The current study aimed to extend research on self-concept change (i.e., a short-term change in self-concept as a result of selective self-presentation in public online settings). Based on public commitment theory, previous research has identified the public nature of online settings to prompt these changes. This study specifically focused on different degrees of publicness (i.e., public and semi-public), as well as the option to customize visibility settings typically embedded in social media settings. In an experiment, participants (N = 251) were asked to present themselves as either introvert or extravert, in a public or semi-public setting, or a setting in which participants were allowed to choose how public their selective self-presentation would be (i.e., customization). The manipulations did not lead to changes in self-concept, indicating that the degrees of publicness in the context of social media do not necessarily prompt commitment to self-presentations as expected. These findings shed light on the consequences of selective self-presentations for the self in different online settings, and the mechanisms that underlie these.
Every minute, millions of people share carefully crafted bits and pieces about themselves that add to their online self-presentations on social media platforms such as Facebook or Twitter. What some have called a social media revolution (Smith, 2009), poses new challenges to our understanding of self-presentation, that is, the process of managing the impressions that others may form (Goffman, 1956; Leary & Kowalski, 1990). The rapid technological developments within social media platforms have fundamentally changed how and to whom people present their identity. Notably, the impact of being ‘public’ in digital environments is still poorly understood, in particular in relation to the extent to which a message is visible to different, potentially unintended, audiences. Some recent scholarship has demonstrated that public self-expression in an online setting may subsequently lead to a change in individuals’ self-concept (also termed identity shift; e.g., Gonzales & Hancock, 2008; Walther et al., 2011). Within the current age of ‘mass self-communication’ (Castells, 2007), it is all the more relevant to fully understand such potential consequences of mass self-communication for the self.

The phenomenon of a self-concept change fits in with the broader media-effects field of self-effects. This relatively new line of research deals with the effects of self-expression on senders’ emotions, attitudes, cognitions, or behaviors, rather than the typical focus of effects on receivers (Valkenburg, 2017). Self-concept changes have so far been theoretically grounded in the idea that public settings elicit an internalization of presented traits due to an increased sense of accountability towards an audience. In an experiment, Gonzales and Hancock (2008) found that individuals who presented themselves as extraverted, compared to introverted, rated themselves as more extravert after doing so on a public blog than those who did so in the private setting of a text document. The notion of public self-expression, rather than private self-expression, thus seems a relevant factor in obtaining this self-effect. As social media have now become dominant means of self-presentation, especially selective self-presentation, it is meaningful to examine the extent to which self-concept changes unfold under the public conditions that social media offer.

Social media provide spaces where users initiate and control their public self-expressions. Specifically, users consciously appropriate the tools that social media provide when sharing their expressions (Baym & boyd, 2012). These tools facilitate users to post messages that are visible to everyone (i.e., public), although
not necessarily guaranteed, or to a more narrowly defined subset of people (i.e., semi-public). Some tools may further heighten the potential for visibility, for instance by making content searchable or cross-posting content on other outlets. It is necessary to consider these characteristics of publicness to more effectively understand how public self-expressions on social media impact potential changes in users’ self-concept. By means of an experiment, the current study accordingly aims to further extend research on self-concept change in social media-like settings, and disentangle the impact of the different types of public sharing that social media affords. Specifically, we distinguish between public and semi-public settings, as the literature has outlined this as one of social media’s defining features (boyd, 2011). In line with the idea that social media are primarily user-controlled spaces, we additionally account for the opportunities to customize the visibility of one’s self-expression that platform interfaces commonly afford.

Understanding Self-Concept Change
The ‘change’, in its conceptual definition, refers to the adjustment of an individual’s self-concept to be more in agreement with the self-presentation, as based on subsequent self-assessment about the self. The theoretical principle of self-concept change is rooted in the works of Tice (1992) and Schlenker, Dlugolecki and Doherty (1994) who established this effect as a result of selective presentations of the self in offline settings. In explaining the phenomenon, three mechanisms have been suggested to play a role. First, as outlined in self-perception theory (Bem, 1967), individuals have been argued to reflect on their own, prior, behavior to gain insight on their self-concept. In this reasoning behavior thus precedes self-conceptual construction, which may explain how certain acts of self-presentation subsequently come to influence beliefs about the self. A second mechanism is based on biased scanning theory (Jones, Rhodewalt, Berglas, & Skelton, 1981). This theory maintains that one’s self-concept is composed of multiple sub-conceptions rather than being a single construct, for which some may become more or less salient in response to one’s overt behavior in a given situational context. To that end, presenting oneself in a selective manner (e.g., extravert) may activate memories about experiences that fit with the content of that self-presentation (e.g., experiences in which one acted in an extraverted way), and influence subsequent self-assessment.

