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Influence of Intimacy for Webtoon Creators on Attitudes Toward Illegal Webtoon Consumption: Focusing on the Moderating Effects of Message Framing and Message Subject

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Influence of Intimacy for Webtoon Creators on Attitudes Toward Illegal Webtoon Consumption: Focusing on the Moderating Effects of Message Framing and Message Subject

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Keywords: Illegal webtoon, Message Framing, Legitimate webtoon usage intention, Familiarity with webtoon creators, subject of message

1. Introduction

The webtoon market is experiencing exponential growth. The global webtoon market size, which was 3.7 billion dollars (4.699 trillion KRW) in 2021, is expected to reach 56.1 billion dollars (71.08 trillion KRW) by 2030 (Byeon, 2023.07.18). The success of webtoon-based OSMU (One Source Multi-Use) content, including 'Moving,' 'Sweet Home,' and 'Marry My Husband,' has led to a growing interest in webtoons among users and content creators alike. However, as the webtoon market expands, the number of individuals engaging in illegal webtoon activities is also increasing rapidly, creating challenges for the webtoon industry. As of 2022, the size of the illegal webtoon market was 721.5 billion KRW, accounting for approximately 40% of the domestic webtoon market size (KOCCA, 2024), which is twice as high as the damage caused by illegal webtoons in 2019, which was 318.3 billion KRW. It is notable that the frequency and number of paid transactions by webtoon users have decreased overall in 2023 compared to 2022. The proportion of users who pay for webtoons more than five times a week has decreased from 6.7% in 2022 to 4.1% in 2023. Similarly, the proportion of heavy users who exceed an average monthly payment of 20,000 KRW has also decreased from 12.6% in 2022 to 10.7% in 2023 (KOCCA, 2023; 2024). The

proportion of users paying 20,000 KRW or more also decreased from 12.6% in 2022 to 10.7% in 2023 (KOCCA, 2023; 2024). This decline can be attributed to several factors, including the reduction in webtoon usage in the post-pandemic era, fatigue from the mass production of works skewed towards popular genres, and the financial burden of webtoon payment costs.

Webtoons are creative works with clear copyrights belonging to their creators, the unauthorized reproduction and distribution of webtoons constitutes cybercrime infringing on copyrights under the Information and Communications Network Act (Song, 2020). Webtoons are included in the "artistic works" category under Article 4, Paragraph 1, Subparagraph 4 of the Copyright Act, and thus the copyright of the work belongs to the creator. Furthermore, Article 136 of the legislation stipulates that the act of reproducing and distributing webtoons without the creator's permission is illegal, and operators of illegal webtoon sites may be held legally responsible for such actions. Nevertheless, there is currently no legal basis to punish individuals who use these webtoons. Despite the majority of webtoon users being aware that using illegal distribution sites like 'Newtoki' and 'Toonkor' is illegal (KOCCA, 2023), they continue to use these sites due to the lack of clear punishment regulations. The

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continued growth in the number of individuals accessing webtoons illegally is accompanied by a corresponding decline in paid usage (Kim, 2023.08.01). Currently, the only indications of the penalties for illegal distributors are provided on webtoon platforms, which is insufficient to prevent illegal webtoon use or to raise awareness about it. As the scale of the damage to the webtoon industry continues to grow, it is becoming increasingly clear that proactive measures are needed to prevent a further decline in paid users and to prevent more of them from switching to illegal webtoon use.

Previously, a range of preventive measures have been employed to address the issue of illegal content distribution, including consumer education about illegal copy content, legal threats and actions against individuals and site operators, and platform-level sanctions (Vida et al., 2012; Gopal & Sanders, 1997). Nevertheless, previous studies have demonstrated that the government's and industry's measures to curb the distribution of illegal content have been largely ineffective, due to reasons such as the ambiguity of the online copyright law's punishment provisions (Heneghan, 2002) and the one-time nature of user education and platform sanctions (Yar, 2018) (Rafee & Cronan, 2006). Furthermore, despite annual anti-illegal webtoon campaigns by the domestic webtoon industry, these campaigns have been largely ineffective due to their one-time nature and lack of awareness among users (Ko, 2022.10.13).

To eradicate the illegal distribution of webtoons, it is necessary to implement technical efforts and institutional support from the industry. However, it is also important that users refrain from using illegal webtoons (Sinha & Mandel, 2008; Limayem et al., 2004; Vida et al., 2012). For this to occur, a change in the perceptions and attitudes of users towards illegal webtoons must first take place. What are the key factors that influence users' perceptions of illegal webtoons? A robust connection between webtoon creators and their audience can reinforce unfavorable perceptions of illicit webtoons. One of the most notable characteristics of the webtoon industry is the

phenomenon of 'fandom culture', whereby users interact with creators through comments, likes and fan cafes, thereby forming extended fan communities (Yecies et al., 2020). Some users even engage in volunteer activities to translate and promote their preferred works, thereby demonstrating a high level of affection for both the creators and their creations (Nam & Jung, 2022). Webtoon platforms such as Naver Webtoon and Kakao Webtoon provide spaces for amateur creators to serialize their works, including in the challenge comics section. This allows creators to communicate with users from their amateur days and to build strong trust and intimacy over a long period (Shim et al., 2020). A strong bond between users and creators is associated with a greater desire to protect the creator's works and copyrights and a willingness to pay for their favorite creator's works (Bonner & O'Higgins, 201; Chiou et al., 2005). The greater the users' sense of guilt or remorse regarding the damage caused by illegal content use, the more likely they are to refrain from such behavior (Park, 2015; Levin et al., 2004). Users who have a high level of intimacy with the creators are more likely to have a negative attitude towards illegal content use (Holm, 2014).

Conversely, the use of message framing can be employed to influence information in a desired direction, thereby modifying the perceptions and behaviors of those who receive the message (Ferguson & Gallagher, 2007). Message framing is the deliberate setting of the frame of a message to guide people's choices, attitudes, and behaviors in a specific direction. It can be broadly divided into gain framing and loss framing (Rothman et al., 1993). Gain framing emphasizes the desirable outcomes of a particular behavior, with the intention of inducing people to act. In contrast, loss framing highlights the undesirable outcomes of a particular behavior, with the objective of preventing people from acting (Maheswaran & Levy, 1990). For instance, gain framing related to webtoons can emphasize the positive aspects, such as enabling creators to continue their creative activities through legal

webtoon usage or ensuring the long-term availability of their favorite works. When exposed to messages emphasizing gain framing, users will recognize the benefits and advantages of legal webtoon usage and will be motivated to continue paying legitimate fees. Conversely, when exposed to loss framing messages that highlight the potential punishment for illegal webtoon usage (not using legal webtoons) or the financial damage to creators, users will recognize the negative outcomes of illegal webtoon usage and avoid it.

