The relation between self-esteem and social media usage during the COVID-19 pandemic while considering age and gender

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Abstract

The recent COVID-19 pandemic imposed a high health threat on the population, forcing numerous safety measures to be implemented, such as social distancing and quarantines. This social isolation likely resulted in an increased usage of social media which is known to have adverse effects on individual's self-esteem, with these effects differentiating between age groups and genders. The current study examined the relation between self-esteem and social media usage before and during the COVID-19 pandemic, while considering the role of age and gender. The study used a longitudinal design, and the data was collected by Longitudinal Internet Studies for the Social Sciences (LISS). The sample consisted of 2135 participants (51% female, 49% of male) with the average age of 42.1. Line graphs and Within-Subject Contrasts were used to examine the changes of self-esteem and social media usage before and during the COVID-19 pandemic. Pearson's correlation and a repeated measure ANOVA analysis was used to examine the relationship between self-esteem and social media usage over time, including age and gender as covariates. A decrease in self-esteem and an increase in social media was found, however, the effect size of both changes was very small. No significant relation was found between self-esteem and social media usage over time, and age and gender did not explain this relationship. A significant limitation of this study related to the instrument of measurement of social media usage, which should be considered for future research.

Keywords : *self-esteem, social media usage, covid-19 pandemic, age, gender*

Introduction

Since the COVID-19 pandemic outbreak in 2020, the world has been forced to adapt and cope with the consequences of this crisis. Generally speaking, pandemics are classified as large-scale outbreaks of infectious diseases, significantly increasing morbidity and mortality over a considerable geographic spread, which causes a powerful interruption in the economic, social and political domain (Ruiz et al., 2021). The World Health Organization has declared COVID-19 a global pandemic (World Health Organization, 2020) which according to Kickbusch et al., (2020), is unlike anything that has been experienced in the modern times.

Accordingly, an array of safety measures was implemented in order to control the infection and mortality rates. The severity of these measures varied across countries. However, a form of lock down was introduced in most countries, which limited and placed burdens on people's daily life. In the Netherlands, lockdown measure included the closing of most commercial shops, restaurants bars and cafés, leaving only the essential shops open (Terpstra, et al., 2021). Most social events were canceled, a curfew was introduced, during which being outside past 9 was a finable offense. People were also advised to keep a 1.5-meter distance, wash their hands and avoid social contact in general.

These restrictions have been found to have various impacts on the population, with one of them being on people's self-esteem. Self-esteem is a concept related to an individual's well-being and it consists of one's beliefs, attitudes and evaluations of the self (Rossi, et al., 2020). This concept plays a role in defining an individual and the way they act and fit into the society based on the various roles it fulfills, such as a self-motive or a buffer (Cast & Burke, 2002). It has been found to be deeply rooted in personal values derived from a particular social, cultural and relational context, and is being reinforced through social validation and the perception of being a valued human being with an important role in the society (Rossi, et al., 2020). Self-esteem is perceived as a significant factor of mental health, as well as a protective factor against

the burden of negative influences, such as physical and mental illness (e.g., anxiety) (Mann, 2004).

The context and reinforcement related nature of self-esteem as well as the buffer role it was found to play puts into question the potential changes in self-esteem and the role it might have played for individuals during the COVID-19 pandemic. In a study conducted by Rossi, et al., (2020), self-esteem was investigated in the role of a buffer against anxiety symptoms provoked by fear of COVID-19 and dispositional loneliness and was proven effective in that role. Theoretically, these findings suggest that individuals with higher levels of self-esteem during COVID-19, did not suffer from mental health issues as strongly as those possessing lower levels of self-esteem, due to the buffer role played by higher self-esteem. However, what is not considered here is that due to the negative effects the pandemic had on mental health (Adams-Prassl, et al., 2022), these same effects might have also affected levels of self-esteem, seeing as these two concepts are somewhat intertwined. A study conducted in Spain, showed a decrease in participants self-esteem as early as in the first three weeks of being in lockdown due to the various stressors imposed by the pandemic (Morales-Vives et al., 2020). Additionally, the researchers found that women and younger individuals showed lower levels of self-esteem during the COVID-19 pandemic than men and older individuals, pointing towards age and gender being significant variables to consider in future research. There have been mixed findings regarding the role and changes in self-esteem during the COVID-19 pandemic, as for some self-esteem was found to work as a buffer against the negative aspects related to the pandemic, and for others, self-esteem suffered due to those negative aspects.

