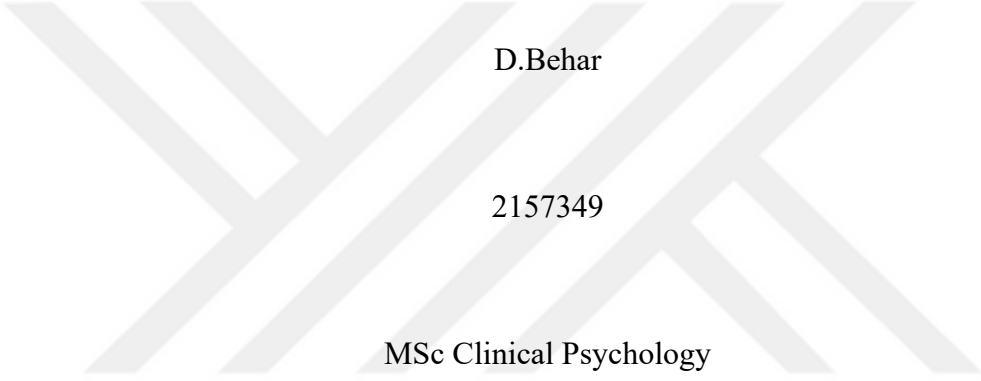


WHAT MAKES LIFE LIVABLE? ETHNIC DISCRIMINATION AS A SOCIAL
DETERMINANT OF SUICIDAL IDEATION AMONG UNIVERSITY STUDENTS IN
THE NETHERLANDS



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Abstract

Background: In order to tackle the persistent increase in suicide rates, there is a need to adopt a comprehensive, prevention-oriented approach that incorporates environmental factors and social determinants, such as experiences of ethnic discrimination. *Methods:* This study employed an explanatory sequential mixed methods design, utilizing extreme scores purposeful sampling. Data was collected with questionnaires and FANI. In the quantitative part (n=186), Mann-whitney U was run to compare the ethnic groups for ethnic discrimination (GED), a Spearman's Rho correlation was run for suicidal ideation (SIDAS) and ethnic discrimination (GED) and a hierarchical regression analysis was run to test GED as a moderator for the relation between interpersonal needs (INQ) and SIDAS. In the qualitative part, four participants with high GED of which two with high and two with low SI were interviewed and thematic analysis was conducted. *Results:* Middle Eastern North African participants had the highest GED scores. A positive correlation was found between GED and SIDAS. GED was found to moderate the relation between INQ and SIDAS, in which INQ became insignificant after the addition of the interaction. Consequences of ethnic Discrimination that relate to SI, like pessimistic change in perception of the world, lower personal and collective self-esteem, and loneliness were identified. Factors such as social support, racial affirmation and perceived help were found to alleviate the psychological consequences of ethnic discrimination. *Conclusion:* Both quantitative and qualitative measures found ethnic discrimination to be a social determinant of SI that poses a risk for the university students in the Netherlands.

Keywords: Social Determinants, Ethnic Discrimination, Racial Discrimination, Suicidal Ideation, Thwarted Belongingness, Perceived Burdensomeness, Mixed-Methods

Layman's Abstract

Suicide rates have been increasing despite efforts to improve access to mental health treatments. This study aims to move towards a more comprehensive approach by emphasising the importance of environmental factors and social determinants, such as the discrimination faced by ethnic minorities, in relation to suicidal ideation. To do so, both questionnaires and interviews were used to gather data from university students in the Netherlands. In the survey part of the study, 186 participants completed questionnaires and were asked about their experiences of ethnic discrimination, interpersonal needs and suicidal ideation. The results revealed that participants from Middle Eastern and North African backgrounds reported the highest levels of discrimination. Additionally, there was a clear link between experiencing discrimination and having more thoughts of suicide. The study also found that the impact of burdensomeness and exclusion on suicidal ideation depended on the level of ethnic discrimination experienced. In the interview part of the study, participants indicated feeling pessimistic about the world, having low self-esteem, and feeling lonely as a result of discrimination. We also found that factors like social support, racial affirmation, and perceived help played a significant role in the relationship between suicidal ideation and ethnic discrimination. All in all, this study illuminated ethnic discrimination as a substantial factor of suicidal ideation amongst university students in the Netherlands, emphasising the need to consider social factors and address such discrimination when dealing with suicidality.

1. Introduction

“There is but one truly serious philosophical problem and that is suicide. Judging whether life is or is not worth living amounts to answering the fundamental question of philosophy. All the rest — whether or not the world has three dimensions, whether the mind has nine or twelve categories — comes afterwards.”

-Albert Camus

1.1 Suicide & Suicidal Ideation

The question of suicide is one humanity has faced in every culture and every historical context. Currently, it is estimated that every year over 703.000 people worldwide die by their own hands. This means that every 40 seconds one individual is lost to suicide and this number increases by twentyfold when including those who attempt suicide (World Health Organisation, 2021). Suicide, one of the leading causes of death, is similarly prominent in the Netherlands with 1859 individuals committing suicide only in 2021 (Statistics Netherlands, 2022), a number that has not substantially decreased since the rise in suicide rates between 2007 and 2012 (Statista, 2022). Moreover, 36 more people committed suicide this year compared to the previous one, illustrating that the Netherlands, like the rest, needs a revised approach to suicide prevention.

When examining and preventing suicidality, looking into suicidal ideation is essential, as suicide attempts are often preceded by its ideation (Beck et al., 1979; Harmer et al., 2020; Suokas et al., 2001; Jobes, & Joiner, 2019). In other words, the presence of suicidal ideation signals the risk of intentions or behaviours before the tragedy occurs (Ji et al., 2020). Suicidal Ideation (SI) can be defined as a range of contemplations, thoughts, wishes, and preoccupations with death and suicide (Harmer et al., 2020). Each year around 2% of people engage in SI (Borges et al., 2010) in either an active or passive way. Active SI is characterized by active planning of the behaviors that one wills to pursue to perpetrate

the suicidal attempt. Passive SI, on the other hand, is characterized by a desire to be dead without behavioral planning of the suicide attempt. Other statistics show that the prevalence rate for the latter type of SI reaches 5.8% within a year and 10.6% over a lifetime (Liu et al., 2020). Despite these staggering rates, the actual prevalence of SI may be even higher, as evidence suggests that SI is widely underreported (Anestis, 2017; Eshun, 2003), possibly because of societal stigma and the fluidity of its definition (Jobes, & Joiner, 2019).

Suicidality is found to be especially prominent for 15 to 29 years olds for which suicide constitutes the fourth leading cause of death (World Health Organisation, 2021). Accordingly, the prevalence of SI is exceptionally common among young adults. In a recent study, those aged 18 to 25 reported SI twice as much as those aged 26 to 49 and four times as much as those aged over 50 (Center for Behavioral Health Statistics and Quality, 2021). In these lines, the prevalence of SI seems to dramatically increase in university students (Mortier et al., 2017; Mortier et al., 2018). Crabb (2005) found that within a sample of 546 undergraduate students, 45.6% reported fantasizing about killing themselves and 95% of these fantasies included explicit reference to suicide methods. This is further supported by a meta-analysis on suicidal attempts, which suggests that 3% of university students attempt suicide each year (Mortier et al., 2018). It is especially important to examine the non-clinical, yet high-risk population of university students, as the counselling and mental health care that universities offer have not benefitted the students that are struggling with suicidality (Drum et al., 2009; Gallagher, 2006; Kisch et al., 2005; Schwartz, 2006).

1.2 Theories on Suicidality

In order to successfully utilize SI to prevent suicide risk, it is essential to clearly define SI using existing theoretical frameworks. There are three widely accepted theories

on suicidality that aim to pinpoint the influential components of SI and its progression to suicide, namely, The Interpersonal Theory of Suicide (IPT), The Integrated Motivational–Volitional Model (IMV) and The Three-Step Theory (3ST) (Klonsky, & May, 2015; O’Connor, 2011; Van Orden et al., 2010). The Interpersonal Theory of Suicide by Van Orden et al. (2010), states that individuals go through four-interconnected stages from SI to action. In the initial stage, the psychological constructs of thwarted belongingness and perceived burdensomeness are identified as proximal and sufficient causes of SI. Here, perceived burdensomeness refers to the subjective feelings associated with perceiving oneself as a burden to others and the related yet distinct construct of thwarted belongingness refers to feelings of being alienated from others (Van Orden et al., 2010; Wyman et al., 2021). The transition from passive to active SI occurs when the psychological construct of hopelessness that refers to the mutability of thwarted belongingness and perceived burdensomeness comes into play. Lastly, the transition from ideation to action occurs if the individual acquires the capability for suicide from experiences that increase pain tolerance and reduce the fear of death, leading to a lethal or near-lethal suicide attempt.

