

# Online news recommendations credibility: The tie is mightier than the source

La credibilidad de las noticias digitales: El vínculo es más impactante que la fuente



- Dr. Tal Samuel-Azran is Full Professor in the Sammy Ofer School of Communications at the Interdisciplinary Center (IDC) Herzliya (Israel) (tazran@idc.ac.il) (https://orcid.org/0000-0002-9501-2949?lang=en)
- Dr. Tsahi Hayat is Professor in the Sammy Ofer School of Communications at the Interdisciplinary Center (IDC) Herzliya (Israel) (tsahi.hayat@idc.ac.il) (https://orcid.org/0000-0002-9807-6024)

# ABSTRACT

In this paper, we wish to examine the perceived credibility of news items shared through Social Networking Sites (SNS) – specifically, as a function of tie strength and perceived credibility of the media source from which the content originated. We utilized a between-subjects design. The Facebook account of each participant (N=217) was analyzed. Based on this analysis, our participants were shown a fictitious Facebook post that was presumably shared by one of their Facebook friends with whom they had either a strong social tie (experiment group), or a weak social tie (control group). All recipients were then asked about their perceptions regarding the news source (from which the item presumably originated), and their perception regarding the credibility of the presented item. Our findings indicate that the strength of the social tie between the sharer of the item and its recipient mediates the effect of the credibility perception regarding the news source, and the perceived item credibility, as well as the likelihood of searching for additional information regarding the topic presented in the shared item.

## **RESUMEN**

Se examina en este trabajo la credibilidad percibida de las noticias compartidas a través de los sitios de redes sociales (RRSS), específicamente, en función de la fuerza de enlace y la credibilidad percibida de la fuente de los medios de la cual se originó el contenido. Utilizamos un diseño entre sujetos. Se analizó la cuenta de Facebook de cada participante (N=217). Sobre la base de este análisis, a nuestros participantes se les mostró una publicación ficticia de Facebook que supuestamente fue compartida por uno de sus amigos de Facebook con los que tenían un vínculo social fuerte (grupo experimental) o un vínculo social débil (grupo de control). Luego se les preguntó a todos los destinatarios acerca de sus percepciones con respecto a la fuente de noticias (de la cual se supone que se originó el artículo), y su percepción con respecto a la credibilidad del artículo presentado. Nuestros hallazgos indican que la fuerza del vínculo social entre el que comparte el elemento y su destinatario media el efecto de la percepción de credibilidad con respecto a la fuente de noticias, y la credibilidad percibida del elemento, así como la posibilidad de buscar información adicional sobre el tema presentado en el elemento compartido.

# KEYWORDS | PALABRAS CLAVE

Credibility, social networking sites, social network analysis, news consumption, information search, experiment, quantitative analysis, influence.

Credibilidad, redes sociales, análisis de redes sociales, consumo de noticias, búsqueda de información, experimento, análisis cuantitativo, influencia.



### 1. Introduction

The rise of online social networks has revolutionized the consumption of news. Indeed, a recent Pew Research Center survey identified that two thirds of those surveyed in the US receive their daily news from online social network ties. (Shearer & Gottfried, 2017). The most popular platform for receiving news recommendations is Facebook, with 45% of US adults reporting that they receive news specifically from their Facebook ties (Shearer & Gottfried, 2017). Clearly, when news is spread via SNS ties, a new factor is introduced into the process of credibility assessment as an interplay between the credibility of the social tie sending the news item and that of the original source of the news item comes into effect. The analysis of this interplay can shed light onto various situations and decisions made regularly by contemporary news readers on SNS. Most notably, it can illuminate how online SNS users judge the credibility of a news item when there is a clash between their trust in the news media source and that of the social tie sharing the news recommendation. The analysis of this type of situation can teach us a great deal about contemporary processes of news credibility evaluation.

Importantly, understanding SNS news credibility evaluation is timely in light of the growing awareness of the spread of questionable information on mobile devices and SNS (Bakir & McStay, 2018; Romero-Rodriguez, Torres-Toukoumidis, Perez-Rodriguez, & Aguaded, 2016). A recent study found that a great part of the news shared and recommended on SNS falls under the definition of fake news (Frier, 2017). Another recent study further showed that the average American adult saw several fake news stories around the time of the last election, with just over half of those who recalled seeing them indicating they believed them (Allcott & Gentzkow, 2017). Moreover, a study of the distribution of fake news found that rumors and lies are actually distributed faster than true news (Vosoughi, Roy, & Aral, 2018). In light of the increasing interest in the evaluation of fabricated items in the political realm, we designed an experiment analyzing the credibility assessment of news items —while specifically focusing on the effect the person sharing the content has over the perception of the credibility of the shared content.

