The Cost of Snooping: How Reading Others’ Personal Correspondences Divides Attention

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ABSTRACT. Given the prevalence of public use of devices to send private messages, these messages are prone to be snooped upon by others. Advances in technology have raised privacy concerns, however, little is known about what is typically sought after and the characteristics of those more likely to snoop. People are socially curious and drawn to gossip, suggesting that personal information that is dramatic or salacious may be more tempting for individuals to access when given the opportunity. In addition, certain personality characteristics relate to negative behaviors online, however, it is unknown what individual differences are related to snooping behaviors. Therefore, we designed novel studies in which participants watched videos where pop-up text message notifications, supposedly for the researcher, appeared. Using eye-tracking, we assessed what factors led to fixation on these fake texts. Results showed participants were more likely to fixate on gossipy texts during passive videos (Z = 303.50, p = .01, d = 0.48), and higher conscientiousness was related to lower snooping, r(26) = −.50, p = .01, 95% CI [−.78, −.22]. Further, individual fear of missing out predicted higher fixation only of gossipy texts, r(22) = .55, p = .01, 95% CI [.15, .79], but independent of text type, greater fixation to texts led to divided attention and poorer memory of video content, r(46) = −.50, p < .001, 95% CI [−.73, −.33]. Together, data suggest that there are costs to private information being made public, both to the individual whose information is on display and the snooper.

Keywords: text snooping, gossip, attention, FOMO, eye tracking

Individuals must learn information about others in order to build relationships (Renner, 2006), and this basic human need fosters the desire to acquire personal information about others (Litman & Pezzo, 2012). Historically, this sharing of information occurred through in-person communication (Levin & Arluke, 1987), however advances in technology make it simultaneously easy to gain access to others’ personal information and difficult to maintain personal privacy (Friedewald & Pohoryles, 2013). Due to the ever-increasing use of technology, broader access to private information, and negative consequences from these trends (Moore, 2011), there is a critical need to learn more about what types of personal information individuals are interested in, and what factors increase individual spying of others’ personal information.

When individuals actively seek information about others, they are particularly drawn by hearsay and gossip (Malamut et al., 2018). Gossip builds community, fosters group cohesion, and even activates the brain’s reward pathway (Gabriels & De Backer, 2016; Peng et al., 2015), all despite it being judged as immoral (Foster, 2004). Gossipy information fuels top-down attention, particularly when information is framed in a negative or salacious manner (Anderson et al., 2011). In addition, immorally themed gossip produces rapid bottom-up attention (Peng et al., 2017), all suggesting that the content of private information matters when individuals spy on others. Therefore, a primary goal of our experiments was to characterize the effects of information content on attention, specifically whether private information is gossipy. To do so, participants engaged in visual tasks during which fake private texts meant for the researcher repeatedly appeared on the
computer screen. To assess attention, we measured fixations using eye tracking technology, validated to quantitatively assess overt attention toward visual stimuli (Hollingworth & Bahle, 2020), and determined if text content affects snooping behavior.

In addition to how information content can influence snooping, there may be individual differences in personality that predict spying behavior. The specific personality factors we investigated were conscientiousness, risk-taking, and fear of missing out (FOMO). Conscientious individuals are less likely to gossip and more self-aware about their use of technology (Babalola et al., 2019; Devaraj et al., 2008), suggesting that conscientiousness negatively associates with information spying. Risk-taking personality involves impulsive decision-making across many domains, social relationships being one of them (Tsukayama et al., 2012). As there is an inherent risk in spreading gossip (Grosser et al., 2010), those higher in risk-taking are more comfortable both spreading gossip and engaging in antisocial behaviors online (Nwanosike et al., 2022). Increased technology and social media use is associated with increased feelings of FOMO, while feelings of FOMO also predict problematic uses of social media (Abel et al., 2016; Buglass et al., 2017; Dempsey et al., 2019). Therefore, high susceptibility to FOMO likely predicts behavior of invading someone else's privacy in an online setting.

In addition to these personality variables, we investigated the more cognitively associated variables distractibility and cognitive absorption. Those higher in distractibility, enhanced by social use of technology and texting (Levine et al., 2012, 2013), often have lapses in attention, resulting in being less able to sustain attention amid distractions (Harriott et al., 1996). Thus, higher propensity toward lapses in attention will likely have more divided attention to gossipy information. Last, cognitive absorption is described as a profound preoccupation with technologically involved tasks, particularly when they encapsulate social curiosity (Agarwal & Karahanna, 2000). Cognitive absorption is accompanied by enhanced perceived reward on social media and minimized perceived risk of privacy concerns (Alashoor & Baskerville, 2015), allowing someone to override immoral feelings of spying on others' personal information.