The second among the ideation-to-action theories of suicide is the Integrated Motivational–Volitional Model (IMV) by O’Connor (2011) which characterises three motivational stages of suicidality that entail pre-motivational, motivational, and volitional factors. The most distal pre-motivational factors are the “background factors” constituting the life events and the environment of the individual. On the other hand, purely psychological, motivational factors are portrayed as the true contributors of SI. More specifically, feelings of defeat and humiliation, moderated by threats to self (e.g coping, memory biases, ruminative processes), lead to a sense of entrapment. The sense of

entrapment then leads to SI and intent, moderated by motivational constructs (e.g thwarted belongingness, perceived burdensomeness, social support attitudes). In the last stage, the SI formed by the motivational factors leads to suicidal behaviour when moderated by volitional constructs (e.g capability, impulsivity, implementation intentions and access to means).

Lastly, the Three Step Theory (3ST) by Klonsky, & May (2015) characterises three distinct phases of suicidality. Step one regards the development of SI through the combination of pain that usually, but not necessarily, refers to psychological or emotional pain and hopelessness regarding its future. Step two regards the distinction between moderate and strong ideation depending on connectedness to life. If the individual perceives that their connectedness, their sense of purpose that keeps one invested in living, surpasses their sense of pain and hopelessness, their SI remains in moderate levels (e.g., “sometimes I think I might be better off dead”). On the other hand, if pain and hopelessness surpass their perceived connectedness, the individuals’ SI strengthens (e.g., “I would kill myself if I had the chance”). The final and third step regards the progression from strong ideation to attempt, depending on one’s capacity and means of committing suicide through habituation to pain, fear, and death via exposure to life experiences.

The above-mentioned theories have been substantial in pinpointing to factors that influence suicidality and its ideation. Although there is a good amount of support for these theories, examining them closely is crucial, as they are the building blocks of our global approach to SI and suicidality today, an issue that is still detrimental to society.

1.3 Criticism on Theories and the Research Gap

Even though mental health care services have increased and been made more eligible over the last decades, there has been no decrease in suicide rates worldwide (World

Health Organisation, 2021). Moreover, the suicide rate of 10.7 per 100.000 people in 1990 in the Netherlands, is almost identical today in 2022 (Statistics Netherlands, 2022). This clearly portrays that our approach to understanding SI in hopes to tackle the global issue of suicide is insufficient or lacking in perspective. This shortcoming can be traced back to the theoretical basis we use in constructing our interventions and approaches to mental health and SI.

The above-mentioned ideation-to-action theories are great examples of the theoretical framework that bases the global approach to mental health and SI. The three theories, The Interpersonal Theory of Suicide (Van Orden et al., 2010), The Integrated Motivational–Volitional Model (O’Connor, 2011) and The Three-Step Theory (Klonsky, & May, 2015) all characterize the key components of SI as psychological constructs of the victim, treating the environmental and societal factors as distal and secondary. For example, the IPT characterizes the psychological constructs of perceived burdensomeness and thwarted belongingness as the sufficient components of SI. Yet, it has been found that the interaction between thwarted belongingness, perceived burdensomeness, and capability for suicide was significantly but only modestly related to the occurrence of suicide attempts (Chu et al. 2017), suggesting that the theory overlooks great aspects of real-life phenomena. Similarly, the IVM only recognizes environmental factors in the pre-motivational phase and excludes them from the motivational phase where SI emerges from the psychological constructs of defeat-humiliation and sense of entrapment moderated by the psychological and cognitive constructs of threat to self-moderators and motivational moderators. Lastly, the 3ST characterizes (mostly psychological) pain and the sense of hopelessness as the constructors of SI and the perception of connectedness as the determinant of the strength of

the ideation, laying almost no emphasis on environmental and societal factors surrounding and forging the victim.

As a response to such theories that place the focal point of suicidality in the internal processes of the victim, we ask: can the “I” have a story of its own that is not also the story of a relation—or set of relations—to a set of norms? (Boer, 2010). An appropriate response lies in the principles of the ecological model by Bronfenbrenner (1979): “The perspective is new in its conception of the developing person, of the environment, and especially of the evolving interaction between the two.”, placing the effects of the environment alongside those of the individuals’ psychology in sculpting them to be as they are. Therefore, it is crucial that future research regarding suicidality and SI incorporates the environmental and social factors that construe the life that victims aim to escape, by asking the question of “What makes life livable?”.

1.4 Social Determinants of Mental Health

There are numerous theoretical frameworks indicating that the question of “What makes life livable?” cannot be answered by simply looking at the internal processes of the individual (Chisholm et al., 2016; Lund, & Breuer, 2018; World Health Organization, 2014). Such theories can be based on the classical equation of Kurt Lewin: $B = f(PE)$. This formula defines the core component of psychology, human behavior, in terms of the person, the environment and especially the interaction between the two. This formula also creates basis for the ecological model by Bronfenbrenner (1979), which criticizes theories that strip child development of its context. Bronfenbrenner’s model illustrates that a child's emerging behavior, such as the way he/she reads, cannot be examined irrespective of external factors, such as the way he/she is taught to read. He creates a template in which these external factors constitute distinct, yet interrelated systems based on their proximity to the child.

The most proximal external factors constitute the microsystem which entails the immediate environment of the child. Then comes the mesosystem which serves as a bridge between the microsystem and the exosystem. Whilst the exosystem encompasses societal factors such as mass media, the larger macrosystem entails attitudes and ideologies of the culture. Lastly, the overarching chronosystem constitutes environmental change throughout time. The philosophy by Judith Butler also beautifully demonstrates that such external factors cannot be overlooked when examining an individual's behavior or state as "The 'I' is always to some extent dispossessed by the social conditions of its emergence" (Boer, 2010).

The approach that portrays the importance of context in the emergence of one's state and behavior is increasingly featured in the developing conceptualization of mental health (Chisholm et al., 2016; Lund, & Breuer, 2018; World Health Organization, 2014). A crucial theoretical framework in this direction is the model by Lund (2018). This model provides a framework to identify potential mechanisms and targets for future mental health interventions. It does so in regard to the Sustainable Development Goals (SDGs), endorsed by the United Nations in 2015, which represent an ambitious plan for sustainable human development by 2030. It delivers the greater clarity needed on which social determinants to target for better mental health and how they are aligned with the SDGs. Here, social determinants refer to the social and economic conditions that have a direct influence on the prevalence and severity of mental disorders. The conceptual framework distinguishes five domains of social determinants with distal and proximal factors in each domain. The demographic domain entails detrimental threats to mental health such as discrimination based on gender, ethnicity and race. The economic domain addresses social determinants such as unemployment, poverty and food insecurity. The neighborhood domain entails

direct risks to mental health such as living in a deprived neighborhood due to social drift, racial segregation, neighborhood crime and community instability. The environmental events domain entails natural disasters and hazards that directly endanger one's mental well-being. Lastly, the social and cultural domain entails social determinants such as lower-level education, bullying and partner abuse.

All in all, mental health is so intertwined with such social determinants that it is unlikely to solve global mental health issues by improving access to mental health treatments per se (Chisholm et al., 2016; Lund & Breuer, 2018; World Health Organization, 2014). Accordingly, overreliance on counselling services is proven to be problematic for students as well. Given that the majority of students who contemplate suicide do not seek professional help and nearly 80% of students who die by suicide never receive help from counselling services (Drum et al., 2009; Gallagher, 2006; Kisch et al., 2005; Schwartz, 2006). Indicating further that suicide is increasingly conceptualized as a public health issue that demands a comprehensive, prevention-oriented response (Knox et al., 2004; Mann, et al., 2005). Hence, by overlooking the importance of social determinants, we may narrow our interventions to altering solely the victim, sending those in need back into the conditions they were trying to escape in the first place (Lund ,& Breuer, 2018). Therefore, this paper aims to illuminate the importance of social determinants on mental health and specifically suicidal ideation, in relation to psychological constructs.

1.5 Ethnic Discrimination as a Social Determinant

A social determinant that needs further attention, especially among university students in the Netherlands, is discrimination that is based on ethnicity. Lund's model (2018) characterizes discrimination as a social determinant with grave consequences on mental health both in the demographic domain where belonging to a discriminated minority

group links to an increased prevalence of mental disorders and in the social and cultural domain where discrimination in the social environment links to increased stress, depressive symptoms, reduced self-esteem and social isolation. Other studies also conclude that discrimination denies access to resources substantial for adapting to other stressors, as well as necessary opportunities for well-being and personal growth (Clark, et al., 1999) making it a unique predictor of negative psychological outcomes, distinct from general stress (Sanders-Thompson, 2002; Taylor, & Turner, 2002). In line with this, perceiving oneself as discriminated against is found to increase the odds of a suicide attempt without the intent to die and an unplanned suicide attempt (Lee et al., 2022; Wei et al., 2007, Wei et al., 2012). Similarly, the World Health Organisation (2021) states that suicide rates are substantially higher for minority groups who experience discrimination.

