

**Depression in female and male burn survivors six months after hospitalization:
Including the role of body image dissatisfaction and partner support**

Loes Golbach 6298494

Faculty Social and Behavioural Sciences

Department Clinical Psychology

University of Utrecht

Elise Boersma-van Dam, M.Sc.

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Abstract

Burn survivors may suffer from depression as a result of burn injuries. This study examines burn survivors' level of depression at six months post-burn, including the influence of body image dissatisfaction and partner support on depression (partner support at three months post-burn). Participants that were used in this study included 266 burn survivors. Burn survivors' body image dissatisfaction, depression, and partner support were measured by the SWAP scale, the BDI-II, and the POSR scale. Body image dissatisfaction, %TBSA, prior suffering from depression, gender, and partner support were measured as possible predictors of depression. In addition, body image dissatisfaction was measured as a possible mediator between %TBSA and depression, and gender and depression. Body image dissatisfaction, %TBSA, and gender were found to have a significant effect on burn survivors' depression post-burn injury. Higher levels of body image dissatisfaction and higher %TBSA levels predicted higher depression levels. Females scored higher on body image dissatisfaction and depression compared to males. Body image dissatisfaction was found to have a mediating role between the relationship of %TBSA and depression, and the relationship between gender and depression. Prior suffering from depression and partner support did not have a significant effect on depression post-burn injury. When treating depression in burn survivors, gender differences, including body image dissatisfaction, should be considered.

Keywords: burn survivors, depression, body image dissatisfaction, %TBSA, gender, partner support

Introduction

Burn injuries belong among the most common and severe traumatic injuries globally. Annually, an approximate of 11 million individuals suffer from burn injuries worldwide (WHO, 2018). Burn injuries can be defined as a type of injury resulting from exposure to high temperature substances, for example steam, hot liquid, and beverages (Yakupu et al., 2022). Burn injuries can differ to a great extent and are highly variable regarding severity, affected tissue, and experienced difficulties as a result (Evers et al., 2010). Concerning severity, several degrees of burn can be identified. Internationally, the depth of burn injuries is classified in degrees I, II, and III, in which I accounts for the least severe wounds and III for the most severe wounds. Moreover, the extent of the burn injury is expressed by the total percentage of body surface area affected (%TBSA) (Rice & Orgill, 2021). In the long term, burn injuries can have numerous complications for burn survivors. Regarding physical complications, burn survivors can particularly suffer from scar contractures. These physical complications, including contractures, bring along several consequences, for example a changed appearance, disability, limited mobility, and a decrease in physical functioning (Akita et al., 2017). These physical complications can influence psychological well-being as well. Regarding psychological complications, burn survivors can suffer from loss of valuable role- and social functioning, social withdrawal, body image dissatisfaction, and psychological distress, such as acute stress disorder, post-traumatic stress disorder, and depression (Fauerbach et al., 2007; McAleavey et al., 2018).

As burn injuries can influence burn survivors' well-being to a great extent, this study aims to gain more insight into the psychological consequences of burn injuries, specifically depression. In addition, this study focuses on two specific factors, namely the influence of body image dissatisfaction and partner support. Gaining insight into these matters may help us understand differences between burn survivors and possible factors that may influence burn

survivors' recovery. A factor that can help to understand the link between depression and body image dissatisfaction is a burn survivor's self-esteem. Self-esteem can be defined as the overall positive or negative manner individuals feel about themselves (Brown et al., 2001). Moreover, body-esteem is seen as a part of self-esteem, as it can be defined as an individual's evaluation of one's body (Lawrence et al., 2006). As aforementioned, physical complications (e.g., changes in appearance and limited mobility) resulting from the burn may give rise to psychological complications, such as dissatisfaction with one's body image and a negative perception of oneself (Van Loey, 2020). Moreover, the visible physical complications can damage a burn survivor's self- and body-esteem, as self-esteem is influenced by the manner in which an individual is viewed on several characteristics and abilities (e.g. one's appearance) (Rumsey, 2018; Rumsey & Harcourt, 2004; Van Loey, 2020). In turn, damaged self-esteem, together with physical complications, may result in depression (Van Loey, 2020).