Whatever factors contribute to snooping behaviors, if attention is divided between a task and acquiring personal information, it should lead to poorer task performance. People have trouble ignoring irrelevant distractors while completing tasks (Ophir et al., 2009), leading to an increased use of multitasking with technology and increased time to complete tasks (Bowman et al., 2010). Not only does multitasking lead to increased completion time, but multitasking with instant messaging decreases memory of task content and is predictive of lower academic achievement (Dietz & Henrich, 2014; Junco, 2012). The cognitive costs of technological distractions by accessing others' personal information are heavy, thus the final goal of this research was to determine the extent to which divided attention through spying on others' correspondences related to loss of performance on an active cognitive task.

The overall purpose of these studies was to measure how participants' conscientiousness, risk-taking, FOMO, distractibility, and cognitive absorption associate with their fixation on others' supposed private information (both gossipy and mundane) using eye tracking technology and whether their fixation divided their attention enough to perform worse on a simple cognitive task. We hypothesized that gossipy text messages would garner more visual attention, and that fixation would negatively correlate with conscientiousness and positively correlate with risk-taking (Study 1). Further, we also hypothesized that enhanced fixation toward gossipy text messages would produce impaired performance on a cognitive task and that high FOMO, distractibility, and cognitive absorption would all positively correlate with divided attention through fixation on the text messages (Study 2).

**Study 1**

In Study 1, participants were asked to pay attention to soothing nature videos while fake text messages of varying content, supposedly for the researcher, popped up on screen. Participant fixation on text messages were assessed compared to conscientiousness and risk-taking personality.

**Method**

**Participants**

Fifty participants from Belmont University introductory psychology courses were recruited to participate in Study 1 through Sona Systems (https://www.sona-systems.com/) in exchange for course credit. Participants were excluded if they wore eyeglasses for corrected vision to ensure proper eye tracking. Additionally, two participants were excluded after recruitment due to failure to calibrate to eye tracking software properly. Therefore, a total of 48 participants (41 women, 7 men; age: $M = 19.56, SD = 2.49$) completed the study. The sample population was predominantly White (38 White or European American, 4 Black or African American, 1 Hispanic or Latinx, 1 Middle Eastern, and 4 prefer not to answer/no response). All studies were approved by the Belmont University Institutional Review Board.
Experimental Design
Through informed consent, participants were told the effects of personality on visual attention would be measured on two relaxing videos, however they were unaware that a fake text message would pop up as a computer notification during each video. We utilized a within-subjects design to test the effects of fake text content (mundane and gossip) on participant fixation, with video presentation order counterbalanced between participants. Additionally, participants took personality scales to measure conscientiousness and risk-taking to associate with text fixation.

Materials and Procedure
Text Message Manipulation. To initiate the manipulation, the researcher greeted the participant in the testing room by asking them to wait a minute while the researcher pretended to write a text message to a friend on the computer through the Android text messaging website. After minimizing the texting website window, the researcher set up the participant for eye tracking, as outlined below. The researchers in the study were all college-aged women, similar in age and demographics to the participants. The main difference between the researchers and participants in the experiment was that the researchers were upper level majors in psychology whereas participants were all taking introductory psychology courses as new majors in psychological science or for general education credit. The researchers wore casual clothing and, outside of the research scripts, were friendly and engaging with participants. This was chosen because previous research has suggested that college-aged participants are more likely to gossip about peers and friends who are similar to them (McAndrew et al., 2007), so we wanted the researchers to come across as peers to participants.

After setting up the participant, the researcher left the testing room and allowed the participant to complete the experiment in private. Two separate 5-minute videos of relaxing nature scenes were shown to participants in a random order with a short break in-between each video. One video was edited to have a fake text notification through the Android app appear in the lower right corner of the screen from “Sara” that contained mundane content about a future grocery store trip. The other video was edited to have a fake text notification from “Babe” that contained gossipy content about the researcher being accused of being seen with another man at a party the night before. Both fake texts appeared around halfway through the video for a duration of 4 seconds before disappearing.

Eye Tracking. Participants sat down at a table in front of a computer monitor with iMotions software and an S1 eye tracker (Mirametrix) across the bottom of the computer screen. Participants rested their face on a table-mounted chin rest (Good-Lite) 60 cm from the screen, and the researcher positioned the participant’s seat and chin rest height so that the participant’s eyes were in the middle of the screen and iMotions’ eyefinder feature detected both eyes. Eye movements were sampled at 60Hz, and 12-point calibration was performed before starting each participant. Calibration was attempted up to three times to achieve “good” or “excellent” calibration, and if the participant failed to achieve “good” calibration after three attempts, their participation was discontinued. Overhead lights in the room remained on and a small broadcast lighting kit (Lime Cube) added nonfluorescent illumination to the participant’s face to enhance contrast for eye tracking calibration.