The concept of self-esteem has been found to be in a fluctuating state, as it is influenced by external factors (Trzesniewski et al., 2003). One factor which is known to have an adverse effect on self-esteem is social media usage. Social media platforms such as Facebook, Twitter, YouTube and others have been growing at an immense rate, involving a significant number of

users for over 10 years (Al-Deen & Hendricks, 2012). This growth enabled media to become an integral part of the society in terms of advertisement, social relations, politics and several other domains. Despite the use of social media being common before the pandemic, a significant increase in media usage frequency has been found during the pandemic on platforms such as Instagram, YouTube, Tik Tok, Twitter and Facebook (Vall-Roqué et al., 2021). Turning to the use of social media is a good opportunity and way around the decrease or even lack of face-to-face contact, as communicating through social media eases integration with peers and increases social acceptance, which has positive effects on psychological well-being (Al-Deen & Hendricks, 2012). However, the negative consequences of increased media usage cannot be disregarded.

In a literature review conducted by Akram & Kumar (2017), the negative consequences of media usage were found to affect individuals on a health, business, educational and societal level. Moreover, with the use of social media comes the potential for users to compare themselves and their lives to the most often edited and perfected content posted by others, which can affect users' self-esteem (Cingel et al., 2022). In a review of most recent self-esteem and social media usage studies conflicting results were found about the strength and direction of this relationship. This led the researchers to establish that it is often dependent on the way the users engage with social media, the nature of content and individual user differences and susceptibilities (Cingel, et al., 2022).

Regarding the *why* and *how* social media affects self-esteem, it is speculated to be due to, social comparison, social feedback and self-reflection. On the one hand, damaging upward social comparisons can occur as the user is exposed to unrealistic standards, on the other hand, positive social feedback received on the users posted content can enable boosts to self-esteem (Cingel, et al., 2022). Social media also gives users the possibility to curate and save certain self-provided information, browse through it and reflect on positive past interactions with

friends which highlights the positive memories and positively influences one's self-esteem (Cingel, et al., 2022).

Another relevant question explored by Cingel et al., (2022), is when and which users are affected more significantly by this dynamic. Factors such as age and gender were considered, pointing towards younger ages and females being more at risk of experiencing lower self-esteem due to media usage. Another source states that social networks are especially impressionable and important to adolescents and younger individuals' lives (Gioia et al., 2020). For the younger generation, using social platforms has become "a way of being" and plays a role in their identity construction. With an increased media usage during the COVID-19 pandemic, the focus of this research is placed on whether this could have affected individuals' levels of self-esteem, especially younger participants and women. A study conducted by Vall-Roqué et al. (2021), focused on determining the impact of the COVID-19 pandemic on the social network site usage (SNS) and whether this was associated with low self-esteem and body image disturbances. The study used a cross-sectional and retrospective design and gathered data from participants through a survey. An increased frequency of SNS usage was found during the pandemic, which was positively associated with lower self-esteem. The sample consisted of only Spanish women with ages varying from 14 to 35 years old, which allowed the researchers to make distinctions of impact between different age groups. It was found that the adolescence (Generation Z), suffered from a lowered self-esteem due to increased SNS usage (Vall-Roqué et al., 2021). The above-mentioned research reflects age and gender to be known correlates of self-esteem and media usage, and they will be controlled for in the current study.

