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Stolen moments

a mixed-method thesis on loneliness in tertiary education

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ABSTRACT

This thesis employs a mixed-method sequential explanatory design to investigate perceived loneliness. In the first phase, using survey data from SOM-undersökningen (2023), the quantitative analysis uncovers an association between tertiary education and perceived loneliness in Sweden; diverging from established literature that links education to improved subjective health outcomes. In the second, qualitative phase, 14 interviews are conducted with students at Lund and Malmö University. A grounded theory approach is utilized in the construction of questions and in the coding. The findings of phase two deviates from those in the first phase. The effects of customary control variables—i.e. gender and age—are found not to have any major significance on perceived loneliness for students. Complex mechanisms, including the influence of cultural differences and instances of social exclusion, are instead identified as factors contributing to the experience of perceived loneliness among interviewees. Reducing the observed gap between local and international students may be a plausible way of partially dealing with loneliness in tertiary education in Lund and Malmö. For future research, it is imperative to conduct in-depth explorations into the nuanced domains of social exclusion within the academic setting, to delve into the intricate role of cultural influences on loneliness, and to investigate a proposed moderation effect of health-related variables. This study lays the groundwork for a more comprehensive academic inquiry into the complexities of perceived loneliness among tertiary education students and offers a foundation for potential targeted interventions.

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Introduction

Loneliness is a strange experience that everyone will come across, at one time or another, during their lifetime. While there might be a reason to label people lonely, the research aimed at understanding the complexities of loneliness is rather interested in the perceived feeling of the experience. Since Weiss' (1973) work on loneliness, a sociological renaissance on perceived loneliness has progressively established itself alongside the medical and psychological research on the topic. The introduction of social media in everyday life and the outbreak of Covid-19 has led to an abundance of papers – of varying qualities – examining loneliness, usually related to isolation (See e.g., Schifano et al. 2023 or Touloupis et al. 2023). What is slowly beginning to get rediscovered in the aftermath of Covid-19, is the 50 year old distinction created by Weiss: that is, the two typologies of perceived loneliness. Social loneliness is in short a nonkin need of social provisions of social integration. Emotional loneliness stems from a deficiency of attachment (Weiss 1973). For the major sociological advances in recent years, these typologies have spearheaded the notion that loneliness arises from deficits in social networks (Sawir 2008). Generally true for the research, however, has been the difficulty of quantifying emotional loneliness. While social integration is met with a few parameters in the different survey databases – such as work-life socialization and social engagement – variables for emotional loneliness are scarce.

The aim of this thesis is to provide a betterment of the understanding of the machinations of loneliness. Building on top of this, came the notion of conducting a mixed-method sequential explanatory study, where phase one was to be quantitative and phase two qualitative. This was done to encapsulate the general tendencies, but also to give way for the more overseen elements of loneliness. A mixed-methods study is contingent on using both qualitative and quantitative methods. Customarily, giving the statistical results precedence is the way to go (Ivankova, Cresswell & Stick 2006). However, the priority of the thesis was given to the qualitative phase, as the intricacies of loneliness were brought to light in the oral records of interviewees (Victor & Yang 2012). In the first phase of the study, the quantitative research question sought to uncover the general tendencies of loneliness. Because the author of the paper is a student at Lund University, it was decided that the qualitative phase was to be held in Sweden and thus to quantitatively examine loneliness in Sweden as well. Phase one research question is as follows: 'What are the drivers of perceived loneliness in Sweden?' This does not suggest that data from other countries is off-limits, as findings suggest that countries of both similar and non-similar welfare structures have comparable loneliness attributes (See, Dahlberg et al. 2022; Yildis & Duyan 2022). The statistical results of phase one informed the selection of 14 respondents to be interviewed about perceived loneliness in the second phase of the study.

Phase one

Existing research

Reviewing the contemporary quantitative literature from a sociological point of view, three major fields of inquiry emerged. The first one views loneliness through a lens of social exclusion, remaining true to the idea that man is a social being in need of inclusion within social life (social integration). The second takes spatial differences into account, acknowledging differences in how loneliness emerges within societies depending on their level of individualism or collectivism. The third field of inquiry is largely a critique of how research has disregarded the symptoms of loneliness; instead looking at the motives of the phenomena.

The first field, which had most relevance for the thesis, is the perspective of inclusion/exclusion. Dahlberg et al. (2022) find that 11.2 percent of the variance of loneliness can be explained by social exclusion, with household size being a large indicator associated with loneliness. The biggest association of loneliness in their study is the difference between single compared to two-person households. Further prevalent when looking at household size is the finding that divorced and widowed individuals show greater measures of loneliness than non-divorced or non-widowed singles (Morgan et al. 2021). Complimentary to this is the theory of the 'greedy marriage', which suggests that long-term singles may pertain their social selves in a more direct manner, while married couples instead direct their attention inwards, toward the dyad that is marriage. Divorced, separated, and/or widowed elders would therefore be more susceptible to loneliness and depression than long-term singles (Kislev 2022). This idea posits that social capital has a positive effect on loneliness related to marital status. Hereby covered have been: social relations and, partly, material resources. Lee (2021) proposes, along with those provisions, civic participation, basic services, and neighborhood cohesion to also be crucial domains for examining social exclusion. These domains of social exclusion touch upon something imperative to the research at hand: social exclusion implies partial agency. It is relational and it has a plethora of suggested areas of production (Albuquerque et al. 2023). This in term, should be seen as a major obstacle in knowledge production of both social exclusion and loneliness.

The efforts of the second field could be viewed as interdisciplinary advancements. Within both the sociological and political science research invested in loneliness, differences in countries have been identified. Higher levels of loneliness have been observed in collectivistic societies compared to individualistic societies, although the attributes are similar. These are thought to be produced through the gaps in individual needs, i.e. social provisions. In collectivistic societies, a larger emphasis is put on family-relations, whereas in individualistic societies, friendships can act

as a counterweight for a lack in family-socialization (Lykes & Kemmelmeier 2014). The literature is not entirely coherent on what collectivistic as well as individualistic societies refer to; whether it is indexed freedom, family relations or individualistic tendencies. Swader (2019) acknowledges that: members of individualistic societies that behave individualistically, i.e. independent, may be at a heightened risk of loneliness. That said, the study also found that individualistic societies are less likely to produce lonely individuals. Backtracking to marriage status, Nyqvist et al. (2019) finds an absence of lonely married or partnered individuals throughout different welfare regimes. This suggests there to be a protective effect of close or intimate relationships, regardless of welfare regime. There is hereby a slight divergence within the research associated with loneliness and welfare regimes, one that might be politically relevant.