A subset of discrimination, ethnic discrimination, has also been associated with grave consequences on mental health and well-being (Brondolo et al., 2003; Collins et al., 2000; Gee, 2002; Jackson et al., 1996; Klonoff and Landrine, 1999; Klonoff et al., 1999; Lund, & Breuer, 2018; Williams et al., 1997, Williams et al., 2003). For example, Lund (2018) states that ethnic discrimination has been strongly linked to depression in youth (Lund, & Breuer, 2018). Other studies demonstrate that minorities who experience ethnic discrimination display more physical and psychiatric symptoms and problematic health behaviors compared to those that are not ethnic minorities and compared to their minority cohorts that are not subject to such discrimination (Brondolo et al., 2003; Lund, & Breuer, 2018; Collins et al., 2000; Gee, 2002; Jackson et al., 1996; Klonoff and Landrine, 1999; Klonoff et al., 1999; Williams et al., 1997, Williams et al., 2003). Furthermore, ethnic discrimination has been found to be an influential factor for SI (Sue et al., 2007; Hollingsworth et al., 2017). A study by Madubata et al. (2022) found that even subtle forms

of ethnic discrimination were associated with SI among African American and Latino youth and were prospectively associated with SI among African American adolescents, beyond the effects of depressive symptoms.

In the scope of the Netherlands, discrimination is a highly relevant social determinant where more than a quarter (27%) of residents perceive themselves as discriminated, a number that has not substantially decreased since 2013 (Sociaal en Cultureel Planbureau, 2018). Additionally, there is an increase in perceived discrimination in educational settings (Sociaal en Cultureel Planbureau, 2018), making it increasingly relevant for university students in the Netherlands. Currently, 9% of students claim to be doing a course below their level due to discrimination and a similar percentage report stopping their training entirely due to discrimination. The latter group concerns 3% of all students in the Netherlands (Aniessen et al., 2022).

Moreover, there is evidence that suggests that discrimination based on ethnicity is most relevant in the Netherlands. More specifically, the report by Sociaal en Cultureel Planbureau (2018), demonstrates that among all minorities, Moroccans, Turks and after Muslims, Antilleans and Surinamese individuals receive the most negative attitude and unequal treatment in Dutch society. Also, Turkish and Moroccan minorities are characterized as constituting the lowest part of the Dutch social hierarchy, making them the biggest subjects of discrimination (Aniessen et al., 2022). Within these lines, it was found that SI among adolescents of Turkish background was significantly higher than in both majority and other minority adolescents in the Netherlands (Van Bergen et al., 2008). This further indicates that ethnic discrimination can be a substantial social determinant of SI, especially in the Netherlands.

In conclusion, ethnic discrimination is a social determinant that has grave consequences on mental health and should not be overlooked when conceptualizing SI (Lund ,& Breuer, 2018; World Health Organization, 2021). Hence, it is only appropriate that university students, a population at especially high risk for SI (Mortier et al., 2017; Mortier et al., 2018), are screened for ethnic discrimination. By doing so, we can pave the way for future interventions that account for such detrimental influences when aiming to prevent suicidality.

1.6 Perceived Burdensomeness and Thwarted Belongingness as Moderators

Circling back to the formula by Kurt Lewin, $B = f(PE)$, human behavior should be characterized in terms of the person, the environment and especially the interaction between the two. Therefore, when conceptualizing SI, our objective is not to neglect the influences of psychological factors but to demonstrate how they are influenced by social determinants such as ethnic discrimination and cannot be regarded irrespectively. Such a complete picture can be illustrated by incorporating the psychological constructs of the above-criticized ideation-to-action theories and the inevitably influential social determinant. The psychological constructs that are incorporated in this paper are thwarted belongingness and perceived burdensomeness, for mainly two purposes.

Firstly, IPT which utilizes the psychological constructs of thwarted belongingness and perceived burdensomeness, is considered to be the groundwork for the ‘next generation’ theories of suicide (Klonsky et al., 2018). Yet, there is overlooked evidence that suggests that this groundwork may be incomplete. Notably, in a large community-based cohort, the interaction between thwarted belongingness and perceived burdensomeness was not significantly associated with ideation in the full sample (Christensen et al., 2013).

Secondly, the shortcomings of this theory can be plausibly explained with social determinants such as ethnicity and its discrimination. For example, Asian American students, relative to White American students, reported higher levels of thwarted belongingness and perceived burdensomeness (Tang, & Masicampo, 2018). In another study, the perceived discrimination of Asian international students was found to intensify the associations between perceived burdensomeness, thwarted belongingness and SI. Similarly, the racial discrimination of African American college students was associated with higher perceived burdensomeness, which was related to increased SI (Hollingsworth et al., 2017).

In sum, it is evident that the psychological constructs of IPT are not sufficient to explain the emergence of SI (Christensen et al., 2013) and that social determinants, such as the discrimination that is associated with being an ethnic minority, play a crucial role in the emergence of these psychological constructs (Hollingsworth et al., 2017; Tang, & Masicampo, 2018; Wyman et al., 2021). Exploring the interplay between these constructs can help us move toward a more complete conceptualization of SI. Moreover, the relationship between ethnic discrimination and SI in regard to the psychological constructs of IPT has not been well studied, especially in the narrative of university students of the Netherlands, creating a research gap that needs to be addressed.

1.7 Objectives & Research Questions

The overarching objective of this paper is to illustrate that the answer to “What makes life livable?” lies further than the internal processes of the victim. We aim to do so by illuminating the importance of social determinants when conceptualizing SI with the focus on the social determinant of ethnic discrimination due to its increasing prevalence in educational settings that pose a risk for university students in the Netherlands (Sociaal en

Cultureel Planbureau, 2018; Mortier et al., 2017; Mortier et al., 2018). When doing so, we utilize a mixed methods design entailing both quantitative and qualitative data and analysis based on the literature that illustrate the need for mixed method studies (Michel, 2021; Mueller et al., 2021).

For the first and quantitative part of this study, our first research question is as follows: “Is ethnic discrimination associated with SI in a non-clinical sample of college students in the Netherlands?”. Based on literature that illustrate the influence of ethnic discrimination on SI (Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022) and those that signal the prominence of ethnic discrimination in educational settings in the Netherlands (Aniessen et al., 2022; Sociaal en Cultureel Planbureau, 2018), we hypothesise that ethnic discrimination will be positively correlated to SI among our sample.

Our second quantitative research question aims to portray how psychological constructs behave differently in relation to social determinants and how these constructs per se do not suffice as influences of SI. The corresponding research question is as follows: “Is the relation between perceived burdensomeness and thwarted belongingness to SI moderated by ethnic discrimination?”. Based on literature (Hollingsworth et al., 2017; Tang, & Masicampo, 2018; Wyman et al., 2021), we hypothesise that an increase in ethnic discrimination will strengthen the relation between perceived burdensomeness, thwarted belongingness and SI.

The second and qualitative part of this study is based on the limitations of quantitative research (Henwood, & Pidgeon, 1992; Toomela, 2010). Even though quantitative methods give us an overview of how our variables move within the population it says very little about the narratives of the individuals we aim to help. More specifically, whilst a correlation can reflect covariations of appearances; the true underlying causes and

the mechanisms that determine how the covariation emerges, cannot be known with quantitative methods (Toomela, 2010). Therefore, based on the literature about SI and ethnic discrimination (Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022), it is crucial to ask the question of “How does ethnic discrimination relate to SI among university students in The Netherlands?”.

Furthermore, literature indicates that, there are other social determinants affecting how ethnic discrimination relates to SI (Hope et., 2017; Rollock, & Lui, 2016). By exploring these factors, the covariances found or not found between ethnic discrimination and SI can be better understood. Such factors might also offer direction to future interventions targeting ethnic discrimination for SI. Hence, we will try to answer the question “What are the social determinants that protect university students in the Netherlands against the negative psychological consequences of ethnic discrimination?”.

2. Methods

2.1 Research Design

The research “What Makes Life Livable? Understanding the Social Determinants of Suicidal Ideation among College Students” is part of the research project “*Owl’s Talons Clenching my Heart: Understanding the Social Determinants of Suicidality Among Adolescents Aged 12-26 years*” conducted by the PhD candidate Ronald Bahamondes-Álvarez. We will make use of an explanatory sequential mixed methods design in which first quantitative data is collected and analysed and then the findings inform qualitative data collection and analysis (Creswell & Plano Clark, 2011). This two-phase design begins with the collection and analysis of questionnaires (i.e., quantitative data), followed by the subsequent collection and analysis of free association narrative interviews (FANI) (i.e., qualitative data) (Creswell & Plano Clark, 2011; Hollway, & Jefferson, 2000). The

purpose of this explanatory sequential mixed methods study is to illuminate the importance of social determinants on SI among university students in the Netherlands. Accordingly, the following overarching question guided the study: “What makes life livable among college students in the Netherlands aged 17- 26?”.