Furthermore, the study aims to extend our understanding of the impact of the credibility assessment process on future actions and behavior. Thus, we also examined the participants' motivation to seek further information about the issue raised in the recommended news item. Such behavior would indicate that the issue raised participants' curiosity and might have even affected their beliefs. This part of the analysis contributes to the search for a link between information exposure and online behavior. It also sheds light on the interplay between information seeking and news credibility (Silverman & al., 2016).

# 2.1. The interplay between information sources and trust: from traditional media to SNS

Early studies of source credibility identified several features as playing an important role in determining source credibility. These include the sources' perceived expertise and trustworthiness (Hovland, Janis, & Kelley, 1953); journalists' knowledge, education, intelligence, social status, and professional achievement (McGuire, 1985); and perceived source motivation (Harmon & Coney, 1982).

In contrast, several studies have found that variables predicting credibility are more likely to be associated with the receiver rather than with source features. Gunther (1992) found that the strongest predictor for people's perception of a credible news item is when they receive it from a person or contact within their in-group, whether it is a political, religious or national group they deem themselves as belonging to (see also Salmon, 1986; Sherif & Hovland, 1961). Other studies have found that perceived source credibility is also mediated by the socio-demographics of the senders, including their level of education, gender and age (Gunther, 1992; Johnson & Kaye, 1998).

However, these sender versus receiver models are now being challenged with the addition of several other elements and mediators in the news spread process. In online social networks in particular, users are constantly exposed to news recommendations in their news feed (Amichai - Hamburger & Hayat, 2017). This new form of news reception and consumption (Garcia-Galera & Valdivia, 2014; Berrocal-Gonzalo, Campos-Dominguez, & Redondo-Garcia, 2014) often takes the form of routine news recommendations from the recipients' online social ties. These ties range from strong ties such as a close family member or friend to weak ties such as a distant work colleague or a distant family member. When assessing the items' credibility, the receivers can assess both the legitimacy of the news source, which is often part of the so-called old or traditional news media, as well as the extent to which he/she trusts the person sharing the content (Hayat & Hershkovitz, 2018; Hayat, Hershkovitz, & Samuel-Azran, 2018). Thus, studies suggest that credibility assessment of news items shared on SNS requires new research methods and approaches addressing not only the credibility of the traditional media source, but also the credibility of the SNS tie sharing the news item (e.g., Hayat, Hershkovitz, & Samuel-Azran, 2018; Johnson & Kaye, 2014).

This body of work has played a major part in the design of our study. Indeed, so far, the few studies addressing this call have provided several new insights on the importance of social ties in the news credibility assessment process. Turcotte, York, Irving, Scholl, & Pingree (2015) found that when the person sharing the news item is considered by the receiver as an opinion leader, the trustability level of the item is amplified, as is the desire to search for further information from the news organization that originally published the item. In 2013, Xu examined the issue of source credibility in the news aggregation platform Digg, and identified that the receipt of a news item via a social recommendation was the primary factor influencing its perceived credibility and likelihood that the receiver would click and open the news item. More recently, Anspach (2017) found that endorsements and discussions were consumed, shared and endorsed more significantly when they came from friends or family members (i.e., a strong social tie) in comparison to other contacts, and they were hardly shared or endorsed when received from unknown individuals.

Our study adds an important component to these analyses by focusing on the impact of tie strength (weak versus strong) on the perceived credibility of a news item. Particularly, it pays special attention to the impact of the interplay

between the tie strength's credibility and the credibility assigned to the traditional news media source on the evaluation of the news recommendation.

As early as 1973, Granovetter famously noted that social networks are comprised of a combination of weak ties, which should be thought of as 'acquaintances', and strong ties which can be regarded as 'friends'. The question Studies suggest that credibility assessment of news items shared on SNS requires new research methods and approaches addressing not only the credibility of the traditional media source, but also the credibility of the SNS tie sharing the news item.

of the interplay between weak/strong ties and source credibility perception is not trivial, as both types of ties contribute different types of information (Putnam, 2000). Notably, Putnam identified that weak ties primarily allow exposure to information that is not yet known and might broaden the receivers' horizons, whereas strong ties are associated with providing emotional and social support – thus highlighting the importance of information received by weak ties.

In contrast, though, more recent research has shown that weak ties are evaluated as dispensable and lacking value (Krämer, Rösner, Eimler, Winter, & Neubaum, 2014). Furthermore, another recent study found that SNS users are more likely to unfriend or unfollow weak ties than strong ties (John & Dvir-Gvirsman, 2015). Given this recent evidence, we may deduce that information gained from weak ties will be granted less attention and consideration compared to information provided by strong ties.

• H1: The stronger the social tie between the recipient and the person sharing the content, the higher the perceived credibility of the content.

Furthermore, we hypothesize that attitudes toward the traditional media source are less predictive of perceived credibility, when the content is shared by an individual with whom the recipient has a strong social tie. On the other hand, attitude toward the media is more predictive of perceived credibility, when the content is shared by an individual with whom the recipient has a weak social tie.

