

Accepted Manuscript

The Self-Hate Scale: Development and Validation of a Brief Measure and its Relationship to Suicidal Ideation

Adrienne I. Turnell , Daniel B. Fassnacht , Philip J. Batterham ,
Alison L. Caley , Michael Kyrios

PII: S0165-0327(18)31314-4
DOI: <https://doi.org/10.1016/j.jad.2018.11.047>
Reference: JAD 10265



To appear in: *Journal of Affective Disorders*

Received date: 18 July 2018
Revised date: 8 October 2018
Accepted date: 3 November 2018

Please cite this article as: Adrienne I. Turnell , Daniel B. Fassnacht , Philip J. Batterham , Alison L. Caley , Michael Kyrios , The Self-Hate Scale: Development and Validation of a Brief Measure and its Relationship to Suicidal Ideation, *Journal of Affective Disorders* (2018), doi: <https://doi.org/10.1016/j.jad.2018.11.047>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A 7-item scale was developed to assess individuals' levels of self-hate.
- Factor analyses support a unidimensional construct of self-hate.
- Self-hate is related to, but distinct from, IPTS constructs.
- Self-hate was found to be a significant predictor of suicidal ideation.
- The relationship between self-hate and suicidal ideation was partially moderated by thwarted belongingness.
- The Self-Hate Scale has the potential to be useful in suicide risk assessment.

Full title: The Self-Hate Scale: Development and Validation of a Brief Measure and its Relationship to Suicidal Ideation.

Authors: Adrienne I. Turnell,¹ Daniel B. Fassnacht,^{1*} Philip J. Batterham,² Alison L. Caley,² Michael Kyrios¹.

1. Research School of Psychology, The Australian National University, Canberra, Australia.
2. Centre for Mental Health Research, Research School of Population Health, The Australian National University, Canberra, Australia.

*Correspondence concerning this article should be addressed to:

Dr Daniel B Fassnacht,

Research School of Psychology, College of Medicine, Biology & Environment,

The Australian National University, Canberra ACT 2601, Australia.

Phone: +61 2 6125 0018

Email: daniel.fassnacht@anu.edu.au

Abstract

Background. The “self” has been implicated in the development of a range of psychological disorders. While a growing body of literature has emerged exploring the Interpersonal Psychological Theory of Suicide (IPTs), little research has been conducted on the construct of self-hate and its relationship with suicidal ideation. The aims of this study were to: 1) develop and validate a brief self-report instrument of self-hate; and, 2) explore the relationship between self-hate, suicidal ideation, and the two main factors of the IPTs, perceived burdensomeness and thwarted belongingness.

Methods. Initial development of the item pool involved an expert panel and the development of the Self-Hate Scale included exploratory and confirmatory factor analyses using a large community sample.

Results. A 7-item Self-Hate Scale was developed, which exhibited a reliable unidimensional factor structure. High self-hate was found to predict suicidal ideation, while the relationship between low/moderate self-hate and suicidal ideation was partially moderated by the level of thwarted belongingness. The study provided limited evidence for the IPTs’ main predictions.

Limitations. While the current study provided support for the psychometric properties of the Self-Hate Scale, the scale will need to be replicated and validated using clinical populations.

Conclusions. The Self-Hate Scale is a brief, psychometrically valid measure of self-hate that has the potential to be useful in suicide risk assessment.

Key words: Self-hate, Perceived burdensomeness, Thwarted belongingness, Suicidal ideation, Interpersonal-Psychological Theory of Suicide, scale.

Introduction

Suicide constitutes a significant public health problem of global importance. Each year, it is estimated that more than 800,000 people die by suicide, ranking it as the 15th leading cause of death worldwide (WHO, 2014). Understanding suicide remains a challenge as it is a complex and highly contextual phenomenon with multiple interrelated and interacting risk factors, many of which are not modifiable through therapeutic intervention (e.g., gender, age, history of suicide attempts; WHO, 2014). A means for improving suicide prevention is to evaluate and advance existing theories of suicidality that attempt to account for the relationship between these broad range of risk factors and suicidal behaviour; hence, providing targets for intervention programs.

The Interpersonal-Psychological Theory of Suicide (IPTs; Joiner, 2005; Van Orden, Witte, Cukrowicz, Braithwaite, Selby, & Joiner, 2010) is a theoretical framework developed to understand suicidal behaviour within the context of previously identified risk factors. The theory posits that to die by suicide, an individual must have both the desire to die (i.e., suicidal ideation), and the capability to act on that desire. According to the IPTs, suicidal desire is driven by the simultaneous presence of two distinct, but related, interpersonal constructs, thwarted

belongingness and perceived burdensomeness, and a sense of hopelessness about these states. Thwarted belongingness refers to an unmet psychological need for social connectedness, and is composed of two facets: loneliness (i.e., “I feel disconnected from others”) and an absence of reciprocally caring relationships (i.e., “I have no one to turn to and I don’t support others”). Perceived burdensomeness refers to the perception that one is a burden or drain on significant others and is composed of two facets: feeling as though one is a liability (i.e., “My death is worth more than my life to others”) and self-hatred (i.e., “I hate myself”; Ribeiro & Joiner, 2009; Van Orden, et al., 2010).

To date, mixed support has been found for the effects of the IPTS constructs on suicidal ideation across a range of populations. A comprehensive review of 66 studies of the IPTS (Ma, Batterham, Caley, & Han, 2016) found that the effect of perceived burdensomeness on suicidal ideation has been the most tested and supported relationship; on average, perceived burdensomeness contributed a larger amount of variance (36% to 41%) in suicidal ideation compared to thwarted belongingness (6%), and above and beyond the contribution of other well-established risk factors, such as depressive symptoms and hopelessness (Ma, et al., 2016; Van Orden, Lynam, Hollar, & Joiner Jr, 2006). Additionally, perceived burdensomeness has been found to be both a moderator and mediator between suicide related behaviours and other risk and protective factors, including but not limited to, anger, PTSD symptoms, negative cognitive style, and neuroticism (Hill & Petit, 2014; Ma, et al., 2016). In contrast, limited and inconsistent support exists for thwarted belongingness, with over half (60%) of the IPTS studies identified in the review finding the association between thwarted belongingness and suicidal ideation to be non-significant (Ma, et al., 2016). Further, the interaction between perceived burdensomeness and thwarted belongingness has been posited as one of the main predictions of

the IPTS, yet this interaction has been infrequently explored and has demonstrated mixed results (Ma, et al., 2016). Inconsistent support for the IPTS has largely been attributed to inadequate measurement of the hypothesised interpersonal-psychological constructs to date (Ma, et al., 2016), highlighting the need for further exploration and development of these constructs, particularly the primary measurement tool of the IPTS, the Interpersonal Needs Questionnaire (Van Orden, Cukrowicz, Witte, & Joiner Jr, 2012). Based on these results, perceived burdensomeness appears to be the more robust interpersonal risk factor for suicidal ideation, which highlights the potential role of targeting perceived burdensomeness for suicide prevention and intervention programs.