The last relevant field of inquiry aims to explain the consequences of (prolonged) loneliness. The general indifference toward the symptoms may be a fair critique of the social science research devoted to loneliness; often citing the medical conditions that health sciences have discovered relating to loneliness, but disregarding the societal consequences (Langenkamp 2021). This fallacy could be coined as the social-physical-paradox, where social phenomena make up the reasons for loneliness, but physical issues (health problems) make up the outcomes. The psychological progresses are alas bigger in this domain, as seen with the finding of momentary loneliness acting as a pro-social motivator: short term loneliness might inspire or push individuals to socialize (Bellucci 2020). Prolonged loneliness on the other hand, is generally what is emphasized in loneliness studies.

Methodological approach

Reviewing the quantitative options for phase one, the Swedish SOM-undersökningen (2023) by Göteborgs Universitet has been selected as the main survey of the thesis. SOM-undersökningen is a national survey conducted through 7 parallel forms. Each form is sent out to 3,500 randomized respondents (via a probability sample), ages 18-85. Both Swedish and non-Swedish citizens were eligible for the survey, which was of great importance during the latter part of the thesis. Although The European Social Survey (ESS) is generally considered to be the most accurate and best fitting for longitudinal and cross-country studies, its last use of a loneliness variable was a single-item measure last issued in round seven (2014). From personal correspondence with the ESS Data Archive staff, the author of the thesis learnt that the ESS' loneliness variables are not part of the core questionnaire. An alternative to the ESS could have been the International Social Survey Programme (ISSP 2017), but it also utilizes a single-item loneliness variable.

Recent ESS (2014) papers make use of the single-item loneliness variables in either one of two ways: recoded into binary where anything but a 'never lonely' is a yes (Dahlberg 2022; Nyqvist et al 2019 & 2021; Swader 2019) or into binary where anything up to 'sometimes lonely' is a no (Rapoliené 2022). The fact of there not being any standardization in place for binary loneliness measures may be debatable. SOM-undersökningen, contrarily, employs the academically acknowledged UCLA 3-item loneliness scale (Russell 1996), in its seventh parallel form. Although it has been disputed whether or not multi-item loneliness scales increase measurement quality (Lykes & Kemmelmeier 2014), it was decided that a quantitative measure was preferred over binary measure.

For the independent variables of the study, customary control variables were at the forefront, in an effort to comparatively rely on prior research. While specific measurements of social engagement and feelings of safety are interesting, the statistical findings have been inconclusive in some aspects (see Nyqvist 2019). Looking specifically at the drivers of loneliness, feelings of safety have not been measured to have any large effect.

Measures

The UCLA 3-item loneliness scale made up for the loneliness index (*N*=1560) used throughout the quantitative analysis as an outcome variable. The index consists of the questions: How often do you feel… "a lack of company"; "left out"; "isolated from others" (Cronbach's Alpha: 0.816). This suggested an appropriate internal validity, meaning that answers did not differ to any substantial effect. Answering categories were "never" (1), "seldom or rarely" (2), "occasionally" (3), "always" (4). This created an index of the scale 3-12. The index was in turn inverted, so that 12="never", 3="always", which enables positive beta coefficients for associations that reduce loneliness in the regression analysis, with the intent of making the analysis more practical to read.

Socio-demographic factors controlled for include gender, age, relationship status, household size, income, university studies, self-rated health and trust towards others (see table 1). Relationship status was coded binary, where 0="single"/"widowed", 1="in a relationship"/"cohabitational relationship"/"married/registered partnership". As relationship status and household size have similarities, such as cohabitation, it was decided to use them both in model 2 of the linear regression analysis. Household size was coded into 0="one person household", 1="shared household". The income variable used was split five-ways where 1=low income, and 5=high income; it was the only ordinal scale used throughout the modeling. Furthermore, university studies was coded binary. Having studied at university or currently studying was coded 1, anything else 0. Self-rated health

Table 1. Descriptives

	N	Mean/%	S.D.
Loneliness, 3-12	1560	9.29	2.07
Male, 0-1	1550	49%	
Age, 16-85	1654	54.09	18.58
Relationship status	1563		
Single		21.8%	
Widow		4.5%	
In relationship		6.5%	
Cohabitation		20.4%	
Married or registered partner		46.7%	
Household size (living with others), 0-1	1562	78%	.41
Income 5-way, 1-5	1523	2.81	1.35
University studies, 0-1	1548	42%	
Self-rated health, 1-10	1570	7.35	2.04
General trust towards others, 0-10	1563	6.59	2.20
Trust towards people in neighborhood, 0-10	1540	7.38	2.13

was included as a scale variable, where 0="very poor", 10="very good". Lastly, an index of trust towards others was created with two variables. The questions in the form were: In your opinion, to what extent do you think people can be "trusted in general"/"trusted in the area where you live"? Answering choices ranged from 0="You can not trust people", 10="you can trust people", making up a 0-20 point scale. Cronbach's alpha was 0.85. The internal validity of trust towards others was high enough to employ it as an index in the following analysis.

Results

A linear regression analysis was conducted to examine effects on loneliness (see table 2). Five models were used to evaluate changes of the Adjusted R^2; it was decided to be used over a regular R^2 in order to correct for overestimation as well as to detect potential decreases in the variance. In the first model, a low adjusted R^2 (.018) confirms that gender and age have little effect on the variance on perceived loneliness. This would explain the previously acknowledged incoherency of whether women or men are more lonely (Nyqvist 2019; Kislev 2022; Yang 2018). Albeit, a positive beta coefficient of gender associates males with less loneliness ($B = .445$, $p < .001$). Regarding age, a positive beta coefficient implies that perceived loneliness decreases with age ($B = .010$, $p < .001$). What should be taken into consideration with this information is the finding of a non-linear U-shaped curve relating to age (Victor & Yang 2012). A drop in loneliness is prevalent from the age of 25 until around 65, where an incline starts to emerge (Appendix 1.1). Middle aged people are the least lonely. This red herring of a non-linear beta coefficient is, however, not only prevalent for loneliness and should be taken into account for all studies employing age variables.

