Research Articles

Self-Disclosure and Psychological Resilience: The Mediating Roles of Self-Esteem and Self-Compassion

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Abstract

Self-disclosure involves sharing thoughts, feelings, and experiences with others, typically surrounding emotionally relevant and often times difficult life experiences. Research suggests a link between acts of self-disclosure and improved psychological resilience. Most research argues that resilience arises because acts of disclosure alter one's thinking around a topic of disclosure, which is then associated with improved resilience. Research also suggests, however, that disclosure can alter personal characteristics such as one's level of self-compassion or self-esteem. Nevertheless, we know relatively little about the potential mediating role that personal characteristics might play in predicting resilience. This exploratory cross-sectional study assesses whether self-characteristics (specifically self-esteem and self-compassion) mediate the relationship between self-disclosure and psychological resilience. Four hundred and forty-three individuals completed a survey that assessed the aforementioned variables. Findings suggest that self-esteem and self-compassion mediate the relationship between self-disclosure and psychological resilience. Demographically, age and those who identified as male reported significantly higher levels of resilience than individuals of other demographics. These findings pinpoint personal characteristics that could be targeted to supplement and improve the efficacy of self-disclosure interventions.

Keywords: self-disclosure, self-esteem, self-compassion, psychological resilience

Self-disclosure is a process wherein individuals express feelings and facts about themselves and their experiences (Jourard & Lasakow, 1958). Self-disclosure can occur in a personally contained nature (i.e., acts of reflection; personal journaling) or in interactions with members of one's social network (Derlega, Metts, Petronio, & Margulis, 1993; Lepore & Smyth, 2002). Topics of disclosure can include "descriptive self-disclosures", which comprise information and facts about oneself, or they can include "evaluative self-disclosures", which comprise expressions of emotion, judgment, or feeling-states (Derlega et al., 1993). Each type may be more or less personal, and may or may not induce emotion, however both types can occur in solitude or in meaningful and every day conversation. In addition to general types of personal or social disclosure, researchers have found support for disclosure interventions that target emotionally relevant life experiences. Such disclosure

interventions ask individuals to write or verbally express thoughts and feelings surrounding significant life event(s) and their relation to that person's thoughts, feelings, and identity.

The act of sharing such thoughts has been consistently linked to improved psychological health (Pennebaker, 1995) and resilience (Satici, 2016), whereas a lack of disclosure has been associated with increased mental rumination (Pennebaker, 1995) and physiological stress, as well as a lack of social support from one's network (Derlega et al., 1993). Previous research suggests that personal characteristics including gender, and methodological variables including disclosure type (written or verbal), can help predict whether an individual is more or less likely to self-disclose (Dindia & Allen, 1992). Additionally, research investigating variables including pressure to disclose (Johansen, Andrews, Haukanes, & Lilleaas, 2014) and regret after disclosing (Moore & McElroy, 2012) help to illuminate the idea that individual experiences play a part in dictating whether disclosure is a beneficial experience. Simply put, types and topics of disclosure, degree of emotion involved, or context in which disclosure occurs, do not necessarily yield the same benefits for all people. Nevertheless, researchers have affirmed the idea that in general, disclosure predicts greater psychological resiliency (Mancini & Bonanno, 2006) and thus may improve psychological well-being in individuals who have a higher tendency to engage in disclosure acts.

Psychological resiliency comprises the ability to mentally "protect" oneself from the negative effects that coincide with distressing experiences, and to adapt to troubling experiences successfully (Fletcher & Sarkar, 2013). Essentially, individuals who have higher psychological resilience experience less stress and greater positive outcomes in light of difficult or emotion-eliciting events. Although research suggests that resilience can indeed be improved upon following acts of self-disclosure (Hemenover, 20015) we still know relatively little about personal processes and characteristics that might further encourage these outcomes. Research has suggested that self-disclosure predicts increases in certain personal characteristics such as one's level self-esteem or self-compassion (Sprecher & Hendrick, 2004; Ziemer, 2014), however research has not yet determined whether these characteristics appear to mediate, or explain, part of the relationship between resiliency and self-disclosure acts.