Aim of this study

Self-esteem was explained to be rooted in personal values as well as something that can fluctuate according to the social, cultural and relational context. Due to the recent pandemic, several stressors were imposed on the population which were found to have a direct influence on people's self-esteem. One of those stressors was the long-lasting isolation period, during which the use of social media platforms was increased. The use of social media platforms has been found to negatively influence individuals' self-esteem, especially those of women and the younger generation. The current study has the potential to offer a meaningful insight into this field due to a few reasons. Firstly, despite an increased interest in this topic, there is yet a limited amount of research in the context of the COVID-19 pandemic, and the findings have been contrasting. Additionally, the studies have mainly used cross-sectional or retrospective designs and convenience samples of specific groups, whereas the current study had a longitudinal design with a representative Dutch adult sample. The aim of this study was to examine the relationship between self-esteem and social media usage, before and during the COVID-19 pandemic while controlling for age and gender. The following were this study's research questions:

RQ 1. "Is there a change in self-esteem before and during the COVID-19 pandemic?"

RQ 2. "Is there a change in social media usage before and during the COVID-19 pandemic?"

RQ3. "Is there a relation across time between changes in self-esteem and changes in social media usage during the COVID-19 pandemic when controlled for age and gender"

Methods

Design

The current study consisted of a longitudinal design, where the data used was collected by the Longitudinal Internet Studies for the Social Sciences (LISS), conducted by Centerdata. The quantitative longitudinal study referred to as the LISS core study provides yearly measurements, referred to as waves, in order to track changes that occur in people's lives (About the Panel | LISS Panel Data, n.d.). This is accomplished by filling out a monthly questionnaire, containing around 100 questions which takes 15-30 minutes, covering diverse topics such as, personality, loneliness, physical activity, income etc. (Simons et al., 2017). In the current study, measurements from the pre-pandemic period used data collected in years 2017 and 2019. The measurement during the pandemic were collected during the years 2020 and 2021.

Participants

The data collected by the LISS panel consists of monthly self-reported online questionnaires from over 5000 Dutch households, consisting of around 7500 individuals (Scherpenzeel, 2011). For households that do not possess an internet connection, one was provided alongside computers, in order to complete the questionnaires. The sample consists of a random sample of the Dutch population. The requirement for the participants is a minimum age of 16, an informed consent form and a permanent residence in the Netherlands. The participants are rewarded monetarily for taking part in the data collection (Scherpenzeel, 2011). For the current study, the sample consisted of 51% of female participants (n=5847) and 49% of male participants (n=5607). The average age of the sample was 42.1. Due to the longitudinal design of the study, the number of participants who filled out the different modules varies. The self-

esteem items were filled out by 3465 participants, whereas the media usage item was filled out by 2545 participants. The number of participants who filled out both self-esteem and social media items across all 4 measurement points is equal to 2135. The study received an ethical approval from the BMS Ethical Committee.

Materials

Self-esteem

Self-esteem was measured using 10 statements where participants indicate the extent to which they agree with them using a 7-point-Likert scale with options ranging from "totally disagree" to "totally agree. The statements are from the Rosenberg Self-Esteem Scale (RSE), which is a widely used self-report instrument, and an example of a statement is "I feel like I have a number of good qualities" and "on the whole I am satisfied with myself" (Rosenberg, 1979). The psychometric properties of RSE are found to be excellent in terms of internal consistency, and a test-retest reliability after two weeks with a correlation of 0.85 and 0.88 which suggests a good stability (Rosenberg, 1979). In the current study, the Cronbach's alpha for the self-esteem scale between 2017 and 2020 was $\alpha = .90$ and in 2021 it was $\alpha = .91$.

Social media usage

The social media usage of participants before and during the pandemic, was measured using data from the "Social integration and leisure" module. This module consists of a series of questions rather than peer-reviewed and commonly known questionnaires. In the current research only the questions about media usage were chosen and analyzed, which accounted for 2 questions. These questions referred to the participants' habits and time spent on social media networks. After a preliminary analysis, due to a high number of missing values, only one of the questions was chosen as a measure of participants' media usage. The chosen question

indicates how often a participant used social media in the last 2 months, with a 7-answer option raging from, never to several times per day.