Relationship status and household size are added to the second model, where one of the two bigger changes to the Adjusted R^2 (.084) is seen (Adjusted R^2 change = .066). This provides explanatory value to the effect on the variance of loneliness. Being in a relationship, living in a cohabitual relationship, or being married lessens the impact of perceived loneliness ($B = .820$, $p < 0.001$). Living together with others also diminishes perceived loneliness ($B = .445$, $p < 0.01$). Whilst this provides an analytical advancement, it should also be viewed in light of the two variables having been binary coded. There are also parameters not accounted for, such as social capital and integration. Social capital has been found to have a big influence on loneliness relating to marital status (Kislev 2022). Loneliness is also related to living conditions and social integration, which in term are both linked to relationship status and household size (DiTommaso & Spinner 1997; Nyqvist et al. 2019). One study finds a direct link between living alone and an increased likelihood of perceived loneliness (Dahlberg et al. 2022).

The third model examines the effects of income and university studies. These variables have been paired as they were found to be correlating: higher education was associated with higher income (Appendix 1.2). Income has a positive association to the index ($B = .238$, $p < 0.01$), linking a higher salary to reduced perceived loneliness. In a tangential study, Ye & Shu (2021) find that economic impoverishment or socioeconomic status is not the leading source of social disintegration, leading to emotions such as perceived loneliness. University studies is the only variable with a

Table 2.

Linear regression analysis of loneliness: 3=often lonely, 12=seldom lonely

	Model 1		Model 2		Model 3		Model 4		Model 4	
	Beta	S.E.	Beta	S.E.	Beta	S.E.	Beta	S.E	Beta	S.E
Constant	8.548	.176	7.522	.211	7.092	.238	5.358	.284	5.128	.297
Male Coded: 1=yes 0=no	.445***	.108	.400***	.104	.239*	.107	.253*	.104	.264*	.104
Age Coded 16-85	.010***	.003	.010***	.003	.012***	.003	.013***	.003	.012***	.0032
Relationship status Coded:0= single/widowed			.820***	.170	.639***	.174	.540**	.168	.522**	.168
Household size Coded: 0-1			.542**	.185	.608***	.184	.580**	.177	.581**	.177
Income Coded: 1-5					.238***	.044	.169***	.043	.158***	.043
University studies Coded: 0-1					-.373**	.115	-.371***	.111	-.399***	.111
Self-rated health Coded: 1-10							.262***	.025	.242***	.026
Trust towards others Coded: 2-20									.036**	.013
Adjusted R^2	.018		.084		.101		.163		.167	

Note: p* < 0.05, p** < 0.01, p*** < 0.001

negative coefficient ($B = -.373$, p < 0.001), insinuating that social factors relating to the universities of Sweden could account for increased loneliness. The adjusted R^2 is, nonetheless, quite small (.101) with an R^2 change of .017. This signifies that the magnitude of the association of income and university studies on the effect on the variance of loneliness is not immense. Yet, it implies that there is an association between the two variables and loneliness. Interestingly, education has been linked to good health, both physical and mental (Ross & Wu 1995; Victor & Yang 2012). Thus, an association between tertiary education and loneliness suggests a gap in knowledge, as perceived loneliness has been found to correlate with poor mental health (Hyland et al. 2019). This association went on to become the central part of the latter half of the study. Furthermore, the male association to reduced loneliness diminishes ($B = .239$, p < 0.05), as variables income and university studies are added.

As a discriminatory variable, self-rated health ($B = .262$, p < 0.001) has been introduced into the fourth model. A big spike in the Adjusted R^2 (.163), with a change of .062, further legitimizes the medical scientific enquiries into loneliness. Although health and loneliness are evidently interconnected, the sociological preference toward social mechanisms may diminish the perceived influence of self-rated health. Prior sociological studies have, however, found self-rated health to be of importance, as with Morgan et al. (2021) who find Ill-health and loneliness to be reciprocatively connected. Poor health is further associated with young adulthood and midlife, but to a lesser extent for older adults (Victor & Yang 2012). Moreover, the adding of self-rated health to the fourth model lessens the effect size of some beta coefficients, such as relationship status (B change $= .099$) and income (B change $= .069$), signaling that health may work as a moderator of perceived loneliness.

Lastly, in the fifth model, the index of trust towards others does not have any substantial effect on loneliness with an Adjusted R^2 change of 0.04. Still, it signifies an association between higher trust towards others and decreased loneliness ($B = .036$, p < 0.01). This has nevertheless been the highlight of prior studies, such as with Rapolienė & Aartsen (2022), whose findings link low levels of trust with social disengagement; in turn associated with increased loneliness. This further validates the qualitative inquiries in phase two – how social engagement and sense of community belonging may work to reduce loneliness.

Discussion

Illustrated in the state of the art above is the emphasis on the role of social exclusion in relation to perceived loneliness, with a direct association between social integration and lowered levels of loneliness (Dahlberg et al 2022). Exclusionary mechanisms may be tied to heightened levels of loneliness and/or emotional/social isolation (Lee 2021; Kislev 2022; Morgan et al. 2021). This is

demonstrated in the second model, where increased household size and relationship status provide explanatory effects on loneliness, as a considerable change in the Adjusted R^2 is noted.

The most unanticipated finding comes from the third model, in which an association between tertiary education and exacerbated perceived loneliness is observed. The validity of examining this finding in phase two of the thesis has been further propagated by a general indifference towards the effects of education on perceived loneliness (E.g. Baretto 2022; Rapolienė & Aartsen 2022; Swader 2019). Although the change in R^2 is not vast, the scarcity of papers examining education and loneliness made the association more compelling.

The fourth model indicates that subjective ill-health can be linked to higher levels of perceived loneliness, mostly for young adults and midlife adults (Victor & Yang 2012). Between model 3 and model 4, a large leap in the Adjusted R^2 signals that health variables may be essential for gaining a better understanding of loneliness. They may also act as moderators, which would be an appropriate subject for future studies.

