Finding Mental Fire Hazards: Understanding Social Determinants of Suicidal Ideation in college students in the Netherlands

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Contents

Abstract

Background: In the Netherlands, over 1,800 people annually commit suicide. Existing suicide models overlook qualitative context and Social Determinants. Thus, this study focused on understanding the Social Determinants of Suicidal Ideation to find what makes life liveable.

Research Questions: Focusing on a non-clinical sample of college students, we addressed several questions: "Does Financial Stress moderate the relation between Subjective Social Status and Suicidal Ideation?", "Are there differences between college students who get Social Support or not for the relation between their Subjective Social Status and Suicidal Ideation?", "How do aspects of Subjective Social Status influence Suicidal Ideation?", and "How does Social Support affect the influence of Financial Stress factors on Suicidal Ideation". **Methods:** The cross-sectional collection and analysis of quantitative questionnaires started of this two-phase study, followed by cross-sectional collection and analysis of qualitative interviews for four purposefully sampled participants. The explanatory sequential mixed methods design guaranteed integration. **Results:** Financial Stress did not moderate but underly the relationship between Subjective Social Status and Suicidal Ideation. Lower Family Income and Financial Insecurity were found to be determinants of Suicidal Ideation. Social Support moderated the relation between Subjective Social Status and Suicidal Ideation. Family Income and Financial Insecurity were found to be main aspects of Subjective Social Status determining Suicidal Ideation. Social Support was found to protect against Suicidal Ideation. **Conclusion:** By identifying Financial Stress, lacking Social Support, and lower Family Income as Social Determinants of Suicidal Ideation, we provide future research opportunities to work towards effective interventions for Suicidal Ideation by focusing on what makes life liveable.

Keywords: Social Determinants, Suicidal Ideation, Subjective Social Status, Financial Stress, Social Support, Family Income, Mixed Methods Design, Joint Display

Layman's Abstract

Approximately every 40 seconds, someone in the world commits suicide, resulting in around 800,000 suicide deaths yearly. Despite extensive research, effective universal interventions have not been found. Suicidal Ideation, thoughts about ending one's life, is complex and influenced by both internal experiences and environmental factors, but these environmental have often been overlooked. By combining and integrating research methods and studying socio-cultural and economic factors, we aimed to better understand Suicidal Ideation and provide future researchers and policymakers insights for prevention.

In this study, we focused on finding what makes live liveable for college students in the Netherlands aged 17 to 26. Our goal was to examine the relationship between Subjective Social Status, Financial Stress, Social Support, and Suicidal Ideation. We found that regardless of Subjective Social Status, Financial Stress strongly influenced Suicidal Ideation. Older students and those with more years of study experienced higher Financial Stress. Lower Subjective Social Status combined with limited Social Support heightened the risk of Suicidal Ideation. Lower Family Income and Financial Insecurity were identified as major factors affecting the impact of Subjective Social Status on Suicidal Ideation. While the study's results may not be directly applicable to other student or societal groups, they provide valuable insights for future research.

Suicide is a worldwide problem, and we are far from understanding it completely, but the current study may have brought society a bit closer by identifying some Social Determinants for experiencing Suicidal Ideation: Financial Stress, lacking Social Support, and lower Family Income.

1. Introduction

1.1 Theoretical Background

By the end of this thesis project, an estimated 460,080 people will have died by suicide. Every year, around the world, approximately 800,000 people end their lives (WHO, 2014). It is estimated that 10 to 20 individuals attempt suicide for every death by suicide, ranging from 8 million to 16 million attempted suicides yearly (WHO, 2014). Suicidal ideation is estimated to have a 9% lifetime prevalence in the general population (Nock et al., 2008). In the Netherlands, 1,861 people died by suicide, and about 94,000 people attempted to take their life in 2021 (Stichting 113, 2021). Suicide is the leading cause of death for youth aged 15 to 25, along with traffic accidents, and for people aged 25 to 44, along with breast cancer (Stichting 113, 2021).

Suicide prevention has been a concern of the UN and the WHO for decades, and an important milestone was reached in 2013 with the signing of the Mental Health Action Plan 2013 – 2020 (MHAP) by the WHO and all its member states. This set, among other objectives, the goal of reducing suicide prevalence in all countries by 10% by 2020 (compared to 2013), as formulated in global target 3.2 (WHO, 2013) which was later changed to aim for a one-third reduction of global suicide rates by 2030 (compared to 2015) in the Comprehensive Mental Health Action Plan 2013 – 2030 (CMHAP) (WHO, 2021). These goals make use of the age-standardised suicide rates (ASSR), so as to be able to compare populations over time, regardless of the age distribution or size of the population (Naghavi, 2019). In 2015, a total of 742,962 deaths by suicide were reported (Ilic & Ilic, 2022), which came down to an ASSR of 9.43 ($95\% \; CI \; = \; 7.37 - \; 12.19$) per 100,000 (WHO, 2023). The MHAP and the CMHAP also emphasised the importance of governments' active involvement in achieving these goals, for social and economic determinants have a strong influence on an individual's mental health. The

implementation of suicide prevention programmes and strategies by governments were highlighted as suggested actions for governments in their approach towards suicide prevention.

In large parts of the world, suicide prevention programmes are focussed on the outcome – preventing death by suicide – as this can bring promising results in reducing suicide numbers. Worldwide, approximately 20% of yearly deaths by suicide happen via pesticide poisoning – mostly in low- and middle-income countries in the Western Pacific region, whereas 51% of suicides are completed with firearms in the USA. (WHO, 2009). Therefore, in Sri Lanka and the USA, banning commonly used highly toxic pesticides, and strict gun control (respectively) may be very fruitful in reducing the number of deaths by suicide (Knipe et al., 2017; Stanley et al., 2020). Similarly, in the Netherlands, prevention of railway suicide has been a key focus of Dutch railway infrastructure manager ProRail (van Houwelingen et al., 2022), which is the second most common means of suicide for Dutch youth (Berkelmans et al., 2020).

These lethal means restriction (LMR) interventions might be useful to reduce the number of suicides (Barber & Miller, 2014; Mann et al., 2005), however they do not address the suicidal ideation. Dutch railway suicide rates have dropped slightly – only for women, not for men – but yearly suicide rates remained stable, suggesting that individuals resorted to different means (CBS, 2021). Similarly, interventions to teach individuals to cope with stressors and be more resilient may reduce the number of (attempted) suicides but they do not reduce the causal stressors of suicidal ideation and (attempted) suicide. It is as if you are taught to get used to extreme heat when one's house is on fire and doing absolutely nothing about your house being on fire. Fireproofing society – intervening on the causes that lead to suicide – would be a much more effective approach to dealing with suicide, and an important predictor of (attempted or completed) suicide is suicidal ideation.

1.1.1 Suicidal Ideation

Suicidal ideation includes all thoughts about ending one's life as well as the making of plans to end one's life. Suicidal ideation strongly predicts suicide attempts and is estimated to occur yearly in 10 - 30% of the worldwide population (Evans et al., 2005; Nock et al., 2008; L. N. Scott et al., 2015). Research by Bruffaerts and colleagues found that among first-year college students from eight different countries ($N = 13{,}984$), in the past 12 months, 8.4% thought of - but had no plans to attempt - suicide, 7.8% had plans - but did not attempt – to commit suicide, and 1% made a planned or unplanned attempt at suicide (Bruffaerts et al., 2019). Amongst college students in the Netherlands, mental health complaints are particularly prevalent, with 25% of respondents ($N = 28{,}442$) indicating that they have longed to be dead or not wake up in the past four weeks (Dopmeijer et al., 2022).

1.1.2 Theories of Suicidality

For a structured understanding of suicidality, numerous researchers have proposed theories that model the emergence and course of suicidality. The integrated motivational–volitional (IMV) model of suicidal behaviour (O'Connor & Kirtley, 2018) and the Interpersonal Theory of Suicidal Behaviour (IPT) (van Orden et al., 2010) are two of the most wide-spread theories of suicidality (Hjelmeland & Loa Knizek, 2020).

The IMV model is a so-called ideation-to-action model and attempts to explain the development of suicidal ideation and clarify why people transition from suicidal ideation to suicide. According to the model, suicidality is the result of the interplay of pre-motivational, motivational, and volitional factors (O'Connor & Kirtley, 2018). These factors belong to the model's three phases which one goes through in the development of suicidal ideation and the transition to attempted suicide. Firstly, there is the pre-motivational phase describing an individual's psychological background based on the biopsychosocial context like predisposing factors and triggering negative events. Secondly, there is the motivational phase describing the emergence and formation of suicidal ideation and intent from a sense of defeat and humiliation

and a sense of entrapment. Threat to self-moderators (e.g., social problem-solving, coping) determine whether defeat leads to entrapment. The transition from entrapment to suicidal ideation is moderated by motivational moderators (e.g., thwarted belongingness, burdensomeness). Thirdly, there is the volitional phase. This focuses on the volitional moderators (e.g., access to means, planning, fearlessness about death) that govern the transition from suicidal ideation/intent to enaction (O'Connor & Kirtley, 2018). Briefly, the model states that there is a vulnerability (i.e., pre-motivational phase) for how – in the motivational phase – stressors (i.e., defeat and humiliation) are experienced (via threat to self-moderators), determining whether and how entrapment is experienced (via motivational moderators) which in turn determines the emergence of suicidal ideation and intent, which does or does not lead to suicidal behaviour based on the volitional moderators in the volitional phase.

The IPT model, conceptualised by Thomas Joiner, is considered the first ideation-to-action model (Klonsky et al., 2016; van Orden et al., 2010). The model is based on the idea that people can only transition from a desire for suicide to (attempted or completed) suicide only when they have acquired the capability for suicide. For this, one has to have a lowered fear of death as well as an increased tolerance for pain. Perceived burdensomeness – feeling that one is a liability and hating oneself – and thwarted belongingness – feeling lonely and without support from others – and a hopelessness that these two states will not change results in suicidal ideation or desire for suicide. When these conditions are met and one is in the presence of harmful means, suicide becomes an option (van Orden et al., 2010).

The IMV and the IPT models both incorporate perceived burdensomeness and thwarted belongingness as corner stones for the development of suicidal ideation and suicidal behaviour. Perceived burdensomeness is described as a mental state characterized by the idea that others would be better off without you, and thwarted belongingness is described as a mental state that results when the need for connectedness is unmet (van Orden et al., 2012). These are

intraindividual psychological factors, but the IMV and IPT model fail to place value on social determinants (Hjelmeland & Loa Knizek, 2020). According to sociologists, this is part of a longer convention of suicidologists and psychologists to adopt the view of "willing and wilful self-termination" in line with medical examiners and coroners that use this to classify death by suicide (Boldt, 1988; Mueller et al., 2021). Several studies conclude that as long as suicide prevention interventions are mainly based on quantitative research and intraindividual factors, strategies for preventing suicide will remain unsuccessful (Boldt, 1988; Gould & Kramer, 2001; Hjelmeland & Knizek, 2016; Hjelmeland & Loa Knizek, 2020; Mann et al., 2005). Current theories and models like the IMV and the IPT primarily focus on the psychological factors within the individual. However, social determinants play an integral part in the emergence of suicidal ideation and in the transition from suicidal ideation to attempted and completed suicide (Lund et al., 2013; Silva et al., 2016; UN, 2015; WHO & Calouste Gulbenkian Foundation, 2014). Examples of such social determinants are, among others, exposure to suicide, in the media or on social media (Daine et al., 2013; Niederkrotenthaler et al., 2020; Sisask & Värnik, 2012), financial stress (Choi et al., 2021; Elbogen et al., 2020), and lack of social support (CDC, 2022; Cheng & Chan, 2007; Lund et al., 2018).

1.1.3 Crisis in Suicidology

Even though countless theoretical models and prevention strategies for suicide exist (Karthick & Barwa, 2017; Mann et al., 2005), none of these models or strategies have been able to achieve structural improvements (de Leo, 2002; Kral et al., 2012; Michel, 2021; Mueller et al., 2021). Theories on suicidality fail to prevent suicide.

In the Netherlands, yearly governmental healthcare spending (including mental healthcare spending) has been rising for as long as records exist (CBS, 2022), however the rates of suicidal ideation and suicide have remained virtually unchanged (CBS, 2021). Increasing knowledge on suicidal ideation is detrimental for achieving the UN's Sustainable Development

Goal set to reduce suicide prevalence by one third by 2030 (UN, 2015). There is still lots to be discovered about the emergence of suicidal ideation and how people transition from suicidal ideation to (completed) suicide attempts. For instance, more advanced methods for contextualizing the information obtained from research about indicators for suicidal ideation are needed (Nock et al., 2008). Furthermore, research into suicidality rarely asks their participants to elaborate on their experiences with regards to suicidal ideation and planning or attempted suicide (de Leo, 2002), but these qualitative questions might provide vital information necessary to device strategies for prevention (de Leo, 2002; Kral et al., 2012). Furthermore, additional research is needed on suicidal ideation amongst young adults to be able to device strategies for prevention (Elzinga et al., 2022; Nock et al., 2008), for instance on defining how specific aspects of social support are able to buffer against the impact of specific life stressors (Åslund et al., 2014).

Theories like the IMV and IPT, are highly focused on the individual but neglect the integration of both individual and general social factors in the developmental models of suicide (Hjelmeland & Loa Knizek, 2020). Currently, no model of suicide development exists that correctly values and includes social determinants, even though research has found that social determinants play a central role in the development of suicidal ideation and suicidal behaviour (Hjelmeland & Knizek, 2016; Lund et al., 2013; Silva et al., 2016).

