

# **INCIDENTAL MEDIA EXPOSURE, OPTIMISM, AND WELL-BEING**

The association between incidental news exposure, life satisfaction,  
and optimism

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## **Abstract**

Due to social media and the increased use of the internet, everyone is almost always exposed to news, even when they are not actively looking for it. This concept is called incidental news exposure (INE). As the news is predominantly negative, exposure can result in various health consequences, especially mentally. Consequently, this study investigated whether INE is associated with life satisfaction. However, not all individuals seem to be affected to the same extent. Based on previous literature, it was hypothesized that optimism is moderating that relation. To investigate this, a cross-sectional online survey study with 327 respondents was conducted. Participants were asked to complete the online survey consisting of an item measuring INE, the Satisfaction with Life Scale, and the Life Orientation Test – revised. Contrary to the expectations, no significant association could be established. Consequently, optimism was not able to moderate the non-significant relation. However, as suggested in previous literature, it was found that optimism significantly predicts life satisfaction. As the results could have been influenced by the measuring method of INE, as well as the specific sample characteristics, future research is needed to confirm the findings.

*Keywords:* incidental news exposure, negative news, life satisfaction, optimism

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## **Introduction**

Nowadays, we are almost always exposed to the latest news. We are constantly surrounded by radio, television, smartphones, and newspapers, which makes it almost impossible not to be informed. Most of the time, we seem to know about everything important that is happening in the world, at least when the media reports about it. Since the internet came into existence, access to current news and the media has been greatly facilitated. Additionally, the introduction of smartphones now gives us the possibility of accessing the internet and all news at anytime and anywhere. Over the last decade, there has also been recorded a shift from traditional to online media (Dimmick et al., 2004). This is considered strongest for television news and newspapers, and especially concerns the daily news domain (Dimmick et al., 2004). The importance of social media networks in terms of news consumption has grown in recent years, making them an essential channel for news publication (Masip et al., 2018). It has also been shown to ease the opportunity of reading news topics the user normally does not consume (Masip et al., 2018). Therefore, it seems to become even harder to be able to avoid the news, even when we are not explicitly searching for it. As of today, the effects of incidental news exposure on mental well-being have not been fully investigated or proven. However, since the news seems to be dominated by sensationalism and negative themes, comprehending the links between INE and mental well-being is necessary. In addition, as it appears that not all people are equally affected by negative news, identifying protective factors is essential.

### **Incidental News Exposure (INE)**

Via social network sites (SNS) and search engines, internet users may be unintentionally exposed to a variety of information and will therefore become incidentally confronted with news they did not seek (Kim et al., 2013). Moreover, for this study, it is defined “as exposure to news content on social media sites while using these sites for other purposes” (Oeldorf-Hirsch, 2018). Consuming traditional media often needs an active motivation to learn about current affairs by turning on the TV/radio or actively reading the newspaper (Tewksbury et al., 2001). The introduction of the internet further enabled to customize this exposure by allowing the users to search for specific news or information they want to obtain knowledge on. However, they often cannot be protected from being exposed to news they did not seek, as many search engines now incorporate news headlines directly on their start page. Consequently, even search engines nowadays function as a constant information service by exposing the user to daily news even before their intended search for non-news related information. Additionally, the internet often tends to display the same headlines on different sites, leading to a constant

repetition of news content. This repetition often arouses the user's interest long enough for them to decide to read the article after all (Tewksbury et al., 2001). The prevalence of being incidentally exposed to the news seems to be high, as 78% of the Facebook users indicated that they were exposed to news (almost) every day while being on the platform for non-news related purposes (Matsa & Mitchell, 2014; Purcell et al., 2010). With the use of social media as an increasingly important source of information, the prevalence of incidental news exposure will remain significant.