Phase two

Introduction and theoretical overview

Through the statistical findings and acknowledgements of past reports in phase one, the qualitative research question for phase two was formulated as: 'In what way do social factors exert influence on perceived loneliness of students at Lund and Malmö University?' The associations of age, relationship status, household size, and most importantly university studies, helped define the question's focal points of inquiry – albeit, there were many more social factors to account for. Instead of adding to the wholly unnecessary contention of quantitative versus qualitative methods, the mixed-method enterprise sought to bridge a knowledge gap that lies in the dichotomy of methods. This undertaking was further supported by the identification of "key risk factors" that are difficult for surveys, say SOM-undersökningen or ESS, to represent, such as expectations and/or self-efficacy (Victor & Yang 2012). Narrowing the scope resulted in fewer prior studies to consult, as loneliness at university was deemed not to have been thoroughly investigated in Sweden. A prominent study from 2008 finds this knowledge gap to be extant in other countries as well (Sawir et al. 2008). The study finds that two thirds of international students in Australia experienced feelings of perceived loneliness and/or social isolation. This was most prominent during the first months after arriving, something taken into account during the operationalization process of this thesis.

Methodological approach

For one month, between May 3 and June 3, 14 interviews were conducted with students from Lund and Malmö University. The interviewer, ditto the author, came into contact with the students through placards – saying "Students wanted for interviews on loneliness! [sic]" – posted at designated study areas as well as outside lecture halls across both universities. The placards in turn had scannable QR-codes that led to a short survey consisting of 11 questions. The questions in the survey regarded nationality, gender, age, university, study discipline, accommodation and level of loneliness (through a revised UCLA 3-item 3-point scale[1]). With information provided from the respondents, a purposeful sample became possible to implement.

Out of 24 respondents of the survey, along with a few personal correspondences' solely through email, 14 interviews were conducted in-person. The sample became a criterion one, as most of the respondents cited some level of loneliness. Two outliers on the low end of the loneliness index were included. Translated into a 1-6 degree scale – where 1 meant "never lonely" and 6 meant "often lonely" – the mean loneliness was 4; median was 5. Ages ranged from 20 to 57. Mean age was 27.36; excluding one outlier, 25.08. The interviews consisted of 9 women, 5 men. To account for cultural differences, half of the interviewees were of some other nationality than Swedish. These nationalities covered three different continents. For comparative purposes later on, the value of SOM-undersökningen (2023) surveying both Swedish and non-Swedish citizens should be noted. Study wise, interviewees were all reading different subjects. Disciplines covered were natural and applied sciences, social sciences, and business. Master studies were most common.

Operationalization of interviews and analysis

The interviews were principally conducted at on site private group study rooms at the two universities. One interview was conducted outside in a park, and one at a café. Lengths of interviews varied from 25 minutes to 57 minutes. Mean was 30 minutes flat. Interviewees were offered a coffee on behalf of the interviewer[2] and were introduced to the study's aim and target. The interviewees also had to give informed consent to the interview being recorded, before the interview proceeded. They were made aware of the statistical findings upon request after the interview was conducted.

The method of inquiry for the interviews was semi-structured, loosely pursuing a grounded theory oriented operation. This allowed for the quantitative findings to generate questions, but for

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[1] With my own revision of three answering alternatives: "Hardly never or ever", "Some of the time" and "Often".

the interviewer not to be beholden to them; being able to take detours and to follow up on points of interest. The interview questions were at first based on five postulated domains of loneliness: the academic domain (1), the household domain, i.e. emotional loneliness (2), and the social domain, i.e. social loneliness (3). Furthermore, a line of questions aimed at troubleshooting were established to act as an offset to the three domains of questions. These regulating questions were based on finding other reasons for loneliness, such as personal or socio-political (4) – in other words, tangential to psychology and/or political science. Lastly, questions that directly approached loneliness (5), with the UCLA 3-item scale, were also included to verify the reliability of the survey (no major differences in perceived loneliness were observed between the survey and the interviews). In the result section, the scale was coined PL, for perceived loneliness.

Examples of written and unwritten questions were: "Do you enjoy the subject that you are studying?" (1); "How do you feel about your accommodation?" (2); "Does the time you spend with your friends feel like quality time?" And "Do you feel like your social needs are fulfilled?" (3); "Do you feel like 'reaching out' has been necessary to do in Sweden, compared to [country of origin], for instance?" (4); "How often do you feel… 'a lack of company', 'left out', and 'isolated from others'? " (5).

Toward the end of the 7th interview, the structured questions were deemed to be somewhat exhausted of new findings. It was acknowledged that the previous distinction of domains had not accounted for socialization, or lack thereof, being an overarching theme – this was conveyed all throughout the accounts of the interviewees. Approaching that point, a more direct approach to grounded theory had been taken in hopes of generating more theory. Questions became more specific: "How does that feel, the change in expected competency?" (1), "Do you think that the negative connotations you have toward the last few years are because of feelings of academic failure?" (1), "Would you say that your peer-to-peer learning has been advantageous?" (1); "Would you say that your social needs are met through your volunteering and your accommodation?" (2 & 3).

Transcribing of the interviews was done word-for-word. Swedish interviews were transcribed verbatim into English. The analytical operationalization followed an inductive open coding, consulting the observations and findings of phase one along with academic papers and theories. Akin to Charmaz' conception of grounded theory (2014), coding was not done to discover theory. Instead, construction of theory was the focal point of the analysis. This allowed for an acknowledgement of the methodological quagmire of finding data that fits a certain theory, where there in actuality might not be one.

Results and analysis

University studies

'If you for example want to become researchers or scholars, /…/ then you will have to prepare for your best friends to become your worst enemies'. (#12, PL=5-6)

I meet this guy who tells me that, yeah: he finished the gymnasium a year early and jump directly into university studies, and that he is doing a double-bachelor's. And [I'm] just like: this is a big bang character, a big bang theory character. These types of people aren't for real, people who just skip a year and do double bachelor's. (#14, PL=3)

The ones who stayed /…/ – in all classes during highschool and the gymnasium there were one or two girls that were nerds, with like 15 different colors [colored markers] /…/ – this class consists of only those types of girls. (#1, PL=4-6)

A distinct feature of loneliness related to university studies were the external pressures that weighed down on respondents. For some, it was pressures coming from teachers, as with the account of respondent #12, who cites their course administrators' first words of the programme introduction – calling upon students to prepare for social upheaval, may act as an exemplary segway to perceived loneliness. For others, it was the feelings of inadequacy and competitiveness. Respondent #14 recalled the meeting with a straight-A student, citing disbelief of the capacity that their counterpart had advertised. Whilst not necessarily true for respondent #14, self-doubt in one's own academic abilities has been found to be associated with perceived loneliness (Arslan 2010). For respondent #1, the class was to be split into two parts, the people who dropped out and the ones who clanged on.