• H2: There will be an interaction between the strength of the social tie and the recipient's attitude toward the media source portraying the content and predicting the perceived credibility attributed to the presented content.

# 2.2. Information seeking and source credibility

As noted, following the source credibility evaluation analysis, we offer to examine the participants' motivation to search for further information as a result of the exposure to the shared news item. This segment of the research aims to contribute to analyses of the way source credibility assessments affect information behavior. This issue became relevant in the 1980s and 1990s with the decreasing trust in traditional news sources (Ladd, 2013).

In the SNS era, the analyses of the interplay between behavior and news trust shifted to other measures of analysis, such as online news consumption behavior (Hayat & Samuel-Azran, 2017; Hayat, Samuel-Azran, & Galily, 2016), and information seeking patterns. A notable analysis (Turcotte & al., 2015) found significant correlation between the perceived credibility of an opinion leader sharing an item and the recipient's tendency to search for

additional information from the news outlet from which the item was originated. The opposite effect was found amongst recipients who perceived the sharer of the content as a poor opinion leader.

• H3: The stronger the social tie with the person sharing the content, the more likely the recipient is to seek additional information regarding the topic presented.

Furthermore, we hypothesize that the attitude toward the traditional media source is less predictive of an individual's likelihood of searching for additional information when the content is shared by an individual with whom the recipient has a strong social tie. On the other hand, attitude toward the traditional media source is more predictive of an individual's likelihood of searching for additional information when the content is shared by an individual with whom the recipient has a weak social tie.

• H4: The interaction between the strength of the social tie with the person sharing the content, and the recipient's attitude toward the media source portraying the content will predict the likelihood of searches for additional information regarding the presented content.

# 2.3. AJE (Al Jazeera English) in Israel

As the study probed Israeli students' assessment of an Al Jazeera English item on the Boycott, Divestment and Sanctions (BDS), it is important to mention that Al Jazeera English has been broadcasting on Israeli satellite provider YES, one of Israel's two main television providers, since its November 2006 launch, illustrating that the channel is perceived as legitimate in Israel (Samuel-Azran, 2016; Samuel-Azran and Hayat, 2017). However, it is also important to mention that at the same time many Israeli viewers are highly suspicious of Al Jazeera, perceiving it as extremely pro-Palestinian and inherently anti-Israeli (Azran, Lavie-Dinur, & Karniel, 2012).

Next, the decision to design a mock article regarding an attempt of BDS activists to block Israeli student exchanges with a US university was aimed to raise interest amongst participants. This is an issue that is bound to interest Israeli students, and is most likely familiar to them, as it serves as a hotbed for pro and anti-Israel activists. BDS activists have had many successes in anti-Israel actions in the US in the last few years, such as influencing leading artists to cancel their concerts in Israel, protesting vociferously in academic institutions and frequently gaining headlines. Our mock article highlights the viability of BDS attempts to ban student exchange with Israeli institutions. Marquette University was selected due to the fact that it is relatively unknown in Israel, making it difficult for the participants to guess the item's credibility.

# 3. Methodology

# 3.1 Sample

Participants in this study were Israeli and international undergraduate students in a private college in the center of Israel (N=217), all of whom had an active Facebook account. Data collection was conducted during February 2017.

# 3.2. Procedure and manipulation

As part of the research questionnaire, participants were presented with a fictitious Facebook status, presumably shared by one of their actual Facebook friends, reporting a story related to BDS. The title of the item was: 'Student supporters of the BDS movement at Marquette University call to stop all student exchange programs with Israeli universities.

As part of the recruitment and preparation process for the experiment, participants were asked to become Facebook 'friends' with a dedicated study account. The participants became 'friends' of the account, and signed an online informed consent form. In this form, they were notified that any data collected from their Facebook profile, will be anonymized, and that no identifying information will be recorded in our database. They were further notified that the participation in this study is voluntary, and they can decide to stop their participation in the study at any point. Following their formal consent, we ran a script that collected data from the participants' Facebook profile. This script was designed specifically for this study, and for each participant and for each of the participants' Facebook friends, the script collected the number of mutual friends they both have, and selected one of the participants' friends with whom he/she had the highest number of mutual friends. This approach is inspired by the model presented by Gilbert and Karahalios (2009), using information that is available via the participants' Facebook profile. Additionally, our script chose for each participant another, random friend (from their Facebook friends list), defined as a 'random tie'.

Finally, the participants were randomly assigned into two groups. The only difference between the groups was in the tie strength of the person who presumably shared the content on Facebook (as presented on the research

questionnaire). The participants in the 'strongest tie' condition group (n=113) received a version of the questionnaire in which the sharer had the strongest tie strength with them (as calculated by our script); the participants in the second group (n=112) received a version of the questionnaire in which the sharer was a random Facebook friend of theirs.