All eye tracking data was collected via iMotions 9.0 software. For each video, an area of interest (AOI) was drawn over the area in the bottom right corner where the text message appeared. Gaze data in AOs were extracted using a velocity-threshold identification (I-VT) filter to classify as fixation, suggesting captured visual attention and not just saccades through the AOI. Time to first fixation was measured to make sure that participants were watching the video and not looking around the screen before the text message appeared, and total fixation was collected as a dependent measure of visual attention to the text message.

Personality Scales. After watching both videos, participants took two scales to assess conscientiousness and risk-taking. They first took the 45-item Big Five Inventory (Goldberg, 1992), although our primary factor of interest were the 9 items pertaining to conscientiousness, measured on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) with scores ranging from 9–45 and high values reflecting high conscientiousness. The other factors of extraversion, agreeableness, neuroticism, and openness were also scored and analyzed for exploratory analysis. Goldberg (1992) reported an alpha of .85 for conscientiousness and in the present study; we found an alpha reliability coefficient of .82.

Participants also took the 30-item Domain-Specific Risk-Taking Scale (Blais & Weber, 2006) asking participants how likely they were to engage in risks across five different domains. Statements were assessed on a 7-point Likert scale from 1 (extremely unlikely) to 7 (extremely likely) with scores ranging from 30–210 with high scores reflecting high risk-taking. Blais and Weber (2006) reported a range of alpha for risk-taking from .71–.86, and in the present study, we found an alpha reliability coefficient of .77.

Following these scales, participants completed a brief posttest credibility survey, asking participants...
Results

Participants Fixate More on Gossipy Texts

To test how fake text content drove visual attention, we measured the effect of text type on total fixation time. The distribution of fixation data did not appear to be normally distributed, so Shapiro-Wilk tests were performed. Both fixation for mundane (W = 0.93, p = .01) and gossipy texts (W = 0.89, p < .001) were nonnormal, so nonparametric tests were run to analyze both sets of hypotheses. Participants fixated more on the gossipy text (Mdn = 1.33 s, SD = 1.25) than on the mundane text (Mdn = 0.98 s, SD = 0.79), shown by a significant Wilcoxon Signed-Ranks Test (Z = 303.50, p = .01, Cohen’s d = 0.48, 95% CI = [0.18, 0.78]; see Figure 1A). This suggests that participants were more distracted by gossipy information.

Conscientiousness Predicts Low Text Fixation

Although attention was higher for gossipy texts, mundane and gossipy text fixations were strongly correlated within participants, Spearman’s r(47) = .59, p < .001, 95% CI [0.34, 0.73] (see Figure 1B), suggesting participants are more or less prone to snooping on others’ texts regardless of content. To test how personality characteristics relate to text fixation, we measured the correlation between conscientiousness or risk-taking and fixation by first totaling text fixation across both conditions per participant. One participant did not complete the conscientiousness scale, so they were excluded from conscientiousness analysis. Taking all other participants into account, there was no significant correlation between conscientiousness and fixation, Spearman’s r(46) = -.24, p = .10, 95% CI [-.50, .04]. However, according to postexperimental surveys, 26 participants (55%) self-reported that they believed the texts were real. When analysis was reran on only those participants, a significant negative correlation emerged between conscientiousness and fixation, Spearman’s r(26) = -.50, p = .01, 95% CI [-.78, -.22] (see Figure 1C), suggesting that conscientious individuals look away from others’ private information only when they believe to truly be looking at private information.

By contrast, risk-taking was not correlated with fixation, Spearman’s r(47) = .21, p = .15, 95% CI [-.12, .43] (see Figure 1D), and was not affected when only looking at those who believed the texts were real. Although our main variable of interest from the Big Five Inventory was conscientiousness, exploratory analysis also examined extraversion, agreeableness, neuroticism, and openness as well. Like risk-taking, none of the other Big Five personality traits were correlated with fixation: Extraversion, Spearman’s r(47) = -.06, p = .60, 95% CI [-.21, .36]; Agreeableness: Spearman’s r(47) = -.07, p = .64, 95% CI [-.36, .23]; Neuroticism: Spearman’s r(47) = .07, p = .66, 95% CI [-.23, .35]; Openness: Spearman’s r(47) = -.04, p = .79, 95% CI [-.33, .26]).

Summary From Study 1

Together, the data from Study 1 suggest that gossipy information about a person is more attention-grabbing than mundane information and low conscientiousness predicts snooping behavior. However, as participants were just passively watching relaxing videos, there was little competing for attention on the fake texts. Given this limitation, Study 2 was designed to incorporate a more active attentional task that could also measure divided attention through task performance. Specifically, Study 2 examined whether fake text messages would divide
attention of participants away from a more active task: paying attention to a video story they knew they would be tested on later.