I was basically invisible here. And suddenly because I started doing it [something of academic importance] or because I proved myself capable of something: suddenly it's like day and night. (#7, PL=1)

We were all relatively knowledgeable in some discipline. We had a bachelor's degree in our backs, and, well, we had gotten accepted. /…/ It felt meaningful to be there and it felt good. But then it became quite clear-cut, actually: the competition. (#12, PL=5-6)

In the rare cases when I have had, like, study groups or peer-to-peer learning, those are the courses that I passed on my first attempt. (#7, PL=1)

Achievement was a prominent theme for a select number of interviewees. Respondent #7 spoke about accomplishment as something crucial for visibility, imperative for not getting disregarded or neglected. Recognition from their institution felt strange, as they had previously been overlooked. A corresponding recollection was detailed by respondent #12, who felt an inclusion through their academic achievements. Mutual feelings of respect by classmates was felt, as

everyone had fought to make the admissions. Furthermore, achievement had a linkage to group work, outlined by respondent #7. Group work has been academically associated with a reduced perception of loneliness (Yildis & Duyan 2022).

Accommodation

"It is hard, finding ones [my] type of people. But to be in big groups and to have big parties, has never really been my thing. So I have become a bit isolated from the corridor." (#1, PL=4-6).

Living at home in a city like this is so isolating. And people that come from other cities, they are sort of forced to socialize and make new friends because they're lonely. But me: because I have parents [here], the reason also why I haven't been mixing so much is because I go straight home from lectures…(#2, PL=6).

I'm very conscious that other people have lots of social spheres they have access to, and I think maybe I don't view the people I have access to as broadly? Like, I know I have people I could socialize with, but I feel most comfortable with my housemates. And I see that they also have that dynamic with other people as well. (#10, PL=5)

To come home after school and job, and that there is someone home. Or that you are supposed to meet someone [a partner] at home later, it felt safe and comfortable. Yes: the opposite of loneliness, then. (#12, PL=5-6)

Accommodation was found to be a factor of perceived loneliness, emanating from various dimensions. As students often share facilities, if not entire kitchens or houses/apartments, neighborhood cohesion may be associated with increased levels of social inclusion/exclusion (Lee, 2021). On one hand, being alienated from social life within the student accommodation was expressed as a concern for some, such as respondent #1. This ties in to Weiss' idea of students experiencing both personal loneliness and social loneliness at the same time (1973); the first one being a loss of close contact with families, the second one being a loss of social networks. On the other hand, some respondents, such as #2, lived with their parents, which was described as a different type of estrangement of social life. Unbeknownst to the literature on loneliness, respondent #2 essentially outlined the whole idea of momentary loneliness being a pro-social motivator (Bellucci 2020). A tie between social loneliness and momentary loneliness for young people moving to new places has also been found (de Jong Gierveld & Van Tilburg 2006). For respondent #2, living at home did not carry this enforcing power of motivation. It instead acted as an immobilizer.

One worry that was raised by respondent #10 was the feeling of cohabitants surpassing oneself socially. A perceived lack of social capital in comparison to others may have an influence on perceived loneliness. For respondent #12, the home along with a partnership had been associated with feelings of safety. Although the evidence on safety and loneliness is vague, this may act as an

indicator towards an association. For older adults in Sweden, lowered neighborhood safety resulted in an increase in perceived loneliness (Dahlberg et al 2022).

Age

> We have people who just finished their bachelor's at like 22 [years of age] and we have people in their mid 40s with, like, children. And they obviously don't have the time to socialize the same way that some of the younger students do. (#10, PL=5)

> I don't really see myself befriending a 20 year old. (#13, PL=4-5)

> The older one gets – and this is generally said – it also becomes harder to arrange get-togethers. (#4, PL=4)

> I think that I am generally happy with them, that I am. But it has also been, a process of, maybe identifying, as you said, a 'quality' out of the time you spend with each other. (#4, PL=4)

Age was not thoroughly investigated in the interviews, but it brought some important input. Respondent #10 spoke of a big age range within their master's programme. Loneliness here was not tied to specific ages as much as it was to the inherent differences in circumstances for the socialization of different age groups. The same age gap was illustrated by respondent #13, who studied a master's programme in a different discipline.

One finding came from respondent #4 who talked of how age changes the dynamic of socialization. They stated that it becomes more and more difficult to find time to socialize as people age. This led to what would become central to the rest of the study: social quality over quantity. Answering the question, 'Does the time you spend with with your friends feel like quality time?', respondent #4 related it to an identification process of what constituted quality time. Drawing upon that, along with the association of a drop in loneliness from the age of 25 (Victor & Yang 2012), an assumption was made that a desire of identifying quality connections may be proliferated in the mid 20s.

Cultural differences and belonging

> I think I would have a much easier time if I was in my home country, as compared to Sweden. So I don't think it's the university, I think it's the type of people – the culture aspect. /…/ Why people are close in my home country is because of the welfare. So your family is your welfare. /…/ I think that is why people in my home country are closer to each other, as compared to here. (#2, PL=6)

Cultural differences were persistently raised as influencing factors of exclusion by the respondents (#2, #3, #5, #6, #7, #10, #13, #14). Respondent #2 described differences in how people related to one another when comparing countries. Contrasting this with the findings of Swader (2019) and

Lykes & Kemmelmeier (2014), the concept of welfare may not exclusively range from collectivistic and weak, to individualistic and strong. Although differences in familial ties have a lesser impact in individualistic societies, the stark adjustment in where the welfare lies may pose a difficult process for people coming from more collectivistic settings.