Given the multifaceted nature of the perceived burdensomeness construct, it is necessary to determine the salient aspects that predict suicidal ideation and thus, specific targets for treatment. However, most research investigating perceived burdensomeness has focused on the liability facet, with very few studies exploring self-hate as a marker of suicide. Self-concepts refer to an individual's mental representation of, or set of beliefs about, his/her own attributes, traits, physical characteristics, social roles, past experiences and future goals (Bhar & Kyrios, 2016). In contrast, interpersonal constructs refer to the relationships or actions between individuals. Therefore, an individual could feel that they are a burden or liability on others without necessarily hating themselves, or vice versa. Self-concepts, and particularly disturbances in the self-system, are central to our understanding of psychopathology and have been implicated in the aetiology, psychotherapy processes and treatment outcomes of a wide range of psychological disorders, including but not limited to, depression, anxiety, trauma, and eating disorders (see for a review Kyrios, Moulden, Doron, Bhar, Nedeljkovic, & Mikulincer, 2016). This emphasizes the importance of exploring self-constructs

within existing theoretical frameworks and highlights the potential significance of self-hatred within the field of suicide. Moreover, self-hate has been found to moderate the frequency of suicidal thoughts, discriminate between suicidal and non-suicidal individuals, and distinguish a chronic-type of suicidal patient (Conrad, Jacoby, Jobes, Lineberry, Shea, Ewing, et al., 2009; Jobes, Kahn-Greene, Greene, Goeke-Morey, 2009). Therefore, the relative contribution of self-hate to perceived burdensomeness, and suicidality more broadly, warrants examination. However, in order to explore the relative contribution of self-hate, several barriers need to be addressed.

First, a succinct understanding and conceptualisation of what self-hate entails is necessary, yet there does not appear to be a widely accepted and comprehensive definition for self-hate. Even within the IPTS, self-hate receives limited consideration beyond being described as an affectively-laden construct with three observable indicators that have empirical associations with lethal suicidal behaviour. These indicators include low self-esteem, self-blame/shame, and a mental state of agitation (which might identify individuals experiencing such a high degree of self-hatred and anguish that their distress manifests physiologically; Van Orden, et al., 2010).

Although a detailed review is outside the scope of this article, the wider literature (including but not limited to Baumeister, 1990; Gilbert, Clarke, Hempel, Miles, & Irons, 2004; Kaplan & Pokorny, 1969; Rempel & Buris, 2005; Rosenberg, 1965; Tafarodi & Swann, 1995), in conjunction with the broad framework of the IPTS (detailed above), were used to generate the following definition of self-hate:

Self-hate represents an enduring dysfunctional and destructive self-evaluation, characterised by attributions of undesirable and defective qualities, and failure to meet perceived standards and values leading to feelings of inadequacy, incompetency, and

worthlessness. High levels of self-hatred are marked by low self-esteem, shame, self-blame or guilt, as well as a mental state of agitation, creating an experience of substantial, often unbearable, psychological and emotional turmoil.

Second, there does not appear to be a theoretically derived scale with satisfactory psychometric properties that assesses self-hate. While perceived burdensomeness has commonly been operationalised using the Interpersonal Needs Questionnaire (INQ; Van Orden, Cukrowicz, Witte, & Joiner Jr, 2012), this largely represents a measure of the liability facet and does not appear to include items assessing self-hate per se (Batterham, Calear, & Van Spijker, 2015). Self-hate has been operationalised within the self-criticism literature as a response to failure or setbacks (i.e., Forms of Self-criticism/Self-reassurance Scale); however, self-hate items were derived from clinical impressions rather than an established theory, and the authors questioned the content validity of this scale in regards to how much 'hate-based emotion' was assessed (Gilbert, et al., 2004). Alternatively, the Self-Disgust Scale (SDS; Overton, Marklan, Taggart, Bagshaw, & Simpson, 2008) has recently been developed to measure the closely related construct of self-disgust, a form of negative self-view that results from a change in one's sense of self from feeling loveable to feelings of inferiority and worthlessness (Chu, Buchman-Schmitt, Michaels, Ribeiro, & Joiner, 2013; Horowitz, Wilner, Marmar, & Krupnick, 1980). However, the SDS was originally designed for use within eating disorders, with a focus on body image, is not unidimensional (consists of between two and three subscales), and has demonstrated an inconsistent factor structure across studies, with multiple items cross loading on factors, thereby making this scale unsuitable for the assessment of self-hatred. Of the few studies that have explored the association between self-hate and suicide, self-hate has been inconsistently operationalised using both single items and

composite measures derived from other well-established scales (e.g., Beck Depression Inventory-II; Beck, Steer, & Brown, 1996; Joiner, Gencoz, Gencoz, Metalsky, & Rudd, 2001; Pfeiffer, et al., 2014). Using items from existing instruments to measure self-hate is likely to result in conceptual issues, such as difficulties assessing a consistent and meaningful definition. Subsequently, it is unclear whether these instruments are measuring the same construct, which limits the ability to compare and synthesise results across studies. These limitations provide support for the development of a theoretically derived instrument of self-hate.

The first aim of the current study was to develop a brief instrument of self-hate, the Self-Hate Scale (SHS), which was operationalised using the aforementioned definition. The reliability and validity of this newly developed scale was examined using a large Australian community sample, comparing it against the INQ. The second aim of the study was to explore the relationship between self-hate, suicidal ideation, perceived burdensomeness and thwarted belongingness. It was hypothesised that: (1) self-hate will be closely associated with items covering facets such as low self-esteem, shame and self-blame, guilt and agitation; (2) as the INQ was considered not to adequately capture the self-hate facet, the SHS will be distinct from the INQ constructs; (3) self-hate will be positively associated with perceived burdensomeness, thwarted belongingness, and suicidal ideation; and, (4) the relationship between self-hate and suicide ideation will be moderated by both thwarted belongingness and perceived burdensomeness.

Method

Ethical approval was granted by the Human Research Ethics Committee at the Australian National University.

Item Selection

The development of the SHS was grounded in the theoretical framework of the IPTS (Van Orden, et al., 2010) and item content represented four key components: low self-esteem, shame and self-blame, guilt and agitation. The initial item pool of the SHS consisted of 83 items. Item content relating to self-esteem was drawn from the wider literature of Rosenberg (1965), Kaplan and Pokorny (1969), and Tafariodi and Swann (1995), particularly through adapting concepts from the Rosenberg Self-Esteem Scale (Rosenberg, 1965) and the Self-Liking/Self-Competence Scale (Tafariodi & Swann, 1995). The shame, self-blame and guilt item content was based on the work of Tangney and Dearing (2002); however, a range of shame and guilt scales were also consulted, including the State Shame and Guilt Scale (Marschall, Sanftner, & Tangney, 1994), Personal Feelings Questionnaire-2 (Harder & Lewis, 1987; Harder & Zalma, 1990), and the Adapted Shame/Guilt Scale (Harder & Lewis, 1987). For the agitation item content, items were influenced by the literature regarding agitated depression (Benazzi, Koukopoulos, & Akiskal, 2004; Koukopoulos & Koukopoulos, 1999) and the Brief Agitation Measure (Ribeiro, Bender, Selby, Hames, & Joiner, 2011). Additional scales were consulted, including the Suicide Cognitions Scale (Rudd, Schmitz, McClenen, Joiner, Elkins, & Claassen, 2015) and the Collaborative Assessment and Management of Suicidality Suicide Status Form-IV (Jobes, 2006).

Items were tailored to be brief, with low literacy demands; items with similar content were included to determine preferred phrasing. After the initial review process by the research team, 69 items were submitted for expert review.

Content Validation and Item Refinement through Expert Review

Nine subject matter experts (including clinicians and researchers) were asked for feedback regarding the scale instructions, the item response scale, and the selection of items that best represented the construct of self-hate. Specifically, experts rated the relevance of each item on a four-point rating scale (“irrelevant”, “peripheral”, “important”, or “essential”), and the inclusion of items on a three-point rating scale (“retain exactly as worded”, “make revisions”, “drop the item”). Space was provided for qualitative feedback on items.