Consequently, despite the availability of identical information, individuals' choices, attitudes, and behaviors will diverge according to whether the message emphasizes gains or losses (Rothman et al., 1993). As gain and loss framing emphasize opposite aspects of a single behavior, the effects of messages promoting the use of legal content have been contradictory (Meyerowitz & Chaiken, 1987; Moon et al., 2015; Rothman et al., 1993; Sinha & Mandel, 2008). Some studies have indicated that highlighting gain message framing is more effective in promoting legal content use, as negative messages can provoke psychological resistance (Moon et al., 2015; Sinha & Mandel, 2008; Whitman et al., 2024). Other researchers propose that emphasizing loss message framing is more effective in promoting legal content use by highlighting strong psychological stimuli and threats (Koay, 2023; Meyerowitz & Chaiken, 1987; Ullman & Silver, 2018). To date, no clear conclusion has been reached regarding the relative effectiveness of gain and loss framing. Furthermore, few studies have examined effective message framing in the illegal webtoon industry.

Previous research has indicated that individuals respond strongly to messages that are highly relevant to themselves (Loroz, 2007; Stapel and Velthuisen, 1996; Maheswaran & Meyers-Levy, 1990). This has led to the development of existing message framing, which assumes that users are primarily concerned with messages that are relevant to them. However, in the case of webtoons, a particularly strong bond is formed between the creator and the user. Consequently,

users will refrain from illegal webtoon use if they believe that their illegal behavior could potentially cause significant harm to the creator (Levin et al., 2004). By employing appropriate message framing strategies, users with a high level of intimacy with the creator can be persuaded to refrain from illegal webtoon use by emphasizing messages that highlight the creator's loss of creative motivation and financial loss. When presented with messages that emphasize the value of the creator's creations and financial benefits, users with a high level of intimacy with the creator may be more likely to perceive the use of legal webtoons as the ethical and financially prudent choice. Consequently, individuals with high levels of attachment and familiarity with the subject are more likely to pay the appropriate price for the product (Söderlund, 2002) and to behave in an ethical manner to maintain a long-term relationship with the creator (Fullerton et al., 1996).

The objective of this study is to examine the influence of intimacy with webtoon creators on the perception of illegal webtoons and to identify the most effective message framing to prevent paid webtoon users from transitioning to illegal webtoon users. To ensure the continued growth of the webtoon industry, it is essential to implement technical measures to prevent the illegal distribution of webtoons while simultaneously preventing existing paid webtoon users from being drawn into illegal webtoons. Because webtoon creators and users form a strong bond through active communication, paid webtoon users are likely to consider the negative impact on both themselves and the webtoon creators when tempted to use illegal webtoons. In addition to the "gain" and "loss" message framing, the extent to which users perceive the damage caused to creators by illegal webtoon use is expected to differ depending on whether the message subject is "me" or "others (creators)". Consequently, the objective of this study is to examine the impact of illegal webtoon use on attitudes towards creators, utilizing "intimacy felt towards the creator" as an independent variable and "message framing

(gain/loss)" and "message subject (me/others)" as moderating variables. If the most effective message for reinforcing negative attitudes towards illegal webtoons can be derived, it is anticipated that the results of this study can be utilized within webtoon platforms as part of a campaign to prevent illegal webtoon use.

2. Theoretical Background

2.1 Contents Piracy and Illegal Webtoon Usage

The development of information and communication technology (ICT) has enabled the real-time use of digital content through channels or platforms (Fietkiewicz, 2020). Digital content is characterized by the convergence of marginal cost of production and distribution to zero, which facilitates its production and allows content providers to offer high-quality content to consumers (Rayna, 2008). However, this characteristic of digital content also renders it simple for consumers who initially purchased the content to resell or share digital products using copies (Lambrecht et al., 2006). Piracy is defined as the act of copying, purchasing, or distributing software or content without the requisite licenses (Wang et al., 2012; Prasad & Mahajan, 2003). In contrast to traditional methods, the illicit copying of digital content via platforms such as live streaming or webtoons does not necessitate the downloading of files, rendering it an appealing alternative for users who are at a reduced risk of encountering viruses or hacking (Hsiao & Ayers, 2019). Despite the abundance of information it contains, digital content is relatively simple to copy, allowing users to obtain illegal content with technical quality comparable to the original (Peitz & Waelbroeck, 2006). Furthermore, the capacity to utilize paid content at a low cost represents a compelling incentive for users to engage in the illicit copying and utilization of digital content (Bhattacharjee et al., 2006).

Furthermore, Webtoons have also been subject to online illegal copying and distribution. The ratio of illegal webtoon traffic to legal webtoon traffic, known as the "legal webtoon market

infringement rate," has been estimated to be approximately 40% (KOCCA, 2024). In contrast to films and music, webtoons do not necessitate streaming or downloading, thereby facilitating the illicit consumption of content in comparison to other forms of media (Choi & Kwak, 2020). Webtoons exhibit distinctive serialization characteristics, including 1) platform-based serialization, 2) weekly serialization, and 3) the existence of serialization practices (Cho, 2021). These three characteristics of webtoons have been identified as sources of inconvenience for consumers when accessing legal content.

Firstly, webtoons offer a diverse range of content services on various platforms, including Naver Webtoon, Kakao Webtoon, and Lezhin Comics. To access the desired works, consumers must complete a series of processes, including platform access, search, login, and payment. If the desired works are distributed across multiple platforms, the user must repeat the same process in an inconvenient manner. Subsequently, the majority of webtoons are serialized on a weekly basis on designated days. Each work comprises between 200 and 300 episodes and is serialized over an extended period of several years. Readers frequently read new episodes and revisit previous episodes to recall the content or binge-read when a certain number of episodes have accumulated. If most episodes are made available for a fee, the option of using multiple episodes simultaneously can prove onerous for users. Finally, a standardized serialization practice has emerged in Korean webtoon production, with approximately 60-80 cuts per episode. Creators create webtoons in accordance with this practice, although there are instances where certain criteria are not met. In such instances, paid users express their dissatisfaction with the lack of compensation for episodes that do not meet the criteria by leaving comments or likes and subsequently discontinuing use. Indeed, research indicates that users may resort to accessing illegal webtoons due to the perceived lack of fairness in the value proposition offered by paid webtoons. Indeed, as evidenced by the findings of

the FGI in the Korea Creative Content Agency report, users identified several factors as motivating their use of illegal webtoons. These included the perceived burden of paid subscription costs, the convenience of accessing webtoons across multiple platforms simultaneously, the inconvenience of split payments across multiple platforms, and the perception that webtoons are not worth paying for (KOCCA, 2024).