### **News and its impact on well-being**

The news these days appear to mainly concern negative topics, for instance, climate change, crime, and political instability (Partington, 2013). Negative news was defined as “items that report social conflicts and disorganization, including stories involving international tension, civic disruption, crime and vice, and accidents and disasters” (Gieber, 1955, as cited in McIntyre & Gibson, 2016). Current examples are especially the pandemic, along with the conflict situation between Russia and Ukraine. It appears that people's interest tends to be aroused by negative or bad news, which then also elicits a stronger reaction than positive news (Aust, 1985; Soroka & Mc Adams, 2015). This finding on the stronger reaction to negative news is called a negativity bias (Soroka & Mc Adams, 2015). Similarly, research has shown that people who tend to have a more negative outlook on the world, favour (television) news media and therefore also consume more of the news content (McNaughton-Cassill & Smith, 2001). Moreover, the concept of mass media itself further predisposes a focus on negative news to arouse its readers (Soroka & Mc Adams, 2015).

As incidental news exposure becomes more prevalent and covers more negative topics affecting people personally, recent evidence suggests adverse consequences for mental well-being that will further negatively impact people's life satisfaction (Olagoke et al., 2020; Stainback et al., 2020; Strasser et al., 2022). The concept of life satisfaction is hereby defined “as the degree to which the experience of an individual's life satisfies that individual's wants and needs, both physically and psychologically” (Rice, 1984, as cited in Demerouti, 2000). Further, life satisfaction is seen “as the cognitive aspect of subjective wellbeing and refers to people's global evaluation of the quality of their life” (Peterson et al., 2005 as cited in Singh & Duggal Jah, 2008). According to Johnston and Davey (1997) participants who were exposed to negative news reported an increase in anxious and sad moods. This finding is consistent with that of Hoyt et al. (2021) who confirmed that heightened exposure was found to predict greater anxiety. Similarly, extensive research has established anxiety as a major factor influencing life satisfaction (Kliszcz et al., 2004). As news exposure seems to lead to increased levels of

anxiety, it can be assumed that it negatively affects an individual's satisfaction with life in the long term.

It has previously been observed that the increased consumption of COVID-19 related news among young people, especially on social media, was found to be associated with deteriorated mental health, increased psychological distress, and depressive symptoms (Olagoke et al., 2020; Stainback et al., 2020; Strasser et al., 2022). Likewise, negative news was found to relate to more negative affect in the readers, revealing a stronger impact when the news covered was personally relevant (de Hoog & Verboon, 2020). Pilcher (1998) has then demonstrated that both depression and negative affect were able to significantly predict one's satisfaction with life.

Previous research has further identified the impact of the media in evoking acute stress responses when reporting on traumatic events (Holman et al., 2014). The study investigating the media's impact following the Boston Marathon bombings showed that respondents who were exposed to the news for six or more hours a week were nine times more likely to experience high acute stress than respondents who were exposed much less to the media (Holman et al., 2014). Life satisfaction was again found to be negatively correlated to stress, as well as strongly correlated to depression (Headey et al., 1993; Holinka, 2015). Considering all this evidence, it seems that being exposed to negative news might lead to a more negative evaluation of one's satisfaction with life.

### **Psychological capital: Optimism**

Research on the influence of daily news on emotional states demonstrated that not every reader is affected to the same extent (de Hoog & Verboon, 2020). This could be caused by the fact that some people have certain characteristics or traits that function as protective factors. At present, hope, efficacy, resilience, and optimism which belong to the core construct of psychological capital (PsyCap) are known to positively influence well-being (Youssef-Morgan & Luthans, 2015).

Optimism is defined as "the expectation that positive things will happen in life" (Scheier & Carver, 1985, as cited in Vacek et al., 2010). Optimistic people hereby cope with challenges by addressing them and are more prepared to deal with threats to their well-being preventively (Seegerstrom et al., 2017). Studies suggest that people who are considered optimistic, benefit from a higher life quality (Conversano et al., 2010). This further improves the mental and physical well-being of the individual in the long term (Conversano et al., 2010). As optimists tend to see the world in their favour, it could help them modify their outlook on the world, as well as their reaction and adaptation to certain situations. Therefore, optimism seems to be able

to work as a protective attitude that can aid individuals in coping with negative situations.