If personal characteristics play a role in explaining the relationship between disclosure and resilience, it is possible for researchers to not only identify those more or less likely to benefit from disclosure therapies, but also work on enhancing such characteristics in study subjects to promote greater outcomes following disclosure interventions. To this end, the current study examines whether self-compassion and self-esteem mediate the relationship between self-disclosure and resilience, which gives further insight into how the disclosure process may work to improve individual outcomes, as well as determine who may be more amenable to the positive outcomes that self-disclosure practices can serve.

Theorizing the Link Between Self-Disclosure and Psychological Resilience

Researchers believe the link among disclosure and resilience is in part explained because disclosure reduces the repression of emotion (Petrie, Booth, & Davison, 1995). Inhibition of emotion requires psychophysiological effort, and this additional cognitive effort negatively impacts both psychological and physical functioning (Magai, Consedine, Fiori, & King, 2009). As such, multiple studies on self-disclosure have linked improvements in psychological health to the expression of emotion that individuals engage in during acts of disclosure (Traue, 1995). According to Pennebaker (1995), long-term health benefits of self-disclosure are only apparent if individ-

uals express emotions rather than providing factual accounts of events. As long as disclosure induces emotion, however, benefits of disclosure are likely to occur (Pennebaker & Beall, 1986). More recent studies have also found evidence that the health benefits of disclosure are not limited to disclosure about traumatic events (Consedine, Sabag-Cohen, & Krivoshekova, 2007; Dupasquier, Kelly, Moscovitch, & Vidovic, 2018; Jensen & Rauer, 2014; Zhang, 2017), suggesting that the act of disclosure in general is linked to greater psychological health and resilience.

Cognitive reappraisal processes are also thought to coincide with disinhibition (i.e., the expression and release of emotion) in explaining positive outcomes following disclosure (Pennebaker, 1995). Cognitive reappraisal comprises an attempt to reinterpret an emotion-inducing event, which alters the event's meaning and changes the emotional impact the individual feels (Cutuli, 2014). When an individual engages in self-disclosure about an event, they create a narrative out of the event which translates abstract feelings into structured experiences (Alparone, Pagliaro, & Rizzo, 2015). Individuals are therefore able to organize their emotions and behaviors, as well as the events that influenced them, which may help them understand the impact of emotional events on their everyday lives. Talking through an event can therefore reduce associated anxiety, while promoting assimilation of the event and any upsetting emotions that the individual may continue to feel (Stiles, 1995). Disclosure of an emotional event can also shift an individual's mindset from a concrete string of events to a more holistic way of looking at the causes and effects of that event (Bucci, 1995).

While disinhibition and cognitive reappraisal are explanatory mechanisms behind why the act of self-disclosure contributes to greater resilience, we do not yet know whether personal characteristics that benefit from disclosure may also contribute to resiliency outcomes. Miller, Berg, and Archer (1983) note that the extent of one's disclosure tendencies and outcomes likely depend on that person's individual characteristics. Characteristics which have known associations with disclosure and resilience include one's self-compassion and self-esteem (Cameron, Holmes, & Vorauer, 2009; Dupasquier et al., 2018; Neff & McGhee, 2010). Although there is no formal theory tying self-esteem and self-compassion together, they have both been conceptualized as positive ways of relating to the self (Neff & Vonk, 2009). Given that disclosure involves the expression of feelings pertaining to oneself, and that studies have already confirmed relationships between disclosure, self-esteem, self-compassion, and resilience (Dupasquier et al., 2018; Gonzalez, 2014; Neff & McGehee, 2010), we felt it was important to examine whether these ways of relating to the self also mediated the disclosure-resiliency relationship.