While the free provision of illegal webtoons may appear to facilitate the rapid spread of content and lower the entry barrier for new users to paid webtoons in the short term, it has a negative impact on the development of the online content industry in the long run (Wang et al., 2013). The illicit dissemination of webtoons has a detrimental impact on the sales of original content, resulting in a reduction in revenue within the webtoon industry and a decline in the production of content by stakeholders and creators in the industry (Henning-Thurau et al., 2007). The majority of webtoon creators rely on revenue generated from paid webtoon sales as their primary source of income. Consequently, a decline in paid sales revenue may result in some small-scale webtoon creators facing financial challenges and ultimately leading to the cessation of their creative endeavors (Seo & Kim, 2022). Furthermore, in the absence of copyright protection for their content, creators may lose the motivation to create new works (Choi & Suh, 2022). A reduction in the incentive for creators to produce webtoons due to the impact of illegal webtoons may result in a deterioration in the quality of webtoon content, with the potential for a contraction of the industry in the long term (Park, 2019). Furthermore, the gravity of the issue posed by illicit webtoons is intensifying as they are translated and edited during the distribution process, thereby expanding the scope of the damage to overseas markets (Park, 2019).

As the damage caused using illegal content continues to increase, it is imperative to implement measures to prevent the further spread of such damage. Previous studies have concentrated on strengthening digital rights management (DRM)

(Choi et al., 2010; Sundararajan, 2004), increasing penalties for distributors (Vida et al., 2012), and voluntary regulation by platforms (Yar, 2018) to prevent the distribution of illegal content (Vida et al., 2012). In the digital industry, efforts are being made to curb the use of illegal content through educational initiatives with the aim of preventing the damage caused by illegal copying and the implementation of regular campaigns. Nevertheless, the measures taken by the government and online platforms, such as strengthening penalties, deleting posts, and reporting, are either one-off or lack effectiveness, thereby limiting the prevention of illegal content use (Lee et al., 2018). Institutions such as the Ministry of Culture, Sports and Tourism and the Korea Creative Content Agency are collaborating with creators to implement campaigns aimed at preventing the illegal distribution of webtoons, including 'Happy Toon Together'. However, there is a lack of awareness surrounding these campaigns, and it is challenging to sustain consumer exposure, which has resulted in limited effectiveness. Furthermore, within the context of webtoon sites, there are only warning messages related to the illegal distribution of webtoons, and no measures can be identified that would prevent the transition of paid webtoon users to illegal webtoon users. As the enactment of legislation to penalize illicit webtoon users is being postponed, it is imperative to implement distinct measures to forestall the intensification of the detrimental impact of illicit webtoons.

One of the most effective methods for preventing illegal behavior is to inform users that their actions are wrong (Wolfe et al., 2008). If consumers are accurately informed of the damage caused by illegal content through campaigns or message framing, users will refrain from using illegal content (Jeong & Khouja, 2013). In online spaces, there is a tendency for the guilt associated with the unauthorized use of others' intellectual property to be weak, due to the nature of digital content, which makes it easy to copy and distribute, and the inadequacy of legal sanctions (Phau et al.,

2014, Phau et al., 2016). In addition, users continue to perceive a low probability of punishment for the use of illegal content, which seems to contribute to a low level of psychological resistance to illegal acts (Park, 2019). It is evident that preventing consumers' use through external measures cannot be a fundamental solution. Therefore, it would be more effective for users to voluntarily give up using illegal webtoons and use content in a legal manner (Sinha & Mandel, 2008).

2.2 Intimacy with Webtoon Creators and Perception of Illegal Webtoons

The webtoon industry has consistently endeavored to foster a sense of intimacy between creators and users. In 2023, Naver Webtoon introduced a dedicated space for creators, designated as the 'Creator Home', and implemented a comment feature with the objective of expanding the reader fandom and ecosystem within the platform (Baek, 2023.11.09). User comments serve several positive functions for creators, including the provision of real-time evaluation and advice on their works, as well as scenario suggestions. Active communication and participation from users contribute to the strengthening and expansion of the foundation of the webtoon industry (Han, 2017). Users' empathies with the production and narrative of webtoons, project their emotions, and engage in emotional exchanges with creators through various communication channels, including the creator's social media accounts and fan cafes (Kim, 2022; Kim, 2016). As intermediaries between culture and users, creators play an important role in conveying the value of their works to users, thereby forming users' positive perceptions and attachments to the works (Hadley, 2021). Creators can cultivate a fan base that is supportive and loyal to them by establishing strong connections with users. Fans demonstrate behaviors that protect the rights of their favorite creators, thereby increasing the relational intimacy with the creators (Jang & Park, 2019). The bonds and intimacy formed between creators and users enhance the vitality of content (Kim et al., 2023) and serve as the driving force for

the formation of a strong 'fandom' for creators (Yecies et al., 2020; Nam & Jung, 2022).

The establishment of a close relationship with creators can serve to inform users of the potential consequences of their illicit actions, thereby encouraging them to refrain from the use of illegal content (Levin et al., 2004). Chiou et al. (2005) demonstrated that readers with a higher level of intimacy with creators are more active in paid subscriptions to the respective contents and tend to refrain from illegal use. Readers with a high level of intimacy with creators demonstrate a strong awareness of the importance of protecting the creators' copyrights and creative motivation, which in turn increases their motivation to use webtoons legally. The strength of the bond between users and creators has been found to influence the perception of guilt associated with the use of illegal content. As the sense of guilt about illegal copying increases, the likelihood of engaging in such behavior is reduced (Higgins et al., 2007; Holm, 2014). In other words, users with a higher level of intimacy with creators are expected to perceive the benefits that creators receive from legal webtoon use or the damage that illegal webtoon use inflicts on creators more strongly. Consequently, research question 1 and hypothesis 1 were formulated.

RQ1: What is the effect of intimacy with a webtoon creator on attitudes towards illegal webtoons?

H1: The higher the intimacy with webtoon creators, the more negative the attitude toward illegal webtoons will be.

2.3 Message Framing and Illegal Webtoons

In accordance with the prospect theory proposed by Kahneman & Tversky (1979), individuals make decisions by evaluating and comparing future gains and losses based on the present. For instance, individuals tend to select the option with a 100% probability of gaining \$3,000 over the alternative with a 20% probability of gaining \$4,000. However, when presented with a scenario where the probability of loss is 100% and the probability of gain is 80%, the majority of individuals will

select the option with a 80% probability of loss (Kahneman & Tversky, 1979). When comparing options 1) and 2), individuals tend to adopt a risk-averse approach, selecting option 1) which offers a guaranteed gain, even if the potential benefit is smaller than that offered by option 2). Conversely, when confronted with a certain loss of 100% as in option 3, people tend to choose option 4, even if it involves risking a larger amount, because there is a chance, albeit low, of gaining something (Tversky & Kahneman, 1984; Gallagher & Updegraff, 2012). In other words, individuals tend to avoid risk when they stand to gain and take risks when they face losses (Levy, 1990).