Current research has shown that optimism is a significant predictor of life satisfaction, in both younger people and the elderly (Leung et al., 2005; Yalçın, 2011). Optimism is found to be associated with important benefits and higher levels of subjective well-being (Forgeard & Seligman, 2012). McNaughton-Cassill (2001) confirmed this by demonstrating that an individual who reports a low level of optimism runs a higher risk of trait anxiety when exposed to negative news. This indicates that when exposed to the same news, optimistic individuals are significantly less at risk of reporting trait anxiety, and therefore most likely also show a higher satisfaction with their life. This notion is supported by Rajandram et al. (2011) who stated that optimism negatively correlates with anxiety, along with depression. It appears that optimism can alleviate the risk of anxiety and depression, which consecutively might protect the person's life satisfaction. Further, optimism was found to weaken the association between the fear of COVID-19 and mental disorders, such as depression and anxiety (Vos et al., 2021). This finding further indicates its potential in alleviating negative mental health consequences. Optimism has therefore been a central part of designing interventions that improve the well-being of an individual (Forgeard & Seligman, 2012). In conclusion, optimism seems to be able to counteract the consequences of news exposure and to predict, and work as a protective factor for life satisfaction.

### **Aims and Objectives**

This study aims to investigate the association between incidental news exposure and life satisfaction, together with the moderating role of optimism. To date, research on the perception of negative news has been conducted focusing on cognitive aspects, such as information processing and memory (de Hoog & Verboon, 2020). However, research to date has not yet determined how incidental news exposure can influence one's feelings, attitudes, and one's evaluation of the quality of life. Negative news was namely shown to negatively influence anxiety and stress, while especially anxiety is a major factor influencing life satisfaction. Researching about these consequences is detrimental to developing suitable interventions and closing the knowledge gap on these associations. Further, optimism has the potential to reduce symptoms of anxiety and depression, while it also significantly predicts life satisfaction. Therefore, investigating whether the positive psychological resource of optimism can serve as a protective factor for life satisfaction and moderate this relation will offer important insights.

Based on the above-mentioned literature, it can be hypothesized that there is a negative relationship between incidental news exposure and life satisfaction, which is moderated by optimism. It is expected that higher levels of optimism can weaken the association between

incidental news exposure and life satisfaction. Therefore, this study aims to answer the research questions: “*To what extent is incidental news exposure associated with life satisfaction?*” and “*Is the association between incidental news exposure and life satisfaction moderated by optimism?*”.

## Methods

### Design

An online cross-sectional survey study was conducted with the independent variable ‘*incidental news exposure*’ (INE), the dependent variable ‘*life satisfaction*’ and the moderating variable ‘*optimism*’ to answer the research question.

### Participants

Eligibility criteria required individuals to be of adult age (above 18 years) and to have a sufficient level of English to be able to understand and answer the items independently. Participants who did not meet the criteria or did not finish the survey were excluded from the final sample. The participants of this study were recruited by the researchers via SONA, a test subject pool solely for students of the BMS Faculty, offered by the University of Twente (UT). The survey link was published on the website which offers different studies for students to participate who can take part in exchange for 0.25 research credit points. Additionally, the survey link was distributed via social media to recruit a more diverse population. Therefore, the study made use of non-random convenience sampling.

In total, 399 participants decided to take part in the survey and only one participant was excluded for not meeting the study criteria. However, 71 participants failed to complete the survey, which led to a final sample of 327 participants. Over half of these, 225, were female (68.8%), 101 were male (30.8%), and two participants identified as non-binary (0.6%). The fewest participants were Dutch (33; 10.1 %), nearly half of them were German (127; 38.7%) and most of them had other nationalities, such as Lithuanian (168; 51.2%) which made it an international sample. The age ranged from 18 to 44 years; with a mean age of 22 ( $SD = 3.295$ ). Most of the respondents were 20 to 22 years old.

### Materials

For measuring the different constructs this study aims to investigate, several validated measures were used. *Incidental news exposure* was measured by adopting the question from the study of Barnidge and Xenos (2021) who investigated incidental news exposure on social media platforms. Respondents were asked, “*How often do you encounter or come across news*



when you have been going online for a purpose other than to get the news?" (Appendix A). The item was scored for online message boards/forums, social networking websites, microblogging websites, photo-sharing websites, video-sharing websites, and mobile messaging websites. It was answered on a 7-point scale, ranging from 1 (never) to 7 (very often). The higher the score of the item, the more often the person was incidentally exposed to the news. The internal consistency of their study was considered high, with a Cronbach's alpha of 0.9 (Barnidge & Xenos, 2021).