Self Esteem

Self-esteem is defined as an individual's perception of their own self-worth (Tafarodi & Swann, 1995) and has been identified as a personal precursor to resiliency and the ability to overcome adverse life events (Rutter, 1987). Additional factors can influence resiliency outcomes, such as having a supportive environment, or having higher quality relationships with caregivers; nevertheless, self-esteem is something that can be personally modifiable regardless of external circumstance or context (Guindon, 2010). Research suggests that self-esteem is a barometer in that it illustrates how valued and accepted we perceive ourselves to be by others (Bos, Muris, Mulkens, & Schaalma, 2006). Abundant studies have shown that having high levels of self-esteem serve as a buffer against difficult experiences (Greenberg et al., 1992; Rector & Roger, 1997). Acts of self-disclosure have been predictive of greater self-esteem given that self-disclosure involves the expression of authentic thoughts and feelings reflective of one's perceived identity (Gonzalez, 2014).

From a mediational perspective, research finds that self-esteem mediates relationships among attentional processes (specifically mindfulness) and psychological well-being (Bajaj, Gupta, & Pande, 2016). Written and verbal disclosure of a person's thoughts, experiences, and emotions is, similarly, cultivating an attentional process that focuses on the topic of disclosure at hand. In fact, self-disclosure practices have been labeled as awareness exercises themselves (Sultan, 2017). Given these similarities, it is possible that disclosure practices are associated with heightened self-esteem (as is evidenced by existing research; Gonzalez, 2014; Wills, 1985) and that this, then, may partially explain improved resilience outcomes following acts of self-disclosure. Indeed, if one has a high perception of self-worth, then the reflection and expression of emotionally relevant life-experiences, may simply serve to bolster their perception of themselves as a resilient individual.

Self-Compassion

A corollary characteristic, self-compassion, is a practice defined as caring for the self with the goal of understanding one's own struggles and experiences without judgment. Similar to resiliency and self-esteem, self-compassion is considered an adaptive, or prosocial, way of relating to oneself (Neff & McGehee, 2010). High self-compassion is associated with a low desire to conceal experiences with others (Dupasquier et al., 2018). When choosing to relate to oneself with kindness, research suggests individuals are less likely to fear judgment from others (Werner et al., 2012), likely increasing their willingness to self-disclose thoughts and feelings to others. Self-compassion is considered a trait, but also one that individuals can cultivate (Smeets, Neff, Alberts, & Peters, 2014). Given that self-compassion is helpful in self-disclosure settings (Dupasquier et al., 2018) and also predicts resiliency (Neff & McGehee, 2010), those who are self-compassionate may also be more likely to experience the psychological benefits that accompany self-disclosure.

In considering the potential for self-compassion to serve as a mediator between self-disclosure and resilience, research finds that acts of disclosure are predictive of greater self-compassion (Ziemer, 2014). This may be due to the fact that disclosure allows one to cognitively engage with, and reflect on, meaningful personal beliefs, thoughts, and experiences that then cultivate a greater sense of kindness and benevolence toward the self (Neff, 2015). Such processes could, at least in part, explain the notion that self-disclosure contributes to greater psychological resilience not only via emotional disinhibition or cognitive reappraisal, but via the process of approaching the self with more understanding, acceptance, and kindness (Trompetter, de Kleine, & Bohlmeijer, 2017). We seek to test this notion as a means of better understanding whether disclosure processes contribute to resiliency outcomes via self-compassion as a mediating variable.

If self-compassion and self-esteem each serve as mediators between self-disclosure and resilience, researchers and clinicians could adopt strategies aimed at further enhancing these characteristics in individuals completing self-disclosure practices and interventions. In addition, such findings would further refine our knowledge on how the disclosure process contributes to greater resilience outside of, or in addition to, emotional disinhibition and cognitive reappraisal processes. For the current investigation, before assessing mediating relationships among variables, we sought to ensure that our primary study variables were indeed related as evidenced by previous research outlined above. To reaffirm these relationships our first hypothesis concluded that:

> H1: A positive relationship will be observed between self-disclosure and psychological resilience.