Furthermore, current theories and models focus on quantitative data, but they lack the integration of context. Qualitative studies are needed to address the meaning of factors and experiences that are risks for or protect against suicidal ideation. The lack of understanding the experiences of suicidal ideation has been suggested as one of the reasons that suicide prevention programmes are far from successful. Research into these subjective experiences could possibly explain why individuals transition from suicidal ideation to (attempted or completed) suicide (de Leo, 2002; Klonsky et al., 2016; Kral et al., 2012; Michel, 2021;

Mueller et al., 2021), therefore the current study uses a mixed methods design – integrating data from qualitative and quantitative measures – to uncover the underlying experiences that may protect against this transition.

1.2 Research Statement

To address the lack of attention for the social determinants and to integrate their meaning, the current study set out to answer the question "What makes life liveable?" by focusing on understanding Social Determinants of Suicidal Ideation. This study is based on research by Lund and colleagues on Social Determinants of Mental Health (SDoMH), which combines insight into determinants of mental health and mental health problems with the UN's Sustainable Development Goals (SDG) in order to shape existing strategies for attaining these goals to also prevent future development of mental disorders (Lund et al., 2018). By focusing on the SDoMH triggers for suicidal ideation can be identified. This way, fire hazards for mental health problems can be determined and tackled appropriately. However, much more research into the SDoMH is necessary to find opportunities for appropriate interventions for suicidal ideation (Lund et al., 2018).

1.2.1 Social Determinants of Mental Health

Human development is a result of surrounding factors, according to Bronfenbrenner's ecological model of development (Bronfenbrenner, 1979). According to this model, human developmental outcomes are not just the result of intraindividual factors, but emergence from the context. The context describes the surroundings of the individual via the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem includes the individuals and institutions that the person interacts with (like family, friends, school, access to healthcare systems, etc.). The mesosystem describes the interactions of parts of the microsystem. The exosystem are influences related to the microsystem (one's neighbourhood, the ideology that drives the school's educational policies, parent's work environment). The

macrosystem consists of societal influences like government, political climate, economic climate, and culture. Lastly, the chronosystem represents the changes over time in the other four systems. Bronfenbrenner states with this theory that all levels of context are influential for human development, from proximal factors in the microsystem (like family and friends), to distal factors in the macrosystem (like political attitude towards suicide prevention programs) (Bronfenbrenner, 1979). And it is not just Bronfenbrenner who attributes context to developmental outcomes, scientist across many fields agree that human development outcomes are influenced by their surroundings (Avison, 2016; Bignardi et al., 2022; Helbich, 2018; Tran et al., 2020), including outcomes for mental health (Kim & Kim, 2017; Lund et al., 2013; Silva et al., 2016).

In an attempt to optimise the prevention of mental disorders, Lund and colleagues set out to develop a framework for the SDoMH in line with the UN's 2030 SDG, that encapsulates key social and economic factors in human mental health outcomes (Lund et al., 2018). This, because mental health problems are rooted in (problems arising from) the social and economic environment to a considerable extent (WHO & Calouste Gulbenkian Foundation, 2014). By aligning mental health interventions with these SDoMH, interventions on mental health problems should become more specific and address a wide array of influential factors in the development of mental health problems in whole populations (Lund et al., 2018). The framework orders factors on their proximity, based on Bronfenbrenner's ecological model (Bronfenbrenner, 1979) and distributes these factors across five domains that link the SDoMH with the SDG (Lund et al., 2018), based on previous research on social determinants of health (Blas & Kurup, 2021; Lund et al., 2013). These domains are social and cultural, environmental events, neighbourhood, economic, and demographic. Among others, social and cultural determinants include education and social stability, environmental determinants include trauma and war, neighbourhood determinants include setting and safety and security, economic

determinants include income and macroeconomic policy, and demographic determinants include age and population density.

To structurally achieve a healthier population, it is important not only to be able to apply the right interventions to treat mental health problems, but also to be able to prevent these mental health problems from transitioning from bad to worse or from (re)developing in the first place (J. G. Scott et al., 2019). Lund and colleagues set out to provide a framework that allow governments, public organisations, and the private sector to start working on preventing the development of mental health problems by globally coordinating their efforts for research and development focussing on the mechanisms for interventions (Lund et al., 2018). This is vital, as mental health problems are so strongly determined by external influences that treating people to then return them to the same situation that was responsible for the development of these mental health problems seems futile.

One such mental health problem, who's development is a result of the environmental context, is suicidal ideation, for which low social support (Carrasco-Barrios et al., 2020), financial stress (Dopmeijer et al., 2022) and subjective social class (Qin et al., 2002) have been found to be related. Suicidal ideation during adolescence has been found to be predictive for higher psychopathology, suicidal behaviour, and suicidal ideation at age 30 (Reinherz et al., 2006). Suicidal ideation is a complex phenomenon involving many facets, it is a textbook example of the biopsychosocial model. However, the social aspect has been missing in the interventions aimed at suicidal ideation (Mueller et al., 2021; Rodríguez-Otero et al., 2022).

1.2.2 The Economic Domain as a Social Determinant of Suicidal Ideation

One of the domains included in Lund's framework is the economic domain. This includes factors that are related to the production, consumption, and transfer of wealth that are a risk for, or buffer against, mental illness. This domain is aligned with SDG 1 (end poverty in all its forms, everywhere), 2 (end hunger, achieve food security and improved nutrition, and

promote sustainable agriculture), 8 (promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), 9 (build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation) and 10 (reduce inequality within and among countries). Within this domain several social determinants are identified that impact mental health. These are income, expenditure, debt, assets, food security, employment status, housing, income inequality, macroeconomic trends such as recessions, and subjective financial strain or financial stress (Lund et al., 2018; Thompson et al., 2017).

Economic factors have also been associated with social and cultural factors. For instance, Åslund and colleagues found that improving people's social networks may potentially lower health-care costs whilst simultaneously improving quality of life. Their study found the strongest buffering effect for social support at high levels of financial stress (Åslund et al., 2014).

Financial Stress. Previous research has found a correlation between psychological functioning and student loan debt (SLD) during and after the acquirement of that debt (Walsemann et al., 2015), and Meltzer and colleagues found debt to be correlated with suicidal ideation (Meltzer et al., 2011). In the Netherlands, major changes have been made for the rules and regulations with regards to student loans in higher education, possibly leading to higher financial stress among students (van den Berg & van Gaalen, 2021). Lund and colleagues have classified financial stress, or financial strain as they put it, in the Economic Domain of Social Determinants of Mental Health. Lund and colleagues also present a hypothesized pathway of low social status strengthening the influence of economic determinants (Lund et al., 2018). They continue by presenting potential interventions, which can be found in providing basic income grants, reducing income inequality, and improving employment (Lund et al., 2018). As financial stress has been found to amplify suicidal ideation (Choi et al., 2021; Elbogen et al.,

2020), a better understanding of the factors of financial stress and how these are affected by social determinants would therefore be imperative in matching the right intervention to the right risk factor. College students in the Netherlands have been found to suffer from high student loan debts (SLB) and this was found to be related to higher financial stress, and higher reports of mental health problems (Dopmeijer et al., 2022). Research by Stichting 113 found that for youth, aged 20 to 30, financial stress was both found to be a factor related to the development of suicidal ideation and found to be a factor these participants wished to receive support for (Elzinga et al., 2022).

1.2.3 The Social and Cultural Domain as a Social Determinant of Suicidal Ideation

Another domain included in Lund's framework is the social and cultural domain. This includes factors that are related to the ways in which the organisation of society, social interactions, and relationships are a risk for, or buffer against, mental illness. This domain is aligned with SDG 4 (inclusive and equitable quality education and promote lifelong learning opportunities for all). Within this domain several social determinants are identified to impact mental health. These are education, family and peer relationships, social capital, social networks, culture, social class or status, and group membership, which provides opportunities to provide and benefit from social support (Lund et al., 2018).

Subjective Social Status. Subjective social status is regarded as an individual's subjective perception of their 'place' in society, based on a person's judgment of where they stand relative to others in society, regarding personal capital (income, education, occupation) (Diemer et al., 2013). Subjective social status has also been described as perceived socio-economic status. Although multiple studies found subjective social status to be significantly correlated with depression (K. M. Scott et al., 2014), research on subjective social status and suicidal ideation previously seemed non-conclusive. Some studies found no relationship between suicidal ideation and education or occupation (Lee et al., 2007), after others found that

suicidal ideation was especially high in people from low social classes (Qin et al., 2002), and even longer ago a 'U-shape' relationship was found with higher suicidal ideation in low and high social classes but low suicidal ideation in middle classes (Powell, 1958). However, more recent findings suggest that for adolescents and young adults, lower subjective social status is correlated with higher suicidal ideation and more suicidal behaviour (Dickerson et al., 2022; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014). Research amongst maltreated children and adolescents found that adolescents showed greater risk for suicidal ideation with lower subjective social status and lower risk for suicidal ideation with higher subjective social status (Dickerson et al., 2022). Vidal and Latkin found that for their adolescent clinical sample, subjective social status was more strongly associated with depression, suicidal ideation, and suicidal behaviours than socio-economic status (Vidal & Latkin, 2020).

Social Support. Social support refers to the interpersonal availability of material and emotional resources (Åslund et al., 2014). Higher levels of social support have been found to increase resilience during times of distress (Rodriguez-Llanes et al., 2013). In their efforts for preventing suicide, the USAs Centre for Disease Control (CDC) has released a suicide prevention resource that includes strategies and approaches to achieve and sustain substantial reductions in suicide, and include promoting social support (CDC, 2022). This is in line with research by Cheng & Chang, who found that social support is negatively correlated with suicidal ideation (Cheng & Chan, 2007). Lund and colleagues stated that interventions focussing on improving social support have a high potential for protecting older adults against depression, onset of dementia and beneficial for mental health. Furthermore, for women in general, befriending programmes and enhancement of social support was found to be able to decrease depression (Lund et al., 2018). Ryu & Fan stated that more research is needed on the relation between social support and financial stress with regards to mental health outcomes (Ryu & Fan, 2022), but it has been found that social support can buffer against negative

influences of financial stress on psychological well-being (Åslund et al., 2014). Amongst college students in the Netherlands, a lack of social support has been found to indicate higher reports of mental health problems (Dopmeijer et al., 2022). Research by Stichting 113 found that for youth, aged 20 to 30, a lack of social support was both found to be a factor related to the development of suicidal ideation and found to be a factor these participants wished to receive support for (Elzinga et al., 2022).

To address the lack of the integration of the socio-cultural and economic domain in interventions for suicidal ideation, the current study will look for Social Determinants of Suicidal Ideation, focusing on Subjective Social Status, Financial Stress, and Social Support.

1.2.4 Objective

With prevention of and interventions for suicide being unable to halt the ever rising suicide rates (Reeves et al., 2022), the 2020 goal of 10% worldwide reduction in suicide rates missed, and there being no indication that the 2030 goal of one-third reduction in suicide rates will be met, it is now more than ever up to the scientific community to figure out what feeds the development of Suicidal Ideation and more importantly, how to prevent the development of Suicidal Ideation. This, not just to ensure that the UN's 2030 SDG will be met, but because people are dying. In the Netherlands, approximately 275 people attempt suicide daily (Stichting 113, 2021). With a reading speed of 238 words per minute (Brysbaert, 2019), the average college student would need approximately 95 minutes to read this thesis. Thus, whilst you are reading, an estimated 142 people will die from death by suicide worldwide, with at least 18 people attempting suicide in the Netherlands. With a quarter of students actively wanting to be dead (Dopmeijer et al., 2022), there is a pressing need for a better scientific understanding of what makes live liveable for college students.

Applying time and resources cautiously, in order to achieve results in an effective way, allows the saved time and resources to be available for further research, for interventions, and

for different problems. This moral imperative stems from the philosophy of effective altruism which encourages real-world results in an effective manner (Gainsburg et al., 2022). By finding ways in which SDoMH of the social and cultural domain and of the economic domain influence Suicidal Ideation, this thesis aims to bring society closer to cost-effective interventions that would prevent Suicidal Ideation from occurring via structural and systemic change, so as to relief not only the individual but the entire population and its future generations.

The objective of this study is to find ways in which variables interacting with Social Determinants of Suicidal Ideation prevent people to resort to suicide. The aim is to find interactions that are manipulatable in a (cost) effective way so as to achieve generalizable results as efficiently as possible. The focus lies on non-clinical sample of college students in the Netherlands, due to time and sampling constraints, and because suicide is a complex problem with different determinants for different populations and inter- and intraindividual differences (Reeves et al., 2022). In short, this thesis set out to find pathways that can lead to interventions that prevent people from developing Suicidal Ideation, instead of curing Suicidal Ideation or 'only' preventing death by suicide to then leave people depressed but alive.

1.2.5 Current Study

The current study utilised a mixed methods design, gathering quantitative and qualitative data on Social Determinants of Suicidal Ideation. Our aim was to provide more insight into potential protective and risk factors amongst Social Determinants of Suicidal Ideation. More specifically, we focused on the Social Determinants of Suicidal Ideation in a quantitative way and qualitatively captured experiences associated with these Social Determinants of Suicidal Ideation to identify characteristics of these Social Determinants of Suicidal Ideation that would help answer the question "What makes life liveable?".

