Social Comparison Orientation Associated with Psychological Well Being: The Mediated Role of Self-efficacy

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The paper focused on how social comparison orientation people apply influences their psychological well-being and how self-efficacy plays an important role in buffering some negative influence from upward social comparison compared with someone better in one domain. In Festinger's (1954) social comparison theory, the social comparison orientation instructed how people process the information they compared for, and related emotion was induced differently. In this paper, 2,000 college students in Boston were proposed to participate in two experiments that discuss how different social comparison orientations affect their perception of life satisfaction. For the hypothetical result, we proposed that a high level of engagement in social comparison and ability-based social comparison was associated with less life satisfaction than the participants who had a low level of social comparison and opinion-based social comparison. In terms of coping strategy, we assumed that a high level of self-efficacy, which is the belief in capability to achieve a certain goal, will buffer the negative impact from upward comparison and improve the life satisfaction of those participants who like to engage with social comparison and ability-based comparison orientation.

Keywords: social comparison, self-efficacy, life satisfaction, social media

Introduction

In human society, comparing others seems to be a pervasive and fundamental approach to acquiring information. According to Festinger's (1954) theory, social comparison is a powerful mechanism that people use to evaluate their situation for better or worse. Through social comparison, people identify their position in various domains by comparing it with others' performance and status. This comparison, in return, influenced people's perception of experience, behavior, and judgment. However, the orientation of comparison seems to play a very important role in how people process the comparison information as positive or negative. The general orientation was categorized as an upward comparison in which people compare with someone better than them in a domain and a downward comparison in those people compared with a less competent or performative person (Festinger, 1954).

Social Comparison Orientation (SCO)

Much research has been focused on upward comparison of how some individuals benefit from comparing with a better person while others fail to consider it as a positive experience to cope with (Gerber, Wheeler, & Suls, 2018; Hajek & König, 2019). A meta-analysis study of social comparison research was conducted to study how people select their comparison orientation as either upward or downward with underlying factors, and how

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the comparison affects people's self-evaluation (Gerber et al., 2018). The result indicated that people have a preference on selecting upward comparison instead of downward, even when there is a threat present in which people might feel upset by comparing with a better person (Gerber et al., 2018). The reason could be due to the ideology of better than average that people prefer to find similarity with better individuals to ensure their superiority and edge, which boost their self-value and esteem. It might partially explain why people constantly use upward comparison rather than downward comparison. Perceiving a better one as a model to learn instead of a potential competitor that threatens self-status can be beneficial for self-enhancement and improvement, which produces more positive reactions instead of negative feelings. In addition, if people are looking for a better life, then seeking for an upward comparison seems to be reasonable (Gerber et al., 2018).

Another interesting finding is that the comparison has a more powerful effect when people compared with local or intimate social circles with unfamiliar domain (Gerber et al., 2018). The uncertainty about circumstance induced people to make more social comparisons to obtain information (Pavlova, Lechner, & Silbereisen, 2017; Quiroga-Garza, García-Sánchez, Treviño-Elizondo, & Willis, 2018; Downes, Crawford, Seibert, Stoverink, & Campbell, 2021). In other words, on the domains that are more unknown and abstract, people tend to compare themselves with others to gain a clearer picture of situation. For example, in a longitude study of how people coped with occupational uncertainty, participants compare more frequently in high unemployment rate regions to ensure their situation is not deviant, which temporarily brings a boost of self-esteem for finding people sharing a similar situation with them (Pavlova et al., 2017). That is, social comparison also helps people to identify themselves in terms of being socially normal or abnormal.

Therefore, according to Festinger's (1954) social comparison theory, social comparison was also categorized as opinion or ability-based orientation that determines whether or not people receive positive or negative feedback through upward and downward social comparison. In a paper about how these two types of orientation influenced online users' mental health, people with high ability-tendency apply more upward comparison and feel satisfied when they were superior to others, so they tend to perceive others as potential competitors or a threat (Park & Baek, 2018). In contrast, people with high opinion tendency focus more on whether they are socially acceptable, so their comparison will stop as long as their opinions align with the majority of people. Therefore, high ability-based users tend to receive more negative feelings when they were unable to reach a relatively better position in the upward comparison while high opinion-based users tend to consider the better one as a model to learn and receive less negative feedback from upward comparison (Park & Baek, 2018).