H1a: Positive relationships will be observed among self-disclosure, resilience, self-esteem, and self-compassion.

We then sought to test our mediating hypotheses which suggested that:

H2: Self-esteem will mediate the relationship between self-disclosure and psychological resilience.

H3: Compassion for oneself will mediate the relationship between self-disclosure and psychological resilience.

Because this study seeks to understand personal variables and characteristics implicated in the disclosure process, we were also curious as to whether demographic characteristics have associations with any of the aforementioned variables. Previous work suggests there are gender differences in self-disclosure such that females disclose more than males; however, this can depend on the gender of the disclosure recipient and nature of disclosure (Dindia & Allen, 2002). In addition, a meta-analysis suggests that women are less self-compassionate than men (Bluth, Campo, Futch, & Gaylord, 2017), and that females tend to have lower levels of self-esteem compared to men (Kearney-Cooke, 1999). We seek to understand whether these findings are replicated in the current study by querying:

RQ1: Are there demographic (i.e., gender and age) differences in self-disclosure, resilience, self-esteem, or self-compassion?

Method

Participants

Eligible participants (adults age 18+) were able to complete this study following informed consent procedures. Four-hundred and seventy-one individuals began our questionnaire, however, twenty-eight were removed due to large amounts of missing data or response screening that indicated lack of attention or inappropriate response selections (e.g., choosing the same response repeatedly). The final sample consisted of 443 individuals. Two-hundred and fifty-three (57.1%) individuals identified as female while 179 (40.4%) identified as male. Eleven individuals (2.5%) did not provide information pertaining to gender. Average age was 21 years (*SD* = 5.82), with a range of 18–56 years. The majority of participants were Caucasian (84%) while 5.9% identified as Asian, 2% identified as Black/African American, 2.7% identified as American Indian/Alaska Native, and 1% identified as Hispanic/Latino. Seven individuals (1.6%) identified as "Other" and 13 (2.9%) did not report their ethnicity.

Procedures

All procedures were approved via the authors' institutional review board. Participants were recruited at a Midwestern University using a snowball sampling strategy. Classroom presentations and study recruitment flyers were utilized to ask upper division undergraduate students for assistance in recruiting adults willing to complete a 20-minute online survey. Students identified eligible individuals and provided them with a secure link to an online Qualtrics survey. Students were able to receive extra credit in upper division classes if they were able to recruit two individuals who each completed the survey successfully. If eligible, students themselves were

able to comprise one of the individuals who could complete the survey, however we also asked that, if they were able, they try to recruit another individual to take the survey that differed demographically from them in age or ethnicity, in an attempt to diversify our sample. All information was submitted anonymously. Individuals who submitted their survey on behalf of another student used a self-generated codename to submit with the survey. This codename was then shared with the student and professor. If the codename was associated with a completed survey the corresponding student received nominal extra credit in the course.

Measures

Self-Disclosure

Self-disclosure was measured using the Self-disclosure Index (SDI; Miller et al., 1983). This measure gauges the emotional depth and authenticity with which people are willing to disclose personal information to others in their social network. Items ask individuals to rate the extent that they disclose various types of information to others. Sample items include: "What I like and dislike about myself," "My fears," and "Things I have done which I feel guilty about." Participants rate their willingness to disclose with others about these topics using a 0 (*discuss not at all*) to 4 (*discuss fully and completely*) set of response options. Average disclosure scores for this study were 2.57 (*SD* = 0.84). Cronbach's alpha = .91.