For the first phase of this study, the first research question was formulated as follows: Does Financial Stress moderate the relation between Subjective Social Status and Suicidal

Ideation in a non-clinical sample of college students in the Netherlands? Based on previous studies (Choi et al., 2021; Dickerson et al., 2022; Elbogen et al., 2020; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2013, 2018), it was hypothesised that an increase in Financial Stress would strengthen the relation between Subjective Social Status and Suicidal Ideation. Furthermore, it was hypothesised that in increase in age would strengthen the relation between Financial Stress and Suicidal Ideation, and that an increase in study year would strengthen the relation between Financial Stress and Suicidal Ideation.

The second research question looked into: Are there differences between college students who get Social Support or not for the relation between their Subjective Social Status and Suicidal Ideation in a non-clinical sample in the Netherlands? Based on previous studies (Åslund et al., 2014; Dickerson et al., 2022; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2018), it was hypothesised that the absence of Social Support would strengthen the relation between Subjective Social Status and Suicidal Ideation.

The second phase of this study – the qualitative part of the design – was based on previous literature on the need for mixed method design (de Leo, 2002; Kral et al., 2012; Michel, 2021; Mueller et al., 2021). The relation between Subjective Social Status and Suicidal Ideation (Dickerson et al., 2022; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2018), in Dutch adolescents and students (Dopmeijer et al., 2022; Elzinga et al., 2022), led to the first research question: How do aspects of Subjective Social Status influence Suicidal Ideation in a non-clinical sample of college students in the Netherlands?

Research on the protective aspects of Social Support (Åslund et al., 2014; Cheng & Chan, 2007; Diemer et al., 2013), and the relation between Financial Stress and Suicidal Ideation (Choi et al., 2021; Elbogen et al., 2020; Lund et al., 2018) led to the second research question: How does Social Support affect the influence of Financial Stress factors on Suicidal Ideation in a non-clinical sample of college students in the Netherlands?

2. Methods

The research "What Makes Life Liveable? Understanding the Social Determinants of Suicidal Ideation among College Students" was 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 PhD candidate Ronald Bahamondes-Álvarez. The purpose of this study was to investigate Social Determinants of Suicidal Ideation in college students in the NL aged 17 – 26, focusing on the Social Determinants Financial Stress, Subjective Social Status, and Social Support. Using a mixed methods sequential explanatory research design, this two-phase study began with the collection and analysis of questionnaires (i.e., quantitative data) followed by the subsequent collection and analysis of interviews (i.e., qualitative data). We implemented integration at the design level through the use of an explanatory sequential mixed methods design. The following overarching question guided the study: What Makes Life Liveable among college students?

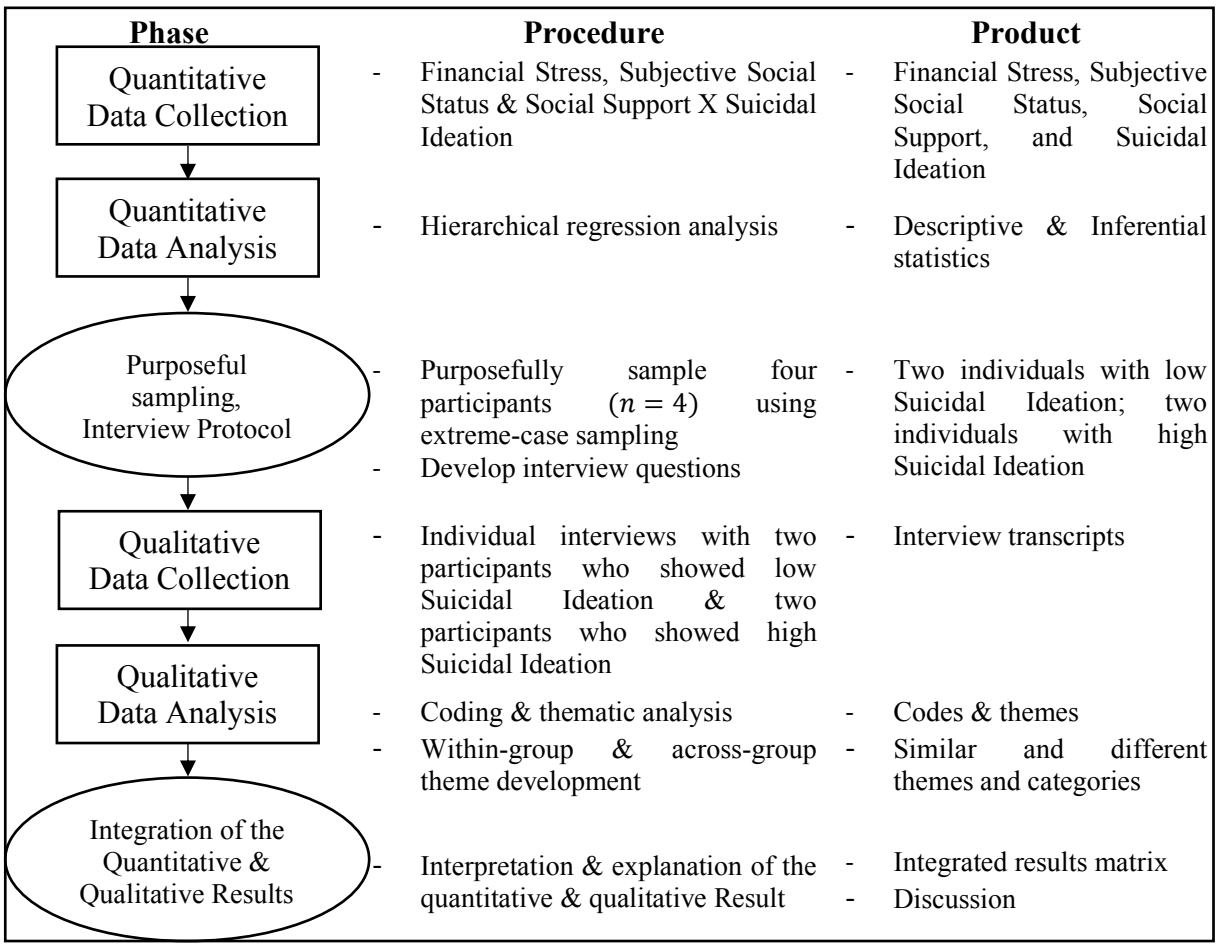
2.1 Integration

Integration is the process that intertwines the two parts of a mixed methods study (Draucker et al., 2020), and is essential for a proper mixed methods study (Guetterman et al., 2015). Properly integrating the results enables the evaluation of the reliability and accuracy of quantitative findings, can aid in the explanation of quantitative findings and of qualitative findings, as well as contribute to the improvement and adjustment of qualitative measures (O'Cathain et al., 2010). Integration can be implemented at the design, methods, interpretation, and reporting levels. The current study guaranteed integration at the design, methods, interpretation, and reporting levels.

Integration at the design level was guaranteed through the use of an explanatory sequential mixed methods design, using the qualitative data from the second phase to explain the quantitative data from the first phase (Fetters et al., 2013).

Figure 1

Visual display for the explanatory sequential study design procedure



At the methods level, firstly, the use of a connecting approach ensured integration. Connecting entails linking one database to the other through sampling (Fetters et al., 2013). In this study, via extreme case sampling based on the quantitative data from the first phase, four participants with extreme (low or high) scores on Suicidal Ideation were invited for the interviews in the second phase to provide the qualitative data. Extreme case sampling was used as the current study was interested in outlying manifestations of Suicidal Ideation, so as to be able to create subgroups of high and low Suicidal Ideation which enables the potential discovery of between-group differences (Draucker et al., 2020). Secondly, the use of a building approach ensured integration. Building entails using the database from the first phase to inform

the data collection approach of the second phase (Fetters et al., 2013). In this study, the quantitative data from the series of questionnaires was used to tailor the interview questions for the qualitative interviews. Furthermore, the data was open for exploratory analysis, enabling alterations of – or newly incorporated – questions for the second phase interview.

At the interpretation and reporting level, integration was guaranteed through the contiguous approach. Both quantitative and qualitative results have been presented in a single report, but they have been reported in separate sections. Using integrated results matrices, qualitative and quantitative results have been reported in joint displays, further ensuring integration of the data (Fetters et al., 2013).

2.2 Quantitative Phase

2.2.1 Design and Participants

The quantitative phase constituted the first part of the current study, using a cross-sectional design. This design aimed to identify associations between certain factors and a specific characteristic of interest at a current point in time. Due to the current study's cross-sectional design, the manipulation of variables through experimentation was not incorporated. Instead, the variables of interest were assessed at a single point in time using psychological measures, and as a result, inferences about causality and the direction of the relationship between variables could not be drawn. The only inferences that could be made using this design were those regarding correlations and associations (Kazdin, 2021).

Based on previous studies (Ndetei et al., 2022; Yen et al., 2014; Yun & Kim, 2020) a medium-sized effect size was expected ($Cohen's\ f\ =\ 0.28$). Using G*Power, a projected sample size of $N = 200$ was determined (Faul et al., 2007) to ensure adequate power for detecting medium effect sizes. Participants were recruited via flyers and posters, college student group chats, social media (Instagram, LinkedIn, Facebook, WhatsApp, Twitter), and worth-of-mouth. Participation was voluntary and participants were remunerated by either 1.5

credits, or a 1 in 30 chance of one of the two prizes of monetary compensation to the value of 30 euros by entering a raffle. Compensation in case of non-completion of the experiment was € 0.00/0.5 credit for up to 15 minutes, and € 3.75 (1 credit) for 15- 30 minutes. The targeted population comprised college students in the NL aged 17 – 26. Participants were included if they were enrolled as a student, were 17-26 years of age, and had a good command over written and spoken English.

2.2.2 Procedures

Ethics. Prior to commencement, the Leiden University Psychology Research Ethics Committee (CEP) reviewed and approved the procedures for the first phase of the study on the 1st of February 2023, corresponding to CEP number 2023-01-25-M.S.Tollenaar-V3-4436. Participants were provided information about the study in the information letter in advance, after which they provided written informed consent. After participation, all participants were provided with a debriefing form to explain the true nature and aim of the study. Participants were rewarded for their participation after termination or completion of the series of questionnaires.

Tasks. Participants participated by answering a series of questionnaires in SONA, the participant management system for research participation used by Leiden University's Faculty of Social and Behavioural Sciences (Sona Systems Ltd., 2022). The questions included were about Suicidal Ideation and its Social Determinants and included the Suicidal Ideation Attributes Scale (SIDAS) (van Spijker et al., 2014), the APR Financial Stress Scale (Heo et al., 2020), the MacArthur Scale of Subjective Social Status (Adult Version) (Stanford SPARQ, 2022), and the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1990). Completion of the series of questionnaires was estimated to take up to 40 minutes.

Duration. The first phase of this study was published on SONA on the 17th of February 2023, after receiving approval from the Psychology Ethic Committee of Leiden University.

The quantitative phase was closed after two weeks on the 2nd of March 2023, when data of 200 participants was gathered.

2.2.3 Data Collection

During the quantitative phase, one dependent and three independent variables were measured using a series of four questionnaires. Additionally demographic information was gathered.

Dependent Variable. The first phase looked into one dependent variable, Suicidal Ideation.

***Suicidal Ideation*.** The Suicidal Ideation Attributes Scale (SIDAS) was used to measure Suicidal Ideation (van Spijker et al., 2014). The SIDAS consists of five items and is a self-report questionnaire measuring frequency, controllability, closeness to attempt, distress, and interference with daily activities on a 10-point scale over the past month. An example of an item to measure frequency of Suicidal Ideation is "'In the past month, how often have you had thoughts about suicide?' (0 = Never, 1–9 = unlabelled points, 10 = Always).". Each of the five items was provided with an annotation of the score scale and were coded so that higher scores represent a higher level of Suicidal Ideation (van Spijker et al., 2014).

Individuals who indicated that they "Never" experienced a certain behavior on the first item of the scale did not have to complete the remaining items. They were assigned a score of 10 for the variable "controllability" (representing full control) and a score of 0 for "closeness to attempt", "distress", and "interference" variable. The overall SIDAS score was calculated by adding the scores of all five items, with the "controllability" variable being reverse scored (10 = 0, 9 = 1, and so on, 0 = 10). The maximum range of the SIDAS is from zero to 50, where higher scores indicate more severe suicidal ideation (van Spijker et al., 2014).

Validity of the SIDAS was assessed using an online questionnaire for adults in Australia ($N = 1{,}352$) (van Spijker et al., 2014). The researchers found high specificity (95.8%) for

presence of suicide plans (with 39.6% sensitivity) at scores ≥ 21. They found high specificity (94.9%) for presence of preparation/attempt of suicide in the past year (with 50.0% sensitivity) at scores ≥ 21. Internal consistency was high, with Cronbach alpha = 0.91 (van Spijker et al., 2014).

Independent Variables. The first phase looked into three independent variables, Financial Stress, Subjective Social Status, and Social Support. Additionally demographic information was gathered.

Financial Stress. The APR Financial Stress Scale was used to measure Financial Stress (Heo et al., 2020). The APR Financial Stress Scale consists of 24 items and is a self-report questionnaire measuring affective (A), physiological (P), and relational (R), aspects of Financial Stress on a 5-point scale. An example of an item to measure physiological responses to Financial Stress is "I have stomach aches frequently because of my financial situation." Each of the items was answered on a scale of 1 to 5, where 1 = "Strongly Disagree" and 5 = "Strongly Agree" (Heo et al., 2020).