Analysis

The data in this research was analyzed using the statistical program IBM SPSS Statistics 28.0.

Assumption check

Firstly, the collected data was checked against three assumptions of repeated measure ANOVA in order to assure reliability of the results. The first assumption being independence, concerns the data collection method, whether each observation is independent of every other observation. This assumption was settled as the data was collected using a random sampling method. The data collection included four-time measurements, therefore the data was further nested. The second assumption is normality which determines if the distribution of the response variable is normality distributed. In order to check this a visual analysis was performed using a histogram due to the large sample instead of a Shapiro-Wilk Test. The normality assumption was met at all four-time measurements. The third assumption is sphericity which refers to the variances of the differences between all combinations of related groups being equal. Determining sphericity was done by performing Mauchly's Test, x^2 (5) = 65.4, p = <.001, which indicated a violation of sphericity. Therefore, a correction was made using the Huynh-Feld, Σ= .98.

Sample characteristics

In order to find the central tendencies of the participants' characteristics, namely, age and gender, descriptive statistics were used. Descriptive statistics were also applied to the key variables of the study i.e., self-esteem and social media usage.

Repeated measure ANOVA

This research aims to investigate potential overall differences that occurred over time on media usage and its effects on self-esteem, therefore a repeated-measure ANOVA was used. Tests of Within-Subject Contrasts were conducted in which the differences between each year (2017 vs. 2019, 2019 vs. 2020 and 2021 vs. 2022) were revealed. This analysis was conducted for the first research question which assessed the potential change in self-esteem over time. As well as for the second research question which assessed the potential change in media usage over time. The third research question, which assessed self-esteem and social media usage as a time-varying covariate and gender and age as time-invariant covariates, the ANOVA test of between-subjects effects was used. With self-esteem as the dependent variable, the four-time measurements (2017, 2019, 2020 and 2021) of social media usage, age and gender as covariates.

Results

RQ 1. "Is there a change in self-esteem before and during the COVID-19 pandemic?"

A significant time effect was found in the analysis, $F(3) = 10.4$, $p = .001$ (Figure 1 & Table 1). A statistically significant decrease was found between the years of 2017 vs. 2019, however, the partial eta squared ($\eta^2 = .001$) suggested a very small effect size. No statistically significant effect was found in the years of 2019 vs. 2020 and 2020 vs. 2021. Self-esteem was found to decline before the pandemic and further stayed at the same level.

Figure 1.

A line graph of changes in self-esteem levels over four years (n=3467)