Using two different procedures, the feedback from experts was used to identify items rated as most relevant: A content validity index (CVI) was calculated for each item to provide the proportion of agreement between experts (Polit and Beck, 2006). CVIs ranged from 0.29 to 1.00, with a mean of 0.82. While Lynn (1986) recommends that for 6 to 10 experts, items with a CVI below 0.78 be revised, deleted or substituted, a more liberal approach was adopted and several items with CVIs lower than 0.6 were retained due to theoretical importance. Additionally, an algorithm was developed to identify items rated as most relevant by experts (Batterham, Brewer, Tjhin, Sunderland, Carragher, & Calex, 2015). Items were included if at least 70% of experts rated the item as either “important” or “essential”, and less than 30% of experts advocated dropping the item. The selected items were reviewed for a final time by three members of the research team (AT, PJB, DBF) to remove any items that had considerable overlap with other selected items.

Twenty-seven items were removed and an additional four items suggested by experts were included in the scale prototype, resulting in a 46-item pool. The mean expert ranking across all items was 2.96 (SD = 0.90) indicating that items were “important” on average. Experts had weak to strong correlations between their ratings, with Spearman rank correlations ranging from 0.03 to 0.91 ($M = 0.39$, $SD = 0.21$).

Scale Development Using Factor Analysis

Participants. The sample consisted of 527 Australian adults; detailed characteristics and demographics are presented in Table 1. The majority of participants were young adults, aged between 18 and 25 (28.3%), or older adults, aged above 54 years (38.5%). Approximately 80% of the sample was female, and about 44% of the sample were single. The majority of participants identified as Caucasian (87.1%), and were living in major cities (59.2%). Participants were predominantly university educated (52%), and employed (48.3%) or enrolled in study (21.8%).

*** Insert Table 1 here ***

Procedure. Participants were recruited through online advertising on the social networking site, Facebook, and directed to an online survey that took approximately 20 minutes to complete. The survey included the 46-item pool of the SHS, as well as demographic variables and measures assessing suicidal ideation/behaviour, interpersonal risk factors for suicide, and a range of other mental health outcomes. Consent was provided online prior to the commencement of the survey and mental health service contacts were provided to all participants. Participant eligibility included: 18 years or older, currently living in Australia, and fluent in English.

Measures.

Self-Hate Scale. The SHS assesses an individuals' level of self-hate over the past year. All items were rated on a 7-point Likert scale, ranging from 1 (not at all true for me) to 7 (very true for me). Total scores are calculated as the mean of all items and scores are coded such that higher ratings indicate higher levels of self-hate (range 1-7).

Interpersonal Needs Questionnaire. The INQ is a 15-item self-report measure of the level of thwarted belongingness and perceived burdensomeness. All statements are rated on a 7-point scale ranging from 1 (not at all true for me) to 7 (very true for me), with higher ratings indicating greater thwarted belongingness and perceived burdensomeness. The scale has demonstrated strong psychometric properties (Van Orden et al., 2012), with strong internal consistency in the current study (Cronbach's $\alpha = .95$ and $.89$ for perceived burdensomeness and thwarted belongingness, respectively).

Youth Risk Behaviour Surveillance System (YRBSS). Four items from the YRBSS (Centre for Disease Control and Prevention, 2016) were used to assess the presence of suicidal thoughts, plans, attempts, and the seriousness of attempts, over the past 12 months (e.g., During the past 12 months, did you make a plan about how you would attempt suicide?). With the exception of one item, each item is responded to on a dichotomous "Yes/No" scale, indicating the presence or absence of suicide-related behaviours. Item 3 requires participants to indicate on a 5-point scale how many times (0 times to 6 or more times) they attempted suicide within the past 12 months.

Demographics. The sociodemographic characteristics included in the current study were age group, gender, ethnicity, education level, employment status, marital status, and geographic location.

A range of brief self-report measures were also administered in the current study. In order of administration, wellbeing was measured with the 14-item Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant, Hiller, Fishwick, Platt, Joseph, Weich, et al., 2007); depressive symptoms were measured with eight items of the Patient Health Questionnaire 9 (PHQ-9; Kroenke, & Spitzer, 2002); anxiety symptoms were measured with the seven-item Generalized Anxiety Disorder 7 scale (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006); and, self-esteem was measured with the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). All measures demonstrated strong internal consistency in the current study (Cronbach's alphas = .95 for the WEMWBS; .91 for the PHQ-9; .92 for the GAD-7; and, .93 for the RSES).

Statistical analysis. Descriptive statistics for each self-hate item are presented in Table 1. SHS items were examined empirically using exploratory (EFA) and confirmatory (CFA) factor analyses. The dataset was randomly split into two halves, with one half reserved for development ($N = 264$) and the other half for validation subsamples ($N = 263$; Fabrigar, Wegener, MacCallum, & Strahan, 1999). No significant differences were found between the two samples on any of the included measures ($p > .05$ for all). Since the construct of self-hate is posited as a rare phenomenon and, thus, not presumed to be normally distributed, the data was not transformed (Floyd & Widaman, 1995; Van Orden, et al., 2012). An EFA with principal axis factoring was performed using SPSS (version 22.0) and a CFA with weighted least squares (WLSMV) estimation was performed using MPlus (version 7.4). WLSMV estimation was used because it provides robust estimations without making any distributional assumptions about the data, and is the recommended approach for modelling with categorical or ordered data (Brown, 2006). The following cut-off criteria were used to assess the CFA model fit: comparative fit index (CFI) and Tucker-Lewis Index (TLI) values $>.95$ and

root-mean-square-error-of-approximation (RMSEA) and standardized-root-mean-square-residual (SRMR) values less than .08 suggest adequate fit (Hu & Bentler, 1999). Cronbach's alpha coefficients were calculated as estimates of internal consistency. Correlations were produced to assess convergent and divergent validity. Descriptive statistics for the SHS were calculated for suicidal ideation/attempt variables. Logistic regression analyses were conducted to assess the effects of self-hate, perceived burdensomeness and thwarted belongingness on suicidal ideation.

Results

EFA

An EFA was initially conducted with the development subsample (N = 264) to determine the number of factors to be extracted. Cattell's scree test and Horn's parallel analysis suggested one factor to be retained, whereas Kaiser's rule suggested between one and three factors (the first four eigenvalues were 33.07, 1.47, 1.15, 0.85). A single factor solution had an eigenvalue of 33.07 and accounted for 71.9% of the total item variance. All items had absolute factor loadings greater than 0.6, indicating a unidimensional construct of self-hate (see Table 2 for factor loadings of the 46 self-hate items). Based on the above criteria, a single factor was retained.

*** Insert Table 2 here ***

The correlation and factor matrices were examined with the goal of identifying five to ten core items that best represented the self-hate construct, to ensure the final scale would be parsimonious and brief to administer. Items were ranked in descending order based on factor loadings, and the top 20 loading items (factor loadings > 0.80) were retained and assessed for multicollinearity (i.e., inter-item correlations $\geq .80$) and theoretical contribution to the construct of self-hate. Items were then eliminated based on the following criteria: (1) considerable conceptual overlap (five items); (2) deemed by the expert panel to be peripheral to the core definition of self-hate (two items); (3) correlations greater than .85 (three items); and, (4) verbose or not clearly expressed (three items). As a final step, all 46 items were re-examined to ensure that no theoretically significant item had been deleted based on statistical criteria. From the 20 items with the highest factor loadings, 13 items were deleted and seven core items were retained to represent the construct of self-hate.