Both self-perception and biased-scanning represent processes that occur
inside the person without the presence of others to observe the behavior (Tice, 1992). However, the internalization of a presented trait such as extraversion has been shown to become much stronger when other people are perceived to be present (Schlenker et al., 1994; Tice, 1992). This amplified effect of publicly performed behaviors builds on the notion of ‘public commitment’, which presents the third mechanism used to explain self-concept changes. In this view, individuals feel a need to commit to an identity they have publicly claimed to be to avoid the risk of coming across as inconsistent. Potentially, the people who observe the self-presentation may hold them accountable when inconsistencies are noticed (Schlenker et al., 1994). As such, selective self-presentation, which is typically a public performance, may influence individuals’ self-assessments on their self-concept through a combination of internalization and public commitment.

Given the centrality of selective self-presentation within computer-mediated settings (e.g., Walther, 1996), self-concept change may very well extend to the online realm. Computer-mediated technologies have however changed the way we express ourselves and manage the impressions we leave on others in two prominent ways. First, computer-mediated settings offer a greater sense of control over one’s self-presentations (e.g., Walther, 1996). As computer-mediated communication is typically asynchronous (i.e., delayed), users have more time to refine what they want to share online. Similarly, users have control over the auditory and visual information (e.g., tone of voice or facial expressions) they want to share, and are thereby able to conceal certain self-aspects. Online settings therefore enable users to selectively reveal information and optimize their self-presentations accordingly. Second, it is easier to reach a larger number of people online than offline, especially on blogs, websites, and public social media platforms (boyd, 2011). Against this background, Gonzales and Hancock (2008) and Walther et al. (2011) aimed to understand how self-concept changes would manifest online. To date, effects were found for expressions in public blog settings and for subsequent feedback that individuals obtained. Carr and Foreman (2016) additionally showed that public feedback on Facebook mattered, especially when received from a familiar source.

**Public and Semi-Public Expressions**

In recent years, social media have become immensely popular as platforms for self-
presentation (e.g., boyd & Ellison, 2007; Livingstone, 2008; Papacharissi, 2011). On these platforms, people typically create a profile, upload information and pictures, and share smaller bits of self-related information through status updates, tweets, comments, or audio(visual) uploads. Users may do so within a typically bounded system (boyd, 2011). Social media are highly focused on social connections, reflected in the networked nature of adding friends, accepting followers, or following others. The number of ‘friends’ or ‘followers’ are often displayed on user profiles, and serve as indirect cues of who may view the shared content. Through privacy settings, users may choose to allow accessibility to essentially everyone on the internet (i.e., public), or limit accessibility by setting their preferences to ‘friends only’ or to only those who one has accepted as followers (e.g., Debatin, Lovejoy, Horn, & Hughes, 2009). The latter more bounded semi-public profile reduces the visibility of one’s self-expressions to a more narrowly defined potential set of receivers.

How public or visible one’s self-expressions on social media are is further shaped by other factors (for a more extensive account, see boyd, 2011). For one, the content that users share on social media typically remains visible long after it has been shared. As such, shared content on social media persists and might, over time, be viewed by an increasing number of people. In addition, users are able to ‘replicate’ content across other online platforms and forums (e.g., Helmond, 2015): What one posts on Instagram may for instance be cross-posted on Facebook, or users may share someone else’s post within their own networks (e.g., retweets). Other features, in turn, facilitate the searchability of content. Many platforms offer a search function so other users may easily find content they are interested in. For instance, users are able to add metadata to a post (e.g., hashtags) to render its content searchable based on the grouping of posts with similar metadata, which may further increase the number of people to view the post (e.g., Papacharissi & De Fatima Oliveira, 2012). Consequently, ‘publicness’ on social media is not a simple public-private dichotomy, but a matter of degree. Against this background, the impact of public self-expression on potential self-concept changes on social media may differ depending on whether users express themselves within an entirely public or a more constrained semi-public setting.