# 3.3. Measurement

Perceived Item Credibility (dependent variable). Based on the work of Flanagin and Metzger (2007), this variable is comprised of five items: trustworthiness, believability, accuracy, completeness, and unbiasedness. Each item was measured using a 7 point Likert scale (Cronbach's  $\alpha$ =0.86). The overall credibility score was calculated as the average of these items (M=2.68, SD=0.72, N=215).

Seek Additional Information (dependent variable). Based on Borah (2014), this variable is comprised of five items: Seek more information supporting your own side of the issue, seek more information supporting the other side of the issue, seek more information that offers a balanced view on the issue, seek more opinions supporting your own side of the issue, and Seek more opinions supporting the other side of the issue. Each item was measured using a 7 point Likert scale (Cronbach's  $\alpha$ =0.75). The overall credibility score was calculated as the average of these items (M=2.12, SD=0.37, N=215).

Demographics (background variables). Age and gender were reported by all participants (N=217). The age range was 19-27 (M=22.12, SD=3.71). Overall, there were 152 females (70%) and 65 males (30%).

Tie Strength (independent variable). To measure the strength of tie between the information recipient (the participant) and the information sharer, we used the Inclusion of Other in Self Scale (Aron, Aron, & Smollan, 1992). This visual assessment tool presents participants with seven pictures, each of which includes two circles – representing the 'self' and 'the other'— that overlap at different levels, ranging from totally separated (1) to almost fully overlapping (7). The participants were asked to mark the picture that best describes their current relationship with the other person, giving the value for this variable (M=3.61, SD=1.64, N=217).

Perceived Channel Credibility (independent variable). Based on the work of Gaziano and McGrath (1986), this variable is comprised of 12 items: whether the media source is fair, unbiased, accurate, factual, tells the whole story,

respects people's privacy, watches out after people's interests, is concerned about the community's well-being, separates fact and opinion, can be trusted, is concerned about the public interest, has well-trained reporters. Each item was measured using a 7 point Likert scale (Cronbach's  $\alpha$ =0.81). The results were translated into a score by adding up the ratings

Table 1. Standardized variables included in regression model predicting perceived credibility (N= 217)											
		Model 2									
β	SE	t	В	SE	t						
.002	.000	1.243	.002	.000	1.682						
.060	.049	1.861	.068	.050	2.364						
.266	.076	6.754	.243	.063	6.586						
.233	.051	5.752*	.213	.048	5.513*						
.328	.039	7.211*	.311	.032	7.071*						
			207	0.42	-6.397*						
		.17									
	β .002 .060 .266 .233	received credibility  Model 1  β SE  .002 .000  .060 .049  .266 .076  .233 .051	Model 1   SE   t	Model 1   SE   t   B	Model 1   Model 6   SE   t   B   SE						

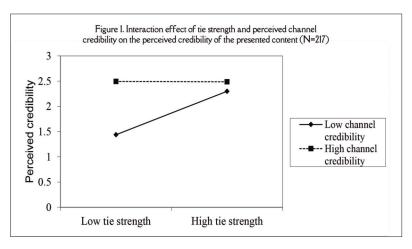
\*p<.05, \*\*p <.01. Note. Since all continuous variables were standardized, βs for continuous predictors correspond to standardized regression coefficients.

of each of the 12 items (M=23.63, SD=7.53, N=217).

# 3.4. Data analysis

We used four regression models to test our hypotheses (Table 1). We first examined whether perceived tie strength and perceived channel credibility indeed predicted the perceived credibility of the presented item (Models 1). We then examined whether there was an interaction between perceived tie strength and perceived channel credibility in predicting the perceived credibility of the presented item (Model 2). We followed the same procedure to examine whether perceived tie strength, and perceived channel credibility indeed predicted the likelihood of searching for additional information regarding the topic presented (Models 3). We then examined whether there was an interaction between tie strength and perceived channel credibility in predicting the likelihood of searching for additional information regarding the topic presented (Model 4).

The Durbin-Watson statistic test was used to investigate the assumption of independence. Normal probability (P-P) plots were used to investigate the normality of error terms. Homoscedasticity was tested by observing the scatter



plot of the residuals and the predicted value. These checks identified no violations of regression assumptions. All statistical tests were one-tailed, and a significance level of p<0.01 was set for all analyses.

To facilitate the interpretation of the statistical interaction, all continuous variables used in our model were standardized (Dawson, 2014). To calculate the statistical power of this study to reject false null

hypotheses, we conducted a post hoc statistical power test (Faul, Erdfelder, Buchner, & Lang, 2009). With six predictors in the regression analysis, an observed R2 of 0.17 (see Table 1), a sample size of 217 and alpha=.05, the test results indicated an observed power of 1.