Psychological Resilience

Psychological resilience was measured using the Brief Resilience Scale (BRS; Smith et al., 2008). This is a six-item measure that asks participants to rate their level of agreement with statements such as "I tend to take a long time to get over set-backs in my life" (reverse scored) and "It is hard for me to snap back when something bad happens" (reverse scored). This particular measure of resilience has been regarded as being one of the most psychometrically sound compared to other resilience measures (Kyriazos et al., 2018). Specifically, Windle, Bennett, and Noyes (2011) conducted a review of 19 existing measures and noted that the BRS (among two others) had the best psychometric ratings. Responses were gauged on a 1 (*strongly disagree*) to 5 (*strongly agree*) set of response options. Cronbach's alpha for the measure was .85. Average resilience was 3.29 (*SD* = 0.73).

Self-Esteem

Self-esteem was measured using the Rosenberg Self-esteem Scale (Rosenberg, 1965). This 10-item measure asks individuals to rate their level of agreement with statements such as "I wish I could have more respect for myself" (reverse scored) and "I take a positive attitude toward myself." Typically higher responses indicate lower self-esteem, however, we coded the self-esteem measure such that higher scores indicated higher levels of self-esteem for ease of interpretation. Responses are recorded using 1 (*strongly disagree*) to 4 (*strongly agree*) answer options. Average self-esteem was 3.01 (*SD* = 0.57). Cronbach's alpha = .89.

Self-Compassion

Self-compassion was captured using the 12-item Self-compassion Short Form (Raes, Pommier, Neff, & VanGucht, 2011). This measure asks participants to rate their level of agreement with statements such as "When something painful happens I try to take a balanced view of the situation" and "When I'm going through a very hard time, I give myself the caring and tenderness I need." Responses are recorded using a 1 (*almost never*) to 5 (*almost always*) set of response options. Participants' average self-compassion score was 3.06 (*SD* = 0.61). Cronbach's alpha for the measure was .84.

Results

Before beginning data analyses, missing data was imputed using item mean score substitution. This technique is suggested as superior to person mean score substitution with higher sample sizes (Downey & King, 1998). Additionally, we assessed normality of data by examining skew and kurtosis. Skew and kurtosis were within acceptable ranges for all variables (−1.5 to 1.5; Tabachnick & Fidell, 2019) except for age, which was to be expected given the average age of participants and the large number of young adults who completed the study. Our first task was to assess associations among study variables. We posited that self-disclosure would be associated with psychological resilience (H1). We also contended that all study variables would be positively associated with one another (H1a). These hypotheses were assessed using Pearson bivariate correlations. Results suggested a number of significant relationships. Specifically, self-disclosure did predict psychological resilience ($r = .10$, $p < .05$). H1 was supported. In addition, self-disclosure was positively related to self-compassion, and self-esteem. Psychological resilience was positively related to self-compassion and self-esteem. Self-compassion was positively related to self-disclosure, psychological resilience, and self-esteem. Finally, self-esteem was positively related to self-disclosure, resilience, and self-compassion. H1a was supported. See Table 1 for r-values among variables.

Table 1

Correlations Among Study Variables

| Variable	1.	2.	3.	4.	5.	6.
1. Self-disclosure	-					
2. Psychological resilience	.10*	-				
3. Trust in others	.19**	.05	-			
4. Self-compassion	.20**	.43**	.09	-		
5. Self-esteem	.30**	.41**	.18**	.68**	-	
6. Age	-.09	.11*	-.07	.05	.02	-

Note. N = 443.

*p < .05, one-tailed. **p < .01, one-tailed.

Hypotheses 2 and 3 posed mediating relationships among the aforementioned variables. Specifically, we contended that self-esteem (H2) and compassion for oneself (H3) would mediate the relationship between self-disclosure and psychological resilience. We assessed these hypotheses by running two mediation models and entering self-compassion, and self-esteem as mediating variables respectively, with self-disclosure as the independent variable and psychological resilience as the outcome variable. Preacher and Hayes PROCESS macro for SPSS was used to run the mediation tests. This SPSS macro uses a bootstrapping approach to determine whether mediating relationships are significant. Accordingly, 95% confidence intervals that do not include 0 are indicative of a significant mediating relationship. Results suggested that self-compassion, CI [.04, .11] and self-esteem, CI [.07, .16] did significantly mediate the relationship between self-disclosure and psychological resilience, providing support for hypotheses two and three. See Figure 1 and Figure 2 for beta coefficients among variables.