Validity of the APR Financial Stress Scale was assessed using an online questionnaire ($N = 668$) for exploratory factor analysis (EFA), and an online questionnaire ($N = 1{,}115$) for confirmatory factor analysis (Heo et al., 2020). EFA resulted in a 3-factor model consisting of affective reaction, relational behaviour, and physiological responses. These factors showed high reliability, with Cronbach's Alpha for affective reaction, relational behaviour, and physiological responses being 0.95, 0.91, and 0.94, respectively. CFA resulted in a high model fit ($\mathrm{CFI} = 0.91, \mathrm{TLI} = 0.90, \mathrm{RMSEA} = 0.10, \mathrm{SRMR} = 0.06$). The model had high factor correlations of 0.73 (factors 1 and 2), 0.72 (factors 1 and 3), and 0.89 (factors 2 and 3) (Heo et al., 2020).

Subjective Social Status. The MacArthur Scale of Subjective Social Status (Adult Version) was used to measure Subjective Social Status (Stanford SPARQ, 2022). The

MacArthur Scale of Subjective Social Status consists of 2 items and is a self-report questionnaire measuring subjective social status on a national and community level on a 10-point scale. For example, item 1 (the national level subscale): "Where would you place yourself on this ladder? Please pick the number corresponding to the rung rung where you think you stand at this time in your life relative to other people in the Netherlands." The two items were accompanied by a picture of a ladder (Figure 2) and provided with instructions (Stanford SPARQ, 2022).

The two ladders were reverse scored so higher scores indicated lower subjective status and lower scores indicated a higher subjective status. Individuals who report "1" experience that they stand at the top of either society (item 1) or their community (item 2). Individuals who report "10" experience that they stand at the bottom of either society (item 1) or their community (item 2). Higher scores for the items indicated lower Subjective Social Status, and lower scores indicated higher Subjective Social Status (Ostrove et al., 2000).

Reliability of the MacArthur Scale of Subjective Social Status was assessed using a sample of Brazilian adults ($N = 245$) in face-to-face interviews (Giatti et al., 2012). The society ladder showed good reproducibility (Kappa > 0.60), and substantial test-retest reliability (ICC $= 0.67$ [CI 95% $0.39 - 0.96$]). The community ladder showed moderate reproducibility ($Kappa = 0.58$), and substantial test-retest reliability ($ICC = 0.64$ $[CI\ 95\% = 0.34 - 0.93]$) (Giatti et al., 2012). Validity of the MacArthur Scale of Subjective Social Status was assessed using a sample of Brazilian adults ($N = 159$) in face-to-face interviews (de Almeide Ferreira et al., 2018). The society ladder showed moderate concurrent validity ($Kappa_w = 0.55$ $[CI\ 95\% = 0.44 - 0.66]$). The community ladder showed good concurrent validity ($Kappa_w = 0.60$ $[CI\ 95\% = 0.47 - 0.73]$). Face validity was determined using computational methods of corpus linguistics created to collect and

analyse linguistic data. This qualitative analysis resulted in good results for face validity for both the society ladder and the community ladder (de Almeide Ferreira et al., 2018).

Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) was used to measure Social Support (Zimet et al., 1990). The MSPSS consists of 12 items and is a self-report questionnaire measuring perceived Social Support received from significant other, friends, and family on a 7-point scale. An example of an item to measure perceived Social Support received from family is "My family really tries to help me." Each of the items was answered on a scale of 1 to 7, where 1 = "Very Strongly Disagree" and 7 = "Very Strongly Agree" (Zimet et al., 1990).

Validity of the MSPSS was assessed using three different samples: pregnant women ($N = 265$), European adolescents living with their family ($N = 74$), and paediatric residents ($N = 55$) (Zimet et al., 1990). The MSPSS overall, as well as the individual subscales, showed high internal reliability for all three subject groups. For the Family subscale, Cronbach's Alpha ranged from 0.81 to 0.90. For the Friends subscale, Cronbach's Alpha ranged from 0.90 to 0.94. For the Significant Other subscale, Cronbach's Alpha ranged from 0.83 to 0.98. For the entire MSPSS scale, Cronbach's Alpha ranged from 0.84 to 0.92. These results are comparable to the original study by Zimet and colleagues from 1988 (Zimet et al., 1988, 1990).

Demographics. Included in the questionnaire were questions on demographics pertaining to the variables of interest. These included personalia (i.e., age, gender, nationality), social background (i.e., living situation, relation status, and college registration), and economic background (i.e., family income, employment status, income, debt, and economic background). Some examples of questions included are: "What is your living environment? Alone – with spouse / partner – housemate(s) – other, specify:" for social background information and "If you are employed, how many hours a week do you work (on average)? Not Applicable – On average ___ hour(s) a week" for economic background information.

2.2.4 Data Analysis

All statistical analyses were performed using the statistical analysis software SPSS, version 27 (IBM Corp, 2020). The data was first examined for descriptive statistics, and assumptions were checked for normality, linearity, and homoscedasticity. Data transformations were applied, as the data failed to meet these assumptions (Howell, 2013; Tabachnick & Fidell, 2019). Before any analyses were run on the data, the dataset was screened for outliers using an explorative analysis in SPSS. Outliers were analysed and controlled according to the best practices for handling outliers by Aguinis and colleagues (Aguinis et al., 2013). Missing data were dealt with using multiple imputation in SPSS (Baraldi & Enders, 2010; Howell, 2013). For the dataset of phase one, four hypotheses were tested.

Hypothesis A. The first hypothesis was "Financial Stress moderates the relation between Subjective Social Status and Suicidal Ideation". Hypothesis A was analysed by means of a hierarchical regression analysis. The variables Financial Stress, Subjective Social Status, and Suicidal Ideation were treated in a quantitative way. Based on the literature (Choi et al., 2021; Dickerson et al., 2022; Elbogen et al., 2020; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2013, 2018), it was expected that an increase in Financial Stress would strengthen the relation between Subjective Social Status and Suicidal Ideation.

Hypothesis B. The second hypothesis was "Social Support moderates the relation between Subjective Social Status and Suicidal Ideation". Hypothesis B was analysed by means of a hierarchical regression analysis. Based on the literature (Åslund et al., 2014; Dickerson et al., 2022; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2018), it was expected that a decrease in Social Support would strengthen the relation between Subjective Social Status and Suicidal Ideation.

Hypothesis C. The third hypothesis was "Age moderates the relation between Financial Stress and Suicidal Ideation". Hypothesis C was analysed by means of a hierarchical regression

analysis. It was expected that an increase in age would strengthen the relation between Financial Stress and Suicidal Ideation.

Hypothesis D. The fourth hypothesis was "Study year moderates the relation between Financial Stress and Suicidal Ideation". Hypothesis D was analysed by means of a hierarchical regression analysis. It was expected that an increase in study year would strengthen the relation between Financial Stress and Suicidal Ideation.

Statistical significance was set at $p < .05$ for all analyses.

2.3 Qualitative Phase

2.3.1 Design and Participants

The qualitative phase constituted the second part of the current study, using a qualitative cross-sectional design. The targeted population comprised college students in the NL aged 17 – 26. Participants were be included if they were enrolled as a student, were 17-26 years of age, and had a good command over written and spoken English. The sample consisted of four participants, who were purposefully sampled from the respondents of the first phase. Participants were selected through extreme case sampling, based on their scores (extremely low or high) for Suicidal Ideation, so as to recruit two participants with high scores and two participants with low scores for Suicidal Ideation. The selection of participants was additionally based on extreme scores for Subjective Social Status and Financial Stress. These participants were approached and invited to participate in the second phase via email or via WhatsApp. Participation was voluntary and participants were remunerated by means of monetary compensation to the value of 15 euros after termination or completion of the interview. None of the four participants dropped out before completing the entire interview, and none of them retracted consent for data analysis, so that no additional candidate had to be approached for participation. All four completed interviews were analysed.

2.3.2 Procedures

Ethics. Prior to commencement, the Leiden University Psychology Research Ethics Committee (CEP) reviewed and approved the procedures for the second phase of the study on the 1st of February 2023, corresponding to CEP number 2023-01-25-M.S.Tollenaar-V3-4436. Participants were provided information about the study in the information letter in advance, after which they provided written informed consent. After participation, all participants were provided with a debriefing form that explained the true nature and aim of the study.

Tasks. Participants participated in a Free Association Narrative Interview (FANI). The questions included were about Suicidal Ideation and its Social Determinants.

Duration. The second phase of this study commenced on the 27th of March 2023, after analysing the data from the first phase, and after receiving approval from the Psychology Ethic Committee of Leiden University. Data collection for the second phase lasted until the 12th of April 2023. Completion of the interview took a maximum of 60 minutes.

Setting. The interviews took place face-to-face, at Leiden University's Faculty of Social and Behavioural Sciences. During the interview, only the interviewer and the interviewee were present. No one observed or listened in during the interview. All interviews were captured using voice recordings, and notes were made during the interview to capture additional information, log remarkable incidences, and write down interesting remarks.

2.3.3 Data Collection

Research Questions. The second phase of the current study was guided by two research questions. The first research question was 'How do aspects of Subjective Social Status influence Suicidal Ideation in a non-clinical sample of college students in the Netherlands?'. Previous literature has provided support for the existence of an interaction between Subjective Social Status and Suicidal Ideation (Dickerson et al., 2022; Goodman et al., 2017; Jeon et al., 2013; Ko et al., 2014; Lund et al., 2018).

The second research question was ‘How does Social Support affect the influence of Financial Stress factors on Suicidal Ideation in a non-clinical sample of college students in the Netherlands?’. Previous literature has provided support for the existence of an interaction between Social Support and Suicidal Ideation (Åslund et al., 2014; Cheng & Chan, 2007; Diemer et al., 2013), and between Financial Stress and Suicidal Ideation (Choi et al., 2021; Elbogen et al., 2020; Lund et al., 2018). The integration of the subjective experiences (from the second phase) with objective incidences (from the first phase) was theorised to provide fundamental insight in the Social Determinants of Suicidal Ideation (de Leo, 2002; Kral et al., 2012; Michel, 2021; Mueller et al., 2021).

FANI Interview. In order to elicit truthful responses, prevent suggestive questioning, and to reduce a socially desirable presentation of the self, the Free Association Narrative Interview (FANI) method was used (Bissell et al., 2016, 2018; Hollway & Jefferson, 2013; Vicario et al., 2021). The FANI method is a semi-structured interview style that uses open ended questions which are as neutral and non-suggestive as possible. The interviewer pays close attention to the ordering and phrasing of the narrative, whilst staying close to the participants’ experiences. It is often used to study subjects prone to be met with apprehension and resistance (Bissell et al., 2016, 2018; Vicario et al., 2021). The FANI method starts out with the assumption, that the subjects of the interview are unable or unwilling to speak open and freely about the subject (Hollway & Jefferson, 2008). Therefore, it uses the psychoanalytic principle of free association. This is based on the idea that people reveal unconscious connections in their story when they are free to structure their own narratives. By allowing the subject of the interview to be introduced by the client, according to Freud the client could present what was at the surface of their unconsciousness. This way, the client’s unconsciousness and consciousness are not manipulated by the therapist’s consciousness (Hollway & Jefferson, 2008).

After asking the first question, the interviewee was encouraged to elaborate as much as possible, without the interviewer controlling the direction the story took. Follow-up questions, based on the interviewee's narrative, were used to elicit more reactions but only when necessary. A number of predefined topics or questions were explored this way during the hour-long interview.

Interview Protocol. To guard the aspects of free association, a limited number of predetermined questions was formulated. The exact phrasing was adjusted depending on whether the participant's extreme scores (for the variable of interest) were high or low.

To answer the first research question, the following three questions were asked. 'Regarding your Subjective Social Status, where do you see yourself compared to other people in the Netherlands?', 'Could you tell me about having thoughts of suicide?', and 'How does your [high/low] Subjective Social Status influence Suicidal Ideation?'. These three questions were based on the results from the analysis of the dataset from phase one.

To answer the second research question, the following three questions were asked. 'Could you tell me about your experiences with Financial Stress?', 'What is it like for you to experience Social Support?', and 'How do aspects of Financial Stress and Social Support influence Suicidal Ideation?'. These three questions were based on the results from the analysis of the dataset from phase one.

2.3.4 Data Analysis

The interviews were recorded, and anonymised transcripts were produced. Audio recordings were listened to, in order to connect personal experiences with careful observation so as to exhaustively capture participants' accounts. All participants completed the entire interview and none of them retracted consent so that all the transcripts could be included in the analysis.

Thematic Analysis. Subsequently, the contents of the transcripts were examined using thematic analysis. Thematic analyses were performed using the qualitative data analysis software ATLAS.ti version 23.1.0 (ATLAS.ti, 2023). Thematic analysis, as described by Braun and Clark (Braun & Clarke, 2006) is a method for analysing data by identifying, analysing, and reporting patterns within a dataset. Thematic analysis follows six steps, familiarisation, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing a report. By using an inductive approach, the data was analysed without relying on pre-existing theoretical frameworks or concepts to identify patterns, themes, and categories. Next, axial coding was conducted, in which the codes were organized into broader categories or themes based on their relationships to one another. Finally, selective coding was used to develop a higher-level conceptual framework that linked the themes and categories to one another and to the research questions.