Model 1 (Table 1) indicates that tie strength is positively correlated with the perceived credibility of the presented item  $\beta$ =.33, t(207)=7.21, p<.05. In other words, the strength of the tie our participants had with the friend who presumably shared the content positively affected their perception regarding the credibility of the shared content (a finding which supports H1). Furthermore, perceived channel credibility is also correlated with the perceived credibility of the presented item,  $\beta$ =.23, t(207)=5.752, p<.05. In other words, participants' perceptions regarding the credibility of the channel from which the presented message originated, positively affected their perception regarding the credibility of the shared content.

Model 2 examines whether there is an interaction between tie strength with the person sharing the content and perceived channel credibility. Interaction effects represent the combined effects of variables on the criterion or dependent measure (in our case, on perceived content credibility). When an interaction effect is present, the impact of one variable (in our case, tie strength) depends on the level of the other variable (in our case, perceived channel credibility). There is indeed significant support for interaction between tie strength and perceived channel credibility over the perceived credibility of the content, as we can see in Models 2:  $\beta$ =-.207, t(207)=-6.4, p<.05.

The interaction plot, depicted in Figure 1, suggests that high tie strength with the person sharing the content yielded higher perceived credibility when channel credibility was low. The effect of high tie strength was negligible when channel credibility was high. Both slopes were significant (P<.05). Thus, our second hypothesis was supported.

Model 3 (Table 2) indicates that tie strength is correlated with the likelihood of searching for additional information regarding the presented item,  $\beta$ =.23, t(207)=7.24, p<.05. In other words, the strength of the tie between participants and the friend who presumably shared the content positively affected the likelihood of their searching for additional information about the shared content. Thus, our third hypothesis was supported.

Furthermore, perceived channel credibility is also correlated with the likelihood of searching for additional information about the presented item,  $\beta$ =.291, t(207)=5.64, p<.05. In other words, our participants' perceptions

regarding the credibility of the channel from which the presented message presumably originated positively affected the likelihood of their searching for additional information regarding the shared content.

Model 4 examines whether there is an

of searching for additional information (N= 217)										
	Model 3			Model 4						
	β	SE	T	β	SE	t				
Age (years)	.002	.000	1.741	.002	.000	1.442				
Gender (Male=1)	.055	.000	1.751	.054	.000	1.968				
Facebook activity	.213	.063	7.742	.216	.059	7.331				
Perceived channel credibility	.291	.051	5.641*	.321	.038	5.924*				
Tie strength	.228	.032	7.237*	.213	.032	7.041*				
Perceived channel credibility X tie strength				115	0.21	-5.872*				
Adjusted R <sup>2</sup>	.09			.11						

\*p<.05, \*\*p <.01. Note. Since all continuous variables were standardized, βs for continuous predictors correspond to standardized regression coefficients.

interaction between tie strength with the person sharing the content, and perceived channel (AJE) credibility. There is indeed significant support for interaction between tie strength and perceived channel credibility over the likelihood of searching for additional information as we can see in Models 4:  $\beta = -.115$ , t(207) = -5.872, p < .05.

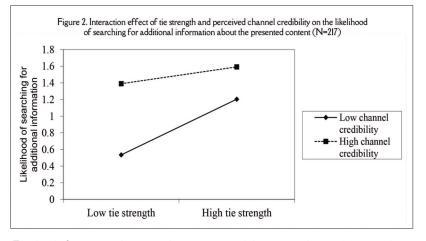
The interaction plot, depicted in Figure 2, suggests that high tie strength with the person sharing the content yielded higher likelihood of searching for additional information when the channel credibility was low. The effect of high tie strength was negligible when channel credibility was high. Both slopes were significant (P<.05). Thus, our fourth hypothesis was supported.

# 4. Discussion

The study examined the interplay between the perceived credibility of a news source (with AJE serving as a case study) and that of sharers of a news recommendation item on Facebook, with special emphasis on the impact of strong versus weak ties within one's network. We designed an experiment in which participants evaluated the credibility of a news recommendation that seemed to emanate from the participants' actual Facebook ties, thus mimicking a real-life scenario. The analysis found that both attitude towards media and tie strengths predicted credibility assessment scores, with stronger trust in the news source (AJE) and stronger tie with the Facebook friend sharing the news recommendation leading to higher credibility assessments. This was true regardless of the participants'

characteristics, such as gender, level of education and Facebook activity level.

However, a more interesting finding is that when the participants received the news recommendation from a strong tie within their network, their negative attitudes toward AJE were less predictive of credibility assessment. finding illustrates superiority of strong ties traditional media in credibility networks



assessment of news shared on Facebook. Strong ties, between the recipient and the person sharing the news, have the potential of authenticating news, including fake news, by contributing to their perceived credibility.