**Study 2**

In Study 2, participants were asked to pay attention to a video actor telling a fairy tale while a similar series of fake text messages popped up on screen. Participant fixation on text messages was assessed and associated with divided attention through recognition of fairy tale details. To see how additional personality characteristics relate to text snooping, fixation was associated with propensity toward FOMO, distractibility, and cognitive absorption.

**Method**

**Participants**

Fifty-five participants from Belmont University introductory psychology courses were recruited to participate in Study 2 through Sona Systems in exchange for course credit with identical exclusion criteria as Study 1. Due to COVID-19 social distancing procedures (see below), participants calibrated themselves to the eye tracker. Consequently, eight participants had eye tracking failures and had to be excluded from data analysis. Therefore, a total of 47 participants completed the study (36 women, 11 men; age: $M = 19.32$, $SD = 1.82$). Consistent with Study 1, the majority of study participants identified as White (36 White, 5 Black or African American, 6 Hispanic or Latinx). All studies were approved by the Belmont University Institutional Review Board.

**Experimental Design**

Study 2 had a similar design to Study 1 with a few differences. Primarily, all participants were told to pay close attention to the same video of an actor telling the story of an obscure fairy tale, during which multiple fake texts popped up in a similar manner. To measure the effects of text content (mundane or gossipy) on both fixation and divided attention, we utilized a between-subjects design where participants were randomly assigned to either the mundane ($N = 25$) or gossipy ($N = 22$) text conditions, and memory of the fairy tale content was assessed using a multiple-choice test. Additionally, participants took personality scales to measure propensity toward FOMO, lapses in attention for distractibility, and cognitive absorption to associate with text fixation. Demographics of participants were similar for those who saw either the mundane or gossipy texts.

**Materials and Procedure**

**Fairy Tale Video and Fake Texts.** As participants arrived, the researcher greeted them by asking them to wait a minute while the researcher wrote a text through the Android text message website. The researcher had the same characteristics and similarity to participants as the researchers in Study 1. Due to COVID-19 policies, social distancing was maintained between researcher and participant at all times, so the participant stayed in the doorway to the testing room while the researcher got the setup ready. After minimizing the texting website window, the researcher disinfected and readied the eye tracking station. After the researcher exited the room, the participant watched one of two identical 10-minute videos of a female theatre student reciting a little-known Norwegian fairy tale, Tatterhood (Asbjørnsen & Moe, 1859/2001). For each video, a series of 10 texts popped up for four seconds each at random intervals. The mundane texts from “Sara” asked about a future trip to the grocery store and discussed different shopping items that they might buy for their apartment. The gossipy texts from “Babe” accused the researcher of being seen with another man and escalated as “Babe” became frustrated by the researcher’s lack of answer. Both videos had their texts appear for a total of 40 seconds and were written to contain the same number of words across conditions.

**Eye Tracking.** Participants sat down at the eye tracking station, rested their head into the chin rest, and personally calibrated themselves at the verbal instructor of the researcher, who was socially distanced. Calibration occurred in the same manner with identical room setup and eye tracking settings to Study 1. All eye tracking data was collected via iMotions 9.0 software. For both videos, 10 separate AOIs were drawn over the area in the bottom right corner where the text messages appeared to match when texts appeared and disappeared. Fixation data in AOIs were extracted using an I-VT filter, and total fixation for each video was measured as the sum of all AOIs together.

**Psychological Scales.** After watching the video, participants took three scales to assess propensity toward FOMO, distractibility, and cognitive absorption. They first took the 10-item Fear of Missing Out Scale (Abel et al., 2016), asking how frequently they experienced feelings related to FOMO measured on an 8-point scale from 1 (never) to 8 (always) with scores ranging from 10–80 and high values reflecting feelings of FOMO. Abel and colleagues (2016) reported alpha values from .69–.88 for the components of the FOMO scale, and in the present study, we found an alpha reliability coefficient of .83.

To measure distractibility, we assessed participant propensity toward lapses in attention through the 25-item Cognitive Failures Questionnaire (CFQ; Broadbent et al., 1982). The CFQ asks participants how frequently they commit minor mental mistakes in everyday scenarios on a 5-point Likert scale ($0 = never$; $1 = very rarely$; $2 = occasionally$; $3 = quite often$; $4 = very often) with scores ranging from 0–100. High scores...
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Absorption Scale (Tellegen & Atkinson, 1974), measuring the trait of having all-consuming attention to stimuli. Each item is scored at 1 (false) or 2 (true) depending on whether participants generally feel each statement is true or false of them. Scores range from 33–66 and high values reflect higher propensity toward absorption. Tellegen and Atkinson (1974) did not report Cronbach’s alpha, but in the present study, we found an alpha reliability coefficient of .76.