Gonzales and Hancock (2008) have noted the importance of studying whether greater publicness leads to stronger self-concept changes. Whereas two out of the three studies on self-concept change used blog settings (e.g., Gonzales & Hancock,
2008; Walther et al., 2011), the most recent self-concept change study used individuals’ Facebook as the public space in which to self-present, representative of a more semi-public setting. From a public commitment perspective, which stresses the potential that other people may hold the self-expressor accountable when inconsistencies are observed (e.g., Tice, 1992), semi-public social media settings may offer a safer bounded space for selective presentations of the self than public social media settings. In semi-public spaces, users may feel less urged to commit to their self-expressions as there are fewer individuals to worry about. Conversely, public settings may maximize the risk that unintended others view one’s self-expressions. For instance, if content is available for people outside of one’s network to view, a post could potentially be found and read by future employers and colleagues, even long after it has been posted. This may heighten the perceived risks for accountability, and strengthen self-concepts more so than semi-public expressions would.

In line with previous work, we overall expected self-concept change to occur in both public and semi-public settings. For public settings, we subsequently expected an amplification of this self-effect relative to a semi-public setting. We therefore hypothesized:

**H1:** Following a self-presentation in a public online setting, individuals presenting themselves as extraverts are expected to rate themselves as more extraverted than individuals presenting themselves as introverts (i.e., self-concept change)

**H2:** Individuals who express themselves in a public setting will experience greater self-concept change than those who express themselves in a semi-public setting

**Public Customization**

Social media afford enhanced control over one’s self-expressions. Moreover, their interfaces offer various options for users to express themselves by active use of expressive tools (e.g., animated emoji reactions, likes, stickers, or various visual effects). Concurrently, as is evident from the above discussion, users are able to actively select and delineate ‘who sees what’. In others words, social media users may customize their audience according to their preferences. Customization refers to the possibility to deliberately modify the course and content of an interaction
in CMC settings in line with one’s needs, brought on by contemporary media technologies (Sundar, 2008). It is up to users to change and select features that will restrict or enhance the publicness of their messages, and are thus actively involved in the degree of publicness that may subsequently impact the perceived level of accountability. To gain a thorough understanding of self-concept changes within the public context of social media, then, one must also consider the influence of being able to actively manage and select the degree of publicness of an online performance.

Social media allow users to a priori construct public or semi-public profiles by adjusting their privacy settings (Tufekci, 2008). In addition, users are able to specify public and semi-public interactions for each message individually, and delete posted content which they in hindsight regret. These features thus continuously present users with a choice of whom they want their messages to be visible to. On Facebook, for instance, users are presented with the question ‘who should see this?’ before posting a status update. In response, users can indicate whether they want a status update to be visible for ‘anyone on or off Facebook’ (public), or for ‘friends only’ (semi-public). Users are thereby not only able to compose a message in a more controlled manner, but may also more actively customize their potential audience (boyd, 2011).

This possibility for customization can affect self-concept change as it may potentially accelerate the process of internalization. The possibility to customize how ‘public’ a message is creates the sense of agency that embodies the appeal of interactive media; the user is an active participant, able to steer the communication to his or her own needs (Sundar, 2008). Agency, in this view, relates to the feeling of being a relevant actor in the communication process. This sense of agency can have direct effects on cognitive, affective, and behavioral responses because of greater attentional effort towards the content, both during and after the interaction (Sundar, 2008). This increased attention towards a message ties in with the aforementioned biased scanning theory, which posits that greater attention to a particular self-presentation could make a particular sub-conception about the self more salient. The act of actively customizing how public one’s self-expressions will be might thus further strengthen the internalization process of an expressed identity trait.

Additionally, the possibility to customize the ‘audience’ may increase the public
commitment to a self-presentation. As Schlenker et al. (1994) note, commitment to an act may be magnified not only by the extent to which it is public or irreversible, the degree of perceived choice in performing the act may in itself also increase one's commitment. For this reason, we expect that being able to customize the publicness of their self-presentation will lead to stronger public commitment, hence greater self-concept changes. Moreover, this effect will be stronger when individuals actively choose to share their self-presentation publicly relative to semi-publicly. Therefore, we hypothesized:

**H3:** Individuals who express themselves in a setting where they can customize the publicness of a message will experience greater self-concept change than those who express themselves in a setting where they cannot customize the publicness of a message

**H4:** The pattern hypothesized in H2 will be more pronounced for those who are able to customize the publicness of their message than for those who are not able to customize the publicness of their message

### Method

#### Sample
In total 276 individuals participated in the experiment. Participants were recruited through a departmental subject pool at a Dutch university, and were rewarded with either research credits or 5 euros. After removing incomplete responses and outliers (more than 3 $SD$ from the mean), a final sample of 251 participants, between 18 and 35 years of age ($M = 23$, $SD = 3.1$), remained, of which 181 were female (72%) and 70 were male (28%).