***Familiarisation*.** During this step, the raw data is transcribed, read and re-read, whilst noting down initial ideas that come up as the researcher reads the data (Braun & Clarke, 2006). All the transcriptions of the interviews were read and re-read, and initial ideas were noted down.

Generating Initial Codes. This entails systematically coding the entire dataset for interesting aspects and gathering data that is relevant to each code (Braun & Clarke, 2006). All the transcripts were coded.

Searching for Themes. Combining codes that seem to be related into themes, collating all data that is relevant to that theme (Braun & Clarke, 2006). All codes were collated into themes.

Reviewing Themes. During this step, a thematic map of the analysis is produced so as to check whether the deduced themes correspond at the level of the code extracts (level 1) and at the level of the complete dataset (level 2) (Braun & Clarke, 2006). A thematic map of the analysis of the entire dataset was produced.

Defining and Naming Themes. This step involves refining the specifics of each theme, and the general narrative of the entire analysis, constructing distinct definitions and names for the themes (Braun & Clarke, 2006). All themes were refined.

Producing the Report. Final analysis of the themes and thematic map, followed by selection and analysis of extract examples. A report of the analysis of the data is produced (Braun & Clarke, 2006). A report of the analysis was produced so as to convey the intricate narrative of the dataset.

Coding. During the thematic analysis, the data was coded manually. The data was coded for as many potential themes as possible within the time frame (approximately 2 weeks). Codes and themes were supplemented by constructs stemming from all the phase one instruments, as well as by Arias-Pujol's and Anguera's 'Dimensions and category systems in the observation instrument for therapists and patients' (Arias-Pujol & Anguera, 2020).

3. Results

3.1 Descriptive Statistics

Descriptive statistics were computed to summarize the demographic characteristics of the study sample. The sample consisted of 181 participants, with an age range of 17 to 26 years ($M = 19.5, SD = 1.778$). The majority of participants were born female ($n = 166$), while the rest was born male ($n = 15$). The self-identified gender composition of the sample was predominantly female ($n = 158$), followed by male ($n = 15$), non-binary ($n = 5$), gender fluid ($n = 2$), and unsure ($n = 1$). The sample included both cis-gender ($n = 175$) and transgender ($n = 6$) participants. The nationality of the sample was predominantly Dutch ($n = 104$), while the rest had a foreign nationality ($n = 77$), including 34 different nationalities. The majority of participants reported middle to upper-level Family Income ($n = 156$), while the rest reported lower middle to poverty-level Family Income ($n = 25$).

Most of the participants reported having no student loan debt ($n = 131$), while the rest reported having a student loan debt ($n = 40$), with a range of

Table 1

Socio-demographic and Economic Characteristics (N=181)

	n	%
Female[a]	166	91.7%
Male[a]	15	8.3%
Transgender	6	3.3%
Cisgender	175	96.7%
Gender identity		
Female	156	86.2%
Male	14	7.7%
Nonbinary	5	2.8%
Genderfluid	2	1.1%
Unsure	1	0.6%
Dutch Nationality	104	57.5%
Non-Dutch Nationality	77	42.5%
Ethnicity		
Black	1	0.6%
White	155	85.6%
MENA	12	6.6%
Hispanic	3	1.7%
Asian	10	5.5%
Family income level		
Poverty	1	0.6%
Lower	7	3.9%
Lower middle	17	9.4%
Middle	52	28.7%
Upper middle	86	47.5%
Upper	18	9.9%
Student loan		
Yes	141	77.9%
No	40	22.1%
Monetary support		
Yes	35	19.3%
No	146	80.7%
Relationship status		
Single	92	50.8%
Dating	16	8.8%
Relationship	70	38.7%
Married	3	1.7%
Household		
Living alone	24	13.3%
With spouse/partner	10	5.5%
With housemates	59	32.6%
With parents/family	88	48.6%
Study programme		
App. Uni. Bachelor	4	2.2%
University Bachelor	169	93.4%
University Pre-Master	1	0.6%
University Master	7	3.9%

[a] Sex assigned at birth.

200 to 90,000 euros ($M = 2041.08, SD = 8946.530$). The majority of participants reported being single ($n = 92$), followed by being in a relationship ($n = 70$), currently dating someone ($n = 16$), and being married ($n = 3$). The sample included people living alone ($n = 24$), living with parents/family ($n = 87$), living with housemates ($n = 58$) and living with partner ($n = 10$). The majority of participants were university bachelor students ($n = 169$), followed by master students ($n = 7$), applied university students ($n = 4$) and university pre-master students ($n = 1$). The mean for years of study for the sample was 1.45 years, with a range of 1st to 8th year ($M = 1.45, SD = 1.234$). Overall, the sample appeared to be predominantly Dutch, white, young, female, with an affluent family background and currently enrolled in a university bachelor's program.

Table 2

Descriptive Statistics of Demographics and Economic Characteristics, and Independent Variables (N=181)

	n				Std.		
	Valid	Missing	Mean	Median	Deviation.	Min.	Max.
Age	179	2	19.503	19.000	1.778	17	26.0
Study year	169	12	1.450	1.000	1.234	1	8.0
Finances							
Student loan debt[a]	171	10	2041.082	.00	8946.530	0	90000
Debt (other) [a]	170	11	83.594	.00	632.005	0	8000
Student loan income / month[a]	177	4	90.042	.00	220.873	0	1200
Monetary support / month[a]	179	2	444.974	154.00	1186.919	0	15000
Work hours / week	180	1	4.875	2.50	6.049	0	32
Salary / month[a]	178	3	190.343	77.50	257.785	0	1300
Suicidal Ideation Total	181	0	6.083	2.00	8.270	0	35
Suicidal Ideation Total - log.	181	0	.582	.477	.491	.00	1.56
Subjective Social Status (NL)	180	1	6.111	6.000	1.797	1	9
Financial Stress[a]	180	1	1.472	1.000	.680	1.00	3.00
Social Support[a]	180	1	2.561	3.000	.662	1.00	3.00

[a] In euros.

[b] Recoded into categories low (1), mid (2), and high (3).

3.1.1 Prevalence of Suicidal Ideation

Of the 181 participants in the study, the majority ($n = 127$) reported experiencing Suicidal Ideation in the past month ($M = 6.083, SD = 8.270$). 13 of the participants' scores exceeded the threshold for high risk of suicidal behaviour, which is indicated by a score of at

least 21. Suicidal Ideation was similar for men ($M = 5.20, SD = 6.689$) and women ($M = 5.61, SD = 7.877$). In terms of age, Suicidal Ideation was highest for participants 22-26 years of age ($n = 23, M = 7.87, SD = 10.420$), and lowest for participants 17-21 years of age ($n = 156, M = 5.68, SD = 7.863$). Of the participants that are employed ($n = 93$), the prevalence of Suicidal Ideation was highest among participants working 16-24 hours per week ($M = 7.00, SD = 10.037$), followed by those working 8-16 hours per week ($M = 5.97, SD = 8.556$), and those working 1-8 hours per week ($M = 3.62, SD = 6.014$). Regarding nationality, the prevalence of Suicidal Ideation was higher among participants that moved to the Netherlands ($n = 69, M = 7.10, SD = 8.994$), and lower among participants that had lived in the Netherlands all their life ($n = 91, M = 4.41, SD = 6.479$). Regarding Family Income, the prevalence of Suicidal Ideation was highest among participants who reported lower income level ($M = 13.00, SD = 7.246$) and lowest among participants who reported upper-middle income level ($M = 3.27, SD = 8.994$). These results suggest that a substantial proportion of the sample experienced Suicidal Ideation in the past month, with higher rates among certain subgroups such as participants with an international background, older adults, those working more, and those with a less affluent family background.

3.2 Analysis of the Quantitative Data

All statistical analyses were performed using the statistical analysis software SPSS version 27.0 (IBM Corp, 2020). Before running any analyses on the data, the dataset was checked for outliers using an explorative analysis in SPSS. Any values that deviated more than three times the interquartile range from the mean were individually checked. In total, 9 outliers were found.

3.2.1 Outliers

Two outliers were found for student loan debt (case number 181 = € 90000, and case number 180 = € 57000), which exceeded three times the interquartile range of € 8822 ($M = 8725.63, SD = 17002.109$). These participants were studying for 8 and 7 years already (respectively), explaining their higher student loan debt, and therefore the values were deemed acceptable and normal entries that represent observations in the population. The outliers were kept in the dataset as extreme values are part of the scope of the current study.

Three outliers were found for debt to others (case number 170 = € 8000, case number 47 = € 1600, and case number 169 = € 1000), which exceeded three times the interquartile range of € 278 ($M = 458.42, SD = 1439.642$). These values were deemed acceptable and normal entries that represent observations in the population. The outliers were kept in the dataset as extreme values are part of the scope of the current study.

Two outliers were found for monthly monetary support (case number 34 = € 15000, and case number 178 = € 3000), which exceeded three times the interquartile range of € 488 ($M = 557, SD = 1305.027$). The entry corresponding to case number 34 was deemed non-representative of the observations in the population. However, this entry was not filtered out from the dataset as monthly monetary support was not to be included in any of the analyses. The entry corresponding to case number 178 was deemed an acceptable and normal entry that represents observations in the population. This outlier was kept in the dataset as extreme values are part of the scope of the current study.

One outlier was found for monthly salary (case number 177 = € 1300), which exceeded three times the interquartile range of € 250 ($M = 360.44, SD = 253.984$). This value was deemed an acceptable and normal entry that represents observations in the population. The outlier was kept in the dataset as extreme values are part of the scope of the current study.

3.2.2 Bivariate Correlations

After checking the data for outliers, a bivariate correlation was performed to examine the correlations between the studies main and demographic variables. The correlations between all independent variables were significant, except between Subjective Social Status and Social Support, as presented in table 3. Several significant correlations were found for the demographic variables.

Table 3

Spearman's Rho Correlations for the independent variables

		Suicidal Ideation Total – log.	Subjective Social Status	Financial Stress	Social Support
Suicidal Ideation Total – log.	Correlation Coefficient	1.000			
	Sig. (2-tailed)	.			
	N	181			
Subjective Social Status	Correlation Coefficient	-.268**	1.000		
	Sig. (2-tailed)	.000	.		
	N	180	180		
Financial Stress	Correlation Coefficient	.269**	-.202**	1.000	
	Sig. (2-tailed)	.000	.007	.	
	N	180	180	180	
Social Support	Correlation Coefficient	-.252**	.011	-.472**	1.000
	Sig. (2-tailed)	.001	.885	.000	.
	N	180	180	180	180

** Correlation is significant at the .01 level (2-tailed).

Family Income was correlated with all independent variables, as presented in table 4. Specifically, there were positive correlations found between Family Income and Subjective Social Status, as well as between Family Income and Social Support, indicating that higher levels of Family Income are associated with higher Subjective Social Status and higher levels of Social Support. There were negative correlations found between Family Income and Suicidal Ideation, and between Family Income and Financial Stress, indicating that higher levels of Family Income are associated with lower Suicidal Ideation and lower Financial Stress. Furthermore, Family Income was correlated with both receiving monetary support ($r(179) = .290, p < .001$), and the amount of monthly monetary support received ($r(177) = .273, p < .001$).

Table 4

Spearman's Rho Correlations

		Suicidal Ideation Total – log.	Subjective Social Status	Financial Stress	Social Support	Family Income
Family Income	Correlation Coefficient	-.254**	.401**	-.261**	.177*	1.000
	Sig. (2-tailed)	.001	.000	.018	.000	.
	N	181	180	180	180	181
Ethnic_Asian	Correlation Coefficient	.163**	-.139	.146	.002	-.056
	Sig. (2-tailed)	.028	.063	.051	.979	.451
	N	181	180	180	180	181
Ethnic_MENA	Correlation Coefficient	.197**	-.232**	.157*	-.182*	-.219**
	Sig. (2-tailed)	.008	.002	.036	.014	.003
	N	181	180	180	180	181
Ethnic_White	Correlation Coefficient	-.273**	.220**	-.187*	.139	.137
	Sig. (2-tailed)	.000	.003	.012	.062	.066
	N	181	180	180	180	181

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

In addition, several significant correlations were found for different ethnicities, as presented in table 4. A positive correlation was found between Asian and Suicidal Ideation, indicating that being Asian is associated with higher Suicidal Ideation. For MENA (Middle-Eastern/Northern-African), significant correlations were found for all independent variables as well as for Family Income. Specifically, there were positive correlations found between MENA and Suicidal Ideation, as well as between MENA and Financial Stress, indicating that being MENA is associated with higher Suicidal Ideation and higher Financial Stress. Negative correlations were found between MENA and Social Support, between MENA and Subjective Social Status, as well as between MENA and Family Income. This indicates that being MENA is associated with lower Social Support, lower Subjective Social Status, and lower levels of Family Income. Additionally, significant negative correlations were found between White and Suicidal Ideation, and between White and Financial Stress, indicating that being White is associated with lower Suicidal Ideation and lower Financial Stress. A significant positive

correlation was found between White and Subjective Social Status, indicating that being white is associated with higher Subjective Social Status.