Then, the next question is what individual traits might determine people's social comparison orientation (SCO). In Gibbons and Buunk's (1999) Iowa-Netherlands Comparison Orientation Measure (INCOM), a positive correlation between social comparison and negative effect, neuroticism, and social desirability was found. Specifically, an individual who has lower self-esteem and higher emotional instability and depressive emotion tends to compare more frequently with others. The explanation was because the individuals who are uncertain about themselves tend to develop more negative and fragile self-evaluations that require constant comparison to stabilize their self-value, which resonated with previous research on uncertainty that not just the physical but also the psychological uncertainty motivates people to engage in social comparison. In addition, people with high level of SC tend to have lower self-esteem, perception of self, and poorer effect balance than low level of SC (Vogel et al., 2015).

Social Comparison Orientation (SCO) in Offline Context

In a study examining the SCO influence on student's math performance, students who apply more approach style, moving self-value to the comparison target value, tend to improve their math performance than students who apply the more avoidant style in which students move away from the target comparison value (Boissicat et al., 2021). The underlying explanation could be that students with an approachable style are more likely to be inspired by the target goal in upward comparison while feeling demotivated in downward comparison. Thus, when they were put into an upward comparison context, their self-evaluation increased, which increased their confidence in actual performance in the long term. The result indicated how individual's perceived social comparison remarkably affects academic performance (Boissicat, Fayant, Nurra, & Muller, 2021).

Nevertheless, can we switch our social comparison (SC) perception for more positive feedback? A one-year longitudinal study conducted examined the relationship between SCO and social-emotional adjustment and academic performance (Fu, Chen, Liu, & Li, 2016), supporting the finding that high level of SCO leads to an improvement in academic performance (Boissicat et al., 2021). The well-adjusted students who process comparison as a normal and motivating goal to improve tend to express higher self-esteem and self-efficacy, leading to less influence from less competence in the upward comparison. On the other hand, poor adjustment students enjoy downward comparison for short-term self-inflation, but it might also reduce their effort and motivation to study (Fu et al., 2016). Again, the engagement of SC seems to improve people's performance in various contexts because through comparison, they identified their relatively higher power status and self-evaluation, which consolidated their conceptual image as good or bad and buffered the negative influence from upward comparison. However, how people process this comparison information also plays an important role in determining whether people perceive positive or negative feedback.

A study focused on high school students found a positive correlation between upward social comparison in social network service (SNS) and depressive symptoms (Li, 2019). The interesting variation between this association was envy, which is the painful feeling of another person's good fortune. If an individual fails to process the comparison information positively, it often induces more envy and maladaptive reactions such as depressive symptoms. However, the role of self-efficacy can significantly reduce negative feelings from the upward comparison because students who are high in self-efficacy tend to consider the target goal as attainable (Li, 2019). Self-efficacy indicates a person's own belief of incapability successfully reaches the expected goal or achievement (Hajek & König, 2019), so an individual who has a high level of self-efficacy has a stronger belief to change their less performative situation in the upward comparison while an individual who has a low level of self-efficacy might feel frustrated for lack of belief to get better. This finding was also applied to the job context that people who believe their effort can control the outcome tend to use more upward comparison, and people who do not think personal effort can control the outcome tend to use more downward comparison (Gerber et al., 2018; Pavlova et al., 2017). Self-efficacy is a powerful variation that determines the SOC and buffers the negative impact of SC. The following section will explain more about self-efficacy and SCO.

SCO in Online Context

Social media has become the most common platform for people to compare and acquire information. This section's main focus is how social media influences SOC and its related impact on people. Because most social media posts are good and positive to attract more attention, some studies indicate that people who are compared frequently through social media can lead to negative self-evaluations (Vogel et al., 2015; Tandoc, Ferrucci, &

Duffy, 2015). In other words, we assume social media is great soils for upward social comparison. However, considering the deceptive nature of social media posts, users might feel disappointed and frustrated for being in a fake and ostentatious upward comparison context. High-level or frequency comparison users tend to be affected more by attractive posts on social media for their desire to be better than others (De Vries et al., 2017). However, the positive posts on Instagram only reduced the positive effect of inspiring and motivating high-level comparison users, and it does not induce negative feelings for both high and low levels of comparison users (De Vries et al., 2017). That is, the positive content on Instagram only steals the joy of browsing for people who like to compare upward, but it does not play the role of a catalyst of negative emotion for users.