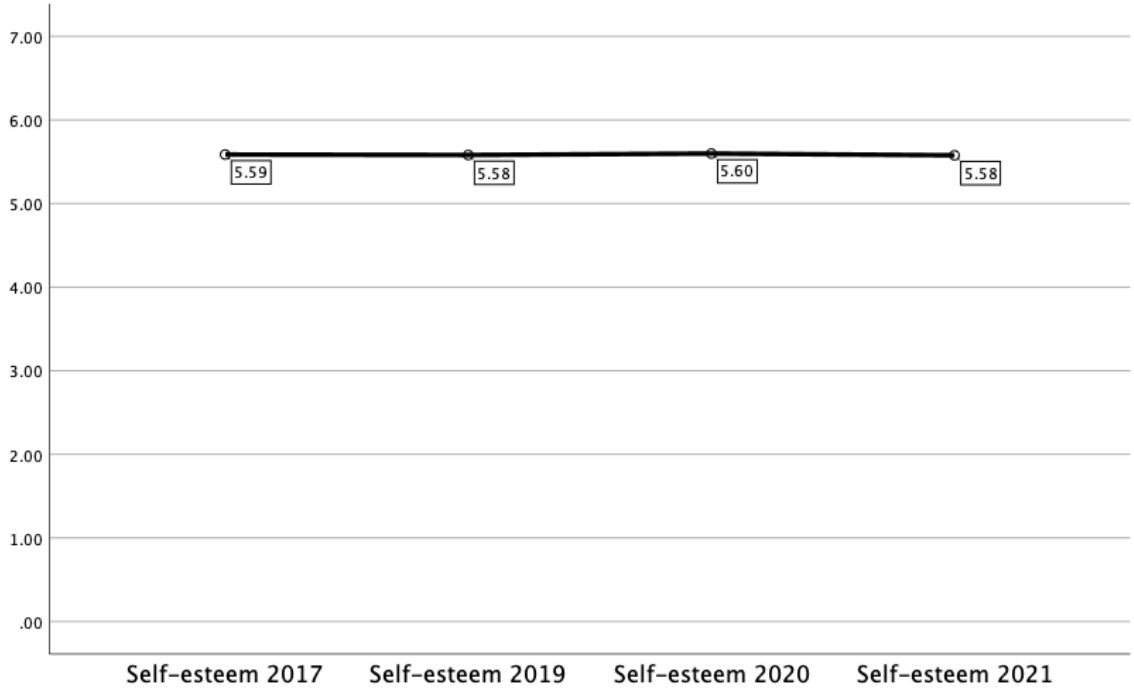

Table 1.

Tests of Within-Subject Contrasts for self-esteem for all four time points

	Time points	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.
Self-esteem	2017 vs. 2019	352.185	1	352.934	13.934	<.001
	2019 vs. 2020	9.036	1	9.036	.410	.522
	2020 vs. 2021	8.044	1	8.044	.386	.535
Error (Self-esteem)	2017 vs. 2019	87602.815	3466	25.275		
	2019 vs. 2020	76405.964	3466	22.044		
	2020 vs. 2021	72310.956	3466	20.863		

RQ 2. "Is there a change in social media usage before and during the COVID-19 pandemic?"

A significant time effect was found in the analysis, $F(3) = 7.13$, $p = .008$ (Figure 2). A statistically significant effect was found between the years of 2017 vs. 2019 but the partial eta squared ($\eta^2 = .002$) showed a very small effect size (Table 2). A statistically significant effect was also found between the years of 2019 vs. 2020 but the partial eta squared ($\eta^2 = .006$) again suggested that the effect size was very small. There was no statistically significant effect between 2020 vs. 2021. Social media is shown to have a decline before the pandemic, followed by an increase during the pandemic, and further stayed at the same level.

Figure 2.

A line graph of changes in social media usage over four years (n=2545)