2.2 Integration

Integration is the way in which the two parts of a mixed methods design is brought together (Fetters et al., 2013). The integration of quantitative and qualitative data dramatically increases the value of mixed methods studies. For example, through integration, the qualitative data can assess the validity of the quantitative data whilst the quantitative data can generate the qualitative sample or enlighten the qualitative data (O’Cathain, Murphy, and Nicholl 2010).

In this study, integration will be achieved at the design, methods, interpretation and reporting levels. Firstly, integration at the design level will be achieved with an explanatory sequential mixed methods design where the quantitative data is collected and used for the forming of the qualitative data (Fetters et al., 2013). Secondly, integration at the methods level will be achieved with the connecting approach regarding sampling. Here, the scores from the quantitative phase will determine the participants that will attend the qualitative phase (Fetters et al., 2013). More specifically, purposeful sampling will be implemented combined with extreme case sampling. Additionally, the building approach will be implemented in which the database from the first phase informs the data collection of the second phase (Fetters et al., 2013). More explicitly, exploratory analysis and new or adjusted interview questions may be incorporated in the qualitative phase based on the quantitative results (Fetters et al., 2013). Thirdly, at the interpretation and reporting level, integration will be achieved with the contiguous approach where the findings of the two

phases are reported in a single report, but the qualitative and quantitative findings are reported in different sections (Fetters et al., 2013).

2.3 Quantitative Phase

2.3.1 Participants and design of this section

The quantitative phase entails a cross-sectional design with the use of self-report questionnaires. A cross-sectional design can be defined as an observational or descriptive research, that analyses information about a population at a specific point in time (American Psychiatric Association, 2023; Kesmodel, 2018). The population we are investigating is 17-26 year old university students in The Netherlands. We will have a sample of 200 participants based on G*Power to yield adequate power to detect medium effect sizes for the planned analyses (Faul et al., 2007). Recruitment will be done via flyers, social media and announcements in campus common areas. Inclusion criteria entails being enrolled in Leiden University, having access to SONA and good command over written English.

2.3.2 Procedure

In the quantitative part, the participants will fill out questionnaires for approximately 40 minutes, namely the INQ-15, GED and SIDAS alongside demographic questions. Information about the study will be given in advance, whereupon all participants provide a written informed consent that include their consent for being contacted for the second phase of this study, namely the interview. After filling out the questionnaires, all participants will receive a debriefing form and get rewarded for their participation. The rewards entail SONA credits and a chance to win one of the two prizes of 30 euros. In the case of non-completion, the participants will be given € 0.00/0.5 credit for up to 15 minutes, and € 3,75 (1 credit) for 15- 30 minutes. The above-described procedures were

approved by the Psychology Ethic Committee of the Leiden University with the corresponding CEP number 2023-01-25-M.S.Tollenaar-V3-4436.

2.3.3 Instruments

Dependent variable. This study makes use of one dependent variable which is suicidal ideation.

Suicidal ideation. The instrument we are using to measure the dependent variable of suicidal ideation (SI) is the Suicidal Ideation Attributes Scale (SIDAS). The SIDAS is a five-item scale assessing frequency, controllability, closeness to attempt, distress, and interference with daily activities on 10-point scales within the past month. The items are: 1. “In the past month, how often have you had thoughts about suicide?” (0= Never to 10 = Always); 2. “In the past month, how much control have you had over these thoughts?” (0 = No control/do not control to 10 = Full control); 3. “In the past month, how close have you come to making a suicide attempt?” (0 = Not at all close to 10 = Have made an attempt); 4. “In the past month, to what extent have you felt tormented by thoughts about suicide?” (0 = Not at all to 10 = Extremely); and, 5. “In the past month, how much have thoughts about suicide interfered with your ability to carry out daily activities, such as work, household tasks or social activities?” (0 = Not at all to 10 = Extremely). The total SIDAS score is the sum of the five items, with controllability being reverse coded. The maximum score is 50 indicating the most SI and the minimum score is 0 indicating no SI. Amongst a non-clinical sample of 1352 Australian adults (aged over 18), the mean score was 5.51 (M= 5.52, SD=9.79) and the scores were significantly higher for the subgroup of 18-24 year olds (M=7.51, SD=11.59). Additionally, among Malaysian university students the mean was 8.38 (M= 8.38, SD= 9.50). According to the Cronbach’s alphas, SIDAS had very good internal consistency both among the non clinical population of Australian adults ($\alpha = .91$)

and among Malaysian university students ($\alpha = .89$) (Prihadi et al., 2020; Van Spijker et al., 2014).

Independent variables. This study made use of two independent variables. Namely, a measure of ethnic discrimination and a measure of the interpersonal needs: thwarted belongingness and perceived burdensomeness.

Ethnic discrimination. The instrument we are using to measure the independent variable of ethnic discrimination is the The General Ethnic Discrimination scale (GED) (Landrine et al., 2006). This questionnaire measures the perceived ethnic discrimination both within the participants' lifetime and in the past year. GED entails 18-items of ethnically based discriminatory experiences with a 6-point Likert scale. A sample question is "How often have people misunderstood your intentions and motives because of your race/ethnic group?" For which respondents answer three times with respect to the frequency of discriminatory experiences in one's entire lifetime (0 = *Never* to 6 = *Almost all the time*), the frequency of those experiences in the past year (0 = *Never* to 6 = *Almost all the time*), and the appraised stressfulness associated with each experience (1 = *Not at all stressful* to 6 = *extremely stressful*). This measure is reported to have equal effectiveness in assessing perceived ethnic discrimination across diverse racial and ethnic groups (Landrine et al., 2006). It is also demonstrated to have very good internal validity in a sample of 260 African American, 166 Asian American, and 183 Latino American university students ($\alpha = .94$) (Cheng et al., 2013).

Perceived burdensomeness and thwarted belongingness. The instrument we are using to measure the independent variables of perceived burdensomeness and thwarted belongingness is the The Interpersonal Needs Questionnaire (INQ) (Van Order et al., 2008). This questionnaire was developed for suicidality risk assessment based on the IPT

via the measurement of perceived burdensomeness and thwarted belongingness (Van Orden et al., 2008). The INQ is a 15-item measure which is an empirically derived refinement of the original INQ-25 that improves practicality of the tool by reducing the administration length (Van Orden et al., 2012). The measure uses a 7-point scale ranging from 1 (*not at all true for me*) to 7 (*very true for me*). Of the 15 items, six items measure perceptions of burdensomeness (e.g., “These days, I think I am a burden on society”), while the other nine items measure feelings of belongingness (e.g., “These days, I feel like I don’t belong”). Higher scores reflect higher levels of Thwarted Belongingness and Perceived Burdensomeness once the items 7, 8, 10, 13, 14, and 15 of the Thwarted Belongingness subscale are reversely coded. The construct validity of INQ has been supported by positive correlations with SI and depressive symptoms (Van Orden et al., 2008). The measure is also shown to have good internal consistency for which the Cronbach’s alpha coefficient was .89 for the Thwarted Belongingness subscale and .85 for Perceived Burdensomeness subscale among U.S. college students (Van Orden et al., 2008).

Demographic variables. The participants will also be asked to fill in a questionnaire regarding their demographic information. The questionnaire entails questions about their age, relational status, possible children, living area and situation, sex, identified gender, sexuality, English and Dutch language proficiency, education, employment, income and financial status. The questionnaire will also measure ethnicity by asking “Which of the below ethnicities do you identify with the most?” (Black – White – MENA – Hispanic – Asian) (Quillian et al., 2019), “How strongly do you identify with the above-mentioned ethnicity?” (1 = not at all to 7 = completely) and “Is there a better way to describe your ethnicity? If so, specify”.

2.3.4 Analysis

All statistical analyses will be performed with the SPSS, version 27 (IBM Corp, 2020). Firstly, the data will be screened for outliers based on Cook's distance. If it deems appropriate, those with a Cook's distance above 1 will be removed. We will run descriptive statistics using the demographic variables. The assumptions of normal distribution of residuals, linearity and homoscedasticity will be checked with scatterplots and histograms. Multicollinearity will be checked by the tolerance/VIF values.