On the other hand, Tandoc et al.'s (2015) study not just supported the positive relationship between envy and depressive symptoms in Li's (2019) article but the comparison in acquaintance through surveillance in social media associated with stronger negative feelings (Li, 2019; Tandoc et al., 2015). Thus, whom people compare with might partially explain how social media influences users' psychological well-being. In addition, the intensity of using social media leads to more negative feelings in users, such as loneliness (Tandoc et al., 2015). Its impact on Facebook users indicated that people who have high level of SC tend to use more on Facebook because of their social desire for attention and sensitivity to others' needs and change, which in return makes them less stabilize of self-image (Vogel et al., 2015; Tandoc et al., 2015). Therefore, the intensity and purpose of using social media might influence their effect on users, especially on their psychological well-being.

Many researchers also focus on the relationship between loneliness and SNS study (Li, 2019; Tandoc et al., 2015; De Vries et al., 2017; Yang, 2016), Instagram interaction and browsing reduce users; loneliness (Yang, 2016). However, when SCO was added to it as a moderator, the reducing effect only worked for the low-level comparison users. That is, the purpose of using SNS might affect users' psychological well-being positively or negatively, and with high levels of comparison, users might experience more loneliness because of the sense of inferiority in the upward comparison context, making them disengage from healthy way of using SNS, and social interaction (Yang, 2016). In research between Facebook and SOC, a mutual relationship was proposed between high levels of comparison and intensity of using social media (Lee, 2014). Although the experiment indicated that a high frequency of using social media leads to more negative feelings, such as loneliness, the direction of the effect is unclear (Lee, 2014). An individual who spends much time on social media is likelier to compare with others, while a person who likes to compare a lot with others might also spend more time on social media. Thus, social media platforms are rich in opportunities for social comparison. However, the effect on an individual's psychological well-being is mixed, depending on the individual differences and SOC.

Self-efficacy and Psychological Well-Being

To further understand how SOC influences a person's psychological well-being, self-efficacy seems to be an important cognitive aspect influencing the perception of life satisfaction (LS) and SOC. In research of self-efficacy, self-esteem, and optimism as resilience resources can effectively buffer the negative effects of upward comparison, leading to a better LS (Hajek & König, 2019). In a study with adolescents, a positive correlation between self-efficacy and LS was found, and self-efficacy can produce a buffer function between LS and stressful events (Moksnes et al., 2018). Because in adolescence, maintaining good interpersonal friendships with peers and academic performance are both potential stressors, those with high levels of self-efficacy tend to have a more realistic understanding of self-education and resources, making an effort effectively and increasing the likelihood

of reaching desired goals. Consequently, finding strategies to improve self-efficacy is critical for developing a better LS during social comparison.

The other study on Taiwanese university students also suggests that high levels of self-efficacy can improve academic performance and social relationships (Chiu, 2014), so the impact of self-efficacy is across youth age groups. However, students with low levels of self-efficacy tend to be more vulnerable and sensitive to comparison, so they are more likely to become addicted to smartphone use in social media to compensate for the need for socialization (Chiu, 2014). Therefore, attention should be paid to how self-efficacy mediates the desire and resilient ability toward social comparison.

Besides, in a study of how to cope with the influence of SCO, a protective mechanism was proposed to defend self-image by expanding self-identity to romantic partners and close friends (Thai & Lockwood, 2015). First, imagining a romantic partner was less attractive in an upward comparison context led to a negative feeling and less satisfaction with the romantic partner. However, for the participants who include or view romantic partners as part of their own identity, they tend to develop a protection strategy that downplays the importance of comparing domains, which indirectly reduces the negative effect of upward comparison as long as they are not important (Thai & Lockwood, 2015). This protection strategy also expanded to close friends in the following study. Hence, we proposed a useful coping strategy to resist upward social comparison, ultimately increasing an individual's psychological well-being.

Also, Downes et al. (2020) applied the performance prove goal orientation (PPGO) scale to study whether seeing a better job performance from a coworker will harm or facilitate employees' performance, and PPGO was defined as: "individuals' desire to display competence and outperform others" (p. 423). Participants with high PPGO, hoping to stay a superior performance and status, tend to have lower self-efficacy and performance under an upward social comparison scenario. In contrast, low levels of PPGO affect self-efficacy and job performance (Downes et al., 2020). A great strategy for a high level of social comparison individuals to cope with upward comparison's negative impact was to emphasize the absolute value instead of relative value. In other words, emphasizing the absolute feedback and highlighting their outperformance can shift their focus from comparing others to comparing themselves, which boosts their self-esteem and efficacy because they are paying attention to their individual development.