> There is always downsides – I always feel like that, when I'm studying abroad, like treating [sic] as a foreigner. /…/ Like, all the activities [are] based on 'I'm an outsider' and not [sic] know much about the place. (#3, PL=3)

> Loneliness and belonging are very closely associated in my mind. I think that in spaces where I feel like I belong, I don't experience loneliness. (#10, PL=5)

> If I'm in this space with all Swedes, and they speak in Swedish, I have to actively remind myself that, like, I belong in this space, as a way to overcome the barrier of loneliness. (#10, PL=5)

> If you're not Swedish, there is no 'in'. /…/ And if you don't, yeah, get sort of like the cultural gist of things, then you're sort of, left out a bit. (#13, PL=4-5)

> I came here to experience the culture and without knowing it very well, I assumed that it could be my time to invest more in social relationships. /…/ Ironically, the time-study life balance allowed me to do so, but I felt that even the nations, the way nations are created as organizations that mostly engaged students are… was the kind of a limit for me because I did not like what they created, like the event[s]. I did not feel any motivation to join. I applied [myself]. I was really, like, [in] the first week, I was really looking for my place, but I felt that's not what I want to do. I don't want to do clubbing. (#9, PL= 4-5)

Feelings of perceived loneliness relating to cultural phenomena were also detailed through varying accounts of experiencing a heightened sense of playing the role of a foreigner. Alshammari et al. (2023) find that social isolation is extensive for international college students living in another country. For respondent #3, being treated as a foreigner resulted in the burden of feeling like an outsider during social events, projecting itself onto perceived loneliness. This was further emphasized by respondent #10. They also stated the 'Student Nations'[3] in Lund to be a contributing factor of a two-sided belonging for them, considering the urge of overcoming certain barriers. Respondent #13 too, implied that the Swedish language that dominates the Nations had a partially segregative effect, as they rely on prior cultural knowledge. The accounts that were absent of recollections of language barriers or underlying bias, were not entirely sold on Student Nations either. For respondent #9, the internal structure of the student nations was an issue. Levels of participation and volunteering have been found to be determinants of loneliness (de Jong Gierveld

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[3] In Lund, 'Student Nations' are for some an integral part of the student life. All university students can volunteer at brunches, bars, clubs, and events held at the student nations. Because of the non-existent labour cost, the student nations can maintain cheap prices for drinks and food. If one invests their time in one of the student nations, they may get elected to manage certain events.

& Van Tilburg 2006). For respondents #10, #13, and #9, they instead functioned as exclusionary mechanisms.

> I would want the pressure of meeting people. (#2, PL=6)

> With other international students, there's still an easier script how to get to know each other and also, a different, like, relating to each other, even though we are different, there is still something we have in common and that is that we are foreigners here. (#5, PL=1-2)

> We had more international students before, and back then I think it was a bit more social. (#8, PL=5)

> This way, all my weirdness could be chalked up to just the cultural gap. (#7, PL=1)

Momentary loneliness seemingly affected some international students in a positive fashion. By being excluded from the various safety nets that the Swedish students could rely on, some instead approached social life head-on. One account of having seen this was Respondent #2, who at the time of the interview lived at home with their parents. What can be seen in Lund, taking that into account, are the clusters of non-Swedish students. Respondent #5 talked about a certain commonality of foreigners, where their differences to Swedish students were a uniting force. In a study conducted in Australia, a type of loneliness coined 'cultural loneliness' was identified (Sawir et al. 2008). This loneliness may in some aspects disregard both social and emotional provisions, instead being triggered by an absence of favored language and cultural preferences. The major finding of the Australian study was that international students often depended on same-culture networks. Entailed by respondent #5, same-culture networks came in the form of all international students, as opposed to local students. Whether the pressure of having to socialize was the protagonist here, or if it had something to do with a Swedish non-Geist, the common denominator may be summed up by respondent #8, who spoke about their student corridor, implying that the mutual understanding of international students could foster an environment of socialization. Respondent #7 had a different outlook on life as an international student. For them, being labeled different, by virtue of them being a foreigner, was in some sense a freedom. They were able to act as themselves, playing into a stereotype that is associated with certain behaviors.

Deeper connections and relationships

> I am the type of person: I don't like having many friends, but I like having a few loyal ones. And I feel like this is harder to achieve, in this milieu, at university, because it is a lot of big networks, lots of big parties. (#6, PL=5)

> Well, maybe not more, but deeper. Because I have many that I know and that I have socialized with during lectures, sometimes outside. But it is more acquaintances, than perhaps deep friends [relationships] like the ones [I] had in the gymnasium or in primary school. (#8, PL=5)

> I'd like to have more, more friends, yeah. But also, I think also like friends with more similar interest. /…/ I think for me to get to the sort of, like, level of Swedish where I can make meaningful connections in Swedish; I think that would like take a lot of time and effort that I just don't have to… I just don't have the time for that with studies. (#13, PL=4-5)

> You get to know friends through friends, and that doesn't happen to me anymore, because I know too few. (#6, PL=5)

A yearning for deeper connection was found with almost all interviewees. Respondent #6's poignant testament may act to conclude the general conception of the matter. They talked about the university setting being troublesome for those wanting more out of their social circle than just to party. Respondent #8 gave a similar account when asked about whether they felt like they had a fair amount of social contacts, or if they wanted more acquaintances. Likewise, Respondent #13 longing for meaningful connections, but a lack of time and/or effort, signaled a tendency that was common for all respondents. Weiss (1973) concludes that no single relationship can make up for all of one's social provisions, that being one's needs. Loneliness stems as a result of loss of these provisions. What deeper connections meant for the respondents was not entirely clear. From Weiss' perspective however, it could be hypothesized that reassurance of worth, attachment, or opportunity of nurturance may be the deficits to blame. For the last account of respondent #6 they spoke about how knowing people creates more opportunities to get to know people. This is referenced in the literature as a reciprocity of relationships, that the holders of satisfying relations receive the most provisions (DiTommaso & Spinner 1997). Thus, experiencing a negative reciprocity is all the more likely for the lonely, "when it has shrunk to the point that it doesn't propagate any further" (#6).

> We started dating after I moved here … But that might have also been, like, why, I was unstable with different social contexts, because I knew I had one person. But we wanted, like, we didn't want to hang out too much so that I could build other social networks, but it was maybe just the time and like knowing I have one person to rely on that made me a little bit less active. (#10, PL=5)

> I had a lot invested into my identity as a student at the university, for instance, and I had a very much invested into my identity as a partner to this person. (#12, PL=5-6).