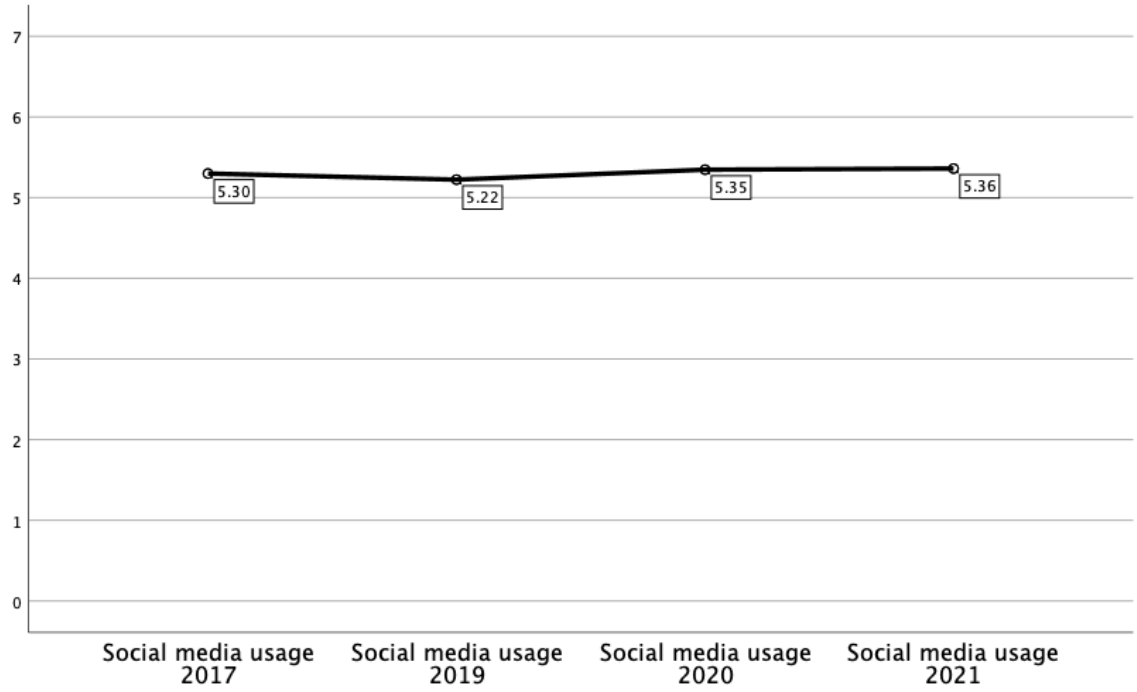

Table 2.

Tests of Within-Subject Contrasts for media usage of all four time points

	Time points	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.
Media usage	2017 vs. 2019	14.636	1	14.636	5.424	.020
	2019 vs. 2020	38.988	1	38.988	14.888	<.001
	2020 vs. 2021	.481	1	.481	.192	.661
Error (Media usage)	2017 vs. 2019	6864.364	2544	2.698		
	2019 vs. 2020	6662.012	2544	2.619		
	2020 vs. 2021	6376.519	2544	2.506		

RQ3. "Is there a relation across time between changes in self-esteem and changes in social media usage during the COVID-19 pandemic when controlled for age and gender?".

Firstly, the relations of age and gender with self-esteem and social media usage were assessed at the first and last measurements. Age was negatively related to self-esteem and a negative association was also found between age and social media usage (Table 3). These findings suggest that older adults were found to have less self-esteem and used social media less. Regarding gender, a significant relation was found with self-esteem and social media usage. A significant relation was also found between all the time measurements of self-esteem and social media usage.

Table 3.

Pearson correlation between the participant's age, gender, self-esteem and media usage measurements over time

		Age	Gender	Self-esteem 2017	Self-esteem 2021	Media usage 2017	Media usage 2021
Age	Pearson correlation	1	.003	-.188	-.214	-.349	-.423
	Sig. (2-tailed)		.760	<.001	<.001	<.001	<.001
	N	11454	11454	6064	4224	4681	4038
Gender	Pearson correlation	.003	1	.031	.055	.113	.128
	Sig. (2-tailed)	.760		**.**017	<.001	<.001	<.001
	N	11454	11454	6064	4224	4681	4038
Self-esteem 2017	Pearson correlation	-.188	.031	1	.393	.052	.045
	Sig. (2-tailed)	<.001	.017		<.001	<.001	.007
	N	6064	6064	6065	3795	4177	3621
Self-esteem 2021	Pearson correlation	-.214	.055	.393	1	.060	.069
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	4224	4224	3795	5335	3205	4678
Media usage 2017	Pearson correlation	-.349	.113	.052	.060	1	.525
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	4681	4681	4177	3205	4975	3053
Media usage 2021	Pearson correlation	-.423	.128	.045	.069	.525	1
	Sig. (2-tailed)	<.001	<.001	.007	<.001	<.001	
	N	4038	4038	3621	4678	3053	5039

The ANOVA test of between subject effects using self-esteem as the dependent variable and social media usage, age and gender as the covariates, revealed no relation of self-esteem with social media usage and gender (Table 4). There is still a significant relation of self-esteem and age. As shown by the ANOVA analysis, gender and social media usage are not related to self-esteem across time, however, the correlation analysis showed that there are relations between these variables at certain moments in time.