Story Recall. After taking the three scales, participants took a 13-item multiple-choice test on plot content of Tatterhood to assess the degree of attention they gave the presented story. Correct answers were summed and a recall accuracy (% correct) was calculated for each participant.

Finally, participants completed a brief posttest credibility survey, asking participants if they believed the text messages were real or not, completed demographic information, and were debriefed to close their participation in the study.

Results

Text Fixation Predicts Low Story Recall

The total time fixated on texts were high in Study 2, however, there were 10 texts in Study 2 versus only one per video in Study 1. On average, fixation per text was almost 50% less for Study 2 ($M = 0.62 \text{s/text}$) than Study 1 ($M = 1.23 \text{s/text}$). Shapiro-Wilk tests showed fixation was not normally distributed ($W = 0.80, p < .001$), so nonparametric tests were run to analyze all hypotheses. Unlike in Study 1, gossipy texts ($Mdn = 2.77 \text{s, } SD = 8.40$) did not garner more fixation than mundane texts ($Mdn = 5.33 \text{s, } SD = 4.90$), shown by an insignificant Mann-Whitney test ($U = 251.00, p = .61, \text{ Cohen’s } d = -0.11, 95\% \text{ CI} = [-0.69, 0.46]$; see Figure 2A). It is unknown why the gossipy texts did not evoke more fixation in Study 2, but there are multiple possibilities. Almost all participants (91%) stated they believed the text messages were real, and results remained when excluding those that claimed otherwise, so credibility of the manipulation likely did not affect fixation results from Study 1 to Study 2. Otherwise, the texts themselves could be less distracting, the video could be more absorbing, or participants could have had stronger selective attention, knowing they would be tested on the material. Because there were multiple texts in Study 2, we also analyzed fixation across individual texts with a 2 x 10 (Text Content x Text Order) multifactorial ANOVA. Fixation did not significantly change from text to text, $F(9, 405) = 1.62, p = .15, \eta^2 = .04$, nor was this relationship impacted by whether or not texts were mundane or gossipy, $F(9, 405) = 1.30, p = .26, \eta^2 = .03$. For simplicity, we ran all other comparisons using overall text fixation per participant.

Further, text content did not affect story recall. Participants who saw mundane ($M = 77\%, \ SD = 17.28$) and gossipy texts ($M = 73\%, \ SD = 18.82$) had similar recall performance, $t(45) = 0.74, p = .47, \text{ Cohen’s } d = 0.21, 95\% \text{ CI} = [-0.36, 0.79]$. However, increases in text fixation were significantly correlated with lower recall of the fairy tale content, Spearman’s $r(46) = -.50, p < .001, 95\% \text{ CI} = [-.73, -.33]$; Figure 2B). This negative correlation held independent of text content, suggesting

| FIGURE 2 |
| Study 2 |

Note. A. Violin plot showing no effect of text content during an active visual task. B–E. Fixation on texts predicts low video recall. Feelings of missing out (FOMO) predicts fixation on gossipy texts only. Shaded regions represent 95% confidence intervals.
that divided attention to texts of any type was detrimental for recall of the video material.

**FOMO Predicts Fixation on Gossipy Texts**

To test if propensity toward FOMO, distractibility, and cognitive absorption related to text fixation, Spearman correlational coefficients were measured for each scale versus text fixation. Aggregating across all participants, FOMO was not correlated with text fixation, Spearman’s \( r(46) = .10, p = .49, 95\% \text{ CI} [-.20, .39] \). This was apparent for participants looking at mundane text messages, Spearman’s \( r(24) = - .06, p = .76, 95\% \text{ CI} [-.46, .35] \), but for participants looking at gossipy text messages, higher FOMO was significantly associated with higher text fixation, Spearman’s \( r(22) = .55, p = .01, 95\% \text{ CI} [.15, .79] \) (see Figure 2C). However, neither distractibility, measured by lapses in attention in the CFQ, Spearman’s \( r(47) = .13, p = .37, 95\% \text{ CI} [-.17, .41] \) (see Figure 2D), nor cognitive absorption, Spearman’s \( r(47) = .07, p = .65, 95\% \text{ CI} [.23, .36] \) (see Figure 2E) were correlated with fixation, and both null correlations held when looking at mundane versus gossips texts, individually.