Dissatisfaction with one's body is common among burn survivors (Lawrence et al., 1998). Body image satisfaction (BIS) can be defined as the evaluation of one's own physical appearance (Dittmar, 2009). Body image dissatisfaction (BID), meaning, when an individual evaluates one's body negatively, is a pressing health issue, as it brings along serious and wide-ranging health consequences, such as decreased mental health and lower quality of life (Davison & McCabe, 2005; Fiske et al., 2014; Griffiths et al., 2018; Wilson et al., 2013). In research of Fauerbach et al. (2000) it is stated that changes in appearance are often a result of burn injuries (e.g., scarring). These changes in appearance can lead to a changed perception of one's body, resulting in BID. A model that supports this contains the cognitive behavioural model by Cash (2012). The model states that a changed appearance of one's body, which does not fit within cultural norms of attractiveness, can lead to BID, as the altered appearance may be stigmatised by others (Cash, 2012; Willemse et al., 2021). In turn, a burn survivor's self-esteem may be affected by stigmatisation, as it is influenced by others' approval (of one's

appearance for example). Furthermore, both a cross-sectional and a longitudinal study have shown that BID greatly anticipates symptoms of depression post-burn (Al Ghriwati, 2017; Thombs, 2007). This may be explained by the finding that burn survivors with high BID can suffer from more psychological distress and psychiatric problems, such as depression (Thombs et al., 2007).

Depression is one of the most common disorders resulting from burns (Ali & Pervaiz, 2019; Fauerbach et al., 2007; Sareen et al., 2013). According to the DSM-5, depression disorder can be characterised by loss of pleasure, cognitive impairment, low mood, insomnia or hypersomnia, feelings of worthlessness and guilt, recurrent thoughts of death, and sudden weight loss or gain (American Psychological Association, n.d.). Among burn survivors, the prevalence of depression can range from 4% to 40%, either in the hospital or at discharge (Al Hamzawi et al., 2018; Palmu et al., 2010; Thombs et al., 2006). One year post-burn, the prevalence can range from 10% to 55% (El hamaoui et al., 2002; Logsetty et al., 2016). A reason why depression can follow from a burn injury may be that symptoms of depression are prevalent in serious injuries that involve loss (Lipowski, 1983). In this case, loss can take the shape of a changed appearance or a decrease in physical functioning. Another reason that could explain depressive symptoms post-burn injury may be the level of pain burn survivors experienced. Research by Ulmer (1997) found that the injury's severity (%TBSA) can be related to higher pain levels and depressive symptoms. Similarly, one study showed that burn survivors have a higher chance to develop depression when they report more pain (Wiechman et al., 2001).

Comparably, BID increases with larger burn injuries (%TBSA) as well (Al Ghriwati et al., 2017; Lawrence et al., 2006; Thombs et al., 2007). Research by Thombs et al. (2007) has found that %TBSA predicts BID, as the severity of the burn may influence one's appearance, and therefore one's body perception. In turn, burn survivors with high BID can suffer from

more psychological distress and psychiatric problems, such as depression. Thus, BID may mediate the relationship between %TBSA and depression (Thombs et al., 2007). Remarkably, the same study by Thombs et al. (2007) did not find a direct effect of %TBSA on depression, which may indicate a mediating role of BID between %TBSA and depression. Additionally, research gives rise to a possible mediating role of BID between gender and depression as well (Thombs et al., 2007).

Research has shown differences between females and males concerning BID post-burn. It has been found that females are at higher risk of BID both six and 12 months after hospital discharge and decreased psychological adjustment one year after hospital discharge (Thombs et al., 2008). A reason for this finding may be the fact that females value their appearance more than males, which can result in greater BID post-burn (Thombs et al., 2008). This may imply that females' self-esteem is more dependent on their evaluation of their appearance compared to that of males (Willemse et al., 2021). In turn, greater BID can result in greater depression (Al Ghriwati, 2017; Thombs, 2007). Furthermore, research has shown a gender difference concerning depression, with more females suffering from depression than males, approximately twice as many (Hyde & Abramson, 2017; Hyde et al., 2008). Concerning burn injuries, a study by Su and Chow (2020) showed that female burn survivors score significantly higher on depression than male burn survivors.