The concept of message framing theory can be elucidated through the lens of prospect theory. This theory posits that the focus of a message can influence the choices, attitudes, and behaviors of individuals, even when the information conveyed remains unchanged (Rothman et al., 1993). Message framing is broadly divided into gain and loss framing (Buda & Zhang, 2000). Gain framing is a persuasive technique that induces people to perform a particular action by highlighting the benefits of doing so. In contrast, loss framing is a strategy employed to prevent people from performing a certain action by emphasizing the risks or disadvantages of not doing so. This distinction is evident in the work of Maheswaran and Levy (1990) and Jeong et al. (2020). To illustrate, in a breast self-examination (BSE) campaign, if gain framing is emphasized, the message may highlight that five minutes of self-examination each month can facilitate the early detection of tumors in women. In contrast, if loss framing is emphasized in the same campaign, the message may highlight that failing to perform 5 minutes of self-examination each month may result in missed tumor detection and more challenging treatment (Meyerowitz & Chaiken, 1987). In a campaign with the same objective of encouraging breast self-examination, the content of the message may differ depending on whether loss or gain framing is emphasized. The appropriate utilization of message framing allows for the manipulation of

information to be conveyed in a positive or negative manner, with the objective of influencing the perceptions and behaviors of individuals who encounter the message in a desired direction (Ferguson & Gallagher, 2007).

The concept of message framing has been employed primarily in studies of political campaigns related to health, with the objective of encouraging the adoption of beneficial health behaviors, such as vaccination (Kim et al., 2020; Gallagher & Updegraff, 2012; Gursoy et al., 2022), health screenings (Rothman et al., 1993), and the prevention of excessive alcohol consumption and smoking (Quick & Bates, 2010). Previous studies have demonstrated that gain framing is an effective approach for encouraging the adoption of disease prevention behaviors, such as vaccination, smoking cessation, and exercise. Conversely, loss framing has been shown to be more effective in promoting disease detection behaviors, particularly in relation to skin cancer, HIV, and other diseases (Gallagher & Updegraff, 2012; O'Keefe & Jensen, 2007). In the context of disease detection behaviors, individuals may undergo tests with the possibility of currently having the disease in mind, which can lead to feelings of anxiety and a sense of significant risk, fearing that the disease might be detected (O'Keefe & Jensen, 2007). Conversely, disease prevention behaviors are designed to reduce the probability of individuals becoming unwell in the future, thereby making them less risky than disease detection behaviors which confirm whether they are currently unwell (O'Keefe & Jensen, 2007). Consequently, loss messages are more effective for disease detection behaviors with a higher risk, while gain messages are more effective for disease prevention behaviors with a lower risk. These findings are consistent with the prospect theory proposed by Kahneman and Tversky (1979), which posits that individuals tend to avoid risk in low-risk contexts and seek risk in high-risk contexts.

Furthermore, studies analyzing how individual behavior differs when gain/loss message framing is emphasized to solve social problems caused by digital piracy have yielded interesting

results (Moon et al., 2015; Sinha & Mandel, 2008; Whitman et al., 2024). The results of the studies indicate that gain framing is more effective than loss framing, as it tends to elicit a relatively lower level of psychological resistance or perceived risk. Moon et al. (2015) found that the effect of loss-framed messages in preventing illegal music downloading behavior was reduced compared to gain-framed messages. This is due to the negative wording of messages provoking psychological reactance (Quick & Bates, 2010). When presented with negative messages that prohibit certain behaviors, users experience a sense of threat to their freedom, resulting in feelings of discomfort and fear. Consequently, they act in opposition to the message (Clayton, 2022). For instance, individuals exposed to loss-framed messages may resort to the use of illegal webtoons as a form of rebellion if they encounter a message indicating that the use of illegal webtoons is being prohibited by policy authorities. In other words, specifying the undesirable consequences of illegal acts can provoke people's rebelliousness, leading to an increase in illegal copying behavior, contrary to the original purpose (Whitman et al., 2024). Sinha and Mandel's (2008) study also demonstrated that emphasizing the benefits of using websites in a legal manner is more effective in preventing digital piracy than highlighting the possibility of punishment for using illegal sites. The utilization of gain message framing can persuasively emphasize that the use of legal content can contribute to the development of the industry and increase individual benefits (Jeong & Yoon, 2014).

Conversely, research findings have indicated that loss framing may be more effective than gain framing (Levin et al., 2007; Ullman & Silver, 2018). It has been demonstrated that individuals tend to pay greater attention to negative messages than positive ones (Smith & Petty, 1996). Consequently, focusing on loss messages leads to the generation of stronger psychological stimuli and a sense of risk (Koay, 2023). Indeed, negative framing has been demonstrated to diminish the intention to engage in illicit copying behavior by

underscoring the potential for legal repercussions (Sinha & Mandel, 2008). Whitman et al. (2024) demonstrated that messages emphasizing the possibility of legal punishment are effective in reducing women's intention to use illegal content. In Ullman & Silver's (2018) study, individuals exposed to messages emphasizing the potential legal consequences of illegal downloading demonstrated a reduction in their use of illegal content. Consequently, loss message framing has been demonstrated to be more effective than gain message framing in increasing users' psychological fear and anxiety (Meyerowitz & Chaiken, 1987).

Campaigns that emphasize the positive aspects of legal webtoon use can highlight advantages such as the continuous growth of the webtoon industry and the availability of high-quality works based on legal webtoon use. Those exposed to gain framing will recognize the benefits and advantages of legal webtoon use and will be willing to pay a fair price for using webtoons. Conversely, when loss message framing is employed, users will perceive the potential losses and risks associated with illegal webtoon use, including the possibility of legal repercussions and the financial and mental damage to creators. This will encourage them to refrain from using illegal webtoons. There is no consistent research finding on the effectiveness of different messages in preventing digital piracy. Furthermore, few studies have examined the effects of message framing in the context of illegal webtoons. Considering the preceding discussion, the following research question can be derived:

H2: Compared to loss framing, exposure to gain framing will result in more negative attitudes toward illegal webtoons as intimacy with webtoon creators increases.