Figure 1

Self-Esteem, Self-Disclosure, and Resilience Mediation Model
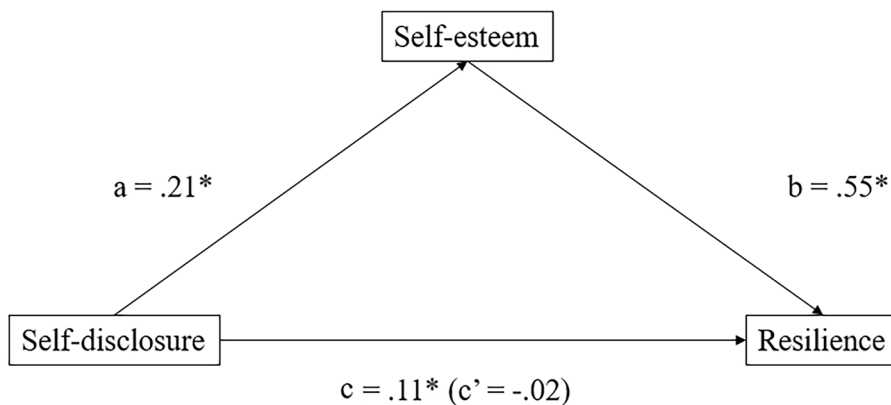
Note. Standardized regression coefficients for the relationship between self-disclosure and resilience as mediated by self-esteem. CI [.07, .16].

Figure 2

Self-Compassion, Self-Disclosure, and Resilience Mediation Model
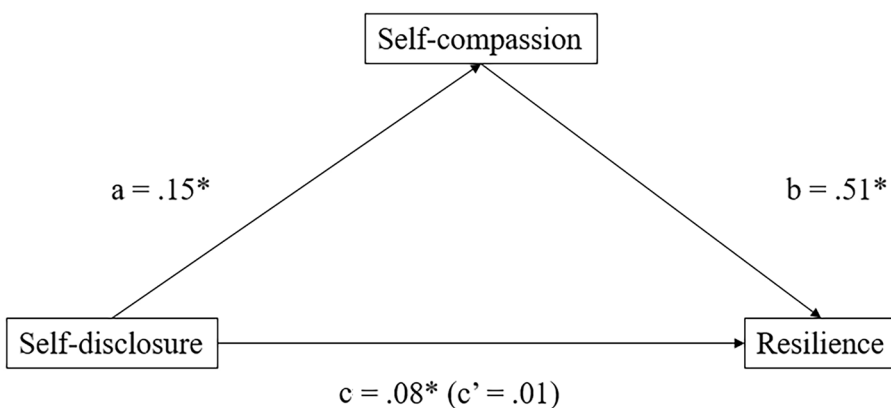
Note. Standardized regression coefficients for the relationship between self-disclosure and resilience as mediated by self-esteem. CI [.04, .11].

Our final goal was to determine whether there were age or gender differences among study variables (RQ1). We tested whether age had an association with self-disclosure, resilience, self-compassion, and self-esteem using Pearson bivariate correlation analyses. Results suggested that age exhibited a positive relationship with psychological resilience ($r = .11$, $p < .05$). Age was not significantly related to other study variable (p's > .05). We next assessed gender differences using independent samples t-tests. Results indicated that there were significant gender differences in levels of psychological resilience. Specifically, males ($M = 3.38$, $SD = 0.67$) reported higher levels of resilience than females ($M = 3.20$, $SD = 0.77$, $t(43) = 2.51$, $p < .05$). There were no other significant gender differences among study variables (p's > .05).