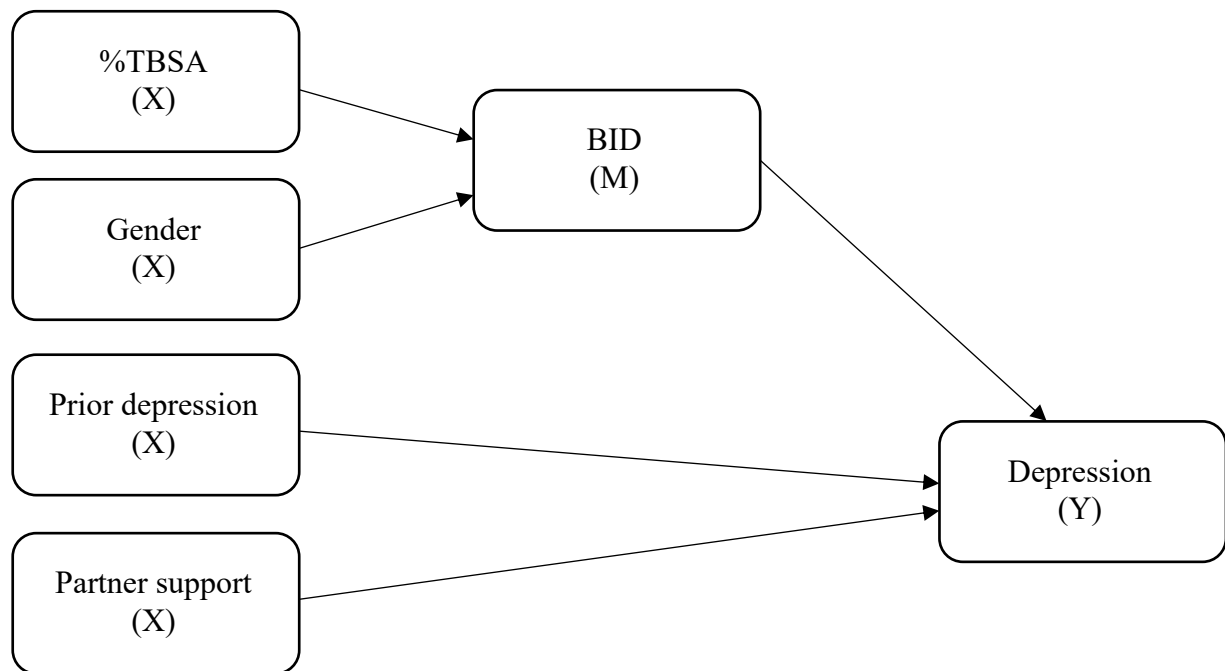
Besides, the likelihood of relapse in individuals who have a history of depressive episodes is high, as it is argued that a minimum of 80% of individuals who suffered from depression in the past will suffer from an additional depressive episode (Malhi et al., 2015; Zhang et al., 2018). Similarly, the existence of psychological disorders (e.g., depression) pre-burn injury is a great predictor for the existence of depression post-burn injury (Fauerbach et al., 1997; Fauerbach et al., 2007; Patterson et al., 1993; Van Loey & Van Son, 2003).

Although depression is common among burn survivors, social support, provided by one's

partner for example, may help to decrease levels of depression, as higher perceived social support can be linked with lower levels of depression (Liu et al., 2020).

Social support, including support of burn survivors' partners, can help burn survivors cope with psychological strains generated by the burn (Gilboa, 2001). This study focuses specifically on the support provided by burn survivors' partners (partner support), as having a partner is of great importance in feeling a sense of social support, with highest positive effects on health and well-being compared to friend- and family support (Walen & Lachman, 2000). Social support can be defined as comfort or aid from others, predominantly to help the individual in need to cope with social, biological, and psychological troubles (APA Dictionary of Psychology, n.d.). Research has shown that perceived social support can be a predictor of an increase in psychological quality of life (Anzarut et al., 2005). Research of Orr et al. (1989) has shown that social support helps to decrease depression and increase burn survivors' self-esteem and body image, as burn survivors perceive their body as more valuable compared to those that do not receive social support.

Concerning above mentioned information, a research question and several hypotheses can be stated. The research question entails "To what extent has having suffered from burn injuries, thereby considering one's body image dissatisfaction and partner support, have an effect on the levels of depression within a timeframe of 6 months?" It is hypothesised that higher levels of depression will occur in burn survivors with higher BID, higher %TBSA levels, who are female, suffered from depression pre-burn injury, and do not receive partner support. Furthermore, it is hypothesised that BID mediates the relationship between %TBSA and depression, and between gender and depression. A graphic representation of the hypotheses is shown in figure 1.

Figure 1*Graphic representation of hypotheses*

Note: BID = body image dissatisfaction.

Method

Inclusion

Data used in this study consisted of synthetic data, gathered through simulation of the original data. This was done for ethical reasons to ensure the anonymity of the participants. The original data were part of a larger study focusing on the social impact of burns, in three Dutch and three Belgian burn centres. Recruitment occurred between October 2013 and October 2015 and included both burn survivors and their partners. Follow-ups took place at both three and six months after the initial recruitment. Regarding inclusion criteria, burn survivors must have had a hospital stay of >24 hours following the burn event, must be 18 years or older, and master the Dutch language. The latter two criteria concerned their partners as well. Furthermore, participants were required not to suffer from any psychiatric

problems that could interfere with the understanding of questionnaires (e.g., cognitive deficits, psychosis).