Table 4.

ANOVA Test of between-subjects effects with self-esteem as the dependent variable and media usage across time, age and gender as covariates (n=2135)

	Type III Sum of Squares	*df*	Mean square	F	p
(Intercept)	347596.31	1	347596.31	9052.75	.000
Gender	37.52	1	37.52	.98	.323
Age	6164.17	1	6164.17	160.54	<.001
Media usage					
2017	0.84	1	.84	.02	.882
2019	2.56	1	2.56	.07	.796
2020	7.05	1	7.05	.18	.668
2021	87.15	1	87.15	2.27	.132
Error	81708.33	2128	38.39		

Discussion

The aim of this research was to examine the relationship between social media usage and self-esteem, before and during the COVID-19 pandemic amongst the Dutch population. The answer to the first research question, whether there was a change in self-esteem before and during the pandemic, is that there was a statistically significant decrease in self-esteem before the pandemic, however, this effect was very small. This study consisted of a large sample, which suggests that an effect of this size does not provide any significant practical implications. When answering the second research question, about a potential change in social media usage, it can be said that a statistically significant increase in media usage occurred during the pandemic, however, this effect was also very small. The third research question was *"Is there a relation across time between media usage and changes in self-esteem during the COVID-19 pandemic when controlled for age and gender?".* The analysis showed that there is no relation between media usage and self-esteem over time. This means that the individual's levels of self-esteem were not related to their time spent on media usage. The third research question also investigated the effects of including age and gender in the relationship between self-esteem and social media usage. The results show that age was the only statistically significant variable related to self-esteem. Moreover, age was found to have a negative correlation to both media usage and self-esteem. These findings suggest that older individuals reported less media usage and lower levels of self-esteem.

Interpretation

The results of this study concerning self-esteem changes differ from the findings of Morales-Vives, et al., (2020), who observed a decrease in participant's self-esteem already in the early stages of the pandemic. Here, a small decrease occurred before the pandemic and stayed relatively stable throughout. It is difficult to provide an explanation for the found change

because the findings about the changes in people's self-esteem in the context of the pandemic have been ambiguous. As mentioned in the introduction, self-esteem has been found to play a rather complex role for individuals. Some individuals experienced a decrease in self-esteem because of the various negative aspects of the pandemic. While others, did not experience a decrease in self-esteem and mental health in general, due to the buffer role that self-esteem has been found to play against the stressors imposed by the pandemic (Rossi, et al., 2020). This buffer effect could be an argument as to why no changes in self-esteem were found during the pandemic in the current study. Here, the assessment of self-esteem was performed at the aggregate level, consisting of mean levels which did not allow making conclusions about individual differences in self-esteem. Therefore, the different role in which self-esteem presented itself for individuals was not explicitly investigated here. Future research could consider the role that self-esteem has been found to play on an individual level and further examine the changes between individuals.

The results of the second research question have shown that an increase in social media usage was found during the COVID-19 pandemic, however, the effect size was very small. Because of that it is difficult to take any practical implications from these findings. Previous research conducted by Vall-Roqué et al., (2021), and Lui et al. (2021), yielded more definite evidence of a social media increase during the pandemic on platforms such as Instagram, YouTube, Tik Tok, Twitter and Facebook. A potential explanation for the conflicting results could be due to a difference in research designs, as the current study consisted of a longitudinal design. Additionally, social media usage here was measured using only one item which was rather broadly formulated. It would be beneficial to include a better measuring instrument of social media usage in future research.