3.2.3 Assumptions

Assumptions were checked for normality, linearity, and homoscedasticity. The assumptions were checked by visual inspection of the Histograms, P-P plots, and Scatterplots. For linearity, in the scatterplots, a horizontal line through zero did not seem to best fit the data, the data therefore showed signs of non-linearity and the assumption of linearity was violated. For homoscedasticity, in the scatterplots, a rectangle seemed to best fit the datapoints, therefore the data showed no signs of heteroscedasticity; the assumption of homoscedasticity was not violated. For normality, the datapoints in the P-P plots spread around the diagonal in a S-shape, therefore the data showed signs of non-normality. The datapoints in the histograms did not follow the shape of a bell curve, which too was an indicator for non-normality; the assumption of normality was violated. The data on suicidal ideation was log-transformed to meet the normality assumption and the linearity assumption. The main question underlying the current study, "What makes live liveable?" was investigated by looking into several hypotheses. The hypotheses were tested using hierarchical regression analyses. Statistical significance was set at $p < .05$ for all analyses.

3.2.4 Financial Stress as a Moderator

A moderation analysis using hierarchical regression was used to test if Financial Stress moderates the relation between Subjective Social Status and Suicidal Ideation.

Main Effects. The first block of the hierarchical regression analysis showed that the overall model was significant ($F(2,177) = 10.288, p < .001$), accounting for 10.4% of the variance ($R^2 = .104$), with a Cohen's F of .105 ($Cohen's\ F = \sqrt{R^2/(1-R^2)} = \sqrt{.104^2/(1-.104^2)} = .105$) which indicates a small effect (Cohen, 1988). Subjective Social

Status had a main effect on Suicidal Ideation ($B = -.065, SE = .020, t = -3.295, p < .001, 95\%\, CI = [-.104, -.026]$), indicating that lower Subjective Social Status was associated with higher levels of Suicidal Ideation. Financial Stress too had a main effect on Suicidal Ideation ($B = .135, SE = .052, t = 2.594, p = .010, 95\%\, CI = [.032, .237]$), indicating that higher Financial Stress was associated with higher levels of Suicidal Ideation.

Interaction effect. The second block of the model, including the interaction-effect (Subjective Social Status * Financial Stress), was significant ($F(1,176) = 8.217, p = .005$), accounting for 14.4% of the variance ($R^2 = .144$), with a Cohen's F of 0.146 ($Cohen's\ F = \sqrt{.144^2/(1 - .104^2)} = .146$) which indicates a small effect (Cohen, 1988). Subjective Social Status lost its main effect on Suicidal Ideation ($B = -.057, SE = .047, t = 1.219, p = .225, 95\%\, CI = [-.035, .149]$). Financial Stress retained its main effect on Suicidal Ideation ($B = .636, SE = .182, t = 3.491, p = .001, 95\%\, CI = [.277, .996]$). The interaction effect too had a main effect on Suicidal Ideation ($B = -.081, SE = .028, t = -2.867, p = .005, 95\%\, CI = [-.136, -.025]$). The moderation analysis revealed that the relationship between Subjective Social Status and Suicidal Ideation is not a main effect when Financial Stress is included in the model.

As the regression coefficient Subjective Social Status drops from significant to insignificant, the genuine relationship with Suicidal Ideation is not carried out uniquely by Subjective Social Status. The other variable, Financial Stress retains its significance, showing itself as the variable underlying the association. This does not mean that Subjective Social Status cannot be used to predict Suicidal Ideation at all, but it does mean that Subjective Social Status in an of itself is not having a direct effect per se. A possible explanation for this finding might be the effect of multicollinearity, as is identified in table 3, which indicates that Subjective Social Status is negatively correlated with Financial Stress ($r(178) = -.202, p =$

.007). This means that higher levels of Subjective Social Status are associated with lower levels of Financial Stress. This is also indicated by a high Variance Inflation Factor (VIF), under the Collinearity Statistics. These are 5.972 for Subjective Social Status, 12.124 for Financial Stress, and 15.756 for the interaction effect Subjective Social Status * Financial Stress.

In conclusion, Financial Stress cannot be used as a moderator for the relation between Subjective Social Status and Suicidal Ideation, as the interaction between Financial Stress and Subjective Social Status nullified the main effect of Subjective Social Status. Therefore, the null hypothesis of Financial Stress not being a moderator for the relation between Subjective Social Status and Suicidal Ideation could not be rejected. Figure 3 shows the pathways that were tested. An overview of the results can be found in table 5.

Figure 3

Model Summary

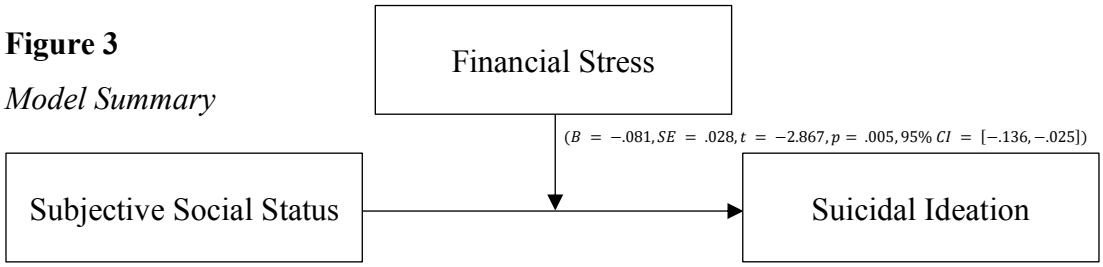


Table 5

Moderation Financial Stress on Subjective Social Status Relating to Suicidal Ideation

	F	***P-Value***	***R***	***R^2***
Model Summary	8.217	.005*	.380	.144
	β	***SE***	***t***	***p***
Effect of Subjective Social Status	.057	.047	1.219	.225
Effect of Financial Stress	.636	.182	3.491	.001*
Interaction-effect (Subjective Social Status * Financial Stress)	-.081	.028	-2.867	.005*

* Significant at α = .05.

3.2.5 Social Support as a Moderator

A moderation analysis using hierarchical regression was used to test if Social Support moderates the relation between Subjective Social Status and Suicidal Ideation.

Main Effects. The first block of the hierarchical regression analysis showed that the overall model was significant ($F(2,177) = 11.592, p < .001$), accounting for 11.6% of the variance ($R^2 = .116$), with a Cohen's F of .117 ($Cohen's\ F = \sqrt{R^2/(1-R^2)} = \sqrt{.116^2/(1-.116^2)} = .117$) which indicates a small effect (Cohen, 1988). Subjective Social Status had a main effect on Suicidal Ideation ($B = -.073, SE = .019, t = -3.805, p < .001, 95\%\ CI = [-.112, -.035]$), indicating that lower Subjective Social Status was associated with higher levels of Suicidal Ideation. Social Support too had a main effect on Suicidal Ideation ($B = -.159, SE = .052, t = -3.026, p = .003, 95\%\ CI = [-.262, -.055]$), indicating that lower Social Support was associated with higher levels of Suicidal Ideation.

Interaction Effect. The second block of the model, including the interaction-effect (Subjective Social Status * Social Support), was significant ($F(1,176) = 6.209, p = .014$), accounting for 14.6% of the variance ($R^2 = .146$), with a Cohen's F of 0.148 ($Cohen's\ F = \sqrt{.144^2/(1-.104^2)} = .148$) which indicates a small effect (Cohen, 1988). Subjective Social Status retained its main effect on Suicidal Ideation ($B = -.270, SE = .081, t = -3.330, p = .001, 95\%\ CI = [-.429, -.110]$). Social Support too retained its main effect on Suicidal Ideation ($B = -.648, SE = .203, t = -3.191, p = .002, 95\%\ CI = [-1.049, -.247]$). The interaction effect too had a main effect on Suicidal Ideation ($B = .077, SE = .031, t = 2.492, p = .014, 95\%\ CI = [.016, .138]$).

Therefore, the null hypothesis of Social Support not being a moderator for the relation between Subjective Social Status and Suicidal Ideation could be rejected. This means that the moderation analysis revealed that the relationship between Subjective Social Status and Suicidal Ideation was stronger for individuals who reported lower levels of Social Support. In conclusion, Social Support acts as a moderator for the relation between Subjective Social Status

and Suicidal Ideation. Figure 4 shows the pathways that were tested. An overview of the results can be found in table 6.

Figure 4

Model Summary

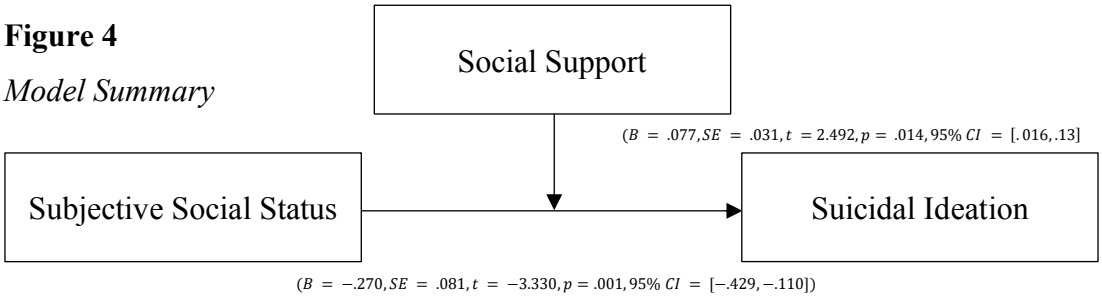


Table 6

Moderation Social Support on Subjective Social Status Relating to Suicidal Ideation

	F	***P-Value***	***R***	***R^2***
Model Summary	6.209	.014*	.382	.146
	β	***SE***	***t***	***p***
Effect of Subjective Social Status	-.270	.081	-3.330	.001*
Effect of Social Support	-.648	.203	-3.191	.002*
Interaction-effect (Subjective Social Status * Social Support)	.077	.031	2.492	.014*

* Significant at α = .05.

3.2.6 Age as a Moderator

A moderation analysis using hierarchical regression was used to test if Age moderates the relation between Financial Stress and Suicidal Ideation.

Main Effects. The first block of the hierarchical regression analysis showed that the overall model was significant ($F(2,176) = 5.181, p = .007$), accounting for 5.6% of the variance ($R^2 = .056$), with a Cohen's F of .056 ($Cohen's\ F = \sqrt{R^2/(1-R^2)} = \sqrt{.056^2/(1-.056^2)} = .056$) which indicates a very small effect (Cohen, 1988). Financial Stress had a main effect on Suicidal Ideation ($B = .154, SE = .053, t = 2.895, p < .004, 95\%\ CI = [.049, .259]$), indicating that higher Financial Stress was associated with higher levels of Suicidal Ideation. Age did not have a main effect on Suicidal Ideation ($B =$

$.022, SE = .020, t = 1.094, p = .276, 95\%\ CI = [-.018, .062]$), indicating that there was no association between age and levels of Suicidal Ideation.

Interaction Effect. The second block of the model, including the interaction-effect (Financial Stress * Age), was significant ($F(1,175) = 8.141, p = .005$), accounting for 9.8% of the variance ($R^2 = .098$), with a Cohen's F of .099 ($Cohen's\ F = \sqrt{.098^2/(1-.098^2)} = .099$) which indicates a small effect (Cohen, 1988). Financial Stress retained its main effect on Suicidal Ideation ($B = 1.894, SE = .612, t = 3.094, p = .002, 95\%\ CI = [.686, 3.102]$). The main effect of Age on Suicidal Ideation became significant ($B = .164, SE = .054, t = 3.063, p = .003, 95\%\ CI = [.058, .270]$). The interaction effect too had a main effect on Suicidal Ideation ($B = -.089, SE = .031, t = -2.527, p = .005, 95\%\ CI = [-.151, -.027]$).).

Therefore, the null hypothesis of Age not being a moderator for the relation between Financial Stress and Suicidal Ideation could be rejected. This means that the moderation analysis revealed that the relationship between Financial Stress and Suicidal Ideation was stronger for older individuals. In conclusion, Age acts as a moderator for the relation between Financial Stress and Suicidal Ideation. Figure 5 shows the pathways that were tested. An overview of the results can be found in table 7.

Figure 5

Model Summary

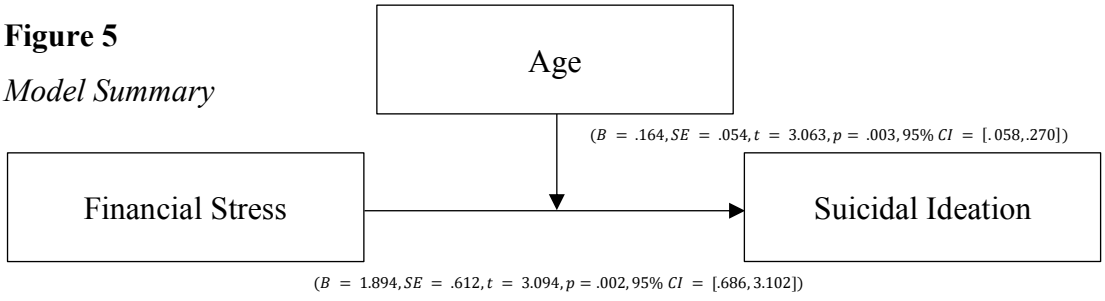


Table 7

Moderation Age on Financial Stress Relating to Suicidal Ideation

	F	***P-Value***	***R***	***R^2***
Model Summary	8.141	.005*	.312	.098
	β	***SE***	***t***	***p***
Effect of Financial Stress	1.894	.612	3.094	.002*
Effect of Age	.164	.054	3.063	.003*
Interaction-effect (Financial Stress * Age)	-.089	.031	-2.853	.005*

* Significant at α = .05.

3.2.7 Study Year as a Moderator

A moderation analysis using hierarchical regression was used to test if Study year moderates the relation between Financial Stress and Suicidal Ideation.