2.4 Message Subject and Illegal Webtoons

When individuals perceive the content of a message to be highly relevant to themselves, they tend to process the message content more cognitively (Loroz, 2007) and modify their behavior

accordingly (Stapel and Velthuis, 1996; Maheswaran & Meyers-Levy, 1990). The concept of message framing has been employed in the context of health campaigns that encourage individual behaviors, such as health screenings (Gallagher & Updegraff, 2012; GURSOY et al., 2022; O'Keefe & Jensen, 2007). The objective of message framing related to illegal copying is to prevent individuals from engaging in illegal activities. Consequently, the content of the message focuses on the potential benefits and losses that the user can obtain (Moon et al., 2015; Sinha & Mandel, 2008; Whitman et al., 2024). When the message subject is "me," users perceive a high relevance between the message content and themselves, leading to a willingness to change their own behavior. For instance, when individuals perceive that the legal consequences of engaging in illegal activities are certain and swift (Williams and Hawkins, 1986), or when they anticipate significant benefits from legal use (Sinha & Mandel, 2008), they are more likely to refrain from such activities. In study by Ullman & Silver (2018), it was found that the most effective way to deter users' illegal content usage behavior is to utilize messages stating that 'I can be a direct subject of punishment by engaging in illegal downloading'. Furthermore, research findings indicate that gain framing, which presents the benefits that users can obtain through legal content use, is an effective deterrent to illegal content use for individuals who perceive the problem of illegal copying as serious (Sinha & Mandel, 2008).

The subjects affected by the consumption of illegal content include not only the individual user, but also the creators of the content in question. Creators are unable to protect their copyrights, are deprived of fair profits and royalties, and lose their motivation to create due to users' illegal content use (Choi & Suh, 2022; Levin et al., 2004). Those who engage in the use of illegal content are more likely to engage in illegal copying when they perceive it as a harmless activity or fail to recognize the impact on third parties (Levin et al., 2004; Hoon Ang et al., 2001). Freestone & Mitchell (2004) conducted a qualitative study on Generation Y users and found

that users engaged in illegal copying behavior actively and without hesitation, as they believed that their actions did not directly cause harm to digital content sellers. Hoon Ang et al. (2001) found that individuals who purchased illegal content perceived that the act of using illegal copies did not cause significant damage to singers or the music industry.

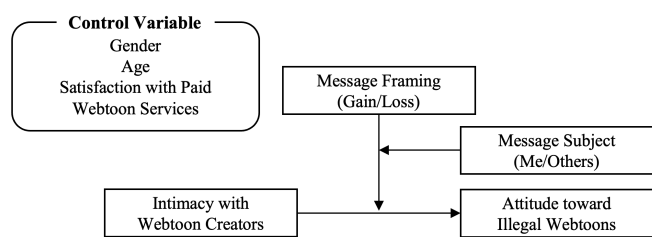
Conversely, when individuals perceive their actions as unethical, they may attempt to modify their conduct (De Corte & Van Kenhove, 2017). The greater the users' feelings of guilt or remorse regarding the issues that arise from the use of illegal content, the more their illegal usage behavior will be suppressed (Park, 2015). Indeed, research has demonstrated that messages emphasizing the damage caused by illegal copying to creators or the creative industry are more effective in increasing negative perceptions and reducing users' digital illegal copying intentions than messages emphasizing legal punishment for individuals (De Corte & Van Kenhove, 2017). The webtoon industry has fostered a strong bond between users and creators, leading to the formation of a dedicated fan base (Yecies et al., 2020). Consequently, when considering the use of illegal webtoons, there is a high probability that users will consider the impact on the creators and creators. Moreover, research findings indicate that loss message framing is most effective when focusing on oneself, while gain message framing is most effective when focusing on others (Loroz, 2007). Consequently, it can be anticipated that the impact of loss and gain framing messages on user behavior may differ depending on the message subject.

In this study, we distinguished the message subject of message framing (gain vs. loss) as either 'self' or 'others,' and anticipated that attitudes toward illegal webtoons would differ depending on the focus of the message framing. For example, the consequences of illegal webtoon use can be divided into two categories: legal punishment that the user may receive and financial loss that others may suffer. The strength of users' perceptions or behaviors regarding the use of legal webtoons may

vary depending on which message they encounter. Consequently, the following research hypothesis can be derived.

H3: The moderating effect of message framing on the relationship between intimacy with webtoon creators and attitudes toward illegal webtoons will be stronger when the message subject is others (creators) rather than self.

Figure 1 presents the research model of this study.



<Figure 1> Research model

3. Research Method

3.1 Experimental Design and Stimuli

The purpose of this study is twofold: firstly, to confirm the influence of intimacy with webtoon creators on the perception of illegal webtoons; and secondly, to derive effective messages to prevent paid webtoon users from converting to illegal webtoon users. To this end, intimacy with webtoon creators was employed as an independent variable, with message framing and message subject serving as moderating variables. The objective was to examine which message framing leads to higher negative attitudes toward illegal webtoons. In line with the studies by Gursoy et al. (2022) and Loroz (2007), the message framing was manipulated into four main conditions, and the differences in attitudes toward illegal webtoons were analyzed according to each condition. The first message framing condition corresponds to a loss message framing-me, the second to a loss message framing-others(creators), the third to a gain message framing-me, and the fourth to a gain message framing-others(creators). The respondents were


randomly assigned to one of the four experimental conditions. The degree of intimacy felt towards webtoon creators was gauged using a 7-point Likert scale comprising items that had been validated in previous studies and which were employed as a moderating variable.




The composition of the stimuli for the four conditions is as follows: The first set of stimuli comprised messages about the potential losses incurred by the individual (condition 1) and by other parties (condition 2) because of the use of illegal webtoons. Condition 1 included the legal penalties that the user might face for using illegal webtoons. Recognizing the possibility of legal punishment for their illegal actions can lead users to cease such behaviors (Shinha & Mandel, 2008). Indeed, legal punishment is a significant concern for those engaging in the use of illegal webtoons. Given that the current legislation only permits the imposition of penalties on those who violate copyright law (up to five years' imprisonment and a fine of up to 50 million Korean KRW), this standard was employed to delineate the parameters of the punishment to be imposed on users. Condition 2 outlined the financial and psychological losses that creators would suffer because of users' illegal webtoon use. The utilization of webtoons by users without the requisite permissions may infringe upon the copyrights of creators, thereby preventing them from receiving a fair value for their creations. Subsequently, the gain message stimuli delineated the advantages I would accrue (condition 3) and those that others, namely creators, could derive (condition 4) from the utilization of legal webtoons. The benefits I would gain in condition 3 included messages about the necessity of protecting oneself from punishment related to illegal content use and the ability to enjoy favorite works for a long time by preserving the webtoon ecosystem. The benefits that others, namely creators, could gain in condition 4 included content about the ability to sustain their livelihoods and continue their creative activities through fair monetary value compensation.

Prichard et al. (2022) posit that effective

warning messages should adhere to four key principles: firstly, they should be constructed using clear and concise language; secondly, they should provide explicit information about the actions to be taken to prevent specific risks or potential harm; thirdly, they should be provided by a trustworthy source; and fourthly, they should utilize different colors according to the level of risk. In this study, the stimuli were kept to a maximum of three lines to ensure readability. Furthermore, the risks associated with illegal webtoon use and the benefits of legal webtoon use were specified. Furthermore, Naver's logo, which is associated with the use of illegal webtoons, was presented to enhance the credibility of the source. Additionally, important sections were highlighted in red. To enhance the persuasive impact of the message, the copyright-related terminology employed on webtoon platforms was integrated with message framing techniques and employed in the experiment. The stimuli employed in this study are presented in <Table 1>.