These findings strengthen various former analyses revealing the dramatic power of recommendations by SNS members recommending news to validate and strengthen the credibility of news recommendations (Anspach, 2017; Turcotte & al., 2015). Our findings highlight that in addition to opinion leaders (Turcotte & al., 2015), strong ties can be highly instrumental in affecting the perceived credibility of a shared news item. Furthermore, our findings demonstrate the interplay between the credibility of the news organization who publishes the news story, and Facebook friends who share this content. This distinction is one of Facebook's special attributes, which in essence places both professional journalists and friends in the role of gatekeepers. This introduction of friends as gatekeepers is largely unexplored in the communication and education literature (Turcotte & al., 2015). Relatively few studies have explored the role social ties play in mediating content that originates from news organizations (Hayat, Hershkovitz, & Samuel-Azran, 2018). This question is especially complicated, given that within the mediated-interpersonal contexts credibility evaluation is a challenging process due to the diverse professional and lay sources the content can come from (Johnson & Kaye, 2014). Little has hitherto been known about the role played by individuals who share the content over the assessment of such content.

Recent studies have shown that SNS strongly incorporates connections that facilitate extensive interpersonal communication. Furthermore, the credibility assessment process of the content shared within these platforms is influenced by this interpersonal communication (Flanagin, 2017; Kim & Hollingshead, 2015). Indeed, the credibility assessment process was shown to be associated with interpersonal communication mediated through SNS (Metzger, Flanagin, & Medders, 2010; Winter, Brückner, & Krämer, 2015). As these platforms are heavily based

on social connections, tie strength (between information sharer and information receiver) should definitely play a role in the credibility assessment process (Turcotte & al., 2015). Our findings show that not only do these ties play a role in the credibility assessment process, but also the influence of strong ties is in fact more important in the evaluation of an item's credibility than that of the traditional news source portraying the item.

The findings have relevance for source credibility studies and media studies in general, indicating the further decline in credibility and status of traditional news sources. In an age when so many people receive their news via friends, tie strength is more meaningful than the credibility perception of the traditional media source. From a wider perspective, these findings add to the mounting evidence regarding the decreasing credibility of traditional media sources in the last three decades (Ladd, 2013). While Ladd identified that the 1970s marked a peak in media trust, and the 1990s marked a sharp decline in public trust in the media, our analysis identifies another layer of deterioration in the trust in traditional media: The reputation of a strong tie surmounts the reputation of a media channel (despite its various gatekeepers, including editors and reporters, a global spread and endless resources to verify and authenticate news) and plays a more central role in credibility evaluation. These findings are worrying for news media managers evaluating their contemporary reputation, and simultaneously highlighting the potency of peer-to-peer communication.

The study also contributes to contemporary analyses of fake news credibility evaluation, demonstrating the ability of interested bodies to deliver and spread fake news in SNS with high potency. The findings indicate that a viral item shared by many Facebook members is highly likely to gain credibility due to the possibility it will be shared by at least some strong ties. These findings thus offer a partial explanation for the high success of fake news in SNSs (Silverman & al., 2016).

For information studies, the analysis also illustrates that SNS-shared content that is considered credible can guide behavior, specifically the search for further information about the issue. In this respect, our findings support the findings of Turcotte and others (2015), one of the only former analyses examining the link between news trust on SNS and the tendency for information-seeking behavior. The scholars found that news perceived credible (following submission by opinion leaders) leads to more information searches for content originating from the same media outlet that portrayed the message. Turcotte and others (2015) and our study's combined findings indicate that trusted SNS members can be highly potent in guiding behavior and mobilizing other SNS members.

Like any study, our analysis also suffers from its own limitations. Specifically, it suffers from the following three main limitations. First, the Facebook friends did not actually share the content. Furthermore, the presumably shared item was fabricated. Although various studies examining evaluations of online content and more specifically studies which examine users' tendency to evaluate content credibility and the tendency to search for further information of the issue use fabricated items (Turcotte & al., 2015), we recommend that future studies will complement their analyses with other approaches such as qualitative methods (e.g., interviews) to further validate the interplay between the various constructs. Second, while we conducted a paper-based survey, we recommend that future analyses will conduct the survey on a computer screen. This will allow to present the online shared content to the participants in a manner that better resembles the content they saw during the course of the study. Lastly, the topic of the fabricated content was very specific (BDS-related content, relating to a specific university in the US). Future studies should aim at examining the relevance of our findings within the context of additional knowledge domains.

Given the availability of large scopes of online data, future studies might consider validating the findings using unobtrusive behavior measures that are indicative of credibility assessment (e.g., the opening of links provided in the shared message), and searching patterns (thus providing a stronger measure of participants' active choices to read more about the topic at hand). This type of research will enable the validation of the findings regarding the effect of tie strength and channel credibility, on credibility assessment and the likelihood of further information-seeking in real-world settings.