**General Discussion**

The two present studies demonstrated the types of private text messages on which snooping may divert attention from a visual task and personality characteristics that predict individual differences in snooping. Study 1 measured the effects of both mundane and gossipy text messages in a within-subjects design where text messages popped up during relaxing videos. Study 2 attempted to measure the attentional costs of snooping on texts. It also measured the effects of both mundane and gossipy text messages, but in a between-subjects design where a series of text messages popped up during the telling of a story whose content participants would be later tested on. The results suggest that gossipy text messages garner more attention, but primarily when the visual task at hand is passive, not active. Fixation on texts, in general, varied between participants, however, higher fixation was related to poorer recall of story details. Although conscientiousness predicted low fixation, propensity toward FOMO predicted higher fixation when text messages were gossipy in content. Overall, the results suggest that some personality and situational differences interact to influence snooping of others’ private messages and that paying attention to those messages divides attention from whatever the task is at hand.

People are drawn toward gossip information about others (Malamut et al., 2018), but our results suggest that gossipy texts were only more fixated on in Study 1, when participants were passively watching a relaxing video, rather than actively watching a more cognitively demanding storytelling video. This follows the load theory of attention, which shows that irrelevant distractors are more likely to be ignored when perceptual load is high (Lavie et al., 2003). Participants fixated less on average for each text in Study 2 than the one text per video in Study 1. Anecdotally, all participants were aware that the texts popped up, and participants in Study 2 uniformly believed their credibility, but if less overt attention was paid to text messages in Study 2, participants might have been relatively ignorant of the text content itself, and this ignorance might have produced a null effect of gossipy content.

There are a few reasons why attention might have been diverted away from the texts in Study 2. First, compared to a related variable, social curiosity, propensity to gossip is more about entertainment value for the receiver than building social connection (Hartung & Renner, 2013). This suggests that perhaps participants were more fixated on gossipy texts in Study 1 for their entertainment value. However, the content of the text messages was similar in both studies, suggesting that participants in Study 1 might have been more drawn to the texts because, by contrast, the videos they watched were boring. Although watching an actor tell a fairy tale is not intrinsically salient, stories are largely attention-grabbing based on their novelty (Wu & Huberman, 2007). Therefore, the little-known Norwegian folk tale, Tatterhood, was likely novel enough to engage participants more fully away from text messages for a short amount of time. In addition, the constant presence of a face in Study 2, compared to nature scenes in Study 1, likely recruited more overt attention to the center of the video and away from the edges where the texts appeared (Kuhn et al., 2016).

Another likely reason participants paid less attention to the texts in Study 2 is that there was more extrinsic incentive for participants to pay attention to the video in Study 2. In Study 1, participants were only told to pay attention to the relaxing videos with no further instructions, but in Study 2, they were explicitly told that they would be tested on the plot content of the story video. Although there were no consequences for doing well or poorly on the retention test, knowing there will be a test is enough to enhance selective attention to media (Lee et al., 2012). Likewise, because the videos in Study 1 contained no language components, the texts offered little competition for participants’ working memory. On the other hand, if participants diverted attention to reading the texts in either condition of Study 2, it competed with language comprehension and task performance (Martin, 1977; Oliver et al., 2020). Together, there was top-down demand to ignore the distracting texts that...
were irrelevant for the task at hand. Research has shown that irrelevant distractors do compete for attention but can be ignored when perceptual load is high enough (Forster & Lavie, 2008), suggesting that text content can more easily be ignored when load of the task is higher, like that seen in Study 2 in both language and task demand.

Finally, one important variable that differentiated Study 1 from Study 2 was that Study 1 was completed before the COVID-19 pandemic began and Study 2 was completed a few years into the COVID-19 pandemic when in-person experimentation was freshly reapproved by Belmont’s Institutional Review Board. As gossip may be sought after to help relieve negative feelings from social isolation (DiFonzo & Bordia, 2007), any potential social isolation due to health policies and behavioral choices during the pandemic may impact snooping on others’ private texts. During the time of Study 2, Belmont University was fully in-person, and undergraduate students who participated in this study were living communally in dorms and apartments and regularly attending class in large groups, so real-time isolation was likely no more of a factor for the participants in Study 2 over Study 1. However, coming off of multiple years of social isolation and a migration to online learning could have profound impacts on cognitive control and social curiosity in students. Isolation during the COVID-19 pandemic has been linked to general cognitive impairments, changes in emotional and social decision-making, and engagement during virtual learning (Bland et al., 2022; Ingram et al., 2021; Mesghina et al., 2021). Therefore, the effects of the COVID-19 pandemic and its lasting effects cannot be ruled out, and future studies should be planned with a specific focus on how policies and behaviors during the pandemic might have shifted virtual behaviors.