The *Satisfaction with Life Scale (SWLS)* (Appendix B) was used to assess a person's evaluation of their own life, based on their own criteria (Pavot & Diener, 2009). The scale consisted of 5 items, e.g. "In most ways, my life feels close to my ideal.", which were scored from 1 (strongly disagree) to 7 (strongly agree) with higher results indicating higher satisfaction with life. The scale was assessed by adding up the scores of the participants for each item. The higher the resulting score, the more a participant was satisfied with their current life (Pavot & Diener, 2009). The internal consistency for the SWLS was high, showing a Cronbach's alpha of 0.87 (Diener et al., 1985).

The *Life Orientation Test-Revised (LOT-R)* (Appendix C) was used to assess how optimistic (or how pessimistic) a person is (Scheier et al., 1994). The scale consisted of 10 items, e.g. "In uncertain times, I usually expect the best.", which are answered on 5-point scales, ranging from 0 (strongly disagree) to 4 (strongly agree). Adding up all the scores of the items, the higher the score, the more optimistic and less pessimistic the respondent is (Scheier et al. 1994). Internal consistency was considered acceptable, with a Cronbach's alpha of 0.70 for the optimism scale and 0.68 for the total scale (Glaesmer et al., 2012).

For the current study, the Satisfaction with Life Scale (SWLS) showed a strong internal consistency ( $\alpha = 0.831$ ,  $n = 5$ ). The facets of the Life Orientation Test-Revised (LOT-R), used to measure optimism, reported acceptable reliability ( $\alpha = 0.744$ ,  $n = 10$ ). As INE was measured on a single item for several platforms, reliability was not computed.

## **Procedure**

Before the survey was published, ethical approval (request no. 220375) was obtained from the BMS Ethics Committee of the University of Twente. The participants were invited to take part in the study by following the link via the SONA System from the University of Twente or by following the link of the website Qualtrics. Entering the survey, participants were informed about the aim of the study, the procedure, information about data processing and storage, and the contact details of all the researchers. Before commencing the survey, participants were asked to give active consent. In case someone did not consent, this person

was directed to the end of the survey. Once they agreed to participate, respondents were asked for general demographic information on their age, nationality, and gender. The survey then continued with the adopted INE item, the Satisfaction with Life Scale, and the Life Orientation Test revised. The INE item was chosen, and therefore non-randomly, to appear at the beginning of the survey. To equalize potential missing values for the participating researchers and to reduce question order bias, the following questionnaires were randomised before publishing the survey. After answering all items, respondents were debriefed about the aim of the study, thanked for their participation, and contact details of the supervisor were given for any additional questions or concerns.

### **Statistical analysis**

The analysis investigated the association between incidental news exposure and life satisfaction, as well as the moderating role of optimism in that relation. The data contained the scores of each participant on the three scales of INE, satisfaction with life, and optimism. It was assessed and analysed in SPSS (Version 27).

First, the descriptive statistics were assessed to examine how the data is distributed. This was achieved by checking the means and standard deviations of each variable, along with looking at the corresponding histograms. Following, Cronbach's alpha was used to evaluate the reliability of the scales.

Next, Pearson correlations between the constructs of interest were computed to gain insight into the univariate relationships between all scores. Correlations were interpreted as weak when the correlation was below 0.35, moderate between 0.36 and 0.67, above 0.68 as strong, and correlations above 0.9 were further interpreted as very high (Taylor, 1990). Correlations were assessed to establish the relations between all variables of interest. It was further used to examine and answer the first research question on the association between the main variables INE and life satisfaction.

Further, the assumptions for linear regression were evaluated to see whether normality, linearity, homoscedasticity, and absence of multicollinearity were met. This was done by looking at the P-P plot and the scatterplot of the residuals. Once the assumptions were met, moderation analysis was conducted using the PROCESS macro extension for model 1. The analysis examined the potential moderating role of optimism.