# 5. Conclusions

Scholars have acknowledged the great importance of the perceived credibility of the channel from which a message has originated (Harmon & Coney, 1982). Recent work has shown that when being exposed to online content, online readers' most trusted source of information was 'a person like myself' (Harris & Dennis, 2011). We believe that those findings, combined with our findings, can be leveraged to supplement our understanding regarding the importance of the interplay between social tie strength and perceived source credibility. These valuable determinants can be instrumental when examining both perceived credibility of the examined content and likelihood of searching for additional information. Furthermore, Perceptions of credibility of SNS based content, have been studied in

recent years; however, the effect of social variables on this process have been largely overlooked, hence its importance. With social media being a major source of information for many learners at all age levels, our study sheds light on learning-related processes that have so far been understudied. Consequently, our results can serve as a basis for a future development of educational intervention program that will assist learners to better judge online content. In that context, an important contribution of our results is the testing of the association between tie strength, and the perceived credibility of the content. In other words, while the tie strength between the recipient and the content sharer has nothing to do with the actual credibility of the content, our findings shows that the tie strength biases the recipient perception regarding the shared content. This bias should be addressed in future educational intervention, in order to foster more accurate perception of the credibility of content shared through SNS. As such, this study offers one of the first empirical evidence for the important role played by social tie strength in the rapidly growing realm of contemporary news consumption.

### References

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-236. https://doi.org/10.1257/jep.31.2.211

Amichai-Hamburger, Y., & Hayat, T. (2017). Social Networking. The International Encyclopedia of Media Effects, 1-12. https://doi.org/10.1002/9781118783764.wbieme0170

Anspach, N.M. (2017). The new personal influence: How our Facebook friends influence the news we read. *Political Communication*, 34(4), 590-606. https://doi.org/10.1080/10584609.2017.1316329

Aron, A., Aron, E.N., & Smollan, D. (1992). Inclusion of other in the self-scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63(4), 596-612. https://doi.org/10.1037/0022-3514.63.4.596

Azran, T., Lavie-Dinur, A., & Karniel, Y. (2012). Accent and prejudice: Israelis' blind assessment of Al-Jazeera English news items. Global Media Journal: Mediterranean Edition, 7(2), 31-43. https://doi.org/10.5040/9781501300196.ch-012

Bakir, V., & McStay, A. (2018). Fake news and the economy of emotions: Problems, causes, solutions. *Digital Journalism* 6(2), 154-175. https://doi.org/10.1080/21670811.2017.1345645

Berrocal-Gonzalo, S., Campos-Dominguez, E., & Redondo-García, M. (2014). Media prosumers in political communication: Politainment on YouTube. [Prosumidores mediáticos en la comunicación política: El 'politainment' en YouTube]. Comunicar, 22, 65-72. https://doi.org/10.3916/C43-2014-06

Borah, P. (2014). The hyperlinked world: A look at how the interactions of news frames and hyperlinks influence news credibility and willingness to seek information. *Journal of Computer-Mediated Communication*, 19(3), 576-590. https://doi.org/10.1111/jcc4.12060 Dawson, J.F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1-19. https://doi.org/10.1007/s10869-013-9308-7

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). Statistical power analyses using G\* Power 3.1: Tests for correlation and regression analyses. Behavior Research Methods, 41(4),1149-1160. https://doi.org/10.3758/BRM.41.4.1149

Flanagin, A.J., & Metzger, M.J. (2007). The role of site features, user attributes, and information verification behaviors on the perceived credibility of web-based information. *New Media & Society*, 9(2), 319-342. https://doi.org/10.1177/1461444807075015

Frier, S. (2017). Facebook stumbles with early effort to stamp out fake news. Bloomberg. https://bloom.bg/2z2fLzH

García-Galera, M.C., & Valdivia, A. (2014). Media prosumers. Participatory culture of audiences and media responsibility. [Prosumidores mediáticos. Cultura participativa de las audiencias y responsabilidad de los medios]. *Comunicar*, 22, 10-13. https://doi.org/10.3916/C43-2014-a2

Gaziano, C., & McGrath, K. (1986). Measuring the concept of credibility. *Journalism quarterly*, 63(3),451-462. https://doi.org/10.1177/107769908606300301

Gilbert, E., & Karahalios, K. (2009). Predicting tie strength with social media. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 211-220). https://doi.org/10.1145/1518701.1518736

Gunther, A.C. (1992). Biased press or biased public? Attitudes toward media coverage of social groups. *Public Opinion Quarterly*, 56(2), 147-167. https://doi.org/10.1086/269308

Harmon, R.R., & Coney, K.A. (1982). The persuasive effects of source credibility in buy and lease situations. *Journal of Marketing Research*, 19(2) 255-260. https://doi.org/10.2307/3151625