<Table 1> Composition of Stimuli According to Message Framing and Message Subject

Loss Message Framing
<p>Condition 1 : Me</p> <hr/> <p>This work is published under a formal serialization contract with Naver and is protected by copyright law.</p> <p>Illegal use of webtoons <u>threatens my life</u> and can result in a prison sentence of up to 5 years or a fine of up to 50 million KRW.</p> <p style="text-align: center;"></p>
<p>Condition 2 : Others</p> <hr/>

<p>This work is published under a formal serialization contract with Naver and is protected by copyright law.</p> <p>Illegal use of webtoons <u>endangers the livelihoods of creators</u> and causes them to abandon their <u>creative activities.</u></p> <p style="text-align: center;"></p>
<p style="text-align: center;">Gain Message Framing</p> <hr/> <p>Condition 3: Me</p> <hr/> <p>This work is published under a formal serialization contract with Naver and is protected by copyright law.</p> <p>Legal use of webtoons <u>protects my life as a reader</u> and <u>ensures that I can enjoy my favorite works for a long time.</u></p> <p style="text-align: center;"></p>
<p>Condition 4 : Others</p> <hr/> <p>This work is published under a formal serialization contract with Naver and is protected by copyright law.</p> <p>Legal use of webtoons <u>protects the livelihoods of creators</u> and <u>ensures they receive fair compensation for their time and effort.</u></p> <p style="text-align: center;"></p>

3.2 Sample and Measurement Items

The experiment was conducted in an online environment using the data collection platform Pickply. The survey was conducted over a four-day period from 28 May to 31 May 2024. The experimental subjects were limited to users between the ages of 20 and 50 who had experience using paid webtoons through screening questions. The 'Webtoon User Survey' report by the Korea Creative Content Agency indicates that over 80% of paid webtoon users are between the ages of 20 and 50. Most of these users are in their 20s and 30s (KOCCA, 2023). To recruit participants suitable for this study, screening questions were used to ascertain whether they were adults and had

experience with paid webtoons.

A total of 240 participants were randomly assigned to one of four groups in the experiment. The participants were requested to provide information regarding their preferred webtoon work and creator, presented with a hypothetical scenario of utilizing the work, and subsequently exposed to the experimental stimuli. The respondents were required to respond to a series of questions designed to measure the independent variable of intimacy with webtoon creators, the dependent variable of attitudes toward illegal webtoons, the control variable of satisfaction with paid webtoon services, and statistical characteristics such as gender and age. The items employed in the study were reconstructed based on items validated in previous studies and measured on a 7-point Likert scale (1: strongly disagree, 7: strongly agree). The items used in this study are presented in <Table 2>.

The concept of intimacy with webtoon creators refers to the degree of intimacy that webtoon users feel toward creators. The measurement items were adapted from those used in Sinclair and Dowdy's (2005) study, with a Cronbach's alpha of .922. Attitudes towards illegal webtoons refer to the degree of negative perceptions about illegal webtoons, the items used in the study by Al-Rafee and Cronan (2005) were utilized (Cronbach's $\alpha = .955$). Satisfaction with paid webtoon services refers to the level of satisfaction with paid webtoons, such as previews provided by webtoon services. The items used in the Chae et al. (2015)'s study were reconstructed (Cronbach's $\alpha = .897$). The reliability analysis of the measurement items demonstrated that all items met the established criteria, with Cronbach's α values exceeding 0.7.

	INT 2	This creator feels like an old friend to me	3.55	
	INT 3	I feel intimacy with this creator	3.99	
	INT 4	I have a deep interest in this creator	4.46	
	INT 5	I understand and affirm the thoughts and feelings of this creator	4.21	
Attitude Toward Illegal Webtoons	ATT 1	Using webtoons on this site is a bad idea	5.34	.955
	ATT 2	Using webtoons on this site is a foolish idea	5.26	
	ATT 3	I dislike using webtoons on this site	5.19	
	ATT 4	Using webtoons on this site is unpleasant	5.12	
Satisfaction with Paid Webtoon Services	SAT 1	I am satisfied with the paid webtoon service	5.27	.897
	SAT 2	I enjoy using the paid webtoon service	5.09	
	SAT 3	The paid webtoon service meets my needs	5.37	
	SAT 4	The paid webtoon service gives me satisfaction	5.39	

<Table 2> Measurement Items

Variables	Items	M	Cronbach's α
Intimacy with Webtoon Creators	INT 1 I feel emotionally connected to this creator	3.69	.922

3.3 Analysis Method

The study employed the statistical software package SPSS 29.0 for the analysis. Firstly, descriptive statistical analysis and correlation analysis were conducted to identify the demographic characteristics and examine the

correlations among the main variables used in the study. Cronbach's α values were derived to verify the validity and reliability of the measurement items employed in this study. Subsequently, an independent samples t-test was conducted to ascertain the efficacy of the manipulation check, while multiple regression analysis was employed to investigate the interrelationships between the variables.

4. Results

4.1 Respondents profile

We collected a total of 240 responses from adult users with experience using paid webtoons, with 60 respondents per group. We excluded 50 respondents from the analysis who failed the manipulation check items or responded insincerely. As a result, the analysis was conducted with a total sample of 190 respondents. The demographic characteristics of the respondents are shown in Table 3. The gender ratio of the respondents was 72 males (37.9%) and 118 females (62.1%). Over 85% of the respondents were in their 20s and 30s. According to a report by KOCCA (2023), approximately 46% of all webtoon users have experience with paid webtoon services, with the highest proportion in their 20s and 30s. Given that the study targeted users with experience in paid webtoons, the age distribution of the sample appears appropriate. Additionally, 61.1% of the respondents had a college degree, and the largest income group was those earning between 2 million and 3 million KRW (27.4%).