Participants

This study consisted of 266 participants, with a mean age of 43 ($M = 43.22$, $SD = 15.42$). From the participants, 30.1% were female and 69.9% were male. Participants were recruited by means of probability sampling; all consecutive participants in the whole study period were asked to participate. Regarding partners, 186 burn survivors had a partner, 72 did not have a partner, and eight did not confirm having a partner or not. However, as this study used synthetic data, synthetic data for “missing” partners was included. Therefore, no missing data was present concerning the scales that measured BID, depression, and partner support. Thus, at both measurement moments (three and six months) all participants responded. Nonetheless, a “surrogate-missing data analysis” indicated that burn survivors with a partner ($M = 3.24$, $SD = .99$) scored significantly lower on partner support than burn survivors without a partner/no confirmation about a partner ($M = 3.70$, $SD = 1.01$; $t(264) = 3.48$, $p < .001$). In addition, no significant differences were found concerning BID and depression.

Procedure

This research was approved by the Dutch and Belgium ethic boards (NL44682.094.13 and B670201420373). Furthermore, approval from the Ethics Review Board of the Faculty of Social & Behavioural Sciences (FERB) was acquired. During the participants' hospitalisation, both their partners and themselves were solicited to take part in the study by a local researcher. The participants gave written informed consent after being provided with oral and written information about the study. Follow-up measurements were sent through postal mail.

Measures

Body image dissatisfaction

The Satisfaction With Appearance Scale (SWAP) was used to determine burn survivors' BID (Appendix A). It consists of 14 items, which assess both the social-behavioural impact of burn scars and subjective satisfaction with one's body (Lawrence et al., 1998). Items from 4 to 11 were recoded. The burn survivors rated every item's statement regarding their thoughts and feelings about their appearance post-burn on a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). By adding the scores and calculating the mean afterwards, the scores were determined. High scores on the scale indicate a low body image and a high dissatisfaction with appearance (Lawrence et al., 1998). Concerning reliability of the SWAP, an internal consistency of $\alpha = .92$ was determined, indicating excellent reliability (George et al., 2003). Furthermore, the SWAP is considered a valid measure, as the discriminant and convergent validity are good (Pope et al., 2007). Burn survivors' BID was assessed at six months post-burn through postal mail.

Depressive symptoms

The Beck Depression Inventory II (BDI-II) was used to assess the severity of depression in burn survivors through self-report (Beck et al., 1996). It consists of 21 items and is scored on a four-point scale, ranging from 0 to 3. By adding the scores and calculating the mean afterwards, the scores were determined. Total scores could range from 0 to 63. A high score indicates greater depressive symptoms (Steer et al., 1999). Scores between 0 and 13 indicate slightest depression, scores between 14 and 19 indicate mild depression, scores between 20 and 28 indicate moderate depression, and scores between 29 and 63 indicate serious depression (Beck et al., 1996). Concerning the reliability of the BDI-II, an internal consistency of $\alpha = .95$ was determined, which indicates good reliability (George et al., 2003). Furthermore, the convergent validity of the BDI-II is supported (Storch et al., 2004). Burn survivors' levels of depression were assessed at six months post-burn through postal mail.

Partner support

The Partner-Oriented Self-Regulation Scale (POSR) was used to determine partner support (Appendix B). Specifically, the POSR assesses expressed concern for the burn survivor by their partner (Stroebe et al., 2013). It consists of three items, namely item 1 “I encourage my partner to talk about their feelings”, item 2 “I ask my partner how they are feeling”, and item 3 “I show interest in what is going on in my partner.” Items were scored on a five-point scale, ranging from 0 (not at all) to 5 (very much). By adding the scores and calculating the mean afterwards, the scores were determined. A high score on the scale indicates higher expressed concern. Concerning the reliability of the scale, Cronbach’s alpha contained $\alpha = .85$, which indicates good reliability (George et al., 2003). Furthermore, the POSR has a high face validity and sufficient psychometric properties (Stroebe et al., 2013). The POSR scale was completed by the burn survivors’ partners at three months post-burn through postal mail.

Patient characteristics

Besides aforementioned scales, several patient characteristics were measured. Characteristics included %TBSA, gender, prior suffering from depression, and age. %TBSA indicates the extent of the burn injury and is expressed by the total percentage of body surface area affected (Rice & Orgill, 2021). The Rule of Nines determines %TBSA, by estimating the burned body surface area, based on allocating percentages to different areas of the body (Moore et al., 2022). Prior suffering from depression was assessed through self-report, with a dichotomous question.