Main Effects. The first block of the hierarchical regression analysis showed that the overall model was significant ($F(2,166) = 5.244, p = .006$), accounting for 5.9% of the variance ($R^2 = .059$), with a Cohen's F of .059 ($Cohen's\ F = \sqrt{R^2/(1-R^2)} = \sqrt{.059^2/(1-.059^2)} = .059$) which indicates a very small effect (Cohen, 1988). Financial Stress had a main effect on Suicidal Ideation ($B = .148, SE = .055, t = 2.679, p < .008, 95\%\ CI = [.039, .256]$), indicating that higher Financial Stress was associated with higher levels of Suicidal Ideation. Study year did not have a main effect on Suicidal Ideation ($B = .041, SE = .030, t = 1.344, p = .181, 95\%\ CI = [-.019, .101]$), indicating that there was no association between Study year and levels of Suicidal Ideation.

Interaction Effect. The second block of the model, including the interaction-effect (Financial Stress * Study year), was significant ($F(1,165) = 6.228, p = .014$), accounting for 9.4% of the variance ($R^2 = .094$), with a Cohen's F of .094 ($Cohen's\ F = \sqrt{.094^2/(1-.094^2)} = .094$) which indicates a small effect (Cohen, 1988). Financial Stress retained its main effect on Suicidal Ideation ($B = .320, SE = .088, t = 3.643, p < .001, 95\%\ CI = [.147, .493]$). The main effect of Study year on Suicidal Ideation became

significant ($B = .231, SE = .082, t = 2.822, p = .005, 95\%\ CI = [.069, .392]$). The interaction effect too had a main effect on Suicidal Ideation ($B = -.114, SE = .046, t = -2.496, p = .014, 95\%\ CI = [-.205, -.024]$).

Therefore, the null hypothesis of Study year not being a moderator for the relation between Financial Stress and Suicidal Ideation could be rejected. This means that the moderation analysis revealed that the relationship between Financial Stress and Suicidal Ideation was stronger for participants that had been studying longer. In conclusion, Study year acts as a moderator for the relation between Financial Stress and Suicidal Ideation. Figure 6 shows the pathways that were tested. An overview of the results can be found in table 8.

Figure 6

Model Summary

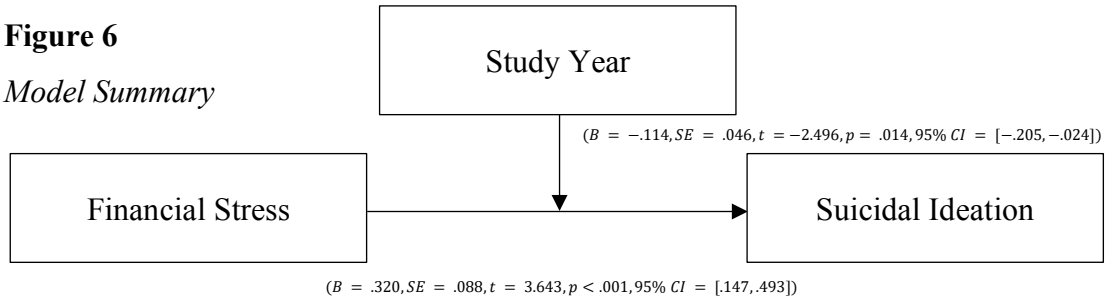


Table 8

Moderation Study year on Financial Stress Relating to Suicidal Ideation

	F	***P-Value***	***R***	***R^2***
Model Summary	6.228	.014*	.306	.094
	β	***SE***	***t***	***p***
Effect of Financial Stress	.320	.088	3.643	.000*
Effect of Study year	.231	.082	2.822	.005*
Interaction-effect (Financial Stress * Study year)	-.114	.046	-2.496	.014*

* Significant at α = .05.

3.3 Analysis of the Qualitative Data

The transcripts were examined by means of thematic analysis, using the qualitative data analysis software ATLAS.ti version 23.1.0 (ATLAS.ti, 2023). Three major themes emerged; Factors of Subjective Social Status influencing Suicidal Ideation, Positive and Negative

Aspects of Social Support, Factors of Financial Stress influencing Suicidal Ideation, which contained seven sub-themes and 11 codes. An overview can be found in table 9.

Table 9

Major Themes and Sub-themes

Theme	***Sub-themes***
Factors of Subjective Social Status influencing Suicidal Ideation.	Factors of Subjective Social Status that make life more liveable. Factors of Subjective Social Status that make life less liveable.
Positive and Negative Aspects of Social Support	Positive and negative aspects of Family/Parental Support. Positive and negative aspects of Partner Support. Positive and negative aspects of Friend Support.
Factors of Financial Stress influencing Suicidal Ideation.	Experiencing Financial Stress Not experiencing Financial Stress

3.3.1 Theme 1: Factors of Subjective Social Status influencing Suicidal Ideation

This theme reflects aspects Subjective Social Status that influence experiencing or not experiencing Suicidal Ideation. The aspects of Subjective Social Status are broken down into two sub-themes, capturing positive and negative components making life more or less liveable.

Factors of Subjective Social Status That Make Life More Liveable. This subtheme represents the positive factors, making live more liveable, which were coded as Subjective Social Status Security. They provide participants a sense of security with regards to their place within society, their pursuit of future goals and dreams, and ability to live – and keep living – a comfortable life. Accounts of Subjective Social Status Security were found 67 times among three participants. They describe seeing themselves as above average and feeling privileged:

2 | "*And I've always felt like I've been privileged in that way because I don't have to worry about such stuff or worry about how we will find housing or worry about how we will pay the tuition fees. […But since I'm here, I really, like, got to know how grateful I can be that. And I feel like I will have a lot of doors open in the future just because I have the financial methods to achieve something or come to some things that other people may don't have. So, yeah, I think it is a privilege.*"

The positive attributes of subjective social status are described also as a result of being satisfied with one's position in society regardless of whether it is above or below average:

4 | "*I'm content. Sometimes maybe I feel like I would have wanted to not be in this position and be able to do more things, like live more comfortably, not second think many choices that include expenses and stuff like this, for mostly pleasure. But I feel like after some years I kind of embraced it and it's more satisfying for me to you know kind of achieve those goals without like wishing I wasn't born like this or in this situation.*"

The accounts describe a general positive outlook on life, feeling enabled to make of life what one wants, and having the means to deal with challenges, making life more liveable.

Factors of Subjective Social Status That Make Life Less Liveable. This subtheme represents the factors that are experienced as negative influences, making live less liveable. The first of these factors is Subjective Social Status Aversity, leaving participants with a sense of being worth less than others, insecurity with regards to their place within society, insecurity with regards to pursue future goals and dreams, and being unable to live a comfortable life. Accounts of Subjective Social Status Aversity were found 41 times among all four participants. They describe seeing themselves as below average with regards to their Subjective Social Status, and the feeling of not being treated equally:

1 | "*I don't think that my depression or my sorrow or my pain, my suffering are really acknowledged right now. Yeah. What I feel is more like invisible, like micro, I don't know, maybe invisible, or just like micro-discrimination towards students and plus I'm an international student, so I don't know, maybe there's double discrimination. And at this time, I feel really hopeless.*"

3 | "*I did have a period when I was a bit younger that nothing really made sense anymore. I was like constantly tired, not really willing to do anything, not seeing any possibilities, because I come from a very small town in Poland. And then also COVID came, and I was here in the Netherlands working for a very, very low wage because I was under 21. So that made it all pretty heavy. I did have some thoughts [of suicide], but I always thought that I would never be able to do that because of my mom, because of my boyfriend, my friends.*"

The negative attributes of subjective social status are described not only in the impoverished position in society due to family background, but also describe negative aspects of their affluent position in society due to family background:

2 | "*They pretty much make fun of me about how much I pay for rent, for example, like monthly, and about the brands I wear and everything, because they just don't do that.*"

The second factor for this subtheme is Academic Pressure and Continuation of Study. This was found 23 times among three participants. It represents both students' negative experiences of studying that participants are experiencing, as well as the fear of not being able to continuate their studies:

1 | "*I think it's a high possibility that you fail the BSA and then you will kick out of the school. And I don't think that, as I'm an international student, I could take the risk of being kicked out or being dropped out, I think. And so, this kind of makes me force myself to be at school, even though I'm so depressed.*"

3.3.2 Theme 2: Positive and Negative Aspects of Social Support

This theme reflects the facets that make up the entirety of Social Support as experienced by the participants in three different areas of life, Family/Parental Support, Friend Support, and Partner Support. It encapsulated both the positive aspects like experiencing emotional and material support, as well as negative aspects like the lack of social support or stress due to conflict with members of the support system.

Positive and Negative Aspects of Family/Parental Support. This subtheme represents the aspects of social support that participants received from their family and or parents. These factors can be both positive and negative influences. The positive factors were coded as Family/Parental Support, providing participants relief and support in the form of emotional and material resources. This was found 16 times among all four participants. Participants describe getting financial support which relieved their Financial Stress, having parents endorsing their life's choices which provided a feeling of being supported in what they chose to do, and being able to talk with their parents and/or family about their encountered hardship providing relief of mental burdens:

2 | "*... I do really rely on my family. And I think that they contribute a lot to me being mentally stable and emotionally stable.*"

3 | "*But I know that my mom is doing everything she can to help me out, and I know that she always has done everything for me, so I think that matters*."

4 | "*… my family, for example, have shown me that if I have a clear goal in my head and I know that I want to do this, I know that I will have their support.*"

The negative factors were coded as Family/Parental Stress. This was found 26 times among all four participants. It refers to instances when interactions with their parents or family were considered stressful, to the assumptions of their parents' opinions or the pressure of living up to certain expectations:

4 | "*… there's this thought in my head that my parents are working hard, and they don't do enough stuff for themselves. And I kind of feel bad for them because I would have liked for them to be a little bit more profitable financially. So, I kind of feel sad for them as well and myself because there's this conflict that I shouldn't do this, but I have to do this.*"

Positive and Negative Aspects of Partner Support. This subtheme represents the aspects of social support that participants received from their partner. These factors can be both positive and negative influences. The positive factors were coded as Partner Support, providing participants relief and support in the form of emotional and material resources. This was found six times among two of the three participants that were in a romantic relationship. They describe having their partner support their life's choices, being able to stay with them if needed, and being able to talk with their partner about their encountered hardship:

3 | "*… not being able to pay for school, pay for rent, it meant that I would have to go back to Poland, to my little town, and not being able to continue with my studies. And that was pretty heavy, but I have a very supportive boyfriend, so he helped me get through those difficult times. So, it was heavy, but it was manageable.*"

The negative factors were coded as Partner Stress, which was found 15 times among all three of the participants that were currently in a romantic relationship. It refers to instances when interactions with their partner were considered stressful, to the assumptions of their partner's opinions or the pressure of living up to certain expectations:

2 | "*And I broke up with him once, and since then he thinks that every single issue means that I'm breaking up again. So that's really exhausting. And also, it makes me feel even worse about my problems because I just feel like the problems are too much for him to handle, and that he can't help me, and that it has a negative effect on our relationship.*"

4 | "*... she kind of, you know, uh, accuses me of not being responsible enough with my money. And, uh, now we're not able to do this, which makes her sad, which makes me sad.*"

Positive and Negative Aspects of Friend Support. This subtheme represents the aspects of social support that participants received from their friends. These factors can be both positive and negative influences. The positive factors were coded as Friend Support, which was found 22 times among all four participants. It refers to providing participants relief and support in the form of emotional and material resources. Participants describe having their friends support their life's choices, being able to relate to their friends, and talking about their encountered hardship:

2 | "*I feel like if I wouldn't have any social relationship or if I wouldn't have any friends or family that would support me, of course, I would feel miserable.*"

4 | "*...whenever I feel like I get anxious about stuff. I know that I have people around me who are in a similar, either social or economic status. Uh, so I know that I can, you know, count on them, and relate to them and this makes it better.*"

The negative factors were coded as Friend Stress and Isolation, which was found 62 times among all four participants. It refers to instances when interactions with their friends were considered stressful, and to the lack of friends or peers leading to social isolation, not having people around to relate to, and being lonely:

3 | "*... I don't really have many friends, only a few, and a few of them are also in Poland still, so when I see that others are hanging out constantly and partying every week, it makes me feel like I'm not social enough.*"

3.3.3 Theme 3: Factors of Financial Stress Influencing Suicidal Ideation

This theme reflects the aspects of Financial Stress that influence experiencing or not experiencing Suicidal Ideation, reflecting the facets that lead to and maintain Financial Stress,

as well as facets that protects against and provide relief of Financial Stress. The influential factors of Financial Stress are broken down into two sub-themes, which capture the protective factors – like receiving monetary support from family – leading to not experiencing Financial Stress and making life more liveable, and the risk factors – like low Family Income – leading to experiencing Financial Stress and making like less liveable.