An EFA was rerun using the remaining seven items. Both the scree plot and eigenvalues (the first three eigenvalues were 5.7, 0.31, 0.26) indicated a one factor solution, which explained 81.3% of the total variance. Internal consistency for the scale was strong ($\alpha = .96$).

CFA

A CFA was then conducted using the validation subsample ($N = 263$) to explore whether the construct of self-hate was distinct from thwarted belongingness and perceived burdensomeness. A three-factor model, including the 7-items of the SHS, 6-items of perceived burdensomeness and 9-items of thwarted belongingness from the INQ scale, showed acceptable fit on some indices ($CFI = .98$; $TFI = .97$) but not others ($\chi^2 = 643.14$, $p < .001$; $RMSEA = .09$, 95% CI [.08, .10]). Examination of factor loadings in the three-factor model revealed two problematic items with small loadings on the thwarted belongingness factor (item 1, "Other people care about me" (reversed scored) = .45,

and item 6, “I often feel like an outsider in social gatherings” = .69). Following the removal of these two items, the revised three-factor model demonstrated adequate fit ($\chi^2_{(167)} = 437.42$, $p < .001$; RMSEA = .08, 95% CI [.07, .09]; CFI = .99, TFI = .98). Figure 1 provides an overview of the items retained in the final model.

*** Insert Figure 1 here ***

Convergent and Divergent Validity

Correlation analyses supported the hypothesised relationships between the scales (see Table 3). Moderate, positive correlations were found between self-hate and perceived burdensomeness ($r = .72$), self-hate and thwarted belongingness ($r = .62$), and perceived burdensomeness and thwarted belongingness ($r = .58$). Further, self-hate was correlated with depression ($r = .72$), anxiety ($r = .63$), self-esteem ($r = -.79$), and wellbeing ($r = -.71$) measures.

*** Insert Table 3 here ***

Clinical Utility

Individuals with suicidal ideation were significantly higher on self-hate ($M = 4.45$; $SD = 1.61$) than those without suicidal ideation ($M = 2.42$; $SD = 1.50$; $t(525) = -13.3$, $p < .001$). Differences in self-hate between suicide attempters ($M = 5.25$; $SD = 1.42$) and non-attempters ($M = 2.86$; $SD = 1.72$) could not be assessed due to the small size of attempters ($N = 18$).

Table 4 provides a summary of the regression models predicting suicide ideation as the dependent variable. Model 1 included the constructs of perceived burdensomeness, thwarted belongingness and self-hate, and was significant; $\chi^2(3, N = 527) = 144.4$, $p < .001$. Both perceived burdensomeness (Wald = 11.8, $p = .001$) and self-hate (Wald = 27.5, $p < .001$) were significant predictors of the presence of suicidal ideation, with the strongest predictor being self-hate (OR = 1.65). In contrast, thwarted belongingness was not a significant predictor of suicidal ideation (Wald = .05, $p = .82$).

The interaction terms between burdensomeness, belongingness and self-hate were included in Model 2, which was also significant; $\chi^2(7, N = 527) = 154.04$, $p < .001$. Only the main effect of self-hate (OR = 4.71; Wald = 10.6, $p = .001$) and the interaction between self-hate and thwarted belongingness (OR = .80; Wald = 4.3, $p = .04$) were significant predictors of suicidal ideation in this model (see Figure 2 for interaction plot). Thwarted belongingness, perceived burdensomeness and their interaction were not significantly associated with suicidal ideation.

Additionally, age, gender and depression were included as covariates in a final model. Only age was significantly associated with suicidal ideation, such that participants aged 26-35 years experienced significantly less ideation than participants aged 18-25 years (Wald = 5.6, $p = .02$); however, this did not impact on the estimates of the significant effect of self-hate nor its interactions with thwarted belongingness.

*** Insert Table 4 here ***

Discussion

The current study developed and provided empirical support for the Self-Hate Scale (SHS) using an Australian community sample. Both exploratory and confirmatory factor analyses supported a unidimensional construct of self-hate that is related to, but distinct from, the IPTS constructs of perceived burdensomeness and thwarted belongingness. Additionally, self-hate was found to be a significant predictor of suicidal ideation, and the relationship between self-hate and suicidal ideation was found to be partially moderated by thwarted belongingness. These results have important implications for the IPTS and suicide prevention and intervention.

The first aim of this study was to develop a valid and theoretically grounded self-report instrument to assess self-hate. Although the initial item pool was closely associated with four item types, including low self-esteem, shame and self-blame, guilt and agitation, factor analyses supported a unidimensional construct of self-hate.

The reliability and validity of the SHS was examined using a large community sample. Strong internal consistency indices indicated a coherent instrument. Additionally, the SHS demonstrated good convergent and divergent validity when compared with the IPTS constructs, as well as additional, conceptually similar measures of mental health including depression, anxiety, wellbeing and self-esteem. As expected,

moderate, positive associations were found between self-hate and perceived burdensomeness, thwarted belongingness, depression and anxiety; moderate, negative correlations were found between self-hate and wellbeing and self-esteem. This suggests that, while the SHS has shared variance with other measures of mental health, it also measures a construct that is distinct to depression, anxiety, suicidal ideation and overall wellbeing. Finally, although high correlations with self-esteem were expected given the conceptual overlap between these self-evaluative constructs, this relationship needs to be explored further to determine whether the SHS is adequately capturing the defined self-hate construct or simply providing an alternative measure of low self-esteem. Future studies could explore the relationship between self-hate and similar measures of negative self-perceptions, such as self-criticism and self-disgust, to help characterise and further define the nomological net of self-hatred. Interestingly, feelings of self-disgust have been theorised to contribute to feelings of inadequacy, and in turn to the development of feelings of burdensomeness (Chu, et al., 2013). Therefore, research exploring the relationship between self-disgust and self-hate, as well as their relationships with suicidal ideation might provide a greater understanding of the similarities and differences between these constructs.

The second aim of the current study was to explore the relationship between suicidal ideation and the constructs of self-hatred, perceived burdensomeness, and thwarted belongingness. A CFA was conducted to determine the factor structure of the SHS in relation to the INQ constructs of perceived burdensomeness and thwarted belongingness. While the initial CFA supported a three-factor model, modifications unrelated to the SHS improved the overall factor structure; two items on the INQ were removed due to small loadings on the expected

thwarted belongingness construct. Although the removal of these items improved the fit of the model, the non-normality of the data might have contributed to the modest RMSEA fit statistic. Conceptual and measurement issues have been raised in regard to the thwarted belongingness construct (Ma, et al., 2016), which has demonstrated inconsistent, and often weak, relationships with suicidal behaviour. As such, the current results support the need for further research to refine the construct of thwarted belongingness and the instruments purportedly measuring it, with potential for development of a more robust assessment.

Overall, the results of the CFA suggested a measurement model that consisted of 20 items, with 7 items loading on the self-hate factor, 6 items loading on the burdensomeness factor, and 7 items loading on the belongingness factor. These results, in conjunction with the moderate to high intercorrelations between self-hate, perceived burdensomeness and thwarted belongingness, support the hypothesised relationships between these constructs as related, but distinct constructs. Specifically, the moderate correlation between perceived burdensomeness and self-hate highlights the conceptual similarities between these two constructs but also indicates that the SHS is measuring something that is distinct from perceived burdensomeness. The distinct nature of these constructs suggests that the self-hate facet is not explicitly measured in the INQ and, thus, supports the need for a self-hate scale.