Moreover, the analysis for the third research question showed a lack of a significant relation between self-esteem and media usage over time, however, a relation was detected at

certain moments in time, as can be seen in the correlation analysis. The effects of media usage on self-esteem are a widely researched topic which proved to report contradicting results. On one hand, the current findings showed a weak positive relation between social media usage and self-esteem, which is in line with a study conducted by Cingel et al., (2022). In this case social media usage might boost one's self-esteem due to receiving positive social feedback. On the other hand, no relation between social media usage and self-esteem was found across time, which could be related to a relative stability of self-esteem across the pandemic. Additionally, the analysis considered the role of age and gender as covariates in order to assess whether they are confounding variables in the relation between self-esteem and social media usage. Only age was found to be related to self-esteem when also controlling for social media usage and gender. This finding suggests that the relation between age and self-esteem is independent of social media usage. The correlation analysis shows that at moments in time both age and gender were related to self-esteem and social media usage, even thought that relation was rather weak. The negative correlation between age and self-esteem is in line with previous research conducted by Orth & Robins (2014), who found that self-esteem is shown to decrease at a rather fast pace with old age. It has also been found that older individuals (Cotten et al., 2022) use social media platforms less often than the younger generation, supporting the negative correlation found in the current study.

Strengths and limitations

One of the strengths is the longitudinal design of the current study. The data collection was performed by a reliable company with a high volume of participants and the possibility of repeated measures. It provided the current research with an extensive amount of data and a unique access to the Dutch population. However, the limitation of this data collection style was the inability to have a choice in the items used to measure certain variables, in this case, media

usage. This variable was measured using only one question, which investigated how often participants used social media in the past 2 months, with a 7-point Likert scale. It would have been beneficial for this research to create a more detailed set of items regarding the participants social media usage. Gaining an insight into the specific way and nature of content that individuals are exposed to on social media, may affect their self-esteem in adverse ways (Cingel et al., 2022). Thus, a set of questions about the use frequency of specific apps (Vall-Roqué et al., 2021), the preferred pages to follow and the type of activities performed (scrolling, posting, reading, commenting, engaging in group pages) would be a good addition to this research.

Recommendations for future research

While previous research found that media usage might have a negative effect on individual's self-esteem, the results of the current research show that this might not always be the case, even though a relation was found for certain moments in time, but not across time. While an increase of media usage was reported, there was no significant decrease in self-esteem reported by the participants. It has been mentioned that investigating the effects on self-esteem might be more insightful when considering the individual level instead of the aggregate level. Therefore, future research could consider making that distinction when researching self-esteem, due to the lack of findings on the mean level in the current study.

Furthermore, in the current research it is unknown as to what specific platforms have been used more often during the reported increase in usage. A next step to consider for future research would be to take the variates and specific use of social media use into account. It would be beneficial to investigate the different types of media being used and the way in which it is used and observe whether there is a difference in the way that it affects self-esteem.

Lastly, it has been stated that social networks are notably more impressionable and play a more important role to younger individuals and adolescents (Gioia, et al., 2020). Additionally, the use of social media has gained a more crucial role of their identity construction and 'a way of being', compared to the older generation. Based on this, it can be said that the way they operate on social media and the effect it has on various aspects of their lives, such as self-esteem, might differ from the effects on the older generation. Seeing as the average age of the sample in the current study was 42, it reflected the behaviors and habits of a different age group than the one expected for the purpose of the current study. A suggestion for future research would be to consider investigating a moderation effect, to find out if the relations between self-esteem and social media usage differ for different age groups.

Conclusion

The current research investigated a potential relationship between media usage and self-esteem before and during the COVID-19 pandemic. It has also considered the role that gender, and age might play in the said relationship. The findings suggest that no relationship was found across time, and age seemed to have an independent relation to self-esteem. The decrease in self-esteem and the increase in social media usage proved to have very small effect sizes, which impairs the ability to make practical implications from the found changes. There was a significant limitation in the way that social media usage was measured. Future research should consider including items to investigate the types of platforms and the way in which individuals navigate through social media. Exploring those different approaches to social media usage could yield insightful findings about potential effects on individual's self-esteem.

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