Discussion

Research suggests a link between self-disclosure and greater well-being, including psychological resilience (Bonanno, 2012; Pennebaker, 1995; Satici, 2016). While processes of self-disclosure such as emotional inhibition and cognitive reappraisal can contribute to resilience, this does not explain individual characteristics that might be impacted or improved upon following acts of disclosure; nor does it determine whether these individual characteristics might actually predict resiliency outcomes. Our study was conducted to investigate individual characteristics that contribute to the relationship between self-disclosure and psychological resilience.

Before running substantive analyses we assessed whether self-disclosure indeed predicted psychological resilience (H1). This hypothesis received support. It also reinforced the notion that our primary variables were related, echoing that of previous work (Glass, Dreusicke, Evans, Bechard, & Wolever, 2019). In addition, we posited that positive relationships would be reported between our predictor and outcome variables and the individual characteristics of self-esteem and self-compassion (our proposed mediating variables). Findings suggested that self-disclosure was positively related to both self-compassion, and self-esteem. Psychological resilience was also positively related to self-compassion and self-esteem. We then sought to test our primary hypotheses, positing that self-esteem (H2) and compassion for oneself (H3) would mediate the relationship between self-disclosure and psychological resilience. Both self-esteem, and self-compassion did mediate the relationship between self-disclosure and resilience, providing support for our second and third hypotheses.

The results suggesting that self-esteem mediates the relationship between self-disclosure and psychological resilience imply that a sense of self-worth may be internally acknowledged or improved upon during the disclosure process, given that self-esteem plays a role in contributing to resilience. Because individuals with lower self-esteem tend to disclose less frequently than those with higher self-esteem (Cameron et al., 2009), the current finding has number of implications. Prior research suggests individuals with lower self-esteem experience greater fear of disclosure ramifications such as feelings of embarrassment, or disapproval from others (Cameron et al., 2009). Consequently, individuals with lower self-esteem are less likely to disclose meaningful information, therein reducing the potential benefits self-disclosure can espouse, including improved resilience. Our study points to the ideas that a) the self-disclosure process in itself can predict greater self-esteem, which then predicts greater resilience, and b) that working on one's level of self-esteem could be beneficial for improving resiliency. Psychological resiliency may then prompt a reduction in fears surrounding disclosure, thus further enhancing self-esteem, well-being, and a greater willingness to disclose to others. Future research should consider interventional work that focuses on improving self-esteem levels, particularly in at-risk or traumatized individuals, to ascertain whether this increases disclosure and/or improves resiliency to an even greater extent.

Results of our study suggest that, in addition to self-esteem, self-compassion mediates the relationship between self-disclosure and psychological resilience. Neff (2015) notes that there are three components to self-compassion. These components include: self-kindness as opposed to self-judgment, common humanity versus isolation, and mindfulness as opposed to over-identification. Given that disclosure predicts self-compassion, it is likely that self-disclosure encourages an individual to also engage with one or more of these more specific components of self-compassion. For example, disclosing cares, concerns, and beliefs may prompt kindness toward the self, and may also encourage a sense of common humanity in experiencing such thoughts and emotions. Particularly when disclosing with others, it is likely that one is reassured that their feelings are

shared by others, therein reinforcing the idea of a common humanity (Schmidt & Cornelius, 1987). In addition, engaging with the disclosure process is known to prompt cognitive reappraisal, which comprises altering the way one thinks about themselves or their experiences (Ellis & Cromby, 2009). This process may contribute to the third aspect of self-compassion—that of mindfulness, wherein one experiences thoughts and feelings as malleable, as opposed to over-identifying with them. Future research should examine these speculations to determine which specific components of compassion tend to be cultivated via disclosure processes. Since disclosure begets self-compassion, and self-compassion begets greater psychological resiliency, future studies may also wish to explore combination interventions wherein disclosure practices are coupled with self-compassion practices, to encourage greater benefit to study participants. Outside of research contexts, it may behoove individuals to work on extending care and compassion toward themselves if they notice tendencies toward harsh or negative self-talk. An increase in self-compassion may then coincide with greater willingness to disclose to others, and greater resiliency when facing difficult life experiences.