Even though fixation overall was lower in Study 2, those participants higher in FOMO were more likely to fixate, but only for the gossipy texts, suggesting that, for some participants, they read texts enough to understand their content. Low FOMO in college students is associated with higher selective attention to lectures amid distractors (Al-Furaiah & Al-Awidi, 2021), suggesting that participants lower in FOMO were able to dismiss the text messages as irrelevant, regardless of content. FOMO leads to surveillance and stalking of others’ activities online (Tandon et al., 2021; Throuvala et al., 2019), so those higher in FOMO may be more likely to notice the texts and read them initially. When the text content is boring and does not feed their FOMO, participants can choose to ignore them and pay more attention to the video on hand. However, when the content is gossipy, higher FOMO may fuel being nosy and more absorbed by how the text conversation progresses, despite loss of attention to the video. Individuals high in FOMO have difficulty regulating concerns about their own privacy online when searching for information (Westin & Chiasson, 2021), and they likely find it more difficult to regulate any concerns about the private information of others as well. In addition, forced separation from the internet to perform tasks only increases feelings of FOMO (Milyavskaya et al., 2018), so those already higher in FOMO may have been even more tempted to snoop on gossipy information while they cannot use their own devices. Lastly, social isolation during the COVID-19 pandemic has been shown to have increased problematic phone usage—an effect mediated by high FOMO (Brailovskaia et al., 2021; Gioia et al., 2021), suggesting that our effects may be related to a larger issue in how emerging adults treat online communication in the modern post-COVID world.

Regardless of text content, individual differences in conscientiousness were associated with text fixation, with higher conscientiousness predicting less fixation. This matches previous research that conscientious individuals are less likely to gossip themselves (Babalola et al., 2019). Conscientiousness has not been found to be related to privacy concerns over personal information (Bansal et al., 2016), but conscientious individuals are strict rule followers (Roberts et al., 2014). Although there were no explicit rules from the researchers to ignore distracting information during the videos, engaging in gossip can be seen as violating social norms related to privacy (Cole & Scrivener, 2013). Therefore, for those who did not believe the texts were real, there was no “rule” to follow in choosing to read or not read the texts, and conscientiousness was not predictive of fixation. However, for those that did believe the texts were real, those higher in conscientiousness did not fixate on the texts, suggesting that they were more concerned about violating social norms related to the researcher’s privacy. Conscientiousness seems to be protective against developing negative social media usage related to internet addiction (Stavropoulos et al., 2016), and our results also suggest that conscientiousness seems to be protective against snooping on private information of others.

We did find a cost to snooping, as the greater participants fixated on texts of any content in Study 2, the worse their accuracy of plot details from the spoken story. Pop-up texts have previously not affected speech recall performance (Cohen & Gordon-Salant, 2017), but the texts in that study were irrelevant and uninteresting. Even in the mundane condition of our study, the texts that participants read were believed to be personal information about the researcher, and social information gathering is both interesting and a crucial
motivation behind why people gossip (Beersma & Van Kleef, 2012). Somewhat supporting this idea that social information is more interesting, research has shown that, during a visual search task, the addition of people into a competing, distracting visual scene caused more visual attention to the distractor (Doherty et al., 2017). And importantly, memory in the visual search task at hand was more impaired with these social distractors than control distractors with equal visual salience. Thus, attention drawn to the fake texts in our study divided attention from the story they were asked to pay attention to instead. This is important, as college students are often distracted by many pieces of information on their devices while they are trying to pay attention to classwork (Glass & Kang, 2019; Mokhtari et al., 2015). In naturalistic studies in classrooms, students pay less attention to class activities while multitasking with media (May & Elder, 2018), so any divided attention to media, either one’s own or someone else’s can hinder real-time performance.

Limitations
Although belief in the text message manipulations was low in Study 1, we hypothesized that this was due to separate, single text messages appearing once randomly within each video, largely seen by participants as too coincidental to be true. By changing the study design to be between-subjects and the text messages to be more indicative of a one-sided conversation, we think the fake text messages worked well as a credible manipulation. However, a central limitation across both studies is the incentive for participants to pay attention to the videos. As hinted above, there are many real-world ramifications for being distracted by social media or gossipy content about others, in the classroom, during interpersonal conversations, and while working or studying (Arikewuyo et al., 2021; Dontre, 2021; Oh et al., 2019; Yemoh & Amitai, 2022). By contrast, there is little significant cost for diverting attention as a participant in our studies. To address this, future studies could enhance incentive through experimental means or using a more naturalistic environment. Incentive to pay attention to the video could be enhanced by offering monetary compensation for performance on a recall test or having the researcher conduct the recall test through an oral exam to enhance social pressure. Additionally, similar manipulations could occur in real classroom environments using confederates placed throughout a classroom during a guest lecture. This would also ask whether proximity to distractions on someone’s private computer affects snooping.