Statistical analysis

For the statistical analysis, the gathered data were converted to the programme SPSS version 28. First, to assess associations between the variables (depression, BID, partner support, %TBSA and age), a correlation analysis was conducted. Second, to assess significant

gender differences concerning BID and depression, two Independent-Samples T Tests were conducted. Third, to determine the effect of the predictors (gender, prior suffering from depression, BID, and partner support) on depression, a multiple regression analysis was conducted. Lastly, to examine if BID mediated the relationship between %TBSA and depression, and the relationship between gender and depression, two mediation analyses (PROCESS analyses) were conducted (Hayes, 2022).

Results

Descriptive statistics

Results are shown in table 1. In order to examine correlations between the independent variables BID, partner support, and %TBSA, and the dependent variable depression, a correlation analysis was conducted. The independent variable “age” was included as well. A significant correlation was found between BID, %TBSA, and depression.

Furthermore, it was determined which level of depression (slight, mild, moderate, serious) burn survivors experienced. Out of the 266 burn survivors, 236 experienced slight depression, 26 experienced mild depression, three experienced moderate depression, and one experienced serious depression.

Table 1*Correlations (Pearson) of dependent variable, independent variables, and age (N = 266)*

	1	2	3	4	5
1. Depression	-	.58**	.08	.24**	-.11
2. BID	.58**	-	-.04	.25**	-.13
3. Partner support	.08	-.04	-	.17	.05
4. %TBSA	.24**	.25**	.17	-	.01
5. Age	-.11	-.13	.05	.01	-

*Note: ** $p < .01$, * $p < .05$, two-tailed. $N = 266$. BID = body image dissatisfaction.*

Hypotheses testing

Independent-Samples T Tests

To examine the difference between female and male burn survivors concerning BID and depression, two Independent Samples T Tests were conducted. The results showed that females scored higher on BID than males, as a significant difference ($t(201) = -3.28, p = .001$) was found between females ($M = 1.89, SD = 1.32$) and males ($M = 1.27, SD = 1.22$).

Regarding depression, the results showed that females suffered from higher levels of depression than males, as a significant difference ($t(90.60) = -2.54, p < .05$) was found between females ($M = .46, SD = .52$) and males ($M = .27, SD = .36$).

Multiple Regression

The results are shown in table 2. To predict depression from gender, prior suffering from depression, BID, partner support, and %TBSA, a multiple regression was conducted. The independent variables significantly predicted depression, $F(5, 86) = 11.55, p < .001$, indicating that the five independent variables combined had a significant effect on depression.

Additionally, the $R^2 = .402$ showed that the independent variables explained 40.2% of the variance in depression.

Furthermore, the influence of each independent variable on depression was assessed, to determine their individual effect on depression. The results showed that the variables gender, BID, and %TBSA had a significant effect on depression. Additionally, it was found that the variables prior suffering from depression and partner support had a non-significant effect on depression.

Table 2

Multiple regression analysis results predicting depression

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Gender	.15	.07	.19	2.13	.04*
Prior depression	-.03	.08	-.04	-.41	.68
BID	.14	.03	.48	5.35	.00**
Partner support	.02	.03	.06	.67	.49
%TBSA	.01	.00	.25	2.79	.01*

Note: ** $p < .01$, * $p < .05$. $N = 266$. BID = body image dissatisfaction.

Mediation analysis (PROCESS analysis)