The first hypothesis is "There are differences in ethnic discrimination for White, Black, Asian, Hispanic and MENA ethnic groups.". This grouping is sampled from the study by Quillian et al., 2019. In line with the literature, we hypothesise that "MENA ethnic group will be the ethnic group scoring highest on ethnic discrimination" (Aniessen et al., 2022; Sociaal en Cultureel Planbureau, 2018; Quillian et al., 2019). To test these, we will conduct an ANOVA with Tukey post-hoc tests. If the assumption of homogeneity is not met, we will use Game-Howell for post-hoc testing. If the groups are too heterogeneous, the non-parametric test of Kruskal Wallis can be conducted. During this testing, ethnicity will be treated as qualitative data whilst ethnic discrimination will be treated as quantitative data.

The second hypothesis is that "Ethnic discrimination will be positively correlated with SI" (Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022). To test this hypothesis a Pearson's r correlation will be conducted in which both variables will be treated in a quantitative way. The assumptions of linearity and normal distribution will be checked using a scatterplot. If assumptions are not met a Spearman correlation will be conducted instead. Either way, the correlation will be conducted based on the overall score, lifetime and recent and appraised ethnic discrimination scores on the GED.

The third and last hypothesis is that “An increase in ethnic discrimination will strengthen the relation between perceived burdensomeness, thwarted belongingness and SI.” (Hollingsworth et al., 2017; Tang, & Masicampo, 2018; Wyman et al., 2021). The variables of this hypothesis will all be treated in a quantitative way. To test this hypothesis we will first check if SI is positively correlated with perceived burdensomeness and thwarted belongingness and that the assumptions of linearity, homoscedasticity and normality are met. Later, a hierarchical regression analysis will be conducted to investigate the moderation effect. Statistical significance will be set at $p < .05$ for all analyses besides the post-hoc tests for which the alpha will be Bonferroni corrected for multiple testing.

2.4 Qualitative Phase

2.4.1 Participants and design of this section

For the cross-sectional qualitative phase of the study, four participants will be purposefully sampled according to the quantitative data. We will make use of extreme score sampling in which all participants will have reported high levels of ethnic discrimination (Cochrane, 2017; Teddlie & Yu, 2007). In order to explore the narrative of those who experience SI in relation to ethnic discrimination and those who do not and what distinguishes them, two of the participants will have reported SI in line with ethnic discrimination whilst two of them will not. As consented to in the quantitative phase, the participants will be invited to participate in the second phase via email. The participants will attend an hour-long in person interview at Leiden University’s Faculty of Social and Behavioural Sciences in which only the interviewer and the interviewee will be present. These interviews will be recorded, and notes can be taken by the interviewer to navigate the interview. To ensure confidentiality the recordings will be deleted entirely once the report is finalized. The total of the interviews will last two-weeks starting from (approximately)

mid-March 2023. Once the interviews are complete the participants will be rewarded 15 euros.

2.4.2 Data Collection

The questions to “What are the social determinants that protect university students who deal with SI in the Netherlands against the negative psychological consequences of ethnic discrimination?” and “How does ethnic discrimination relate to SI among university students in The Netherlands?” will be investigated with the Free Association Narrative Interview method (Hollway, & Jefferson, 2000). This method is based on the psychoanalytic principle of free association, which states that unconscious connections are revealed through the links that people make if they are free to structure in their own narratives (Hollway, & Jefferson, 2008).

During the hour-long interviews, we will ask and elaborate on certain open ended questions. For those that score high on both SI and ethnic discrimination, we will ask the question of “Can you tell me about the ethnic discrimination you experience in the NL as a university student” to understand the ethnic discrimination that relates to SI amongst university students in the Netherlands (Aniessen et al., 2022; Sociaal en Cultureel Planbureau, 2018; Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022). Secondly, we will ask the questions of “How does ethnic discrimination affect you” and “You reported experiencing SI, how does ethnic discrimination relate to this?” to investigate how ethnic discrimination relates to SI whilst maintaining the freedom of their narrative (Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022). We will also ask the question of “What factors influence the negative consequences of ethnic discrimination?” to openly investigate which other social determinants of mental health

influence ethnic discrimination and SI (Chisholm et al., 2016; Hope et., 2017; Lund ,& Breuer, 2018; Rollock,& Lui, 2016; World Health Organization, 2014).

For those who scored high on ethnic discrimination but low on SI we will ask the similar questions of “Can you tell me about the ethnic discrimination you experience in The Netherlands as an university student”, “Some people experience SI in relation to ethnic discrimination, what are your thoughts about this?”(Aniessen et al., 2022; Sociaal en Cultureel Planbureau, 2018; Sue et al., 2007; Hollingsworth et al., 2017; Madubata et al., 2022) and most importantly, “How do you protect yourself against the negative consequences of ethnic discrimination?” to understand which social determinants distinguish those who experience SI in relation to ethnic discrimination and those that do not (Chisholm et al., 2016; Hope et., 2017; Lund ,& Breuer, 2018; Rollock,& Lui, 2016; World Health Organization, 2014). As these questions are preliminary, they are open to moderation or change based on the quantitative data results.

2.4.3 Analysis

Thematic analysis will be applied for identifying, analyzing, and reporting patterns within the transcripts using Atlas.ti 23 (Braun & Clarke, 2006). Thematic analysis as described by Braun & Clarke (2006) is done within six steps. Step one entails familiarizing oneself with the data by repeatedly reading the data in an active manner, searching for meaning and themes. Step two entails generating the initial codes. Here, codes distinguish a characteristic of the data that is of interest to the research. Step three entails searching for themes by analyzing and combining the codes to form overarching themes. Phase 4 begins once a set of candidate themes are formed, and they can be refined. Here, the themes that are not really themes (e.g. without sufficient supporting data, or data that are too diverse), themes that can collapse into each other (e.g. two apparently separate themes might form

one theme) and themes that might need to be broken down into separate themes are revised. Phase five entails defining and naming the revised themes where a detailed analysis is written for each individual theme. The final and sixth phase entails producing the final report. The reliability of the thematic analysis and the authenticity of the inferences will be done by having a fraction of the transcripts analysed by a distinct rater and comparing the results. To ensure anonymity during analysis, instead of the names of the participants nicknames will be used. Hence, their names will not be mentioned or attached to their data in any of our platforms.

3. Results

3.1 Quantitative Results

3.1.1 Participants

After complete case analysis based on the independent (INQ, GED) and dependent variables (SIDAS) and deletion of double entries, the total sample consisted of 186 participants with an age range of 17-26 ($M_{age} = 19.58$, $SD = 1.89$) (See Table 1 for correlations). In terms of ethnicity, the sample was predominantly White (86.6%) with 11 MENA (5.9%), 10 Asian (5.4%), 3 Hispanic (1.6%) and 1 Black (0.5%) participants and 81 (43.5%) of these participants reported being international students. The sample mean for the duration of living in the Netherlands in years was 11.169 ($M = 11.169$, $SD = 8.91$) (see Table 1). Regarding sex, the sample consisted of 18 Males (9.7%) and 168 females (90.3%). Regarding sexuality, 131 reported as heterosexual (70.4%), 37 as bisexual (19.9%), 11 as homosexual (5.9%), and 7 as other (3.7%). The sample was 50.5% single with the remaining 40.3% being in a relationship and 8.6% dating. The participants reported being mostly middle-upper class in family income and on average worked 4.96 hours per week ($M = 4.96$, $SD = 6.15$). The sample mean for SI was 6.49 ($M = 6.49$, $SD =$

8.93) (see Table 2). According to the classification by Van Spijker et al. (2014), 54 participants (29%) reported experiencing no SI, 116 participants (62.4%) reported low SI and 16 participants (8.6%) reported suicidal risk/high SI. Amongst the 136 participants that indicated experiencing SI, 41 (31.1%) reported disclosing their SI with others.

Table 1

Correlation matrix

Measures	1	2	3	4	5	6	7	8	9
1. Suicidal ideation									
2. Age	.091								
3. Duration living in the NL	-.180**	.060							
4. General ethnic discrimination	.290***	.078	-.228**						
5. Recent ethnic discrimination	.228***	.074	-.184**	.859***					
6. Lifetime ethnic discrimination	.291***	.071	-.230**	.972***	.813***				
7. Appraised ethnic discrimination	.281***	.094	-.194**	.965***	.797***	.906***			
8. Total INQ-15 score	.519***	.200**	-.160*	.163*	.153*	.139*	.182**		
9. Thwarted belongingness	.419***	.192**	-.094	.093	.1542	.080	.106	.906***	
10. Perceived burdensomeness	.537***	.154*	-.210**	.183**	.146*	.160*	.197**	.924***	.710***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

3.1.2 Assumptions

In order to test the hypotheses assumptions were checked. For the correlation the normality of SIDAS and GED scores, their linearity and outliers were inspected. The normality of the SIDAS scores were inspected with a histogram in which the distribution was highly right skewed. Accordingly, the SIDAS total scores were log transformed with the formula $\text{LG10}(X+1)$ to approximate normality whilst dealing with 0 scores. After the log transformation, the high frequency of 0 scores remained but the remaining distribution

approximated normality. The normality of total GED scores were also inspected with a histogram that yielded a highly right skewed distribution. Outliers were checked via Cook's distance, for which the highest value was 0.101 indicating no outliers. The linearity of SIDAS and GED scores was checked with a scatterplot and the assumption was met.