Finally, a regression analysis was conducted to assess the effects of self-hate, perceived burdensomeness and thwarted belongingness on suicidal ideation. After controlling for all other constructs, as well as age, gender and depression, self-hatred was found to be a significant predictor of suicidal ideation, such that individuals were almost five times more likely to experience suicidal ideation for each one-unit increase

on the SHS. Individuals experiencing suicidal ideation were found to have significantly higher mean levels of self-hate than those without suicidal ideation, which highlights the importance of self-hate as a marker for suicidal ideation. Interestingly, individuals who had previously attempted suicide reported higher mean levels of self-hate than those who had not previously attempted suicide. However, it is not clear whether this difference was statistically significant due to the small sample size of attempters. Further research should explore the relationship between self-hate and suicidal behaviour, specifically plans and attempts, as high levels of self-hate may not be restricted to those with ideation but rather present across different forms of suicidal behaviour.

Furthermore, a significant interaction effect was found between self-hatred and thwarted belongingness, such that in individuals with low to moderate self-hatred, higher levels of thwarted belongingness significantly increased the odds of suicidal ideation. However, individuals with higher levels of self-hatred were significantly more likely to experience suicidal ideation irrespective of levels of thwarted belongingness. These results suggest that self-hatred may be a primary predictor of suicidal ideation within the IPTS framework and that interpersonal constructs may have a diminishing relationship with suicidal ideation among individuals with high self-hate. Perhaps then, self-hatred is an intrapersonal construct of individual importance rather than an aspect or facet of the interpersonal construct of perceived burdensomeness, as proposed in the IPTS. Alternatively, it might be that the INQ is only measuring interpersonal aspects of perceived burdensomeness and is not adequately capturing the intrapersonal or internal states that are seemingly important for the development of suicidal ideation. Of note, only two individuals in the study who experienced low levels of thwarted belongingness and high levels of self-hate reported suicidal ideation.

Although these two individuals were not statistical outliers, given the large sample size, it is questionable whether these two individuals represent a clinically important subgroup. This result might suggest that these two individuals derive most of their self-worth from domains other than interpersonal connections (Crocker & Wolfe, 2001), and perhaps some other domain might be contributing to high levels of self-hate and, thus, high levels of suicidal ideation. Alternatively, based on social comparison theory (Festinger, 1954), perhaps individuals are engaging in upward social comparisons with valued social connections to establish or verify their identity/sense of “self” (Stets & Burke, 2014). Upward comparisons have been linked to negative consequences, such as depression (Gibbons, 1986), and possibly self-hatred and higher suicidal ideation. More research is needed to explore whether thwarted belongingness is a robust independent predictor of suicidal desire among individuals with a strongly negative sense of self.

As expected, perceived burdensomeness was positively associated with suicidal ideation, when controlling for the main effects of self-hatred and thwarted belongingness. However, the effect of perceived burdensomeness on suicidal ideation was attenuated and no longer significant after controlling for the interaction effects between thwarted belongingness, perceived burdensomeness, and self-hatred. Contrary to expectation, neither thwarted belongingness, nor the interaction between perceived burdensomeness and thwarted belongingness, were found to significantly predict suicidal ideation. These results provide limited support for the predictions of the IPTS, although they appear somewhat consistent with the IPTS literature (Ma, et al., 2016). In comparison with thwarted belongingness, perceived burdensomeness has generally been found to be a more robust interpersonal predictor of suicidal ideation (Ma, et al., 2016), which was partially confirmed in the

current study. However, of the relatively few studies that have explored the interaction between perceived burdensomeness and thwarted belongingness, mixed results have been reported; the studies which have repeatedly found interaction effects have used large-scale community populations (Christensen, Batterham, Mackinnon, Donker, & Soubelet, 2014; Christensen, Batterham, Soubelet, & Mackinnon, 2013; Joiner Jr, Van Orden, Witte, Selby, Ribeiro, Lewis, & Rudd, 2009; Ma, et al., 2016). It is possible that the current study, which had a comparatively modest sample size, was underpowered for the detection of an interaction effect, despite the relatively high prevalence of suicidal ideation.

Theoretical and Clinical Implications

The current findings have important theoretical and clinical implications. The SHS appears to be a robust research tool for investigating the role of self-hatred in suicidal behaviour, facilitating the refinement and advancement of existing theories of suicide. Theoretically, the current study provides a deeper understanding of the construct of perceived burdensomeness, expanding upon the IPTS by proposing that self-hatred is a distinct construct from, rather than underlying facet of, perceived burdensomeness, as measured using the INQ.

Clinically, the SHS has the potential to be an important tool for assessing suicide risk and identifying targeted areas for intervention. Identifying and decreasing levels of self-hate might involve minor adaptations to existing intervention components, such as cognitive restructuring, to reduce self-hate cognitions. There is a growing body of evidence that self constructs are important targets for effective treatment in a range of psychological disorders (Kyrios, Moulding, Doron, Bhar, Nedeljkovic, & Mikulincer, 2016). Therefore, based on the

current results, therapies that can facilitate self-acceptance and promote self-compassion might be viable options for suicide prevention programs (Gilbert, et al., 2004).

Limitations

This study has several limitations which suggest directions for future research. First, a non-clinical sample, which had elevated but relatively low base rates of suicidal ideation was recruited. Responses from a clinical group may have revealed a different factor structure; as such, further research is needed to replicate the factor structure and validate the SHS within a clinical population. Second, a high proportion of the sample were female and Caucasian, so the results of this study may not be representative of the general population or generalise across ethnicities. Third, based on the results of the CFA, two items were removed from the thwarted belongingness scale, such that the thwarted belongingness measure no longer represented the intended form in the INQ. Fourth, the study utilized a cross-sectional, self-report questionnaire; therefore, the results may have been influenced by common-method variance and the survey did not include attention checks, therefore some of the results may not reflect true responses. Future research would benefit from further validation of the SHS in a range of settings along with longitudinal designs to determine whether self-hatred plays a causal role in the development of suicidal ideation and to test whether the scale is sensitive to clinical change. Additionally, future research could explore the indirect pathways between young age and IPTS variables as peak ideation was found to occur in individuals aged 18-25 years. Finally, further research exploring the role of self-hatred in suicidal behaviour is warranted.

In conclusion, the current study developed and provided evidence for the validity of a brief 7-item self-report scale to assess self-hatred. Self-hatred was found to be a significant and robust predictor of suicidal ideation, suggesting future research avenues for suicide prevention and intervention programs. Finally, in order to continue the development of the SHS, this instrument could be used in other settings to further explore the role of self-hatred in a range of clinical and non-clinical settings, as well as demonstrate its generalizability to a diverse range of populations.

References

- Batterham, P. J., Brewer, J. L., Tjhin, A., Sunderland, M., Carragher, N., & Cleave, A. L. (2015). Systematic item selection process applied to developing item pools for assessing multiple mental health problems. *Journal of Clinical Epidemiology*, 68(8), 913-919. Doi:10.1016/j.jclinepi.2015.03.022
- Batterham, P. J., Cleave, A. L., & Van Spijker, B. A. (2015). The specificity of the Interpersonal-Psychological Theory of Suicidal Behavior for identifying suicidal ideation in an online sample. *Suicide and Life-Threatening Behavior*, 45(4), 448-460. Doi:10.1111/sltb.12140
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, 97(1), 90-113. Doi:10.1037/0033-295X.97.1.90
- Beck, A., & Steer, R., & Brown, G. A. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Benazzi, F., Koukopoulos, A., & Akiskal, H. S. (2004). Toward a validation of a new definition of agitated depression as a bipolar mixed state (mixed depression). *European Psychiatry*, 19(2), 85-90. Doi:10.1016/j.eurpsy.2003.09.008
- Bhar, S. S., & Kyrios, M. (2016). The self-concept: Theory and research. In M. Kyrios, R. Moulden, G. Doron, S. S. Bhar, M. Nedeljkovic, & M. Mikulincer (Eds.), *The self in understanding and treating psychological disorders* (pp. 8-18). Cambridge, UK: Cambridge University Press.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford.
- Centre for Disease Control and Prevention. (2016). Youth Risk Behavior Survey. Unpublished instrument. Retrieved from www.cdc.gov/YRBSS. Accessed on 10 November 2015.