#### Experimental Design
Participants were randomly assigned to one of six stimulus conditions as part of the 2x2x2 partial factorial between-subjects design employed in this study, reflecting the factors of personality self-presentation (introversion vs. extraversion), degree of publicness (semi-public vs. public) and customized publicness (yes vs. no). Two
additional conditions were formed post-hoc as a result of the self-selection process in the customized publicness conditions, adding up to 8 conditions in total. As customization is inherently about users’ choice and selection, participants who were randomly assigned to the customized publicness conditions could self-select whether they wanted their message to be public or semi-public. The settings that participants in these conditions selected were extracted from the website interface, and coded. The coding of this data resulted in the creation of additional public and semi-public conditions.

Procedure
Participants were seated behind a computer in a private room in the university laboratory building. After giving active consent, participants were presented with a cover story. Participants were told that ‘The Personality Project’, as the research had been advertised, was a large-scale online project that aimed to assess whether and how people detect personality traits in written texts. Additionally, participants were told that an online community platform (thepersonalityproject.org) had been created to allow different universities and their students to easily participate. Because the project was still at an early stage, as it was framed, an equal amount of testcases (those who write a piece of information incorporating a personality trait) and evaluators (those who identify personality traits in written texts) were needed. This cover story is in line with previous self-concept shift studies, and was created to: 1) provide a realistic setting for letting participants write a self-related text; and 2) reinforce the notion that the message would be visible to an online audience.

Participants were subsequently presented with information about the platform and instructions concerning the self-presentation, which included five steps: 1) login on the website by clicking the link and using the login details; 2) start the message with first name, age, sex and university being attended; 3) explore the settings of the message, which differed slightly per condition; 4) write a text based on five questions (discussed below); and 5) post the message on the website. After posting the message, participants continued with the questionnaire constructed in Qualtrics, which included posttest measures of self-reported extraversion, and manipulation checks concerning the degree of publicness and customization that participants perceived. After finishing the questionnaire, participants were thanked for their participation and debriefed.
Stimuli

In line with the cover story, a website was created that reflected a community platform where researchers and students from different universities within the Netherlands could work together on the make-believe project ‘The Personality Project’. The website was made to resemble the social network site Facebook in its layout, specifically the layout of a Facebook group (see Figure 1). The website included a cover photo, an ‘about’ box located at the right side of the page, a message box located on the top center of the page, and mock posts located below the message box, a tagcloud located at the right side of the page, and the possibility to ‘logout’. Similar to Facebook, when participants would click the ‘post’ button after writing their message, the post immediately appeared below the message box as the last posted message. In a pretest \((N = 40)\), the majority of participants (67%) had indicated that the website resembled a social media platform.

To make participants believe the site was already up and running, and thereby enhance realism, three mock posts were created and were shown on the page as the three last posted messages. In addition, the number of members (1143) of the community platform was depicted on the left side of the page, which was added to reinforce the fact that an online audience was present, and again to enhance realism. For similar reasons, participants were asked to login on the website with login details that were provided in the instructions. When clicking the link to the website, participants were first presented with a login screen, and were only directed to the main page after correctly filling in the username and password.
Experimental Conditions

**Personality self-presentation**

In line with the approach employed by Tice (1992), Gonzales and Hancock (2008), and Walther et al. (2011), participants were asked to write a self-related text based on five questions. In answering these questions, participants were instructed to rely on their own experiences, rather than make up a story. The five questions included the subjects of pastime with friends and family, hobbies, most important thing learned during studying, and favorite activity during the last holiday. Half of the participants were asked to portray themselves as extraverted, while the other half were asked to portray themselves as introverted. Across all conditions, participants were presented with the definition of both extraversion and introversion to avoid that self-concept change would be induced by priming; a potential limitation Gonzales and Hancock (2008) had put forward in their study. Participants wrote
their answers to the questions directly in the message box on the website, and were instructed to ‘post’ the message as soon as they were done. Linguistic analyses were used to assess participants’ identity performance, which is further described in the result section below.