For the hierarchical regression the additional assumptions of multicollinearity, normality of residuals, homoscedasticity and linearity of INQ and SIDAS were checked. Multicollinearity was checked with $VIF = 1.898$ and $Tolerance = .527$, indicating no multicollinearity. The normality of residuals was checked with a histogram that indicated an acceptable distribution. Homoscedasticity was inspected with a scatterplot that indicated some homoscedasticity.

Table 2

Scores on INQ, GED and SI-DAS

	Sample		White		Non-white	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Suicidal Ideation	6.49	8.93	5.80	8.45	10.96	10.75
Recent ethnic discrimination	21.81	9.46	19.94	3.72	33.84	20.57
Lifetime ethnic discrimination	23.49	10.49	21.17	4.88	38.44	20.51
Appraised ethnic discrimination	24.39	13.29	21.45	8.00	43.36	22.40
Total GED score	69.69	32.02	62.56	15.36	115.64	61.57
Total INQ-15 score	35.56	16.63	33.98	15.62	45.76	19.52
Thwarted belongingness	16.08	7.30	15.42	6.86	20.32	8.70
Perceived burdensomeness	19.48	10.83	18.55	9.89	25.44	14.49

3.1.3 Hypothesis Testing

- 1) “There are differences in ethnic discrimination for white, Black, Asian, Hispanic and MENA ethnic groups.”

Based on solely the means, the GED total scores were highest for MENA participants ($M = 145.82$, $SD = 76.51$), followed by Asian participants ($M = 99.40$, $SD = 33.26$), Hispanic participants ($M = 75.67$, $SD = 35.85$) and the Black participant ($X = 66$). The GED total scores were lowest for the White participants ($M = 62.56$, $SD = 15.36$). Due to the small sample size of MENA, Hispanic and Black participants compared to the White participants, ethnicity was recomputed as white ($N = 161$) and non-white ($N = 25$). The corresponding SIDAS, GED and INQ scores are shown on Table 2.

Accordingly, The GED scores of white and non-white groups were compared instead of the specific ethnic groups. Due to the non-normality of the scores, this was done via the non parametric test of Mann-Whitney U. The results indicated that there was significant differences between the appraised ethnic discrimination scores ($U = 565$, $p < .001$), recent ethnic discrimination scores ($U = 880.50$, $p < .001$), lifetime ethnic discrimination scores ($U = 506.50$, $p < .001$) and total GED scores ($U = 53.00$, $p < .001$) of White and Non-white groups. The difference between the total GED scores between groups had a large effect size with Cohen’s d ($d = 1.18$). Hence, we rejected the null hypothesis and retained the presented hypothesis.

- 2) “Ethnic discrimination will be positively correlated with SI”

Due to the non-normality of SIDAS and GED scores, a Spearman’s rho using the original SIDAS scores was conducted instead of Pearson’s r . As hypothesised, total GED scores ($r(184) = .290$, $p < .001$), recent ethnic discrimination scores ($r(184) = .228$, $p < .01$), lifetime ethnic discrimination scores ($r(184) = .291$, $p < .001$) and appraised ethnic

discrimination scores ($r(184) = .281, p < .001$) were significantly and positively correlated with the SIDAS scores (see Table 1). Thus, we rejected the null hypothesis and retained the presented hypothesis.

3) “An increase in ethnic discrimination will strengthen the relation between perceived burdensomeness, thwarted belongingness and SI.”

To test moderation effects a hierarchical regression analysis was conducted with the Log transformed SIDAS scores, the total INQ scores and the interaction variable of total INQ multiplied by total GED scores. In block one the local model yielded significant results ($R^2 = .350, F(1,184) = 98.93, p < .001$), explaining 35% of the variance in SIDAS scores. Here, there was a significant main effect found between total INQ and SIDAS scores ($b = .018, SE = .002, \text{Beta} = .591, t(185) = 9.95, p < .001$). In block two, the final model also yielded significant results ($R^2 = .365, F(1,183) = 4.399, p = .037$), explaining 36.5% of the variance in SIDAS scores. Here, both INQ ($b = .000038, SE = .000018, \text{Beta} = .474, t(185) = 5.843, p > .001$) and the interaction of INQ and GED ($b = .000038, SE = .000018, \text{Beta} = .170, t(185) = 2.097, p = .037$) were significant predictors, indicating a significant moderation effect with a small effect size (Cohen’s $f^2 = 0.024$). Thus, the analysis supports the rejection of the null hypothesis and retainment of the presented hypothesis.

As there was some homoscedasticity, a binary logistic regression was also conducted as an exploratory analysis. Here, a dummy variable was computed which indicated the absence/presence of SI with a cut-off point of 0 on the total SIDAS scores (Van Spijker et al., 2014). In block one, the local model with INQ as the sole predictor yielded significant results ($\chi^2(1) = 34.698, p < .001$). The Hosmer test was insignificant ($\chi^2(8) = 10.871, p = .209$), also indicating a good fit. The model explained 24.3%

(Nagelkerke R^2) of the variance in SI and correctly classified 73.1% of cases. Here, INQ scores had a significant main effect ($B = .084$, $SE = .018$, $\text{Exp}(B) = 1.087$, $W(1) = 21.47$, $p < .001$) and the odds ratio for INQ indicates that an increase in INQ scores is associated with an increase in the odds of having SI. In the next block, the global model with the added interaction variable of total INQ scores multiplied by total GED scores also yielded significant results ($\chi^2(1) = 8.667$, $p = .003$). The Hosmer test was insignificant ($\chi^2(8) = 6.251$, $p = .619$), also indicating a good fit. The global model explained 29.7% (Nagelkerke R^2) of the variance in SI and correctly classified 72.6% of cases. Here, INQ was no longer a significant predictor ($B = .011$, $SE = .033$, $\text{Exp}(B) = 1.011$, $W(1) = .114$, $p = .735$), instead the interaction was the significant predictor ($B = .001$, $SE = .001$, $\text{Exp}(B) = 1.001$, $W(1) = 5.446$, $p = .020$). The odds ratio for the interaction indicates that an increase in the interaction is associated with an increase in the odds of having SI. Thus, we rejected the null hypothesis and retained the presented hypothesis.

3.1.4 Exploratory Analysis

Based on solely the means, The SIDAS score was slightly higher for the Black participant ($M = 13$) than for the MENA participants ($M = 12.36$, $SD = 13.32$), followed by Asian participants ($M = 10.70$, $SD = 9.66$) and Hispanic participants ($M = 6$, $SD = 5.29$) (see Table 2). The SIDAS scores were lowest for White participants ($M = 5.80$, $SD = 8.45$). Based on the Mann-Whitney U test, the SIDAS scores had significantly different mean ranks for non-whites and whites ($U = 1192.50$, $p = .01$) and the difference in SIDAS mean scores had a medium effect size with Cohen's d ($d = 0.53$).

3.2 Qualitative Results

In this part, the results of the thematic analysis will be presented. The results of our thematic analysis entailed 120 codes that were grouped into three main themes with five

sub themes. The three themes are: (1) Consequences of ethnic discrimination that relate to SI (2) Type of ethnic discrimination and, (3) Factors that influence ethnic discrimination's relation to SI. The first and third themes entail three and two subthemes respectively. For the theme "Consequences of ethnic discrimination that relate to SI" the three subthemes are changes in perception, coping mechanisms and psychic reactions and for the theme "Factors that influence ethnic discrimination's relation to SI" the two subthemes are factors with negative effects and factors with positive effects.

3.2.1 Theme 1: Consequences of ethnic Discrimination that relate to SI

For the participants, ethnic discrimination entailed instances of verbal and physical aggression from peers and strangers as well as unequal treatment and negative attitudes from institutions like schools and police due to their ethnicity. Such instances had various consequences on the participants' mental health, associating it to SI. It was evident that ethnic discrimination led to loneliness and alienation and had cumulative effects that triggered SI. Ethnic discrimination also brought about changes in the victim's perception, coping mechanisms, and negative feelings that played a part in its relation to SI.

Changes in perception. In this sub theme, ethnic discrimination was linked to changes in two distinct perceptions: the world and the self, leading to a more pessimistic outlook on life and a negative self-perception. The more pessimistic outlook on life, induced by ethnic discrimination, framed the world as less livable, contributing to SI. As demonstrated in the quote below, the participant Marianna characterized this by a disappointment in the world.

