska C, Pitt MB, Hendrickson MA, Charpentier V, Allen KA, Gotlieb R, Lunos S, Marmet J. What's in a name? Laypeople's understanding of medical roles and titles. Journal of Hospital Medicine 2022;17(12):956–960. doi: 10.1002/jhm.12971
- 53. Rhoads KV, Cialdini RB. The business of influence: Principles that lead to success in commercial settings. In: Dillard JP, Pfau M, editors. The persuasion handbook: Developments in theory and practice Sage; 2002. p. 513–542.
- 54. Petty RE, Cacioppo JT. The Elaboration Likelihood Model of Persuasion. In: Berkowitz L, editor. Advances in Experimental Social Psychology Academic Press; 1986. p. 123–205. doi: 10.1016/S0065-2601(08)60214-2
- 55. Compliance, identification, and internalization three processes of attitude change Herbert C. Kelman, 1958. Available from: https://journals.sagepub.com/doi/10.1177/002200275800200106 [accessed Nov 14, 2023]
- 56. Singh S. Why short-form video is here to stay (even if TikTok isn't). 2023. Available from: https://www.linkedin.com/pulse/why-short-form-video-here-stay-even-tiktok-isnt-sunjay-singh/ [accessed Nov 2, 2023]

Supplementary Files

Multimedia Appendixes

Full Survey Questionnaire.

URL: http://asset.jmir.pub/assets/a15d5b06a4a79626e35321d7cd39a209.docx

Descriptive Statistics for Study Measures Across Two Samples (Student Sample and Qualtrics Sample).

URL: http://asset.jmir.pub/assets/4fa476e593fead640dba15a377190b80.docx