Experiencing Financial Stress. This subtheme represents the economic and financial factors that are experienced as negative influences, leading to experiencing Financial Stress. These factors were coded as Financial Insecurity, leaving participants feeling bad about their financial situation. This was found 36 times among all four participants, equally reported by both the two participants that did and the two participants that did not report experiencing Suicidal Ideation. They describe not having enough money to last the month, and negative social aspects of not being financially independent:

4 | "*I feel like it does not directly influence my mental health, but I feel like indirectly. Because it prevents me from being more free minded and having a peace of mind that I have the options, I can do whatever I want.*"

Not Experiencing Financial Stress. This subtheme represents the economic and financial factors that are experienced as positive influences, leading to not experiencing Financial Stress. These factors were coded as Financial Security, leaving participants feeling good about their financial situation. This was found 20 times among all four participants, equally reported by both the two participants that did and the two participants that did not report experiencing Suicidal Ideation. They describe having enough money to last the month, and positive social aspects of their financial situation:

2 | "*When I do feel bad, I, for example, go shopping and that helps me feeling better. So, I also think financially speaking that when I was just sitting at home and I couldn't go to cafes, I couldn't go to the movie theatres, I couldn't go to restaurants or go shopping or just go grocery shopping and then cooking something for dinner, that would be super frustrating. But I feel like it contributes a lot to my happiness, but it doesn't really get me off from being depressed or having suicidal thoughts, because it's just not the case for me.*"

4. Discussion

By combining quantitatively gathered data and qualitatively captured experiences associated with Social Determinants of Suicidal Ideation we tried to identify underlying factors that help determine what makes life liveable. We focused on the economic and the social and cultural domains. In the quantitative phase, we examined whether Financial Stress and Social Support, separately, moderate the relation between Subjective Social Status and Suicidal Ideation. In the qualitative phase we examined how aspects of Subjective Social Status influence Suicidal Ideation, and how Social Support affects the influence of Financial Stress on Suicidal Ideation.

4.1 Interpretation of the Quantitative Results

Subjective Social Status was significantly correlated with Suicidal Ideation. The higher Subjective Social Status one reports, the less Suicidal Ideation experienced, as pointed out in table 10. This was in line with previous research (Dickerson et al., 2022; Goodman et al., 2017).

Firstly, high Financial Stress was hypothesised to strengthen the relation between Subjective Social Status and Suicidal Ideation. This was found not to moderate but drive this relation. Including the interaction effect rendered Subjective Social Status insignificant, which therefore does not have a direct effect on Suicidal Ideation, despite previous findings (Elbogen et al., 2020; Goodman et al., 2017). Both age and study year moderated the relation between Financial Stress and Suicidal Ideation, in line with the hypotheses and confirming previous research that older students suffer more from Financial Stress (Choi et al., 2021). Family Income was significantly correlated with Subjective Social Status, Financial Stress, and Suicidal Ideation, stressing the influence of the economic domain. In line with previous findings, higher Family Income was associated with higher Subjective Social Status, thus protecting against Financial Stress and Suicidal Ideation (Jeon et al., 2013). The positive correlation between Family Income and monetary support further substantiated the relation

between Family Income and Financial Stress. Individuals with higher Family Income received more monetary support and had a greater likelihood of receiving it.

For the second quantitative research question, low Social Support was hypothesised to strengthen the relation between Subjective Social Status and Suicidal Ideation. Moderation analysis revealed that Social Support indeed moderated this relation, in line with the hypothesis and confirming previous research that Social Support is a protective factor against the adverse effects of lower Subjective Social Status (Dopmeijer et al., 2022; Elzinga et al., 2022). Notably, individuals with lower Subjective Social Status reported less Social Support, highlighting the influence of social dynamics on mental well-being, as pointed out in table 13.

4.2 Interpretation of the Qualitative Results

For the first qualitative research question, thematic analysis showed the adverse effects of lower Subjective Social Status to make life less liveable, in line with research (Dickerson et al., 2022; Goodman et al., 2017). Subjective Social Status was defined as an individual's subjective perception of their position in society based on personal capital such as income, education, and occupation (Diemer et al., 2013). The interviews showed a focus on economic and financial situations, neglecting education and occupation. Prior research too, raised the issue of misinterpreting Subjective Social Status, attributing it mainly to cultural differences underlying the meaning of the word status (de Almeide Ferreira et al., 2018). Thematic analysis showed signs of Financial Stress underlying the association between Subjective Social Status and Suicidal Ideation. Participants identified factors of Financial Insecurity as the major causes for Suicidal Ideation, as pointed out in table 11. All in all, it was mainly the economic aspects of Subjective Social Status that influenced Suicidal Ideation.

For the second qualitative research question, analyses showed that Social Support protected against Financial Stress, in line with previous findings (Åslund et al., 2014). It functioned as a protective factor by providing relief, comfort, and receiving parental financial

support. Structural and incidental support contributed to a sense of well-being during distressing periods, pointed out in table 12, as was found in previous research (Miller et al., 2015). Simultaneously, it was found to be a risk factor for Financial Stress and Suicidal Ideation, as financial support from family/parents was accompanied by feelings of guilt and dependency, and interpersonal conflicts and social stress were reported by all participants. This is in line with previous research, showing social factors can act as stressors that make life less liveable (Miller & Day, 2002; Motillon-Toudic et al., 2022). All in all, Social Support demonstrated a complex relationship with Suicidal Ideation, with aspects of it acting a risk factor but in general being a protective factor against the negative effects of Financial Stress.

Table 10

Integrated Results for Subjective Social Status, and Suicidal Ideation

Quantitative results	**Qualitative results**	**Exemplar quote**
Below average Subjective Social Status and *high* Suicidal Ideation.	The Adversity of lower Subjective Social Status, and Academic Pressure (and worries about continuation of studies) making life less liveable	P01 | *I think it's a high possibility that you fail the BSA and then you will kick out of the school. And I don't think that, as I'm an international student, I could take the risk of being kicked out or being dropped out, I think. And so, this kind of makes me force myself to be at school, even though I'm so depressed.*
High Subjective Social Status and *no* Suicidal Ideation.	The Security of higher Subjective Social Status making life more liveable.	P02 | *And I've always felt like I've been privileged in that way because […] I do not pay anything myself. My parents do all of this. But since I'm here, I really, like, got to know how grateful I can be that. And I feel like I will have a lot of doors open in the future just because I have the financial methods to achieve something or come to some things that other people may don't have. So, yeah, I think it is a privilege.*

Table 11

Integrated Results for Financial Stress

Quantitative results	**Qualitative results**	**Exemplar quote**
Above average Financial Stress, *average* Subjective Social Status, and *high* Suicidal Ideation.	Financial Insecurity making life less liveable.	P03 | *I think it [adverse financial situation] did make me kind of depressed. Although I didn't really contact any psychologist or anyone about it. But yeah, I just felt very lethargic constantly. I really had very little appetite. If I could, I would just be laying in bed all day and thinking about stuff like, oh, what if I don't get the loan?… I think that was the main factor.*

Table 12

Integrated Results for Family Income

Quantitative results	Qualitative results	Exemplar quote
Upper middle Family Income, *below average* Financial Stress, and *high* Subjective Social Status.	Family affluence providing Financial Security underlying higher Subjective Social Status making life more liveable.	P02 | *And I've always felt like I've been privileged in that way because I don't have to worry about such stuff or worry about how we will find housing or worry about how we will pay the tuition fees. And I'm really grateful for that because whatever I'm worrying about is more, like, personally related or university related, but it was never really money related. And of course, I do not pay anything myself. My parents do all of this. But since I'm here, I really, like, got to know how grateful I can be that. And I feel like I will have a lot of doors open in the future just because I have the financial methods to achieve something or come to some things that other people may don't have. So, yeah, I think it is a privilege.*

Table 13

Integrated Results for Social Support, Financial Stress and Suicidal Ideation

Quantitative results	Qualitative results	Exemplar quote
Average Social Support, *above average* Financial Stress, and *high* Suicidal Ideation	Partner Support reducing Financial Stress and making life more liveable.	P03 | *...not being able to pay for school, pay for rent, it meant that I would have to go back to Poland, to my little town, and not being able to continue with my studies. And that was pretty heavy, but I have a very supportive boyfriend, so he helped me get through those difficult times. So, it was heavy, but it was manageable.*
Average Social Support, *above average* Financial Stress, and *low* Suicidal Ideation	Parental Support increasing Financial Stress.	P04 | *... there's this thought in my head that my parents are working hard, and they don't do enough stuff for themselves. And I kind of feel bad for them because I would have liked for them to be a little bit more profitable financially. So, I kind of feel sad for them as well and myself because there's this conflict that I shouldn't do this, but I have to do this.*

4.3 Integration

To draw conclusions from the quantitative and qualitative data taken together, the different phases of the study needed to be integrated (Fetters et al., 2013). At the design level, integration was achieved by through an explanatory sequential mixed methods design, using the qualitative data from phase two to explain the quantitative data from phase one. This helped to provide a thorough understanding of participants' experiences. Integration at the methods level was ensured by using a connecting approach, enabling the corroboration of both data sets. The building approach further secured integration at the methods level, which entails using the

database from the first phase to inform the data collection approach of the second phase, this enabled focussing on specific aspects of the sample, and to adapt the research questions to data. The use of a contiguous approach guaranteed integration at the interpretation and reporting level, which entails presenting both quantitative and qualitative results in a singly report, but in separate sections. Additionally, both qualitative and quantitative results are presented together in joint displays. These integrated results matrices further ensure integration at the interpretation and reporting level (Fetters et al., 2013).

4.4 Strengths of the Current Study

Despite ongoing efforts, effective suicide prevention interventions have not yet materialized, urging researchers to reconsider their approach. This study, employing an explanatory sequential mixed methods design, integrated quantitative and qualitative approaches to offer a comprehensive understanding of the Social Determinants of Suicidal Ideation. This way, it contributes to a better understanding of what makes life liveable for students in the Netherlands. The study highlights the significance of mixed methods and qualitative research in the social sciences, which has the potential to help researchers come to the needed insights into suicidal ideation and suicide prevention interventions that are so desperately needed. Also, the cross-sectional nature of the current study provides a snapshot of the target populations' characteristics at this point in time, which is relevant for researchers looking into the progression towards the UN's 2030 SDG and other researchers investigating prevalence, patterns, or associations of suicidal ideation with the independent variables (Wang & Cheng, 2020). Lastly, considering the sensitivity of the topic of suicidal ideation, the cross-sectional nature of the current study is preferable from an ethical standpoint, as it is less invasive compared to a longitudinal study.

4.5 Limitations and Recommendations for Future Research and Policy Implications

The current study has a number of limitations and recommendations for future research. Firstly, the sample represents the WEIRD population (Henrich et al., 2010), limiting generalizability. Diversifying samples is recommended to enable broader generalization. Secondly, the study had an inadequate sample size ($n = 181$) due to excluding participants. Future research should consider sample losses and recruit a sufficient number of participants to meet the power threshold (Andrade, 2020). Thirdly, the inexperienced interviewers may have hindered true openness of responses (Hollway & Jefferson, 2008). Future research should deploy properly trained or experienced interviewers. Fourthly, most participants recently moved to the Netherlands, potentially limiting their social support network. The social support experienced likely differs compared to students in their home countries or to those living in the Netherlands longer. (De Jesus et al., 2023; Snoubar & Zengin, 2022). Diversifying the sample in future research could prevent selection bias, which is a known limitation of cross-sectional study designs (Wang & Cheng, 2020). Lastly, due to the cross-sectional nature, the current study is unable to establish causality between the variables (Wang & Cheng, 2020). Future research should consider using an experimental or longitudinal design as these are better able to distinguish between correlation and causation as well as explain developmental trajectories.

Future research directions include examining Family Income as a Social Determinant of Suicidal Ideation through objective measures for socio-economic status (M. Bornstein & Bradley, 2014; Mercy & Steelman, 1982), as lower socio-economic status has been linked to worse mental health outcomes. (Macintyre et al., 2018; Reiss, 2013; Reiss et al., 2019). Ethnic differences should also be explored, considering the impact of Social Support and cultural factors (APA, 2017; Haagh & Rohregger, 2019; Williams et al., 2016). Also, future research should employ mixed methods designs as this can provide a comprehensive understanding of Social Determinants of Suicidal Ideation (Kral et al., 2012). Lastly, experimental research on the effects of family income-dependent basic income grants on mental health outcomes is

advised (Haagh & Rohregger, 2019; Marincowitz & Marincowitz, 2023; Pearce et al., 2022) as previous studies showed promising results (Ruckert et al., 2018; Wilson & McDaid, 2021).

4.6 Conclusion

Contrary to the hypothesis, the quantitative analyses revealed Financial Stress to underly, not moderate, the relationship between Subjective Social Status and Suicidal Ideation. The first quantitative research question can therefore not be affirmed. Age and study year were both associated with higher levels of Financial Stress. The second quantitative research question can be affirmed, the relationship between Subjective Social Status and Suicidal Ideation was stronger for individuals who reported lower levels of Social Support.

For the first qualitative research question, lower Family Income and Financial Insecurity were found to be the main aspects of Subjective Social Status influencing Suicidal Ideation. Higher levels of Financial Stress were linked to increased Suicidal Ideation. Conversely, higher Family Income and Financial Security acted as protective factors against mental health problems and Suicidal Ideation, making life more liveable. For the second qualitative research question, the protective role of Social Support from family/parents, partner, and friends. Sharing hardships, relating to others, and receiving financial support contributed to stress management. Parental Support, in particular, played a vital role in reducing Financial Stress. The social environment also contributed in several ways to making life less liveable, but in general was found to be a protective factor making life more liveable.

This study aimed to identify Social Determinants of Suicidal Ideation and provide leads for future research to find interventions that prevent its development. The findings indicate that Financial Stress, lacking Social Support, and lower Family Income are Social Determinants for Suicidal Ideation. Further studying these factors should enable researchers and policymakers to achieve the UN's SDG, but most importantly, it should help develop more effective strategies for preventing Suicidal Ideation and suicide by focusing on what makes life liveable.

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