Degree of publicness (public vs. semi-public)
To make a distinction between public and semi-public settings, three platform features were included in the website that may limit or expand one’s potential audience: hashtags, a boundary setting, and a notification option. The hashtag feature reflects the idea of content on social media being searchable, and is a feature found on blogs, Twitter, and Instagram, among others. The boundary setting entails the possibility to ‘set’ the visibility of a message to either public or friends only, which in this case translated to members of the project only. The notification option, as was communicated to participants, involved the idea that members of the community website would receive an email notification of the posted message. This was added because it would most authentically represent the possibility to replicate content across platforms within the context of the cover story. The public setting included hashtags, a public boundary setting, and a notification to members, which all enhance the visibility of one’s message, whereas the semi-public setting did not include hashtags, a ‘members only’ boundary setting, and no notification to members.

Public customization (yes vs. no)
Participants in the no-customization condition were either presented with the information that their message would be public or semi-public. For these participants, the above mentioned features were already set at default and thereby not customizable, reflected in the feature buttons being colored in a light grey. The participants who were able to customize the publicness of their message (n = 121), on the other hand, were presented with the information that they could choose whether they wanted to use the features to enhance, or reduce the visibility of their message. In addition, the website interface allowed them to customize the settings to their own liking. The website interface registered what participants selected in terms of the available features. This data was used to create two extra conditions post-hoc (i.e., those who chose public versus those who chose semi-public settings).
Measures

Self-reported extraversion
Following the procedure by Gonzales and Hancock (2008) and Walther et al. (2011), participants were asked to provide a true rating of their personality directly after they posted the message on the website. The self-rating consisted of 10 bipolar items that measured intro/extraversion on an 11-point scale. Items included talkative-quiet, enthusiastic-apathetic, outgoing-shy, confident-unconfident (Tice, 1992). The 10 items formed a reliable scale, and were recoded so that higher scores reflected greater extraversion ($M = 7.65$, $SD = 1.37$, $\alpha = .86$).

Manipulation checks
To assess the effectiveness of the manipulation that induced a degree of publicness, participants were asked ‘To what extent do you consider the message you just wrote to be visible for other people’, which they could answer on a 7-point scale ranging from not at all (1) to very (7) ($M = 5.20$, $SD = 1.19$). For the customization manipulation, participants were presented with the question ‘To what extent did the website allow you to modify the visibility of your message’, which they again rated on a 7-point scale ranging from not at all (1) to very (7) ($M = 4.46$, $SD = 1.66$). In addition, participants were asked to rate a number of statements that related to different aspects on how publicness was perceived. Items for instance included to what extent they perceived themselves publicly identifiable through their message ($M = 5.02$, $SD = 1.41$), the likelihood of other people reading their message ($M = 5.03$, $SD = 1.52$), the likelihood of researchers reading their message ($M = 6.24$, $SD = 1.03$), and the likelihood of other students reading their message ($M = 5.14$, $SD = 1.44$), all rated similarly on 7-point scales ranging from not at all (1) to very (7). To assess the relation between publicness and perceived audience size, participants were asked to what extent their message would be read by few or many people, with response options ranging from very few (1) to a lot (7) ($M = 3.92$, $SD = 1.28$).
Results

Identity Performance and Perceptions of Public
To assess whether participants complied with the assigned personality trait in their self-presentations, the produced texts were analyzed using the Linguistic Inquiry and Word Count (LIWC, version 2015) tool with the Dutch dictionary (Zijlstra, Meerveld, Middendorp, Pennebaker, & Greenen, 2004). In line with previous research on self-concept change, texts were assessed on the dictionary components of word count, emotion words (e.g., nice and ugly), social words (e.g., talk, listen, and references to other humans), inclusives (e.g., and, with, and include), exclusives (e.g., exclude, but, and without), tentatives (e.g., maybe and perhaps), causation words (e.g., because and why), and articles (e.g., a, an, and the). Introverts typically use more negations, exclusives, causation words, articles, and negative emotion words, while extraverts use more social words, inclusives and positive emotion words, and generally have a higher total word count (Pennebaker & King, 1999). To test whether those assigned to introvert conditions differed on the use of these words from those assigned to extravert conditions, a multivariate analysis of variance (MANOVA) was used. This revealed significant differences on all ten dictionary components, $F(10, 240) = 5.42, p < .001, \eta_p^2 = .18$. Participants in the extravert conditions thus appear to have produced more extraverted texts (i.e., more social words, inclusives, positive emotion words, and higher total word count) while participants in the introvert conditions produced more introverted texts.