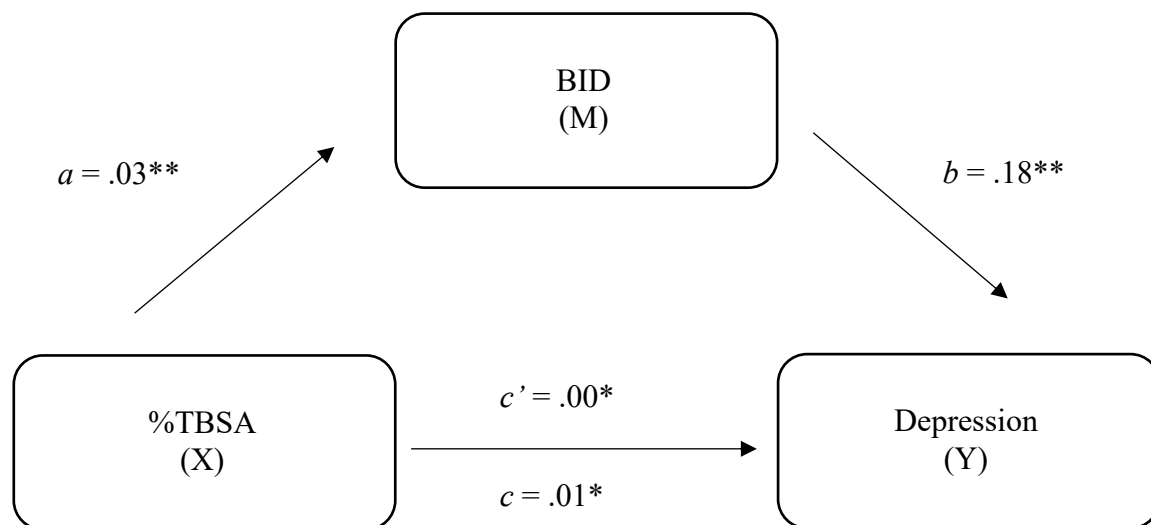
The results are shown in figure 2 and 3. A PROCESS analysis was conducted to determine the mediating role of BID on the relation between %TBSA and depression. A second PROCESS analysis was performed to examine the mediating role of BID on the relation between gender and depression. %TBSA and gender functioned as the independent variables, BID as the mediator, and depression as the dependent variable.

The first mediation analysis showed a significant direct effect of %TBSA on BID ($p < .001$). The direct effect of %TBSA on depression was found to be significant ($p = .04$) as well. This indicated that %TBSA had a significant direct effect on depression. Furthermore,

the analysis showed a significant direct effect of BID on depression ($p < .001$), which indicated that burn survivors who scored higher on BID, scored higher on depression compared to burn survivors who scored lower on BID. Additionally, the analysis showed a significant direct effect of BID on depression ($p < .001$). This demonstrated that BID had a significant direct effect on depression. By using a bootstrap of 5,000, the indirect effect was tested. The indirect effect of %TBSA via BID ($ab = .01$) was found to be significant 95%CI = (.002 to .010), as the lower and upper limit were positive, and zero did not fall between the lower and upper limit.

Figure 2

Mediation effect of BID in the relationship between %TBSA and depression



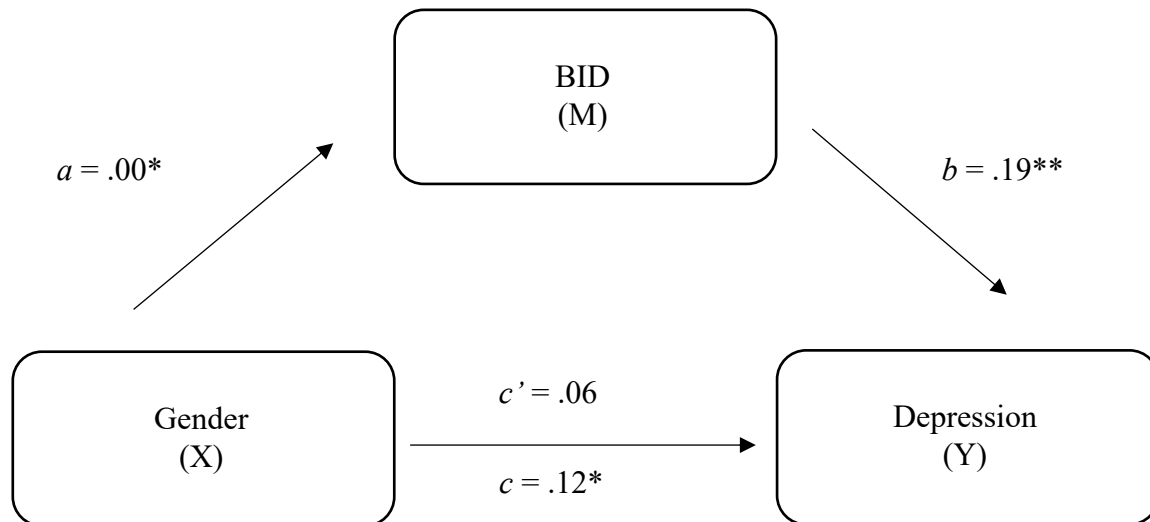
Note: $^{**}p < .001$, $^*p < .05$. BID = body image dissatisfaction.