Our participant samples in both studies were predominantly White and women. This is problematic for reliability and generalization of these results to other populations. In addition to impairing the diversity of our sample, this is important for a number of reasons. First, potential gender effects on both gossipy behaviors and online distractibility have been described and likely relate to our results. Research has suggested that women are more likely to engage in gossip than men (Davis et al., 2018). However, men and women both spend the majority of their conversations discussing social topics (Dunbar et al., 1997), and likely engage in gossip at similar rates (Foster, 2004). The difference may be that women are more likely to appraise their conversations as gossipy, whereas men use other terms for their social conversations (Foster, 2004). In judging gossip scenarios, men are more likely to approve of confrontation and disapprove of inaction toward gossip, which suggests that men and women perceive gossip differently (Wilson et al., 2000). Men are also more likely to use gossip as a means of attaining power, whereas women are more likely to use gossip to build intimacy and closeness (Watson, 2012). In all, this suggests that men and women respond to situations involving gossip differently, and our sample does not allow us to determine if gender differences exist in this specific scenario. In addition, propensity toward FOMO and problematic social media usage is higher in women (Casale et al., 2018; Elhai et al., 2018), so future studies should specifically examine gender as an important variable mediating the factors associated with snooping on others’ information and the reasons for doing so, particularly when that information is gossipy.

Feelings of FOMO are also higher in people identifying as White, compared to racial or ethnic minorities (Debb et al., 2022; Elhai et al., 2018). This suggests that there likely exist cultural differences that feed snooping on others’ private information that we were unable to measure with a relatively homogenous sample. In addition to gaining information and power over others, gossip has been proposed to promote cohesion and bonding, especially within social groups (Baumeister et al., 2004). For minority groups, gossip helps to maintain group connection and harmony while living in another majority’s culture (Lu, 2015), and in multiethnic communities, gossip also occurs routinely across ethnic groups to facilitate social cohesion of the community at large (Driel & Verkuyten, 2022). As snooping behaviors on cell phones are common, similar to verbal gossip (Derby et al., 2012), there are likely cultural differences in the purpose and tendency to snoop as well. Some individuals snoop to gain information about romantic partners because of lack of trust (Arikewuyo et al., 2021), whereas snooping could alternatively be seen as a more technologically advanced form of gossip for the sake of...
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social knowledge and group cohesion. Future studies should specifically investigate these potential cultural differences. Importantly, some evidence from workplace environments has suggested that minority individuals are more likely to be the target of gossip from individuals identifying as White (Carrim, 2016), suggesting that the demographics of both the snooper and target matter. As all researchers (the target of snooping in our study) were White women, this is a factor we were unable to explore, however future studies should study these effects to better understand the role of race and ethnicity in actions of gossip and snooping.

One last generalizability concern worth mentioning is age of the participants, most of whom were 18–22 years old. This matters for a few reasons related to our study. Younger women are more likely to gossip, particularly with negative gossip or when information is about romantic drama (Hess & Hagen, 2021; Massar et al., 2012). This fits theories that the role of social gossip relates to resource acquisition (Massar et al., 2012), and young women more in need of finding a mate may be more likely to participate in gossip about romantic drama. However, fixation on texts in our sample was similar among different ages, suggesting that these age effects in gossip are more likely generational. In addition to gossip, texting as a form of communication is viewed more favorably and used more frequently in younger generations (Kuerbis et al., 2017), which extends to computer mediated forms of texting. Familiarity with technology likely produces automatic attention toward features while using it. Because of all of this, we would expect generational differences in our study that we were unable to measure due to the limited sample population. As older women are only more likely to engage in gossip that is positive for the target (Hess & Hagen, 2021) and use texting technology less frequently, it is presumed that older participants would be less likely to fixate on the gossipy texts from our study.

Conclusions

These studies utilized eye tracking to monitor participants’ snooping on suposed personal correspondences of the researcher that popped up while participants were supposed to be paying attention to experimental videos. Overall, the results suggest that, when the primary task is passive, higher attention is paid to fake texts that are gossipy in content. Further, individual differences in conscientiousness and feelings of FOMO associated with fixation toward text messages and higher fixation to text messages divided attention and predicted worse comprehension of the primary video task. These findings extend the literature on both the traits of individuals and what information they fixate on by engaging in both gossip and spying on others’ private information. In addition, the data apply the literature on multitasking between a primary task and distracting media toward the type of activities prevalent in classroom and work environments. As personal devices continue to be used in public settings where others have the ability to gain access to private information, these types of manufactured snooping and gossiping become more relevant to everyday life. Our results suggest that there is a cost to private information being made publicly available through use of computers and other personal devices: first, to the individual whose private information is now accessible to others who may choose to snoop, and second, to the spy whose attention will be diverted to the accessible information of others.

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