The participants who were randomly assigned to a customized publicness conditions ($n = 121$), were allowed to choose the degree of publicness of their message. Based on their decisions, the degree of publicness was coded and additional conditions were created. Overall, 96 of the 121 participants in the customization conditions chose a semi-public setting (79.3%) and 25 a public setting (20.7%). This tendency for individuals to select a semi-public setting rather than a public setting for their message happened regardless of whether they were asked to present themselves as introverted (46 semi-public to 13 public), or extraverted (50 semi-public to 12 public), $\chi^2 = .13, p = .716$.

To test whether the manipulations of degree of publicness and customization were experienced as intended, separate t-tests were performed. This revealed that
participants who posted their self-related message in the public condition \((M = 5.43, SD = 1.22)\) perceived greater publicness that those who posted in the semi-public condition \((M = 5.08, SD = 1.16)\), \(t(249) = -2.22, p = .027\). This confirmed that in both conditions participants experienced a public setting, yet also that the two conditions significantly differed in perceived degree of publicness. Both the self-presentation manipulation \((t(249) = -.74, p = .460)\) and customization manipulation \((t(249) = 1.66, p = .098)\) did not affect the perceived degree of publicness, nor did the interaction of these factors, \(F(1, 247) = 0.41, p = .522\). Similarly, participants who were allowed to customize the publicness of their message \((M = 5.09, SD = 1.20)\) perceived greater ability of modifcation than those who were not able to customize \((M = 3.88, SD = 1.80)\), \(t(249) = -6.23, p < .001\). The manipulations of degree of publicness \((t(249) = .49, p = .626)\) and self-presentation \((t(249) = -.22, p = .829)\), as well as the interaction of these factors \(F(1, 247) = 0.47, p = .494\), likewise did not influence the perceived ability to modify the publicness of their message. Both experimental manipulations thus proved to be successful.

In further examining how publicness was perceived, additional t-tests were performed with items tapping specific aspects of publicness perception. This revealed that, as intended, participants perceived themselves publicly identifiable through their message equally in both public \((M = 4.99, SD = 1.47)\) and semi-public conditions \((M = 5.04, SD = 1.38)\), \(t(249) = 0.29, p = .771\). Further, participants reported high likelihood of researchers reading their messages in both public \((M = 6.37, SD = 1.00)\) and semi-public conditions \((M = 6.16, SD = 1.05)\), \(t(249) = -1.55, p = .123\).

However, participants in the public conditions \((M = 5.38, SD = 1.39)\) indicated a higher likelihood of other students reading their message than those in the semi-public conditions \((M = 5.00, SD = 1.46)\), \(t(249) = -2.02, p = .045\). Similarly, the likelihood of other people reading their message was reported to be higher in the public conditions \((M = 5.42, SD = 1.38)\) than in the semi-public conditions \((M = 4.82, SD = 1.56)\), \(t(249) = -3.01, p = .003\). The likelihood of other people not related to the project reading their message was also reported to be higher in the public conditions \((M = 3.40, SD = 1.90)\) than in the semi-public conditions \((M = 2.52, SD = 1.47)\), \(t(249) = -4.08, p < .001\). Finally, participants in the public conditions \((M = 4.02, SD = 1.28)\) did not perceive significantly more or fewer people to read their message than those in the semi-public conditions \((M = 3.87, SD = 1.28)\), \(t(249) = -0.90, p = .368\). Overall, these items indicated that publicness was not
necessarily related to the amount of people that would read one’s message, but rather to the likelihood of different groups of people reading one’s message.

Changes in Self-Concept
The proposed effects were tested with an analysis of variance (ANOVA), with the personality self-presentation, degree of publicness, and customized publicness manipulation variables as independent variables, and the measure of self-reported extraversion as the dependent variable. Levene’s test of equality of variances revealed that the assumption of homogeneity of variances was met. In addition, we conducted contrast analyses compliant with the hypothesized patterns to further understand the specific directional effects of the interaction hypotheses. For this, eight contrast weights were assigned as outlined in Table 1.