The second mediation analysis showed a non-significant direct effect of gender on depression ($p = .23$). This indicated that gender did not have a significant direct effect on depression. However, the direct effect of gender on BID was found to be significant ($p < .001$). By using a bootstrap of 5,000, the indirect effect was tested. The indirect effect of gender via BID ($ab = .12$) was found to be significant 95%CI = (.043 to .207), as the lower

and upper limit were positive, and zero did not fall between the lower and upper limit. In sum, the results showed that BID mediated both the effect of %TBSA and gender on depression.

Figure 3

Mediation effect of BID in the relationship between gender and depression



Note: $^{**}p < .001$, $^*p < .05$. BID = body image dissatisfaction.

Discussion

This study examined the effect of gender, prior suffering from depression, BID, partner support (measured at three months) and %TBSA on depression in burn survivors at six months. Gender, BID, and %TBSA had a significant influence on burn survivors' depression. By examining gender effects on depression in more detail, results showed that female burn survivors suffer from higher levels of depression compared to male burn survivors. Moreover, differences between female burn survivors and male burn survivors concerning BID were found as well, with females being less satisfied with their body compared to males. Furthermore, the results showed that BID mediated the relationship between %TBSA and depression, and the relationship between gender and depression. Contrarily, prior suffering from depression and partner support did not have a significant influence on burn survivors' depression.

The finding that gender has an effect on depression, with female burn survivors suffering from higher levels of depression compared to male burn survivors, is in line with previous research (Su & Chow 2020). Notably, the effect of gender on depression could be explained by the mediating role of BID. According to the results of this study, gender has an effect on depression when BID is taken into account. Furthermore, research by Tombs et al. (2008) and Willemsse et al. (2021) argue that females value their appearance more than males. Hereby, self-esteem may play a greater role in females. Female burn survivors may therefore experience more BID compared to male burn survivors, which may result in higher levels of depression. The results of this study support this reasoning.

The finding that %TBSA has an effect on depression replicates previous research by Ulmer (1997) which suggests that depression may increase with the severity of the burn (%TBSA). In addition, %TBSA gives rise to an increase in BID, through alterations in one's appearance, which in turn, can increase depression (Al Ghriwati, 2017; Thombs, 2007). The results of this study substantiate these findings, as %TBSA levels influenced both BID and depression.

It was expected that prior suffering from depression would have a negative effect on burn survivors' depression, however, these results were not found. The results of this study do not support the claims of Fauerbach et al. (1997), Patterson et al. (1993), and Van Loey and Van Son (2003), who state that the existence of psychological disorders pre-burn injury are a great predictor for depression post-burn injury. A reason for these incongruent results may be that this study solely used self-report to measure prior suffering from depression, instead of using a chart-review for instance (Fauerbach et al., 1997). In turn, this may have contributed to bias. Moreover, this study differed from the research by Fauerbach et al. (1997) and Patterson et al. (1993), as this study solely assessed depression as a psychological disorder

pre-burn injury, instead of including other pre-burn psychological disorders as risk factors for depression post-burn injury.

It was expected that partner support would have a positive effect on burn survivors' depression. Nevertheless, the results did not confirm this expectation, as no significant effect of partner support on burn survivors' depression was found. These results do not support the findings by Gilboa (2001), Anzarut et al. (2005), and Orr et al. (1989), which argue that partner support can help burn survivors cope with psychological strains generated by the burn, such as depression. A reason with which the incongruent findings of this study can be explained, is the fact that partner support was measured through self-report by burn survivors' partners (received partner support), therefore not measuring the perceived partner support by the burn survivors themselves. Hence, the measuring method of this study may be less reliable, as perceived- and received support are only weakly related (Haber et al., 2007). Furthermore, the length and quality of the relationship between the burn survivors and their partners were unknown, which could have influenced the results as well, as the relationship quality can influence one's life satisfaction and depression (Leach et al., 2012; Watson & Perrin, 2022).

Limitations

Four limitations of this study could be identified. First, the validity of the SWAP scale is solely assessed for the English version, however, this study used the Dutch version. Thus, the reliability and the validity of the SWAP scale used in this study has yet to be determined. Similarly, more research is required to determine the validity of the POSR scale (Stroebe et al., 2013). Therefore, the accuracy of the findings resulting from the scales is unknown. Second, both prior suffering from depression and partner support were assessed through self-report. This could have resulted in less reliable and valid results, as self-report may be accompanied with bias, specifically when scales cover sensitive topics, such as health related

questions (Van de Mortel, 2008; King & Bruner, 2000). Third, the generalisability of this study could be questionable. The sample size used in this study consisted mostly of males. By including more females, the generalisability of females would increase. Furthermore, the mean %TBSA consisted of 10.4%, which is relatively low. Therefore, the results of this study cannot be generalised to burn survivors who suffered from extremely severe burn injuries. Fourth, the reliability of the simulation of the original data could be questionable. The “surrogate-missing data analysis” showed that burn survivors with a partner scored significantly lower on partner support than burn survivors without a partner/no confirmation about a partner. This was not as expected, as it should not be likely that burn survivors without a partner/no confirmation about a partner score higher on partner support compared to burn survivors with a partner. Nonetheless, a strength of this study contains the time of measurement (six months post-burn injury), as numerous burn injury studies focus on the acute phase (Ali & Pervaiz, 2019; Pardo et al., 2010).