> My expectations are going to be a bit different, because I am single. /…/ I am not really sure how I am going to act socially, it's a bit new. (#12, PL=5-6)

One type of deeper connection can be in the form of a romantic relationship. As pointed out by DiTomasso and Spinner (1997), there is a level of reciprocity of having satisfying relationships, and that deficits in romantic relationships may be categorized into a domain of emotional loneliness. A question that got raised was whether a partner can countervail a lack in other social spheres. IP #10 introduced the notion of a partner holding their social self back, and how they tried to negate that through branching out their own social network. Another respondent detailing a

similar trend was #12, who had part of their perceived identity invested in the idea of being a partner. The theory of the 'greedy marriage' (Kislev 2022) comes into play here, as the personal investment of relationships was questioned by respondents. As an identity dependent on maintaining a relationship is dissolved, questions of social capital start to emerge. Respondent #12, now single, followed up with a change in expectations, and an uncertainty toward their newfound social self.

Loneliness as self-induced and the student health

I have a personality that makes it easier to fall out of face. (#7, PL=1)

I learnt quite early on that if I am lonely, then it is probably my own fault. /…/ It is often the case that newcomers should consciously and actively assimilate themselves. And that is something I am not very good at. (#1, PL=4-6).

I was focusing in the first months of my experience here in Lund in creating other groups outside of the class to be more engaged [in] /…/ and they [the classmates] were on the contrary; they were trying to create their own groups within the class. After, I don't know, one month, groups were established and I felt I was outside. I was outside. (#9, PL=4-5)

[Classmates] remind you that your mental health is important. But at the same time we went back to class and we didn't even talk with each other except in the groups that had formed. (#9, PL=4-5)

A somewhat common occurrence was that interviewees saw personal flaws as perceived reasons for loneliness. Falling out of face, as described by respondent #7, refers to the feeling of being inept of keeping up socially with classmates. Akin to this, was the statements of respondent #1 and #9, who placed blame on themselves for not engaging more socially as newcomers. An idea of contrary motion, effort versus talent, was prevalent for the commentary of #1. They felt that one needs to actively work to assimilate themselves in a group, but that their own skills were lacking; rendering them at fault for experiencing loneliness. Respondent #9 felt that they somehow had missed the train of befriending their classmates. While group work in the classroom setting has been noted to decrease loneliness (Yildis & Duyan 2022), it was here assumed that exclusive social groups could act to increase loneliness for non-participants.

Another concern was that of mental health, which is talked about more and more in relation to university studies. Some respondents found that little to no action had been taken to quell mental health problems. Respondent #9 spoke about classmates who stressed the gravity of caring for one's mental health, but who did not practice behavior that promotes mental health, such as social inclusion – as seen with the findings on loneliness and mental health (Hyland et al 2019). In relation to mental health, respondent #6 mentioned the Student Health organized by Lund university. The

same elements that were outlined by respondent #9 were present here in the form of a non proactive approach to well-being: "You contact the Student Health when you have problems, not before." (#6, PL=5)

Discussion

The themes outlined in phase two of the study were findings that had implications for perceived loneliness. The common denominator of phase two was university studies, which directly impacted the interviewees through factors such as competition, external pressures and achievement. Moreover, it was found to indirectly prompt a myriad of other domains of social exclusion to affect loneliness.

Accommodation exerted an influence on the daily lives of most interviewees, but to what extent remained undetermined. Relating accommodation to living with parents or a missing of one's kin could be associated with emotional loneliness. Conversely, relating accommodation to one's social needs and self-perceived social capital could instead be associated with a dimension of social loneliness. This was also tied to the fact that social loneliness and temporary loneliness have been found to be associated (De Jong Gierveld & Van Tilburg 2006).

Like university studies, age did not directly affect interviewees recallings of loneliness. Yet, it did pose dilemmas for in-class socialization. Age gaps were spoken of as a distinct feature by interviewees studying master's programmes. Relating to this could be the statement of #4, who mentioned that socialization becomes harder to find the time for with age. This also tied in to their noting of localizing a quality of the time seeing friends.

Cultural differences were of notable importance, especially for international students. Coming from collectivist cultures was seen as an obstacle in adjusting to the Swedish university life. The enigma of the 'student nations' was also raised as a concern, as respondents that did not want to experience social isolation—sitting at home—instead had to partake in linguistically segregative and exclusionary social spaces. Both of these options came with feelings of perceived loneliness. A beacon of light, in spite of the discrepancies entailed above, was for some the commonality between international students (Sawir et al. 2008).

Meaningful connections were identified as important antidotes for perceived loneliness. What was noted however, was the difficulty of acquiring the needed provisions for the respondents who felt they had too few. The most readily available analogy is that of making a million dollars. As having money, like provisions, facilitates in making more money – the millionaire will make their million faster than the bankrupt will. The same applies to those lacking in social provisions

(DiTommaso & Spinner 1997). While the deprivation of meaningful connections in the form of friend relations make up for a degree of social loneliness, an emotional exigency of loneliness might come in the form of a lack in family or romantic relationships. Nevertheless, a romantic relationship could also be a driving factor towards increased loneliness – specifically after the relationship is ended (Kislev 2022).

A determinant of perceived loneliness was found to be arisen from self-conscious behaviors of some interviewees. Feeling inadequate in social situations or directing attention at the wrong social sphere was thought to be the cause of social exclusion. Although measures were taken to combat feelings of loneliness, they were said to be passive measures that did not combat social exclusion.

Limitations

Phase one

The major limitation of the quantitative phase is the lack of discriminatory variables. SOM-undersökningen (2023) provides an excellent springboard for analyzing trends in opinions. What is missing, compared to studies made with the ESS, are variables such as feelings of safety and perceived discrimination. Questions related to these, such as worries of ethnic divergences, do not appear in round 7 of SOM-undersökningen. Future studies on loneliness should aim to incorporate both adequate loneliness measurements, as well as discriminatory variables.

Binary coding variables relationship status, household size and university studies may well be criticized. A flaw in the binary coding of relationship status was that single/widowed also could equate being divorced, which has been found to have divergent implications on loneliness. While denunciation related to relationship status typically comes in the form of a critique on modernity and the diffusion of relation types (see e.g., Franklin 2008), household constellations and education also had several dimensions that were not accounted for. One can rent a room but still feel like they live alone. One may have studied at a high tempo and skipped a few years, or vice versa. For the purposes of this phase of the study however, the general tendencies of loneliness sufficed.