Research Proposal

We propose a research study that examines the relationship between SCO and subjective well-being. In study 1, the SCO was categorized as ability and opinion-based orientation to test the validity of Festinger's (1954) social comparison theory in the social media context (Festinger, 1954). We are curious if ability-based orientation will contribute to lower subjective well-being (SWB) because of the high demand for superior feelings. Then, we will add self-efficacy as a mediator to study if it can successfully buffer the negative impact from upward comparison, especially for ability-based participants.

In study 2, we will change the SCO into high and low levels of comparison and study their relationship with SWB. Hence, the high level of the comparison indicates a high frequency of social comparison in the social media scenario, while the low level indicates the opposite result. We will also add self-efficacy into the study to examine if self-efficacy can effectively reduce the negative impact of upward social comparison.

People who are opinion-based comparison orientation express a higher degree of SWB. However, a high level of self-efficacy will increase ability-based orientation participants' SWB more than those with low self-

efficacy levels in both opinion and ability-based orientations. Therefore, we hypothesize that in study 1, people with ability-based comparison orientation express a relatively lower level of SWB or the satisfaction of lives.

In study 2, we hypothesized that participants with a high social comparison tendency would experience lower SWB. In contrast, those with a low social comparison tendency show a higher SWB. However, self-efficacy will increase the SWB of participants with a high level of social comparison tendency but less than a low level of social comparison. Thus, the sequence from highest to lowest SWB should be the low level of SC with high self-efficacy, high level of SC with low self-efficacy, and low level of SC with low self-efficacy.

Methods and Materials

To conduct our experiments, we propose to use 2,000 Boston college students for each study. In study 1, the participants will finish an SCO scale to indicate whether they are opinion- or ability-based orientation. The scale was Gibbons and Buunk's (1999) SC orientation scale, composed of 11 questions such as "I always pay much attention to how I do things compared with how others do things" as an ability-based tendency or "If I want to learn more about something, I try to find out what others think about it" as an opinion-based tendency. The participants will answer on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Next, the participants will complete a self-efficacy questionnaire from Schwarzer and Jerusalem's (1995) General Self-Efficacy Scale (GSE) that is composed of 10 questions, and the participants can answer from 1 (not at all true) to 4 (exactly true) to measure their level of self-efficacy (Schwarzer & Jerusalem, 1995). Then, the participants will finish The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), composed of five items from 1 (strongly disagree) to (5 strongly agree), indicating participants' overall satisfaction with their lives.

In study 2, the only difference was that participants finished a different SCO scale from Gibbons and Buunk's (1999) Iowa-Netherlands Comparison Orientation Measure (INCOM) to determine the level or intensity of SC in each participant (Gibbons & Buunk, 1999).

Setting and Design

The procedure of study 1 and 2 is that each participant will come to the lab and finish their scales on the laboratory computer. The sequence of scale should start from SCO scale, self-efficacy scale, and a subjective well-being scale. Participants can ask any questions to the researcher or staff during the experiment.

Future Remarks

Understanding the relationship between SCO and subjective well-being can greatly contribute to a better life and understanding of ourselves. These study proposals offer a perspective on how SCO will influence our perception of lives. Developing a healthy orientation and proper way of processing information from the social comparison is critical, especially considering the pervasive SC and its important function of obtaining information. In addition, self-efficacy plays a vital role in helping us deal with upward social comparison and maintain our self-image to a relatively satisfactory level. Future studies can look at developing other resilient resources, such as self-esteem and optimism, that can buffer the negative effects of upward social comparison. Moreover, studying how to foster and develop effective coping strategies toward social comparisons, such as expanding self-image, can benefit the individual's mental health.

Conclusion

In a growing complex society, knowing the changes and needs of the social environment becomes an integral

approach to master. A mass of information can be acquired quickly through social comparison, including social ranks, advantages, and shortcomings. However, processing this information in various ways can induce distinctive results and thinking patterns closely related to our self-esteem and self-value. Social comparison is a double-edged sword that, if using upward comparison properly, people will be motivated to pursuit a better goal. In contrast, the excessive upward comparison would result in weak resistance toward unreachable goals and failure. Thus, the orientation that people apply SC is an important factor that determines the conceptual process of information. Remarkably, the self-efficacy and opinion-based comparison effectively mediated the negative impact of abusing upward social. The relationship between life satisfaction and social comparison has been found in various contexts and subject groups. To further examine those results, we proposed two experiments focusing on Boston's SCO and subjective well-being. Due to the essential and indispensable nature of social comparison, we encourage future studies to examine other useful factors and strategies that can guide the proper way of using social comparison and counter the negative impact of social comparison such as mindfulness training.

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