Future research may focus on the effect of partner support, by investigating the perceived partner support by burn survivors, for example. Furthermore, to gain more insight into the possible effects of prior suffering from depression, further research could use a different measuring method (e.g., using medical history) than self-report. Additionally, the role of self-esteem regarding BID and depression may be investigated, as (damaged/low) self-esteem might have an influence on these factors, therefore being a possible risk factor for depression post-burn injury.

This study generates possible practical implications. First, when treating depressed burn survivors, dissatisfaction with one’s body should be taken into account, as it can affect burn survivors’ depression. Additionally, gender differences should be considered, as females are more likely to be dissatisfied with their body compared to males. Therefore, it could be advisable to monitor females more frequently than males post-burn.

To conclude, gender, BID, and %TBSA have an effect on depression. BID mediated both the effect of gender and %TBSA on depression, hereby explaining the effect of gender on depression. When treating depression in burn survivors, gender differences, including BID, should be considered.

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Appendix A

Satisfaction with Appearance Scale (SWAP)

Zet bij elke uitspraak één rondje om het antwoord dat het meeste bij jou past.

- 1 = Helemaal niet mee eens
 2 = Niet mee eens
 3 = Een beetje niet mee eens
 4 = Neutraal
 5 = Een beetje mee eens
 6 = Mee eens
 7 = Helemaal mee eens

	Helemaal niet mee eens	Niet mee eens	Een beetje niet mee eens	Neutraal	Een beetje mee eens	Mee eens	Helemaal mee eens
1 Door veranderingen in mijn uiterlijk veroorzaakt door mijn brandwonden, voel ik me niet op mijn gemak bij mijn familie .	1	2	3	4	5	6	7
2 Door veranderingen in mijn uiterlijk veroorzaakt door mijn brandwonden, voel ik me niet op mijn gemak bij mijn vrienden .	1	2	3	4	5	6	7
3 Door veranderingen in mijn uiterlijk veroorzaakt door mijn brandwonden, voel ik me niet op mijn gemak bij vreemden .	1	2	3	4	5	6	7
4 Ik ben tevreden met mijn gehele uiterlijk .	1	2	3	4	5	6	7
5 Ik ben tevreden met hoe mijn hoofdhuid eruit ziet.	1	2	3	4	5	6	7
6 Ik ben tevreden met hoe mijn gezicht eruit ziet.	1	2	3	4	5	6	7
7 Ik ben tevreden met hoe mijn hals eruit ziet.	1	2	3	4	5	6	7
8 Ik ben tevreden met hoe mijn handen eruit zien.	1	2	3	4	5	6	7
9 Ik ben tevreden met hoe mijn armen eruit zien.	1	2	3	4	5	6	7
10 Ik ben tevreden met hoe mijn benen eruit zien.	1	2	3	4	5	6	7
11 Ik ben tevreden met hoe mijn borst eruit ziet.	1	2	3	4	5	6	7
12 Veranderingen in mijn uiterlijk verstoren mijn relaties met anderen.	1	2	3	4	5	6	7
13 Ik voel dat anderen mijn brandwonden onaantrekkelijk vinden.	1	2	3	4	5	6	7
14 Ik denk dat andere mensen mij niet willen aanraken.	1	2	3	4	5	6	7

Appendix B

Partner-Oriented Self-Regulation Scale (POSR)

POSR

De volgende vragen gaan over hoe u en uw partner samen omgaan met de gevoelens over het brandwondenongeval en de gevolgen daarvan.

	Zelden of nooit	soms	regelmatig	vaak	Zeer vaak
1. Ik hou me groot voor mijn partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Ik probeer mijn partner te ontzien	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ik verberg mijn gevoelens voor mijn partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ik moedig mijn partner aan om over haar of zijn gevoelens te praten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Ik vraag mijn partner hoe zij of hij zich voelt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Ik toon belangstelling voor wat er in mijn partner omgaat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>