"But they (instances of ethnic discrimination) kind of made me see the world in a maybe like darker, worse place than objectively is. And kind of made me disappointed in

the world as well, which in a way was like, okay, if something happens, I don't care. Like if I die, I die.” (Marianna)

On the other hand, as demonstrated below, Ella characterized this as the world not being good or safe.

“But then those ideas popped in my head, like, OK, for example, if in my life I would be, you know, discriminated or not feel safe in the world in general, it's like not a good and safe place. Then what is the point of, you know, existing in general?” (Jennifer)

Ethnic discrimination was also linked to a negative change in the victim's self-perception. Victims of ethnic discrimination have been exposed to hate by discriminators. Through the internalization of this hate, victims started to view themselves more negatively as well. As evident in the narrative of Jennifer, this entailed struggles with self-acceptance, lower self-esteem, shame of ethnic identity and wishing being different.

“I felt shame for the fact that I was from (country of origin). Where there's no reason for that. But I kind of hated myself for it. That I was different.” (Jennifer)

Coping mechanisms. In this sub theme, receiving ethnic discrimination was associated with various coping mechanisms such as detachment and external attribution. Among these the most overt coping mechanism was the victim's avoidance of future discrimination. Receiving ethnic discrimination led to hyper-vigilance among the participants that caused the participants to avoid speaking in front of discriminatory groups, hide ethnic identity and avoid going to school. Most interestingly, as shown in the quote below, in order to avoid future discrimination, at times the receivers of discrimination became the discriminators.

“...this would sound so bad. But because of those two situations, I feel like, you know, I became discriminating to people, for example, if I see that someone is (Ethnicity), I

just in my head, I am like, okay, maybe those people would not like me. Maybe those people would hate me. So that's why I in a way, you know, either never mentioned about this in front of them or just don't communicate with them, which is ugly. And I don't want this, but there is like some barrier that I'm like, oh, what would they do?" (Cassie)

Psychic reactions. This subtheme features how experiencing ethnic discrimination led to feelings such as anger, anxiety, feeling alienated, feeling unaccepted, feeling like an outcast, feeling depressed, feeling hated, feeling overlooked and feeling endangered.

As a result of ethnic discrimination psychological constructs that are associated with SI were also mentioned, namely, helplessness, hopelessness, sense of entrapment, thwarted belongingness and perceived burdensomeness (see quote).

"It makes sense that it affects one so much that one maybe doesn't feel like they belong, or maybe they feel bad that they even are alive, because their ethnicity is seen as something that's wrong, or that shouldn't exist." (Ella)

3.2.2 Theme 2: Type of ethnic discrimination

This theme entails the different types of ethnic discrimination that revealed to have distinct effects on the victims in the interviews. Whilst institutionalized discrimination (from the police, university, school) induced more externalized effects, such as anger towards the world, social instances of ethnic discrimination led to more internalized effects about the self, such as. The duality is portrayed in the quote below.

"For me it was like I wanted to rebel against that. But then I couldn't because the authority, right? They have the last word. So there was definitely this feeling of helplessness. But it's a different kind of feeling because it's helplessness towards authority. Whereas with the social circles it's more about like. Okay but I cannot change myself. Like my character or my appearance for example. Whereas with the institution it

was more like. Anger against the rules, the system. It's kind of a different feeling for me.”

(Jennifer)

It is also plausible that more systematic and institutionalized instances of ethnic discrimination led to a higher sense of hopelessness. This is portrayed in the quote below where Cassie compares getting called racist names versus subtle discrimination received by the police.

“So when it's that deeply woven into how a lot of people think here, it's definitely a lot scarier because it's not really a, oh, that was just a bad experience and maybe that person can change. It just makes the whole grand scheme wider. It's more of a, I can't change an entire society or an entire country. So it's definitely a lot more unsettling on me. It definitely made me realize even more that I'm part of an ethnic group.” (Cassie)

3.2.3 Theme 3: Factors that influence ethnic discrimination's relation to SI

Factors with negative effects. Moving away was found to worsen the effects of ethnic discrimination, especially when the subject moved away from friends and family. In line with this, social support has been one of the most important influences. The feeling of not being understood and lacking people who have similar experiences worsened the psychological consequences of receiving ethnic discrimination.

Additionally, being a minority, also within the social circle, or being in a society with no diversity and no representation in beauty standards made participants experience graver consequences of ethnic discrimination. Another crucial aspect was perceived help. When there was no available institutional, or social help available for the victim, the psychological effects of discrimination were graver. An example is illustrated by the words of Marianna:

“our university, they say that it has this reputation of being, oh, we really care about you, but it's not that way. So, they don't really do anything. So, also, because we're here for university and then this institution is not really doing something, then I feel like it's also more like, okay, who should I turn to and all those things?”.

Another noteworthy factor was having previous mental health issues which made one more vulnerable to the negative consequences of ethnic discrimination. Lastly, it was clearly expressed that the out-groups lacking knowledge about the minorities' cultures and histories facilitated the discrimination and enabled graver psychological consequences.

Factors with positive effects. Social support was again the most important factor that helped with the consequences of receiving ethnic discrimination. For some participants this support was online or from long-distance friendships. Such support facilitated feeling understood and allowed the victims to express their struggles with ethnic discrimination. The participant Cassie describes how social support also facilitates belongingness:

“It definitely feels like you found at least one social group that you belong to, even if it's based off feeling like you don't belong.”.

Moreover, having trust in the system regarding help about ethnic discrimination was a helping factor. Additionally, being able to share their culture, by for example celebrating cultural holidays, and receiving appreciation for it helped with the negative consequences of having received ethnic discrimination.

Lastly, there was a clear difference in how the participants with SI and those without SI viewed the situation in the NL regarding ethnic discrimination. Those who experienced SI were shocked by the amount of discrimination that was present in the NL, indicating that it is worse here compared to their experiences in other countries. On the other hand, the participants with no SI expressed that they experienced discrimination

before, making the discrimination in the NL less impactful. Thus, as seen in Jennifer's words, having previously experienced severe discrimination, lessened the psychological consequences of the ethnic discrimination in the NL.

*"So this in comparison to what I experienced in ... (name of previous country)
Yeah, it wasn't that impactful anymore." (Jennifer)*

4. Discussion

4.1 Interpretation of the Quantitative Part

The first phase of the study aimed to illustrate the influence of ethnic discrimination on SI, portraying how current theories create an incomplete picture of SI where such social determinants are overlooked (Klonsky, & May 2015; O'Connor, 2011; Van Orden et al., 2010). To do so, we tested three hypotheses for which the findings of this study provide support.

The first hypothesis explored which ethnic minority amongst the university students in the Netherlands is the biggest subject of ethnic discrimination. In this study, MENA participants had the highest mean for ethnic discrimination with white participants having the lowest. This finding is in line with literature that state that, amongst all minorities, Moroccan and Turkish are the biggest subject of negative attitude and unequal treatment in Dutch society (Aniessen et al., 2022; Sociaal en Cultureel Planbureau, 2018). It is important to note that statistical tests were not run on the individual ethnic groups due to the small and unequal sample sizes as it violates the assumption of equal variances across groups. Yet, this finding was strongly supported by the large effect size found for the difference in ethnic discrimination between white vs. non-white groups. We found a similar picture for SI where MENA participants, after the Black participant, had the highest mean which was supported by the medium effect size found for the difference in SI between

white vs. non-white groups. This is congruent with literature that illustrate how being an ethnic minority is an important social determinant of suicidality, for which MENA minorities in the Netherlands are at high risk (Aniessen et al., 2022; Lee et al., 2022; Sociaal en Cultureel Planbureau, 2018; Wei et al., 2007, Wei et al., 2012; World Health Organisation, 2021).

The second hypothesis aimed to statistically prove the influence of ethnic discrimination on SI. As we found a significant positive correlation between ethnic discrimination and SI, we were able to support the claim that receiving discrimination for being an ethnic minority, contributes substantially to SI (Madubata et al., 2022; Sue et al., 2007; Hollingsworth et al., 2017) and that mental health should be conceptualised emphasising such social determinants (Chisholm et al., 2016; Lund ,& Breuer, 2018; World Health Organization, 2014).

The third hypothesis aimed to illustrate the shortcomings of the current theories on SI that lay full emphasis on the psychological constructs of the victim, excluding their emerging environment (Klonsky, & May, 2015; O'Connor, 2011; Van Orden et al., 2010). To do so, we focused in on the constructs of IPT, namely thwarted belongingness and perceived burdensomeness, and demonstrated how their relation to SI is significantly moderated by an increase in ethnic discrimination. The notion that perceived burdensomeness and thwarted belongingness became insignificant predictors of SI after adding the moderation effect, indicated further that such psychological constructs per se are insufficient for conceptualizing SI (Hollingsworth et al., 2017; Tang, & Masicampo, 2018; Wyman et al., 2021).