Given findings suggesting that self-esteem and self-compassion work as mediators in explaining the disclosure-resiliency process, future research could also focus on further examining the processes that may contribute to these outcomes. For example, research finds that disclosure practices improve well-being, but that this can be dependent on, or influenced by, the particular word-usage used in disclosures (Alparone et al., 2015). Research should examine whether this also matters for self-esteem and self-compassion outcomes in their relation to disclosure. In addition, cognitive reappraisal improves well-being via disclosure practices (Lu & Stanton, 2010), but it is possible that cognitive reappraisal may also be implicated in self-esteem and self-compassion changes. These new queries all offer areas for future investigation that further refines our understanding of how disclosure contributes to positive personal and relational health outcomes.

Our final goal was to consider whether demographic characteristics, specifically age and gender, predicted differences in self-disclosure and resilience, as well as self-compassion and self-esteem. Results showed a relationship between age and resilience, as well as gender and resilience. Older individuals were more resilient than their younger counterparts. Additionally, men were more resilient than women. There were no other significant age or gender differences among study variables. Although age and gender are primarily fixed characteristics, knowledge about resiliency predispositions associated with these demographics can be a valuable tool to increase awareness and potentially be a call to action. Greater resilience may not simply be due to age, but rather life experience. As we grow older, we may develop better coping mechanisms to combat emotionally distressing occurrences, leading to greater psychological resilience. Greater resilience may also be due to external social factors. Specifically, research on men, women, and resilience, suggests that men may be afforded more opportunities for expressing resilience, and similarly may be more rewarded socially for it (Boardman, Blalock, & Button, 2008). Given these findings, young people as well as women can potentially increase their psychological resilience by engaging in more frequent or more authentic forms of self-disclosure and/or working specifically to improve their self-esteem and self-compassion. While individuals of all demographics have varied levels of disclosure, self-esteem, and self-compassion, being mindful of individual habits related to these variables may be an effective first step to increasing resilience.

Despite interesting outcomes, a number of limitations were present in the current investigation. First, our sample consisted of primarily young adults. We tried to encourage a broader sample by asking students to reach out to other members in their social network to complete the study, particularly those of a different demographic than themselves. Nevertheless, our sample still predominantly comprised young Caucasian adults. In addition,

this was an exploratory cross-sectional study. Intervention work is warranted in this area given that assessing general self-disclosure (even about personal topics) does not equate to studying acts of self-disclosure utilized in disclosure interventions. Last, we could have measured outcomes other than, or in addition to, resilience as there are a host of positive effects that have been studied following self-disclosure. We chose to focus on resilience given its association with a broad range of psychological and physical benefits; future research may wish to ascertain whether self-esteem and self-compassion emerge as mediators among self-disclosure and outcomes such as stress, emotion regulation, and other well documented outcomes that coincide with self-disclosure.

Notwithstanding limitations, this study provides researchers and clinicians with knowledge of who may be more likely to benefit from disclosure interventions, and what internal processes (i.e., self-esteem and self-compassion) may be at work in predicting improved resiliency outcomes. If so inclined, researchers could use this information to more specifically tailor interventional work by incorporating self-esteem or self-compassion practices into disclosure studies, potentially making them more advantageous for study participants. Researchers could also conduct dyadic studies wherein they examine how disclosure recipients impact disclosure outcomes via supportive and advice-giving processes. Results of the current study are likewise beneficial outside of institutional and clinical contexts. Namely, individuals who feel that they struggle with self-esteem and self-compassion may wish to discern whether engaging in self-disclosure practices appears to improve these characteristics and whether this, then, appears to give them a greater sense of resilience. Altogether, we hope the findings and opportunities arising from the current study give individuals, researchers, and clinicians new ideas for pursuing results-based research and outcomes on disclosure and its benefits.

Funding

Competing Interests

Acknowledgments

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