- Christensen, H., Batterham, P. J., Mackinnon, A. J., Donker, T., & Soubelet, A. (2014). Predictors of the risk factors for suicide identified by the Interpersonal–Psychological Theory of Suicidal Behaviour. *Psychiatry Research*, 219(2), 290–297. Doi:10.1016/j.psychres.2014.05.029
- Christensen, H., Batterham, P. J., Soubelet, A., & Mackinnon, A. J. (2013). A test of the Interpersonal Theory of Suicide in a large community-based cohort. *Journal of Affective Disorders*, 144(3), 225–234. Doi:10.1016/j.jad.2012.07.002
- Chu, C., Buchman-Schmitt, J. M., Michaels, M. S., Ribeiro, J. D., & Joiner, T. (2013). Discussing disgust: The role of disgust with life in suicide. *International Journal of Cognitive Therapy*, 6(3), 235–247. doi:10.1521/ijct.2013.6.3.235
- Conrad, A. K., Jacoby, A. M., Jobes, D. A., Lineberry, T. W., Shea, C. E., Arnold Ewing, T. D., ... & Kung, S. (2009). A psychometric investigation of the Suicide Status Form II with a psychiatric inpatient sample. *Suicide and Life-Threatening Behavior*, 39(3), 307–320. Doi:10.1521/suli.2009.39.3.307
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108(3), 593–623. Doi:10.1037/0033-295X.108.3.593
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272–299. Doi:10.1037/1082-989X.4.3.272
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. Doi:10.1177/001872675400700202
- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment*, 7(3), 286–299. Doi:10.1037/1040-3590.7.3.286

- Gibbons, F. (1986). Social comparison and depression: Company's effect on misery. *Journal of Personality and Social Psychology*, 51(1), 140-148. Doi:10.1037//0022-3514.51.1.140
- Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British Journal of Clinical Psychology*, 43, 31–50. Doi:10.1348/014466504772812959
- Harder, D. H., & Lewis, S. J. (1987). The assessment of shame and guilt. In J. N. Butcher & C. D. Spielberger (Eds.). *Advances in personality assessment* (Vol. 6, pp. 89-114). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Harder, D. H., & Zalma, A. (1990). Two promising shame and guilt scales: A construct validity comparison. *Journal of Personality Assessment*, 55(3&4), 729-745.
- Hill, R. M., & Pettit, J. W. (2014). Perceived burdensomeness and suicide-related behaviors in clinical samples: Current evidence and future directions. *Journal of Clinical Psychology*, 70(7), 631-643. Doi:10.1002/jclp.22071
- Horowitz, M. J., Wilner, N., Marmar, C., & Krupnick, J. (1980). Pathological grief and the activity of latent self-images. *The American Journal of Psychiatry*, 137(10), 1157-1162. doi:10.1176/ajp.137.10.1157
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. Doi:10.1080/10705519909540118
- Joiner Jr, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

- Joiner Jr, T. E., Gencoz, F., Gencoz, T., Metalsky, G. I., & Rudd, M. D. (2001). The relation of self-hatred and suicidality in people with schizophrenia-spectrum symptoms. *Journal of Psychopathology and Behavioral Assessment*, 23(2), 107-115.
Doi:10.1023/A:1010915709011
- Joiner Jr, T. E., Van Orden, K. A., Witte, T. K., Selby, E. A., Ribeiro, J. D., Lewis, R., & Rudd, M. (2009). Main predictions of the Interpersonal-Psychological Theory of Suicidal Behavior: Empirical tests in two samples of young adults. *Journal of Abnormal Psychology*, 118(3), 634-646. Doi:10.1037/a0016500
- Jobes, D. (2006). *Managing suicidal risk: A collaborative approach*. New York, NY: Guildford Press.
- Jobes, D. A., Kahn-Greene, E., Greene, J. A., & Goeke-Morey, M. (2009). Clinical improvements of suicidal outpatients: Examining suicide status form responses as predictors and moderators. *Archives of Suicide Research*, 13(2), 147-159. Doi:10.1080/13811110902835080
- Kaplan, H. B., & Pokorny, A. D. (1969). Self-derogation and psychosocial adjustment. *The Journal of Nervous and Mental Disease*, 149(5), 421-434.
- Koukopoulos, A., & Koukopoulos, A. (1999). Agitated depression as a mixed state and the problem of melancholia. *Psychiatric Clinics of North America*, 22(3), 547-564. Doi:10.1016/S0193-953X(05)70095-2.
- Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, 32(9), 509-515.
Doi:10.3928/0048-5713-20020901-06

- Kyrios, M., Moulding, R., Doron, G., Bhar, S. S., Nedeljkovic, N., & Mikulincer, M. (Eds.). (2016). *The self in understanding and treating psychological disorders*. Cambridge, UK: Cambridge University Press.
- Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, 35(6), 382–386.
- Ma, J., Batterham, P. J., Caelear, A. L., & Han, J. (2016). A systematic review of the predictions of the Interpersonal-Psychological Theory of Suicidal Behaviour. *Clinical Psychology Review*, 46, 34-45. Doi:10.1016/j.cpr.2016.04.008
- Marschall, D., Sanftner, J., & Tangney, J. P. (1994). *The State Shame and Guilt Scale*. Fairfax, VA: George Mason University.
- Mplus (version 7.4) [Computer software]. Los Angeles, CA: Muthen & Muthen.
- Overton, P. G., Markland, F. E., Taggart, H. S., Bagshaw, G. L., & Simpson, J. (2008). Self-disgust mediates the relationship between dysfunctional cognitions and depressive symptomatology. *Emotion*, 8(3), 379. doi:10.1037/1528-3542.8.3.379
- Pfeiffer, P. N., Brandfon, S., Garcia, E., Duffy, S., Ganoczy, D., Kim, H. M., & Valenstein, M. (2014). Predictors of suicidal ideation among depressed veterans and the Interpersonal Theory of Suicide. *Journal of Affective Disorders*, 152, 277-281. Doi:10.1016/j.jad.2013.09.025
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29(5), 489-497. Doi:10.1002/nur.20147

Rempel, J. K., & Burris, C. T. (2005). Let me count the ways: An integrative theory of love and hate. *Personal Relationships*, 12(2), 297-313.

doi:10.1111/j.1350-4126.2005.00116.x

Ribeiro, J. D., Bender, T. W., Selby, E. A., Hames, J. L., & Joiner, T. E. (2011). Development and validation of a brief self-report measure of agitation: The Brief Agitation Measure. *Journal of Personality Assessment*, 93(6), 597-604. Doi:10.1080/00223891.2011.608758

Ribeiro, J. D., & Joiner, T. E. (2009). The Interpersonal-Psychological Theory of Suicidal Behavior: Current status and future directions. *Journal of Clinical Psychology*, 65(12), 1291-1299. Doi:10.1002/jclp.20621

Rosenberg, M. (1965). *Society and the adolescent child*. Princeton, NJ: Princeton University Press.

Rudd, M. D., Schmitz, W., McClenen, R., Joiner, T., Elkins, G., & Claassen, C. (2015). The Suicide Cognitions Scale: A suicide-specific measure of hopelessness. Manuscript in preparation.