## Results

### Descriptives and correlations between incidental news exposure, life satisfaction, and optimism

The descriptive statistics for the three variables of interest, such as the mean score and the standard deviation, are presented in Table 1. Contrary to the first hypothesis, correlation analysis (Table 1) demonstrated a non-significant relation between the independent variable INE and the dependent variable life satisfaction. However, as expected, a significant moderate positive correlation between the moderator variable optimism and the dependent variable life satisfaction was found ( $p < 0.01$ ). No other correlations could be identified.

**Table 1.** Descriptives of the main variables and their Pearson correlation coefficients

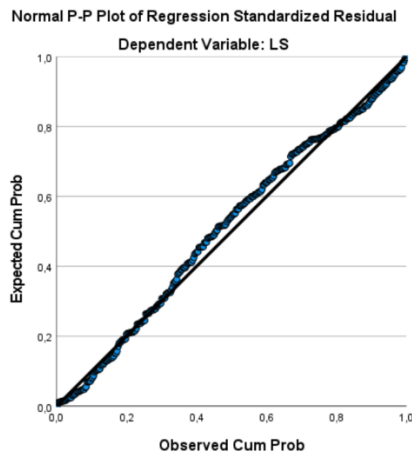
	N	M	SD	Life satisfaction	INE	optimism
Life satisfaction	327	23.20	5.91	-	-	-
INE	327	22.83	5.98	.043	-	-
optimism	327	19.61	4.19	.455**	.015	-

Note.  $p < 0.05^*$ ;  $p < 0.01^{**}$ .

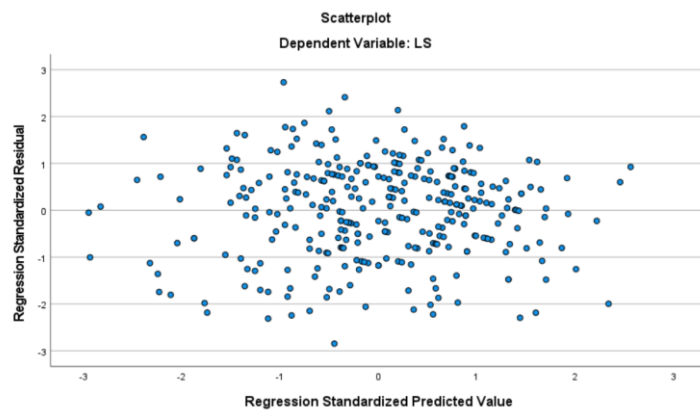
### Moderating role of optimism

The moderation model answered the second research question and investigated whether there is an association between the independent variable INE and the dependent variable life satisfaction that is moderated by optimism.

First, it was evaluated whether the model followed the assumptions for a linear regression of normality, linearity, homoscedasticity, and absence of multicollinearity. The P-Plot (Figure 1) showed a normal distribution with only a small deviation. Further, the scatterplot of the residuals (Figure 2) of the model indicated sufficient homoscedasticity. Lastly, VIF-values for both independent variables were below 10 ( $VIF = 1.000 < 10$ ). Consequently, the total moderation model met all assumptions for linear regression.



**Figure 1.** *P-Plot*



**Figure 2.** *Scatterplot*

Next, the moderation model was conducted using the PROCESS macro extension for model 1. The overall model was found to be significant ( $F(3,323) = 29.78, p < 0.001, R^2 = .22$ ). Confirming the non-significant correlation, INE was not found to significantly predict life satisfaction ( $b = 0.436, t(323) = 1.94, p = .88$ ). However, a significant association between optimism and life satisfaction was observed, indicating optimism as a significant predictor ( $b = 1.098, t(323) = 4.21, p = .00$ ). After including optimism as the moderator in the model, no interaction could be identified. The association between INE and life satisfaction therefore remained insignificant at both high and low levels of optimism ( $b = -.020, t(323) = -1.82, p = .07$ ).

## Discussion

The current study fills the research gap on the potential association between incidental news exposure and life satisfaction. Further, it should reveal whether the psychological capital concept of optimism moderates the expected relation and can therefore serve as a protective factor for life satisfaction. By filling the research gap on these associations, the study should facilitate an understanding of how these relations work. It was hypothesized that INE has a negative association with life satisfaction, and that this relation is moderated by optimism.