4.2 Interpretation of the Qualitative Part

In the qualitative phase we aimed to answer two distinct research questions to explore how ethnic discrimination relates to SI and the social determinants that protect the victims of ethnic discrimination against its negative psychological consequences.

To answer the first research question of “How does ethnic discrimination relate to SI among university students in The Netherlands?” we made use of two relevant themes: consequences of ethnic discrimination that relate to SI and type of ethnic discrimination. In all the interviews, it was revealed that experiencing ethnic discrimination had grave consequences on mental health which contributed to SI. The effects of ethnic discrimination on SI were cumulative as repetitive exposure to ethnic discrimination pushed people to experience life as less livable overtime.

The consequences of experiencing ethnic discrimination that underlie its relation to SI included a pessimistic shift in the perception of the self and the world. This aligns with previous research portraying ethnic discriminations detrimental impact on self-esteem, which in turn links to SI (Cénat et al., 2022; Kh, 2023; James, 2017). Additionally, the role of collective self-esteem was highlighted, with victims of ethnic discrimination experiencing shame and regret about their ethnic identity, leading to lower collective self-esteem and hence a pathway to SI (Cénat et al., 2022; Kh, 2023; Kong, 2016; Shelton et al., 2005; James, 2017). Furthermore, a more pessimistic outlook on the world emerged, characterized by disappointment and a perception of the world as unsafe and hence, less livable (Fisher et al., 2000; Keilp et al., 2012; Scheier et al, 1986; Szalacha et al., 2003). Moreover, loneliness was a clear consequence among victims of ethnic discrimination, which is a known risk factor for SI (Chang et al., 2017; Majeno et al., 2018; Priest et al., 2014).

In addition, the sense of entrapment, thwarted belongingness and perceived burdensomeness upon which IVM and IPT heavily rely on to conceptualise SI (O'Connor, 2011; Van Orden et al., 2010) emerged through experiences of ethnic discrimination. This, along with the moderation effects, highlight that these constructs, although psychological, derive from societal factors, supporting the social determinants theory (Chisholm et al., 2016; Hollingsworth et al., 2017; Lund & Breuer, 2018; Tang, & Masicampo, 2018; Wyman et al., 2021; World Health Organization, 2014).

Lastly, it was observed that different types of ethnic discrimination, namely institutional and interpersonal discrimination, had distinct psychological consequences. Whilst interpersonal discrimination had more internalized effects on the participants' sense of self, institutional discrimination often led to externalized effects, such as anger towards the world, and increased hopelessness. Although both types of discrimination are found to predict SI and suicide attempts, there is scarcity on how they relate to suicidality (Wang et al., 2021), for which the distinct effects of externalisation/internalisation and possibly hopelessness might contribute.

In order to answer the second research question, “What are the social determinants that protect university students in the Netherlands against the negative psychological consequences of ethnic discrimination?” the relevant theme of factors that influence ethnic discrimination's relation to SI was utilized. Social support emerged as a crucial protective factor which was particularly beneficial when individuals felt understood and shared their experiences of ethnic discrimination with others with similar experiences (Cénat et al., 2022; Hailu et al. 2020; Goreis et al., 2020; Sparks et al., 2023). Perceived help, both social and institutional, also played a crucial role in mitigating the psychological consequences of

ethnic discrimination, highlighting the importance of providing support to individuals at risk of ethnic discrimination.

Additionally, racial affirmation, which involves affirming positive aspects of one's racial identity, was identified as another protective factor (Stock et al, 2011; Stock et al., 2018). Participants reported that celebrating important holidays and cultural events helped affirm their ethnic identity and alleviate the psychological consequences of ethnic discrimination. This suggests that institutions should create spaces and opportunities for individuals to express their culture and receive appreciation for it.

Finally, the thematic analysis provided insights into the state of ethnic discrimination in the Netherlands. Participants who reported high levels of SI agreed that systematic ethnic discrimination existed, particularly in educational settings and encounters with the police. Yet, how the participants low on SI versus high on SI evaluated the ethnic discrimination in the Netherlands partially depended on their previous exposure to discrimination. Being exposed to, and surpassed previous instances of ethnic discrimination contributed to building resilience, making it a protective determinant (Rutter, 2012).

4.3 Integration

In this study, the integration of an explanatory sequential mixed methods design proved to be a significant strength, achieved through four levels: design, methods, interpretation, and reporting. Whilst the quantitative phase allowed us to establish associations in the general population, the qualitative part was essential to explore the true mechanisms of these associations (Toomela, 2010). Through the narratives of participants, we gained a deeper understanding of the cumulative effects of ethnic discrimination on SI, operating through changes in self-perception and perception of the world, lowered collective and personal self-esteem and loneliness. The integration of qualitative methods

also enabled us to validate the relation between ethnic discrimination and SI and the interactions between psychological constructs like thwarted belongingness, perceived burdensomeness, and the environment. Additionally, this approach allowed us to explore the distinct consequences of different types of ethnic discrimination on mental health, an aspect that is difficult to capture solely through quantitative methods, especially when it comes to detecting institutionalized discrimination (Karlsen & Nazroo, 2002; Krieger, 2000).

4.4 Strengths and Limitations

For the quantitative part, we had a smaller sample and hence less power than desired to find significant effects which makes it less likely that the significant correlation and moderation effect are due to type 1 error (Kazdin, 2021). The explanatory sequential design was also a crucial strength that allowed us to validate and broaden the quantitative findings. Yet, such a design also enabled possible expectancy effects as the interviewers conducted the interviews after the statistical findings (Adams-Quackenbush et al., 2019). This can be avoided in similar studies by having a separate trained interviewer that is blind to the findings. The extreme score sampling also benefited the qualitative results tremendously. By having half of the participants with high and half with low SI, we were able to identify the differentiating factors in having or not having SI in relation to ethnic discrimination (Palinkas et al., 2015). Also, due to the sampling, the interviewed participants were psychology students. Whilst, limiting generalizability of the interviews, it facilitated clear communication and reflective thinking on mental health.

For limitations, it is important to consider that the questionnaire used to assess ethnic discrimination was not an objective measure but rather a measure of perceived ethnic discrimination which is susceptible to the perceptions of the subject (Kazdin, 2021).

Additionally, the sample was predominantly white, and the minority samples were very limited, hindering between group comparison for which quota sampling could be considered. Regarding the limitations of the qualitative part, the participants that reported low SI did not experience current discrimination as much as the participants reporting high SI. Therefore, alongside the above-mentioned factors, the less amount of discrimination might have also led to fewer psychological consequences and SI. This also supports the cumulative nature of the relation between ethnic discrimination and SI. Secondly, although all participants had different ethnicities and nationalities, they were all female, restricting the generalisability of the results to other genders. This was due to the limited number of male participants (9.7%) in the sample, of which the contacted participants with desired scores did not respond.

Furthermore, even though the interviewers were trained, their interaction with each participant, their increasing comfort and knowledge of the interviews and topics may have affected the responses in unknown ways (Boyd, & Westfall, 1965). Lastly, the participants high on SI reported having previous mental health issues. Even though one of the low SI participants also reported previous mental health issues, having chronic mental health issues might have influenced their susceptibility to the negative psychological consequences of ethnic discrimination.

4.5 Conclusion

The current global approach to suicidality, primarily relies on increasing access to mental health care services. This approach is not far from having medics near a battlefield – although they can provide immediate aid to some victims, the underlying injuries and losses will persist as long as the battlefield exists. Therefore, it is crucial for interventions to consider the victim's environment and social determinants. This study highlighted the

significance of ethnic discrimination as a social determinant that needs to be addressed, particularly among MENA university students in the Netherlands.

To do so, we answered two statistical research questions for which we support that experiencing ethnic discrimination contributes to SI and moderates the relation between thwarted belongingness, perceived burdensomeness and SI. We then answered two qualitative research questions and although not exhaustive, provided insight into how and in relation to which protective factors, ethnic discrimination relates to SI among our sample. We identified lower collective and personal self-esteem, pessimistic changes in perception and loneliness as consequences of experiencing ethnic discrimination that have cumulative effects on SI. We also identified protective factors that institutions may utilize after further research, such as organizing cultural celebrations, promoting perceived help and creating opportunities for community.

Future research should address the limitations of this study, utilizing a larger and more diverse sample to ensure generalizability and allow for comparisons between different ethnic groups and genders. It should also explore the psychological distinctions between interpersonal and institutional discrimination, identify specific areas for targeted interventions, and assess the effectiveness of prevention-focused strategies to combat ethnic discrimination and its negative psychological consequences. Lastly, revised theories on SI should incorporate the recognition of such detrimental social determinants, so that they do not take for granted that all life is livable.

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