<Table 3> Descriptive Statistics(n=190)

Variables	Category	Frequency (%)
Gender	Male	72 (37.9)
	Female	118 (62.1)
Age	20s	87 (45.8)
	30s	76 (40.0)
	40s	22 (11.6)
	50s	5 (2.6)
Education	High school graduate or below	13 (6.8)
	Some College	39 (20.5)
	College graduate	116 (61.1)
	Graduate school or	22 (11.6)

	higher	
Income	Less than 1 million KRW	50 (26.3)
	1 million to less than 2 million KRW	20 (10.5)
	2 million to less than 3 million KRW	52 (27.4)
	3 million to less than 4 million KRW	30 (15.8)
	4 million to less than 5million KRW	18 (9.5)
	5 million KRW or more	20 (10.5)
Total		190 (100)

4.2 Manipulation Checks

To verify whether the manipulation of message framing and message subject in the stimuli was appropriately conducted, an independent samples t-test was performed (<Table 4>). First, the independent samples t-test results for message framing showed a statistically significant difference between the gain framing group and the loss framing group. Specifically, for the loss framing item, the mean for the loss group was 5.68, and the mean for the gain group was 3.75 ($t=10.23$, $p<.001$). For the gain framing item, the mean for the loss group was 3.19, and the mean for the gain group was 5.59 ($t=-12.74$, $p<.001$). Similarly, the independent samples t-test for message subject also showed significant differences between groups. For the item asking whether the message focused on 'me', the mean for the group exposed to self-related messages was 5.72, while the mean for the group exposed to other-related messages was 3.11 ($t=13.37$, $p<.001$). For the item asking whether the message focused on 'others', the mean for the self-related message group was 3.18, and the mean for the other-related message group was 5.72 ($t=-12.45$, $p<.001$). These results confirm that the stimuli were appropriately manipulated according to message framing and message subject.

<Table 4> Manipulation Check Results

Items	Group	n	M(SD)	t	Cohen's d
Loss	Loss	98	5.68	10.23**	1.29

framing	framing		(1.15)	*	1.31
	Gain framing	92	3.75 (1.43)		
Gain framing	Loss framing	98	3.19 (1.56)	-	1.37
	Gain framing	92	5.59 (0.97)	12.74** *	
Message Subject 'me'	Message Subject 'me'	90	5.72 (1.07)	13.37** *	1.39
	Message Subject 'others'	100	3.11 (1.60)		
Message Subject 'others'	Message Subject 'me'	90	3.18 (1.56)	- 12.45** *	1.39
	Message Subject 'others'	100	5.72 (1.21)		

*** $p < .001$

4.3 Research Hypothesis Testing

To examine the effects of intimacy with webtoon creators, message framing, and message subject on attitudes toward illegal webtoons, multiple regression analysis was conducted (<Table 5>). In Model 1, covariates such as gender, age, and satisfaction with paid webtoon services were included. Model 2 examined the main effects of the independent variable (intimacy with webtoon creators) and the moderating variables (message framing and message subject) on attitudes toward illegal webtoons. Model 3 analyzed the interaction effects between the independent and moderating variables, while Model 4 tested the three-way interaction effect among intimacy with webtoon creators, message framing, and message subject. To account for multicollinearity, the continuous variable of intimacy with webtoon creators was mean-centered before analysis.

In Model 1, gender ($\beta = -.18, p < .05$) and age ($\beta = -.15, p < .05$) had statistically significant negative effects on attitudes toward illegal webtoons, while satisfaction with paid services (β

$= .23, p < .001$) had a significant positive effect. Model 2 included the main variables of intimacy with webtoon creators, message framing, and message subject, revealing that intimacy with webtoon creators ($\beta = .20, p < .01$) and message subject ($\beta = .15, p < .05$) had statistically significant positive effects on attitudes toward illegal webtoons. Thus, Hypothesis 1 was supported. Model 2 showed a higher model fit compared to Model 1 ($\Delta R^2 = .061, \Delta F = 4.601, p < .01$), indicating that the added variables significantly influenced attitudes toward illegal webtoons, explaining 17% of the variance.

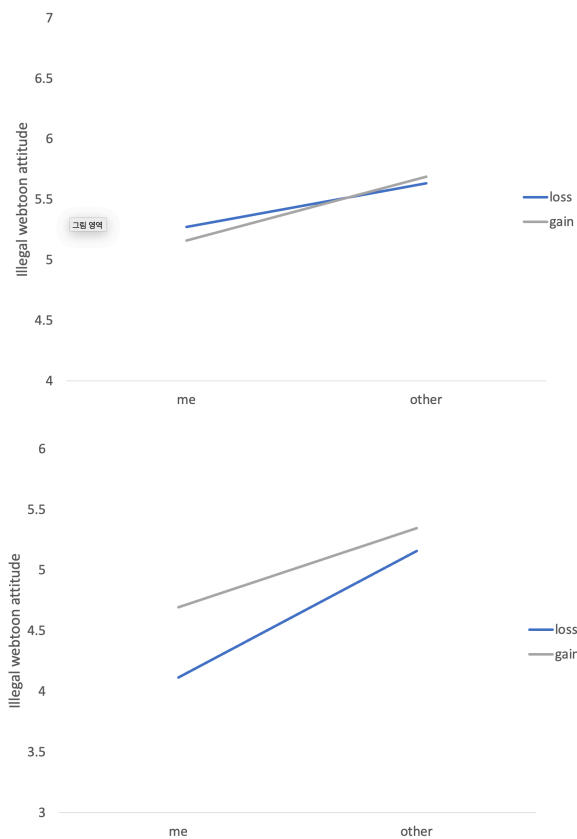
Model 3 included interaction terms between intimacy with webtoon creators (A) and message framing (B), intimacy with webtoon creators (A) and message subject (C), and message framing (B) and message subject (C). As in Model 2, intimacy with webtoon creators ($\beta = .30, p < .05$) had a statistically significant positive effect on attitudes toward illegal webtoons. However, none of the interaction terms were significant, leading to the rejection of Hypothesis 2. Model 3 did not show an improvement in model fit compared to Model 2 ($\Delta R^2 = .008, \Delta F = .625, p = .6$).

Finally, in Model 4, the three-way interaction effect ($\beta = .28, p < .05$) was statistically significant and positively influenced attitudes toward illegal webtoons. The interaction term between intimacy with webtoon creators and message framing ($\beta = -.38, p < .05$) was also significant. Thus, Hypothesis 3 was supported. Model 4 showed an improvement in model fit compared to Model 3 ($\Delta R^2 = .018, \Delta F = 4.128, p < .05$), explaining 22.3% of the variance. These results are illustrated in <Figure 2>.