Contrary to the hypotheses, the main finding of this study was that no significant association between INE and life satisfaction could be established. Consequently, the first research question “To what extent is incidental news exposure associated with life satisfaction?” was answered against initial expectations. This finding is contrary to previous studies which have suggested that increased exposure to news predicted increased psychological distress and depressive symptoms. These were shown to be major factors

influencing a person's satisfaction with their life (Kliszcz et al., 2004; Olagoke et al., 2020; Pilcher, 1998; Stainback et al., 2020).

This result may be explained by the possibility that the concept of life satisfaction might be too broad with too many determinants, making it difficult to establish a relationship with INE. Life satisfaction describes the "cognitive and global evaluation of the quality of one's life as a whole" (Pavot & Diener, 1993, as cited in Pavot & Diener, 2008), meaning it does not solely concentrate on certain factors, such as anxiety. Moreover, positive judgments in other areas seem to be able to outweigh the negative. Therefore, one's satisfaction with life could still be rated satisfactory, even when someone is suffering, for example, from a certain degree of anxiety. Further, as life satisfaction is a component of subjective well-being, it might be difficult to generalize which factors influence the individual judgment of their satisfaction with life (Pavot & Diener, 2008). Each person might weigh certain factors differently and therefore has distinct determinants for their life satisfaction.

Another possible explanation might be that the measurement method of INE was conceptualised too vague and left too much room for own interpretation of the individual. As this study examined how often respondents 'encountered or came across' news they were not actively looking for, it is suggestive that each respondent might have a different definition for the terms. The results might therefore become unreliable, as there seems to be no true consistency. Firstly, at times respondents might not have been aware that they were exposed to news or might not remember correctly on which platform they were exposed. Secondly, as each person then potentially interprets the terms differently, it leads to different scores on the scale even when the exposure might have been the same. Some might even include the times when they searched for the news but were exposed to different topics than they originally searched for. However, as this study aims to investigate the incidental news exposure while searching or engaging in non-news related information or activities, this would establish misleading results. This source of error could have affected the results of the INE item while making it an unreliable measure. This accords with Tewksbury (2001) who stated that the individual assessment of their incidental exposure to news is prone to error and runs a risk to lead to unreliable results.

Lastly, the unexpected results could be attributed to the unknown nature of the news the respondents were exposed to. In the survey, the participants were not asked about the content of the news they encountered. However, with the emergence of online news, readers are now also able to customize and filter the news content to their topics of interest (Tsfati, 2010). This opportunity fosters the possibility that respondents were not solely exposed to negative news, but also positive. Whether they have also been provided with positive news might have a

profound effect on the respondents' well-being. Moreover, de Hoog and Verboon (2020) stated that negative affect, resulting from news exposure, was higher in individuals for whom the news was personally relevant. As the nature of the news was not established, it is unknown whether specific types of news would have demonstrated another relation to the life satisfaction of the responding individual.

Another important finding was that optimism was not able to moderate that (non-significant) main association. As no relation between INE and life satisfaction was established, optimism could not serve as a protector variable. Consequently, the second research question “Is the relationship between incidental news exposure and life satisfaction moderated by optimism?” was also answered contrary to the initial expectations. This outcome is contrary to that of Rajandram et al. (2011) who verified the negative correlations between anxiety, depression, and optimism. However, correlation analyses and moderation analyses demonstrated a moderate positive correlation and a significant positive association between optimism and life satisfaction. This finding seems to be consistent with other research which identified that optimism is a significant predictor of life satisfaction in both young and elderly people (Leung et al., 2005; Yalçın, 2011). It can therefore be inferred that the more optimistic a person is, the higher they rate their life satisfaction.

It seems possible that this non-significant moderation is also due to optimism being associated with INE. To exemplify, there is a probability that INE has a negative impact on optimism, which would then make it difficult for optimism to moderate the main relation. When optimism is lowered by the exposure to negative news, it cannot serve as a protective factor for life satisfaction anymore. As news seems quite focused on sensationalism, it might become complicated for individuals to uphold their optimism in maintaining the expectation that positive things will happen while due to the media the world seems full of negative events (de Hoog & Verboon, 2020). A study by Duffy et al. (2008) on crime perceptions of the public has demonstrated that even though crime rates declined, most people expected that crimes were increasing, mostly due to misinformation in the news they consumed. It can therefore be presumed that optimism could not moderate this relation, as the positive outlook on life might have been declined by the constant confrontation with negative news.