Stets, J. E., & Burke, P. J. (2014). Social comparison in identity theory. In Z. Krizan, & F. X. Gibbons (Eds.), *Communal functions of social comparison* (pp. 39-59). New York, USA: Oxford University Press.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092-1097. Doi:10.1001/archinte.166.10.1092

Tafarodi, R. W., & Swann, W. B. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment*, 65(2), 322-342. Doi:10.1207/s15327752jpa6502_8

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford Press.

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(63), 1-13.

Doi:10.1186/1477-7525-5-63

Van Orden, K. A., Cukrowicz, K. C., Witte, T. K., & Joiner Jr, T. E. (2012). Thwarted belongingness and perceived burdensomeness: Construct validity and psychometric properties of the Interpersonal Needs Questionnaire. *Psychological Assessment*, 24(1), 197-215.

Doi:10.1037/a0025258

Van Orden, K. A., Lynam, M. E., Hollar, D., & Joiner Jr, T. E. (2006). Perceived burdensomeness as an indicator of suicidal symptoms. *Cognitive Therapy and Research*, 30(4), 457-467. Doi:10.1007/s10608-006-9057-2

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Jr, T. E. (2010). The Interpersonal Theory of Suicide. *Psychological Review*, 117(2), 575-600. Doi:10.1037/a0018697

WHO. (2014). *Preventing suicide: A global imperative* (pp. 1-89). Geneva, Switzerland: Author.

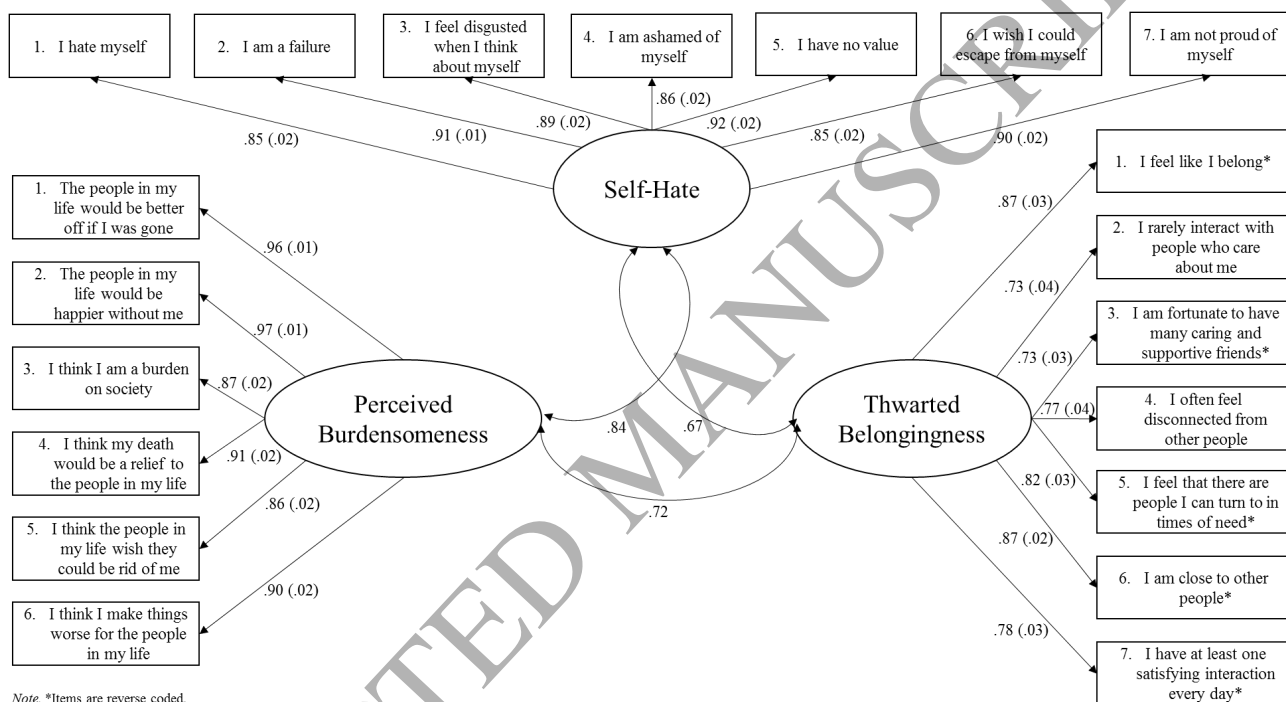


Figure 1.

Revised Three-factor Model Items with Standardised Factor Loadings and Standard Errors (N = 263).

THE SELF-HATE SCALE

1

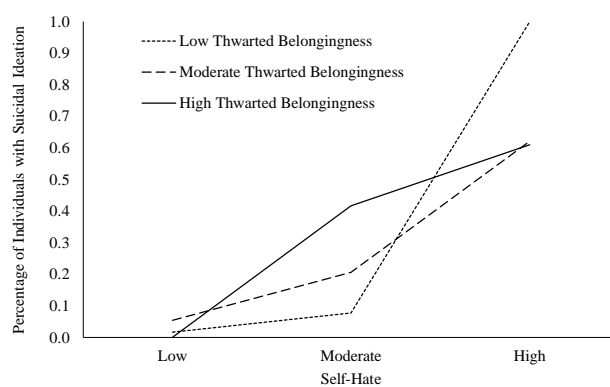


Figure 2.
Two-way Interaction Effect between Self-Hate and Thwarted Belongingness ($N = 527$).¹

¹ Only $n = 2$ individuals represented within the high self-hate, low thwarted belongingness group. However, analyses examining outliers and influential cases revealed no violation; thus, no cases were excluded from the analyses.

THE SELF-HATE SCALE

2

Table 1.

Sample characteristics and demographics (N = 527)

| Variable | n (%) |
|--------------------------------|------------|
| Age group | |
| 18-25 | 149 (28.3) |
| 26-54 | 175 (33.2) |
| 55+ | 203 (38.5) |
| Gender | |
| Male | 104 (19.7) |
| Female | 419 (79.5) |
| Other | 4 (0.8) |
| Marital Status | |
| Single, never married | 231 (43.8) |
| Married | 174 (33.0) |
| Separated/divorced | 101 (19.2) |
| Widowed | 21 (4.0) |
| Ethnicity | |
| Australian Aboriginal | 11 (2.1) |
| Asian | 16 (3.0) |
| Caucasian | 459 (87.1) |
| Other | 41 (7.8) |
| Employment | |
| Full-/part-time employed | 200 (37.9) |
| Unemployed/not in labour force | 157 (29.8) |
| Casual employment | 55 (10.4) |

THE SELF-HATE SCALE

3

| | |
|-------------------------------------|------------|
| Student | 115 (21.8) |
| Education | |
| Less than high school | 30 (5.7) |
| High school graduate | 136 (25.8) |
| Trade/Technical/Vocational training | 87 (16.5) |
| University education | 274 (52.0) |
| Location | |
| Metropolitan city | 312 (59.2) |
| Regional area | 150 (28.5) |
| Rural or remote area | 65 (12.3) |

THE SELF-HATE SCALE

4

Table 2.