A public online setting was hypothesized to elicit a change in self-concept as a result of selective self-presentation. In other words, participants who presented themselves as extraverted were expected to rate their true personality as more extraverted than those who presented themselves as introverted in both the manipulated public and semi-public settings (H1). Second, based on the theory of public commitment, the more public the self-presentation the stronger the self-concept change was expected to be (H2). The main effect of self-presentation ($F(1, 243) = 0.17$, $p = .677$) was not significant. Based on estimated marginal means, participants who presented themselves as introvert ($M = 7.57$, $SE = .13$) rated similar on the self-reported extraversion scale as those participants that presented themselves as extravert ($M = 7.65$, $SE = .14$). Curiously, the main effect of publicness was marginally significant ($F(1, 243) = 3.12$, $p = .079$), which revealed that in the semi-public setting participants rated themselves slightly more extravert ($M = 7.78$, $SE = .11$) than in the public setting ($M = 7.44$, $SE = .16$). The interaction effect of self-presentation and degree of publicness, however, appeared to not be significant either, $F(1, 243) = 0.23$, $p = .634$. The estimated marginal means on self-reported extraversion were again similar for both presentation types posted in public ($M_{\text{introversion}} = 7.44$, $SE = .23$; $M_{\text{extraversion}} = 7.43$, $SE = .23$) and semi-public conditions ($M_{\text{introversion}} = 7.69$, $SE = .16$; $M_{\text{extraversion}} = 7.87$, $SE = .15$). The contrast analysis confirmed that no effect emerged, $t(243) = 0.22$, $p = .825$. Hence, both Hypothesis 1 and 2 were not supported.
Table 1. Contrast weights for each hypothesis test and descriptives for experimental conditions

<table>
<thead>
<tr>
<th></th>
<th>Semi-Public Setting</th>
<th></th>
<th>Public Setting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introvert</td>
<td>Extravert</td>
<td>Introvert</td>
<td>Extravert</td>
</tr>
<tr>
<td></td>
<td>Customization</td>
<td>No customization</td>
<td>Customization</td>
<td>No customization</td>
</tr>
<tr>
<td>H1: intro/extra</td>
<td>-1</td>
<td>-1</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>H2: public/semi-public x intro/extra</td>
<td>-1</td>
<td>-1</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>H3: yes/no custom x intro/extra</td>
<td>-2</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>H4: total for H4</td>
<td>-3</td>
<td>-2</td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>Mean</td>
<td>751</td>
<td>788</td>
<td>781</td>
<td>793</td>
</tr>
<tr>
<td>SD</td>
<td>135</td>
<td>1.41</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>n</td>
<td>46</td>
<td>33</td>
<td>50</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>730</td>
<td>758</td>
<td>750</td>
<td>736</td>
</tr>
<tr>
<td></td>
<td>172</td>
<td>106</td>
<td>124</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>31</td>
<td>12</td>
<td>33</td>
</tr>
</tbody>
</table>
To further understand the underlying mechanisms of self-concept change, the dimension of customizing the degree of publicness of one’s message was examined. The third Hypothesis inquired whether the ability to customize would result in greater self-concept changes than when customization was not an option. The ANOVA revealed a non-significant effect for the two-way interaction of selective self-presentation and customization, \( F(1, 243) = 0.75, p = .388 \). This indicated that introvert and extravert self-presentations both led to similar ratings on self-reported extraversion for those participants who were able to customize (\( M_{\text{introversion}} = 7.40, SE = .22; M_{\text{extraversion}} = 7.65, SE = .22 \)) and those participants who were not able to customize (\( M_{\text{introversion}} = 7.73, SE = .17; M_{\text{extraversion}} = 7.65, SE = .17 \)). The contrast analysis confirmed that no effect emerged, \( t(243) = 0.63, p = .532 \). Hypothesis 3 was therefore not supported.

The fourth Hypothesis posited that self-presentation in a public setting would lead to greater self-concept changes than self-presentation in a semi-public setting, which was expected to be more pronounced when individuals were able to actively customize their self-presentation to be public. The three-way interaction of selective self-presentation, degree of publicness and customization was non-significant, \( F(2, 243) = 0.13, p = .883 \). The contrast analysis confirmed that the hypothesized effect pattern did not emerge, \( t(243) = 0.43, p = .670 \). Accordingly, Hypothesis 4 was not supported.

Discussion

Can presenting yourself on social media prompt a change in self-concept? A body of promising work suggests so (e.g., Carr & Foreman, 2016; Gonzales & Hancock, 2008; Walther et al., 2011). Within the literature, the public nature of online settings has been identified as a key factor in generating self-concept changes. To further deepen and diversify our understanding on the impact of public self-expression on potential changes in self-concept within the context of social media, the current study tested whether differences between public and semi-public settings as well as opportunities of public customization could further amplify such self-effects.