Harris, L., & Dennis, C. (2011). Engaging customers on Facebook: Challenges for e retailers. Journal of Consumer Behaviour, 10(6), 338-346. https://doi.org/10.1002/cb.375

Hayat, T., & Hershkovitz, A. (2018). The role social cues play in mediating the effect of eWOM over purchasing intentions: An exploratory analysis among university students. *Journal of Customer Behaviour*, 17(3), 173-187. https://doi.org/10.1362/147539218X15434304746027 Hayat, T., Hershkovitz, A., & Samuel-Azran, T. (2018). The independent reinforcement effect: Diverse social ties and the credibility assessment process. *Public Understanding of Science*, 28(2),1-17. https://doi.org/10.1177/0963662518812282

Hayat, T., & Samuel-Azran, T. (2017). 'You too, second screeners' Second screeners' echo chambers during the 2016 us elections primaries. Journal of Broadcasting & Electronic Media, 61(2), 291-308. https://doi.org/10.1080/08838151.2017.1309417

Hayat, T., Samuel-Azran, T., & Galily, Y. (2016). Al-Jazeera sport's US Twitter followers: Sport-politics nexus? Online information review, 40(6), 785-797. https://doi/10.1108/OIR-01-2016-0033

Hovland, C.I., Janis, I.L., & Kelley, H.H. (1953). Communication and persuasion: Psychological studies of opinion change. New Haven: Yale University Press. https://doi.org/10.2307/2087772

John, N.A., & Dvir-Gvirsman, S. (2015). 'I don't like you any more': Facebook unfriending by Israelis during the Israel–Gaza Conflict of 2014. *Journal of Communication*, 65(6), 953-974.https://doi.org/10.1111/jcom.12188

Johnson, T.J., & Kaye, B.K. (1998). Cruising is believing?: Comparing Internet and traditional sources on media credibility measures. Journalism & Mass Communication Quarterly, 75(2), 325-340.https://doi.org/10.1177/107769909807500208

Johnson, T.J., & Kaye, B.K. (2014). Credibility of social network sites for political information among politically interested internet users. Journal of Computer-Mediated Communication, 19(4), 957-974. https://doi.org/10.1111/jcc4.12084

Krämer, N.C., Rösner, L., Eimler, S.C., Winter, S., & Neubaum, G. (2014). Let the weakest link go! Empirical explorations on the relative importance of weak and strong ties on social networking sites. *Societies*, 4(4), 785-809. https://doi.org/10.3390/soc4040785

Ladd, J.M. (2013). The era of media distrust and its consequences for perceptions of political reality. In T.N. Ridout (Ed.), *New directions in media and politics* (pp. 24-44). London: Routledge.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey, & E. Aronson (Eds.), *The Handbook of Social Psychology* (pp. 233-346). New York: Random House. https://doi.org/10.4324/9781315784786

Putnam, R.D. (2000). Bowling alone: America's declining social capital culture and politics. New York: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-62965-7 12

Romero-Rodríguez, L.M., Torres-Toukoumidis, D.A., Pérez-Rodríguez, M.A., & Aguaded, I. (2016). Analfanauts and fourth screen: Lack of infodiets and media and information literacy in Latin American university students. *Fonseca*, 12, 11-25. https://doi.org/10.14201/fjc2016121125

Salmon, C.T. (1986). Perspectives on involvement in consumer and communication research. *Progress in communication sciences*, 7, 243-268. http://bir.ly/2CRQR74

Samuel-Azran, T. (2016). Intercultural communication as a clash of civilizations: Al-Jazeera and Qatar's Soft Power. New York: Peter Lang. https://doi.org/10.3726/b10476

Samuel-Azran, T., & Hayat, T. (2017). Counter-hegemonic contra-flow and the Al Jazeera America fiasco: A social network analysis of Al Jazeera America's Twitter users. Global Media and Communication, 13(3), 267-282. https://doi.org/10.1177/1742766517734255

Shearer, E., & Gottfried, J. (2017, September 7). News use across social media platforms 2017. Pew Research Center.

https://pewrsr.ch/2vMCQWO

Sherif, M., & Hovland, C.I. (1961). Social judgment: Assimilation and contrast effects in communication and attitude change. Oxford: Yale University Press. https://doi.org/10.1086/223278

Silverman, C., Strapagiel, L., Shaban, H., Hall, E., & Singer-Vine, J. (2016). Hyperpartisan Facebook pages are publishing false and misleading information at an alarming rate. Buzzfeed News. https://bir.ly/2NKyHZ7

Turcotte, J., York, C., Irving, J., Scholl, R.M., & Pingree, R.J. (2015). News recommendations from social media opinion leaders: Effects on media trust and information seeking. *Journal of Computer-Mediated Communication*, 20(5), 520-535. https://doi.org/10.1111/jcc4.12127 Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146-1151. https://doi.org/10.1126/science.aap9559