<Table 5> Analysis of the Relationship between Webtoon Creator Intimacy, Message Framing, and Message Subject on Attitudes Toward Illegal Webtoons (Dependent Variable)

	Model1			Model2			Model3			Model4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
(constant)	4.29	0.54		3.47	0.58		3.01			2.25	0.85	
Gender	-0.50	0.20	-0.18*	-0.45	0.20	-0.16*	-0.46	0.20	-0.16*	-0.45	0.20	-0.16*
Age	-0.27	0.13	-0.15*	-0.25	0.13	-0.14	-0.24	0.13	-0.14	-0.25	0.13	-0.14
Satisfaction of paid webtoon service	0.30	0.09	0.23***	0.26	0.09	0.20**	0.27	0.09	0.21**	0.26	0.09	0.20**
Creator Intimacy(A)				0.19	0.07	0.01**	0.28	0.13	0.30*	0.49	0.17	0.52**
Message framing(B) (loss=0, gain=1)				0.01	0.19	0.15	0.06	0.27	0.02	0.08	0.27	0.03
Message subject(C) (me=0, other=1)				0.42	0.19	0.20*	0.43	0.26	0.16	0.42	0.26	0.15
A * B							0.04	0.14	-0.15	-0.31	0.22	-0.22
A * C							-0.17	0.13	0.02	-0.45	0.19	-0.38*
B * C							-0.02	0.37	-0.01	-0.06	0.37	-0.02
A * B * C										0.56	0.27	0.28*
R^2	0.136			0.197			0.166			0.18		
$adj R^2$	0.123			0.171			0.166			0.18		
ΔR^2	0.136			0.061			0.008			0.018		
ΔF	9.795***			4.601**			0.625			4.128*		
Durbin-Watson	1.749											

* $p < .05$, ** $p < .01$, *** $p < .001$, DV = Illegal Webtoon Attitude



<Figure 2> The Effects of Creator Intimacy, Message Framing, and Message Subject on Attitudes Toward Illegal Webtoons (Top) High Intimacy (bottom) Low Intimacy

5. Discussion

This study examines the impact of intimacy with webtoon creators on the perception of illegal webtoons, aiming to develop message strategies to prevent paid webtoon users from becoming illegal webtoon users. To this end, message framing was categorized into gains and losses, and the study investigated the maximized effect when these gains and losses were related to ‘me’ or ‘others (the creator)’. The results and implications of the study can be summarized as follows:

First, the higher intimacy with the webtoon creator, the stronger negative attitude towards illegal webtoons. Moreover, compared to highlighting the 'losses' caused by using illegal

webtoons and the 'gains' from using legal webtoons for oneself, focusing messages on the creator, a ‘others’, was more effective in enhancing the negative perception of illegal webtoons. The phrases used in traditional message framing focus on the benefits and losses that ‘I(reader)’ can experience. This stems from the tendency of individuals to process information more cognitively when it is directly related to them (Loroz, 2007; Turri et al., 2013). However, webtoon creators and users engage in active communication based on webtoons, forming high levels of intimacy and emotional bonds. Users who feel a high degree of intimacy with the creator are more aware of the damages caused to the creator by illegal webtoons and are motivated to protect the creator's copyright and creative spirit (Chiou et al., 2015; Holm, 2014). Consequently, users with high intimacy with the creator have a stronger negative perception of illegal webtoons.

Second, users with high intimacy with webtoon creators have a stronger negative perception of illegal webtoons. In this context, using messages that emphasize the 'losses' to 'me' or the 'gains' to 'others' (the creator) is more effective in reinforcing negative attitudes. Individuals with a high emotional bond or intimacy with the creator tend to share values with the creator and sometimes even identify with them (Evanschitzky et al., 2006; Turri et al., 2013). These users already have a strong negative attitude towards illegal webtoons due to their clear understanding of the damages to the creator. Hence, messages about the creator's financial losses due to illegal webtoons may no longer reinforce negative attitudes. Instead, clearly outlining the legal consequences of using illegal webtoons, which users are most wary of, can highlight the illegality of such actions. Additionally, informing users through messages that new legal measures against illegal webtoons can be established and will be enforced can create a greater sense of risk regarding illegal webtoon usage.

Third, the impact of intimacy with the webtoon creator on attitudes towards illegal

webtoons can vary depending on the message framing (gain/loss) and the message subject (me/others). For users with high intimacy with the creator, emphasizing 1) the 'losses' to 'me' caused by illegal webtoons, or 2) the 'gains' to 'others' (the creator) from legal webtoons is effective in reinforcing negative attitudes towards illegal webtoons. Individuals process information related to themselves cognitively and information related to others emotionally (Loroz, 2007). Thus, a combination of 'loss-others' and 'gain-me' messages can maximize the message effect (Loroz, 2007). This means that messages focused on 'me' regarding illegal webtoon usage are processed based on rational judgment, considering the objective consequences (legal penalties) of such actions on oneself. In contrast, messages related to 'others' evoke empathy and make one consider the positive impact that legal webtoons have on the creator's copyright and livelihood. Conversely, for users with low intimacy with the creator, gain framing was effective in reinforcing negative attitudes towards illegal webtoons regardless of the message subject (me/others). This result aligns with previous research showing psychological resistance to loss-framed messages among consumers (Quick & Bates, 2010; Clayton, 2022), suggesting that loss messages may provoke a sense of rebellion among users who lack a strong bond with the creator (Whitman et al., 2024). Therefore, in designing message framing to deter illegal webtoon use, it is crucial to consider both the message subject and the relationship between the reader and the user.

The theoretical and practical implications of this study are as follows: First, this study extends the message framing theory by not only considering gain/loss message framing but also subdividing the message subject into me/others. Previous studies on illegal copying and message framing (Moon et al., 2015; Sinha & Mandel, 2008; Whitman et al., 2024) have focused on the relative effects of gain/loss framing but have not addressed perception changes based on the message subject. The results of this study confirmed that messages describing the

losses due to illegal webtoon use and the gains from legal webtoon use from the creator's perspective, others, are effective in enhancing negative perceptions of illegal webtoons. This reflects the key characteristic of the webtoon industry, where emotional exchanges between creators and users are prevalent, highlighting the need to consider the relationship between creators and users in message framing. By subdividing message framing and message subject, this study differentiated itself from previous research by deriving messages that increase negative perceptions of illegal webtoons.

Additionally, the damage caused by illegal webtoons is increasing yearly, reaching 40% of the webtoon industry (KOCCA, 2024). While previous studies have investigated illegal copying of music, movies, and dramas, these types of content differ from webtoons in that there is no 1:1 interaction between creators and users. Webtoon creators and readers actively interact through comments and communities, building bonds, intimacy, and fan bases. Considering these characteristics, deriving effective message framing to reduce illegal webtoon use has practical significance. Webtoon platforms, in particular, need to utilize personalized message framing considering the level of intimacy between creators and users. In addition to specifying penalties for illegal webtoon distributors, platforms should actively use messages that can raise users' awareness of illegal webtoons.

This study has several limitations. First, the differences in attitudes towards illegal webtoons based on message framing were not significant, leading to an absence of moderating effects of message framing. While it is possible that no perception differences exist between gain/loss framing in the webtoon industry, this may also be due to not considering individual differences in moral beliefs or changes in perception over time. Future research should explore additional relationships between various variables. Second, this study used only one message phrase for each condition (message framing-loss/gain x message subject-me/others). Since user perceptions can vary depending on message composition, future

research should utilize a variety of phrases to conduct studies. Finally, this study limited its experimental participants to users aged 20-50 with paid webtoon usage experience. Future research should include users aged 10 and above 50 to enhance external validity. To definitively eradicate illegal webtoons in the future, it is hoped that the findings of this study will be supplemented and effectively utilized within the webtoon industry.

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