Descriptive Statistics and Factor Loadings for One-Factor Model Using Principal Axis Factoring (46-items; N = 264)

| Item # | Item Content | Mean | SD | Skewness (z score) | Kurtosis (z score) | Factor Loading |
|--------|---|------|------|--------------------|--------------------|----------------|
| 1 | I hate myself | 2.82 | 1.85 | 4.64 | -2.09 | .89 |
| 2 | I am worthless | 2.78 | 1.93 | 5.02 | -2.19 | .88 |
| 3 | I am not valuable to others | 3.01 | 1.96 | 3.82 | -3.23 | .81 |
| 4 | I am dissatisfied with who I am | 3.58 | 2.11 | 1.85 | -4.36 | .82 |
| 5 | I can't do anything right | 2.91 | 1.94 | 5.02 | -2.37 | .84 |
| 6 | I am useless | 2.80 | 1.99 | 4.89 | -2.77 | .89 |
| 7 | I feel negatively about myself | 3.70 | 2.03 | 1.83 | -4.08 | .86 |
| 8 | I am incompetent | 2.88 | 1.93 | 4.77 | -2.53 | .85 |
| 9 | I do not deserve respect from others | 2.35 | 1.72 | 7.87 | 1.15 | .83 |
| 10 | I am a failure | 2.87 | 2.08 | 5.21 | -2.70 | .90 |
| 11 | I feel disgusted when I think about myself | 2.60 | 1.97 | 6.79 | -0.85 | .87 |
| 12 | If other people really knew me, they wouldn't like me | 2.88 | 2.04 | 4.79 | -3.15 | .81 |
| 13 | I do not believe in myself | 3.05 | 2.01 | 4.20 | -3.14 | .85 |
| 14 | I feel embarrassed when I think about myself | 3.14 | 1.91 | 3.83 | -2.80 | .84 |
| 15 | I am unlovable | 2.75 | 1.86 | 4.92 | -2.30 | .82 |
| 16 | I wish I was anyone but me | 2.45 | 1.77 | 7.57 | 1.08 | .81 |

THE SELF-HATE SCALE

5

| | | | | | | |
|----|--|------|------|-------|-------|-----|
| 17 | I am a bad person | 2.13 | 1.65 | 10.36 | 5.13 | .72 |
| 18 | I am critical of myself | 4.56 | 1.96 | -1.46 | -4.03 | .67 |
| 19 | I am not good enough | 3.46 | 2.09 | 2.40 | -4.15 | .87 |
| 20 | I have not achieved anything of worth | 2.95 | 2.08 | 4.83 | -2.78 | .79 |
| 21 | I am ashamed of myself | 2.92 | 2.00 | 5.00 | -2.44 | .87 |
| 22 | I do not deserve to be loved | 2.47 | 1.88 | 7.53 | 0.27 | .86 |
| 23 | I have no value | 2.54 | 1.96 | 7.20 | -0.43 | .88 |
| 24 | I have nothing to be proud of | 2.43 | 1.83 | 7.93 | 0.90 | .85 |
| 25 | When I think about myself, I feel distressed | 2.88 | 1.86 | 4.67 | -2.17 | .86 |
| 26 | The strong negative emotions I feel about myself overwhelm me | 2.87 | 2.00 | 4.93 | -2.34 | .85 |
| 27 | I am unable to handle the overwhelming emotions that I feel about myself | 2.60 | 1.84 | 6.47 | -0.43 | .82 |
| 28 | I do not respect myself | 2.69 | 1.91 | 6.40 | -0.90 | .88 |
| 29 | I feel trapped and unable to escape when I think about myself | 2.80 | 2.01 | 5.87 | -1.77 | .88 |
| 30 | I don't have any positive qualities | 2.15 | 1.60 | 9.07 | 2.84 | .86 |
| 31 | I deserve to be unhappy | 2.02 | 1.66 | 11.93 | 7.55 | .77 |
| 32 | I deserve to feel bad about | 2.02 | 1.63 | 11.60 | 6.86 | .80 |

THE SELF-HATE SCALE

6

| | | | | | | |
|----|---|------|------|-------|-------|-----|
| | myself | | | | | |
| 33 | When I think about myself, I cannot recall any positive qualities | 2.19 | 1.69 | 9.33 | 2.91 | .85 |
| 34 | I wish I could escape from myself | 3.17 | 2.10 | 3.93 | -3.31 | .88 |
| 35 | My presence adds little to the world | 2.97 | 2.07 | 4.67 | -2.78 | .84 |
| 36 | Shame is something that I struggle with regularly | 3.05 | 2.12 | 4.53 | -3.11 | .84 |
| 37 | I always get it wrong | 2.84 | 1.89 | 5.53 | -1.67 | .87 |
| 38 | I mess up everything important in my life | 2.91 | 2.03 | 5.07 | -2.61 | .86 |
| 39 | I am nothing | 2.36 | 1.87 | 8.60 | 1.77 | .88 |
| 40 | I am uncomfortable with who I am | 3.05 | 2.11 | 4.40 | -3.28 | .89 |
| 41 | I am despicable | 1.93 | 1.64 | 12.93 | 9.40 | .80 |
| 42 | I am unworthy of love | 2.28 | 1.85 | 9.13 | 2.21 | .83 |
| 43 | I feel my life has little value | 2.66 | 2.00 | 6.47 | -1.20 | .84 |
| 44 | I do not have faith in myself | 2.95 | 2.03 | 5.00 | -2.47 | .86 |
| 45 | I dislike myself | 2.87 | 2.11 | 5.67 | -2.51 | .88 |
| 46 | I am not proud of myself | 2.89 | 2.02 | 5.20 | -2.31 | .90 |

Note: Bold items were retained for the final SHS.

THE SELF-HATE SCALE

7

Table 3

*Pearson Correlation Coefficients between Self-Hate, Suicidal Ideation, and IPTS Variables**(N's range from 506-527)*

| | Self-hate | Perceived Burdensomeness | Thwarted Belongingness | Suicidal Ideation |
|--------------------------|-----------|-----------------------------|---------------------------|----------------------|
| Self-hate | - | .72* | .62* | .50* |
| Perceived Burdensomeness | .72* | - | .58* | .50* |
| Thwarted Belongingness | .62* | .58* | - | .34* |
| Suicidal Ideation | .50* | .50* | .34* | - |
| Depression | .72* | .62* | .64* | .41* |
| Anxiety | .63* | .52* | .52* | .37* |
| Self-esteem | -.79* | -.59* | -.64* | -.40* |
| Wellbeing | -.71* | -.60* | -.79* | -.38* |

Note. * $p < .001$.

THE SELF-HATE SCALE

8

Table 4

Logistic Regression Models Predicting Suicidal Ideation (N = 527)

| | B (SE) | Odds Ratio (OR) | 95% CI OR |
|--|------------|-----------------|---------------|
| Model 1 | | | |
| Perceived Burdensomeness | .37 (.11) | 1.44** | [1.17, 1.78] |
| Thwarted Belongingness | .03 (.11) | 1.03 | [.83, 1.27] |
| Self-hate | .50 (.10) | 1.65** | [1.37, 1.99] |
| Model 2 | | | |
| Perceived Burdensomeness | 1.06 (.68) | 2.88 | [.75, 10.97] |
| Thwarted Belongingness | .73 (.41) | 2.07 | [.93, 4.63] |
| Self-hate | 1.55 (.48) | 4.71** | [1.85, 12.00] |
| Perceived Burdensomeness x Thwarted belongingness | -.11 (.16) | .89 | [.65, 1.23] |
| Perceived Burdensomeness x Self-hate | -.20 (.16) | .82 | [.59, 1.13] |
| Self-hate x Thwarted belongingness | -.23 (.11) | .80* | [.65, .99] |
| Perceived Burdensomeness x Thwarted Belongingness x Self-hate | .04 (.04) | 1.04 | [.97, 1.11] |

Note. CI OR = confidence interval for the odds ratio.

* $p < .05$ ** $p < .01$.