### **Implications**

The non-significant findings of this study nevertheless helped reveal relevant implications that should be considered to gain a better comprehension in subsequent research. This study provides crucial insights, as the associations of the constructs INE, life satisfaction, and optimism were not investigated in prior research. The present findings hereby imply that

life satisfaction is not sensible to INE, as no association was established. A practical implication of that finding would be that in the case of poor life satisfaction, a reduction of INE would not improve the individual's satisfaction with their life. This finding has further important implications for developing suitable interventions, as it discovered that life satisfaction is not dependent on the level of news exposure, nor can news exposure be seen as a cause for low life satisfaction. Further, optimism could not moderate the non-existing relation but did predict life satisfaction. An implication of this is that optimism might work as a protective factor for life satisfaction when there is a significant relationship with another variable. Moreover, this finding suggests that optimism might serve as protection for multiple smaller variables of the life satisfaction construct, such as the diverse types of well-being.

### **Limitations and Strengths**

However, as the measurement of INE indicated low internal consistency, these data must be interpreted with caution. This inconsistency may be due to the item including only one question, which was then answered for several platforms. As Tewksbury et al. (2001) stated, there is no ideal approach to measure INE, as a person's assessment of their exposure might be unreliable. Further, most of the participants were German or Lithuanian. However, for instance, online message boards or forums are not common, and probably hardly ever used in these countries (Statista, 2022a). The research, from which the INE was adopted, originated in the U.S. (Barnidge & Xenos, 2021). If one then compares the platform used to the U.S., it becomes evident that the use is distributed differently, and that online boards and forums also form a larger part (Statista, 2022b). The sample, therefore, suggests that participants answered 'very often' mainly for platforms of social networking or mobile messaging websites. This could further indicate low consistency because one respondent could have then spent considerable time on YouTube but only a little time on Twitter. A comparison of the findings with those of other studies confirms that the concept is difficult to measure without error, as until now there does not seem to be a reliable method.

Another note of caution is due here since the generalizability of the results is limited. The sample mainly consisted of individuals in their twenties, most likely students. Further, most of the respondents were German, Dutch, or Lithuanian. According to these data, we can infer that almost all participants live in good or privileged living conditions. This circumstance might make most of the news they are exposed to, not personally relevant. Satisfying living conditions might also heavily influence their satisfaction with their life. To exemplify, news on gun violence is probably going to affect people in the U.S. far more, as the news is personally relevant and actively impacts their living conditions. In contrast, news about gun violence is

not personally relevant to people in Europe, for instance in Germany, because the inhabitants generally live in good circumstances far away from the action. Therefore, gun violence news will presumably not elicit the same mental health consequences in Germans as in Americans. Consequently, it cannot be assumed that these results apply to the entire population and can therefore not be generalized. Moreover, there also appear to be cultural differences, as many communities are underrepresented in the media and therefore, might not consider the news relevant or interesting to them. For these reasons, there will always be news content to which some exposed people are more sensitive than others. In another setting or sample, especially in one with a more diverse background, the results would most likely show different scores and correlations.

A strength of this study is that the Satisfaction with Life Scale showed high internal consistency, together with the Life-Orientation Test-Revised displaying sufficient reliability. The data for the constructs of this research was therefore consistent and accomplished valuable results. Further, the data showed no missing values, which indicated that the representativeness of the sample was not violated. For the scope of the study, the sample size was sufficiently large to obtain valid results. Moreover, the research provided insight into relations no prior research investigated and can therefore provide a base for subsequent research in that area.

### **Recommendations for future research**

Future studies on the current topic are recommended and should aim at a replication of the study to validate the findings in a generalizable sample. Subsequent research should therefore strive for utilizing a reliable measure of INE by resolving its susceptibility to error. Moreover, it should be ensured that the liberty of interpreting the terms used in the item is reduced or even extinguished.