Phase two

Although a semi-structured approach was deemed appropriate for this type of study, especially for comparative reasons between phase one and two, there were at times inconsistencies between interviews. A clear-cut structure would have provided better prospects of comparing individual

participants. Disputing this however, was the fact of welcomed unexpected data retrieved from all interviews, as seen with the findings of cultural differences, belonging, deeper connection, and self-induced loneliness.

In hindsight, the de Jong Gierveld 6-item loneliness scale (2006) could have been used instead of the UCLA 3-item scale. The 6-item scale successfully encapsulates both social and emotional loneliness, which would have been favorable for drawing parallels between respondents. Apart from verifying the validity of the 3-item scale during the interviews, it did not serve any major purpose.

Relationship status could have been explored more thoroughly. One difficulty that was found with a diminishingly structured approach to interviews was that of appearing inquisitive. As the interviewer asked non-structured questions, prying unnecessarily into the specifics of interviewees relationships or singlehood was deemed inappropriate and/or a bit off-topic. This resulted in fewer findings that could be met with the theory of emotional loneliness.

Conclusion

With two research questions, one stemming from the other, the thesis set out to analyze drivers of perceived loneliness in Sweden and then to illustrate the mechanisms causing perceived loneliness for students at Lund and Malmö University. In the first phase it found education to be of statistical relevance for perceived loneliness. Having studied at university or currently studying at university is associated with a higher degree of perceived loneliness. A gap in knowledge was acknowledged here, as prior literature has discovered that perceived loneliness is associated with poor health, while education has been linked to good health (Hyland et al. 2019; Ross & Wu 1995). Conversely, self-rated health stands out as a measurement that has a big impact on the effect on the variance of loneliness. Along with this, the variables household size and relationship status provide good explanatory values for grasping perceived loneliness.

These findings laid the groundwork for the second phase, where the associations were more thoroughly examined with the help of interviews. In fourteen 30 minute sessions with select interviewees, topics relating to perceived loneliness and the life as a student were investigated. Through the different testimonies of the interviewees, a handful of domains of exclusion were identified. These domains were analyzed using a grounded theory approach, looking for commonality in responses. Some domains were anticipated, such as progresses in studies, age and accommodation. While university studies are found to have a moderate impact on perceived loneliness, they are found to act as a passive prompter to other domains of social exclusion. Age

limiting socialization and accommodation being associated with both emotional and social loneliness; are two of these domains that tertiary education may prompt. Other domains came as news, as a result of semi-structured interviews and a grounded theory analytical approach. Cultural differences are found to have a big influence on international students. While the temporary loneliness of arriving at a new place might act as a pro-social motivator (Bellucci 2020), partaking in the local customs may not be a one-size-fits-all way of avoiding social exclusion. The 'student nations' on campus are also found to not be entirely inclusive toward international students. Furthermore, the capacity of making meaningful connections also stands out as a sizable hurdle in managing perceived loneliness. This relates back to accommodation and familial contexts, as well as to romantic relationships. Lastly, self-efficacy in social relations is found to be a determinant of perceived loneliness.

Managing perceived loneliness in tertiary education is an intricate matter. However, spaces that thwart social exclusion may work to prevent these feelings. Establishing commonality between local and international students, while discouraging any mandatory alcohol consumption, could be seen as one way of lessening the impact of loneliness. Likewise, encouraging students to create non-temporary, meaningful connections, might be another.

For future research purposes, university studies' indirect impact on loneliness should be subject to further investigation, as its domains of exclusion are extensive. Struggles of cultural differences relating to loneliness should be seen as great resources in knowledge production related to assimilation and cultural understanding. Yearnings of meaningful connections – along with its parallels to age – may be examined, especially in regards to social provisions. Health variables may also be researched as moderator variables in relation to loneliness.

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Appendices

Appendix 1.1

Scatter plot graph of mean Loneliness index, (UCLA 3-item scale) 3 = low loneliness, 12 = high loneliness, by ages 18-85.
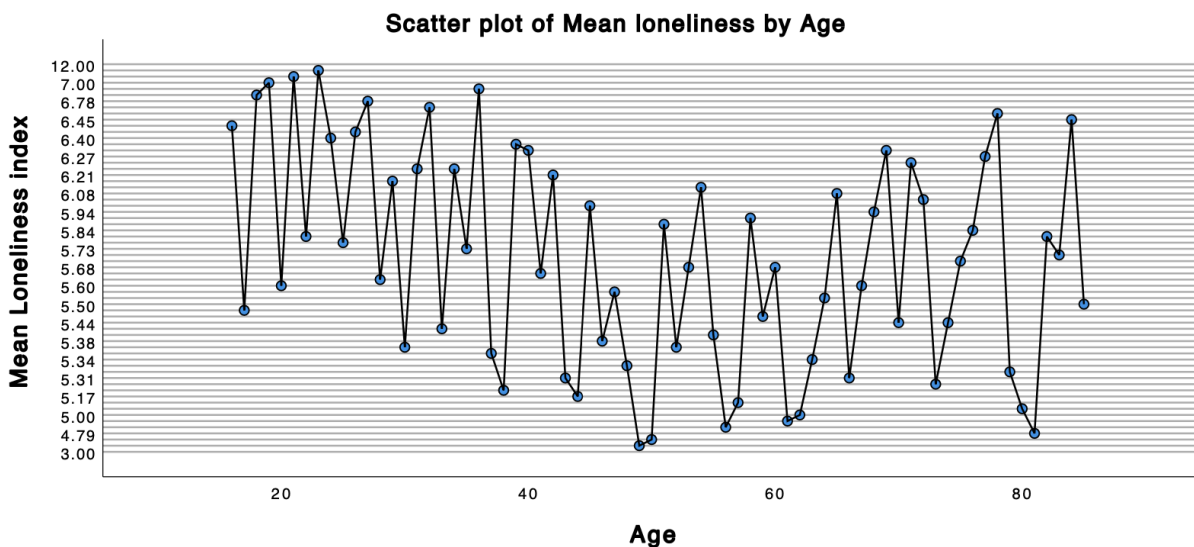
Appendix 1.2

Scatter plot graph of five way personal income (1= max 14 999, 2 = 15 000 - 24 999, 3 = 25 000 - 34 999, 4 = 35 000 - 44 999, 5 = more than 50 000 swedish kronas per month) by level of education.

Scatter Plot of Income, five way by level of education