Based on the reasoning that selectively revealing information about the self for other people to see elicits public commitment, an internalization process may be
activated such that individuals internally match their private self-concepts with recent behaviors (e.g., Tice, 1992). This study showed that selectively presenting the self within settings that resemble public social media platforms did not activate such internalization, and thereby did not reveal any change in self-concept. We expected individuals who presented themselves as extraverted to rate themselves as more extraverted compared to those who were asked to present themselves as introverted. We found, however, that all individuals perceived themselves to be equally extraverted, in either public or semi-public online settings. These findings differ from past research that showed that public identity expressions (i.e., extravert or introvert) on a blog, rather than in the private setting of a text document on a computer, resulted in self-concept changes (Gonzales & Hancock, 2008; Walther et al., 2011).

The possibility to customize the publicness of a self-presentation similarly did not lead to changes in self-concepts compared to those who could not customize the publicness of their self-presentation. We expected this possibility for customization to further increase the sense of potential accountability risks due to being more aware of one’s audience and social context. However, the option to adjust whether a message is completely public or less public (i.e., semi-public) did not appear to activate the internalization of expressed self-concepts. Interestingly, the majority of participants who were allowed to choose the publicness of their message actively limited this; the majority of participants selected a semi-public over a public setting. This suggests that many individuals are aware of their online privacy, and have a relatively strong need to restrict access to personal information as much as the technology allows them to (Joinson, Houghton, Vasalou, & Marder, 2011; Krasnova, Günther, Spiekermann, & Koroleva, 2009; Tufekci, 2008). Overall, our findings tentatively indicate that self-concept changes may not necessarily result from the idea that many others may read or view one’s online self-expressions within social media settings, yet reveal that individuals prefer more semi-public settings.

Contributions and Implications
The results shed new light on the concept of public commitment as a potentially defining factor in eliciting self-concept changes. The theory of public commitment essentially rests on a conceptualization of publicness that represents offline, face-to-face situations (e.g., Schlenker, Dlugolecki, & Doherty, 1994). These situations
differ from online settings, in which individuals are able to manage the searchability, scalability, persistence and replicability of their messages (boyd, 2011). Notably, face-to-face settings maximize the expectation of receiving responses from others while in online settings, especially public social media settings, this may not be the case. Walther et al. (2011) and Carr and Foreman (2016) have already demonstrated that obtaining feedback matters for the strength of self-concept change. Accordingly, the sheer size of one’s online audience may not necessarily activate internalization, but the expectation of obtaining feedback, or actually obtaining feedback, could. Indeed, in the current study the perception of publicness did not so much rest on audience size, but rather on the diversity of people that might come to view the shared content. An explanation for not finding any changes in self-concept may thus be that participants in this study did not expect to receive any feedback.

Our findings contribute to the literature on self-concept change, and self-effects on social media more broadly, by confirming that the mere act of sharing self-related content in public online settings does not necessarily evoke changes inside the self. Accordingly, the underlying mechanism of online self-effects might need re-evaluation, and focus more on feedback. In her account on the status of self-effects within current literatures, Valkenburg (2017) emphasizes that the interaction process between sender and receiver is important for our understanding of the diverse ways in which individuals may be affected by social media uses. This idea may therefore also extend to private social media settings. Instant messaging applications are often used for the sharing of more intimate and personal information, often followed by supportive feedback from recipients (Cui, 2016). Receiving such feedback, especially in case of emotion expression, has been argued to either intensify or reduce one’s emotions or feelings (e.g., Rimé, 2009). Accordingly, if feedback influences the extent to which self-effects occur, future research should not dismiss the potentiality of self-effects in private social media settings.

To further our understanding on self-effects in social media settings, it is imperative that the literature moves toward a more refined understanding of the impact of feedback. While obtaining positive and affirmative feedback has been found more common on social media (e.g., Valkenburg, Peter, & Schouten, 2006), the potential for negative feedback from others remains (e.g., Koutamanis, Vossen, & Valkenburg, 2015). This could lead to adverse effects for the self, notably among
individuals who are more sensitive to dismissive or negative feedback from others. Research may also consider how disconfirmatory feedback may affect self-concept changes (Carr & Foreman, 2016). Specifically, comments that (publicly) contradict or undermine one’s identity expression may influence the extent to which users subsequently assess their self-concept. The fact that users have become increasingly savvy in deploying social media interfaces to fulfill their needs must nevertheless be taken into account. While the current study did not find an effect for customization, social media users may actively mitigate the effects of receiving feedback by deleting comments. The linkage between selective-self-presentation and user-controlled customizations therefore merit more scholarly attention, as this may further uncover the nuances that underlie potential psychological and behavioral consequences of social media use.
References