Additionally, as the associations were found to be non-significant, future studies should examine smaller concepts of life satisfaction in relation to INE. As mentioned above, life satisfaction is a broad construct consisting of multiple smaller concepts. As mood is an essential part of one's satisfaction with their life, subsequent research could investigate the association to INE. Further, general well-being plays a particular role in life satisfaction. Narrowing it down, it would be interesting to explore the relation between emotional and/or mental well-being and INE. This would aid to identify whether small components of life satisfaction are nevertheless associated with INE. If a negative significant relation with a smaller concept can be revealed, INE could be seen as a risk factor that could affect life satisfaction in the long term. To develop a full picture, additional studies should also explore confounding variables of the possible relation. For instance, literature suggested that the personality trait of neuroticism



could have a vital relation to both concepts. Lastly, it will be crucial to identify the type of news the respondents are exposed to for comprehending the impact of, for instance, personally relevant news.

Further research should also be undertaken to investigate the protective factor of optimism. As optimism was identified to predict life satisfaction, it is indicative that being optimistic has a positive influence on the general concept. However, caused of the non-significant relation between the main concepts, its protective factor could not be examined. Future studies could therefore, firstly, establish whether optimism can protect life satisfaction from the impact of other variables. Secondly, further research should be undertaken to investigate the protective potential of the other concepts of PsyCap, such as hope, resilience, and self-efficacy. However, this requires an established significant association between INE and for instance emotional well-being. Lastly, it would be interesting to investigate the direct association between the PsyCap concepts, particularly optimism, and INE. Again, the findings could then indicate whether INE might be a risk factor for lowered life satisfaction.

## **Conclusion**

The study resulted in unexpected outcomes as no association between INE and life satisfaction was found and consequently, optimism was not able to moderate this non-significant relation. As a result, both research questions were answered, although against the initial expectations. In context, INE is not associated with how satisfied a person is with their life. As there is no relation, being optimistic can also not protect the person's life satisfaction from the (non-existent) relation to INE. However, results showed that optimism, and therefore how optimistic a person is, can predict how satisfied the person is with their life. It seems as if the concept of life satisfaction might be too broad to investigate in relation to INE. Future studies should therefore start by focusing on smaller determinants of life satisfaction. Moreover, they should strive for a generalizable sample to validate findings and use and/or establish a more reliable method to measure INE to enable meaningful results. Validated and meaningful results are essential because of the growing importance of INE in the future and to enable the development of suitable interventions for the potential impact of INE.

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## Appendix

### Appendix A. *Incidental News Exposure Item*

Instructions: how often do you encounter or come across news when you have been going online for a purpose other than to get the news? Please respond by using the following scale from Never to Very often.

	Never	2	3	4	5	6	Very often
Online message boards or forums or mobile apps (e.g., Reddit or Digg)							
Social networking websites or apps (e.g., Facebook, Google+, MySpace, or LinkedIn)							
Microblogging websites or apps (e.g., Twitter or Tumblr)							
Photo-sharing websites or apps (e.g., Instagram, Flickr, or Pinterest)							
Video-sharing websites or apps (e.g., YouTube, Vimeo, or Periscope)							
Mobile messaging websites or apps (e.g., Snapchat or WhatsApp)							

**Appendix B.** *Satisfaction with Life Scale*

Instructions: Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

	Strongly disagree	2	3	4	5	6	Strongly agree
In most ways my life is close to my ideal.							
The conditions of my life are excellent.							
I am satisfied with my life.							
So far, I have gotten the important things I want in life.							
If I could live my life over, I would change almost nothing.							

**Appendix C. *Life Orientation Test – Revised***

	Strongly disagree	1	2	3	Strongly agree
In uncertain times, I usually expect the best.					
It's easy for me to relax.					
If something can go wrong for me, it will.					
I'm always optimistic about my future.					
I enjoy my friends a lot.					
It's important for me to keep busy.					
I hardly ever expect things to go my way.					
I don't get upset too easily.					
I rarely count on good things happening to me.					
Overall, I expect more good things to happen to me than bad.					