



Research paper

Which life domains are people with major depression satisfied or dissatisfied with? An individual patient data meta-analysis

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ABSTRACT

Background: People with depression tend to score low on measures of subjective quality of life (SQoL) which has been suggested to reflect a general negative bias of perception. However, studies do not tend to investigate specific life domains. This study investigated satisfaction with life domains in people with major depression and explored influential factors.

Methods: A one-step individual patient data meta-analysis combined data of 1710 people with major depression from four studies. In all studies, SQoL was measured on the Manchester Short Assessment of Quality of Life, which provides satisfaction ratings with 12 life domains. Associations between individual characteristics and satisfaction ratings were investigated using univariable and multivariable models.

Results: Mean satisfaction ratings varied across life domains. Participants expressed dissatisfaction with several domains but expressed satisfaction with others, mainly for domains associated with close relationships. Some of the investigated characteristics were consistently associated with satisfaction ratings across the domains.

Limitations: The primary limitation of this study was in the analysis of individual characteristics, which were chosen based on identification in existing literature and availability in our datasets, and of which several were dichotomised to have sufficiently large numbers which may have resulted in lost nuance in the results.

Conclusions: People with major depression distinguish between their satisfaction with different life domains and are particularly satisfied with their close relationships. This challenges the notion of a general negative appraisal of life in this group, and highlights the need to evaluate satisfaction with different life domains separately.

1. Introduction

It has been widely suggested that individuals suffering from depression have a general negative bias of perception which affects their appraisal of self, others, and their overall situation in life (Holubova et al., 2016; Kuehner, 2002). This has been famously posited in Beck's (1976) cognitive model of depression which suggests individuals with depression view themselves, the world, and the future negatively (Alloy et al., 1999), and has become one of the most popular models for explaining and treating depression (Pössel and Black, 2014).

Subjective quality of life (SQoL) is a measure of individuals' perception of their life (Carpiniello et al., 1997) and is commonly assessed using satisfaction ratings with various domains of life. Individuals suffering from depression tend to score lower on measures of SQoL than other clinical populations, including when compared to individuals with schizophrenia and anxiety disorders (Goppoldova et al.,

2008; Rapaport et al., 2005; Rudolf and Priebe, 1999; Tan et al., 2019). It has been suggested that these low scores reflect the negative perceptions and cognitions associated with depression. This suggestion is supported by consistent findings of an association between levels of depressive symptoms and SQoL ratings: people with more depressive symptoms tend to score lower on SQoL measures (Daly et al., 2010; Jung et al., 2012; Pynnönen et al., 2021; Rudolf and Priebe, 1999).

However, most studies assessing SQoL in people with depression used global SQoL scores representing average satisfaction scores across different life domains, or broad domain categories made up of a composite of items (Berlim et al., 2003, 2008; Carpiniello et al., 1997; Daly et al., 2010; Goppoldova et al., 2008; Holubova et al., 2017; Husse-noeder et al., 2021; Jung et al., 2012; Kuehner, 2002; Kuehner and Buerger, 2005; Kuehner and Huffziger, 2009; Priebe et al., 2010b), rather than analysing satisfaction with different life domains that are meaningfully represented by single items. Rapaport et al. (2005) suggest

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that cumulative SQoL scores combining the appraisal of several life domains risk diluting or missing the impact of domains that are particularly poorly rated. Such composite or global scores potentially mask significant information about people's satisfaction or dissatisfaction with specific domains. Thus, the question arises as to whether people with depression rate their satisfaction with all life domains similarly low or whether – despite an overall tendency for negative ratings – they still distinguish between different life domains and, if so, in which way. Which life domains are they particularly satisfied or dissatisfied with, and which factors influence their satisfaction with these different domains?

To address these questions, we conducted an individual patient data meta-analysis of satisfaction scores with different life domains, and investigated potentially influential factors, using data sets from four studies of people with major depression from different countries.

2. Methods

2.1. Design

We computed a one-step individual patient data meta-analysis of samples from four independent studies. This approach has a number of advantages over using aggregate data, including allowing the investigation of participant level characteristics (Riley et al., 2010; Tierney et al., 2015). We used a one-step approach whereby all individual patient data is investigated in one analysis, whilst accounting for clustering within each study by including the study as a random effect in the statistical models (Riley et al., 2010; Tierney et al., 2015).

All four studies met the following criteria: a) SQoL was measured using the Manchester Short Assessment of Quality of Life (MANSA) (Priebe et al., 1999); b) a diagnosis of a major depressive disorder was established using ICD-10 criteria; c) symptoms were assessed by either trained researchers or the treating clinician; and d) the full data set was available to allow for an individual patient data analysis.

The included studies comprised a randomised controlled trial, a natural experiment, and two observational studies. The EDEN trial compared day hospital treatment with inpatient care in five European countries (Kallert et al., 2007). The COFI trial compared the outcomes of approaches with and without continuity of care across in- and out-patient care in five European countries (Giacco et al., 2018). The CONNECT study investigated the long-term clinical and social outcomes of people who had experienced war in eight countries in South-Eastern Europe (Bogic et al., 2012; Priebe et al., 2010a). The EUNOMIA/InvolveE study investigated outcomes of coercive in-patient treatment in 11 European countries (Priebe et al., 2009; Raboch et al., 2010). Full details and results of all four studies have been published previously elsewhere. Data from all four studies were merged to create one dataset to be analysed. These datasets were chosen as they were available to the author, included participants with a depressive disorder diagnosis, and all contained complete data for each participant for the same measure of SQoL, the MANSA, allowing full analysis of each item. Scores on individual MANSA items have been investigated previously in a population of individuals with schizophrenia and related disorders (Laxhman et al., 2017). This analysis will investigate these scores in individuals with a depressive disorder.

2.2. Participants

All four studies included samples with a range of diagnoses, and only people with a diagnosis of major depressive disorder according to the ICD-10 (F32 or F33) were selected for this analysis. Only participants with complete ratings of all life domains in the MANSA were included. This was to reduce potential inaccuracies through imputing of missing data when comparing ratings with different life domains in the same people.

2.3. Measures

SQoL was collected using the MANSA (Priebe et al., 1999). On the MANSA, people rate their satisfaction with life as a whole and with 11 specific life domains (employment situation, financial situation, number and quality of friendships, leisure activities, accommodation, personal safety, the people that they live with or with living alone, sex life, relationship with their family, physical health and mental health). Each domain is rated on a 7-point rating scale, ranging from 1 ('couldn't be worse') to 7 ('couldn't be better') with 4 representing the mid-point.

Age, gender, marital status, employment status, education level, and living situation were collected as part of the baseline assessments in all studies.

General symptom severity was assessed and rated by the treating clinician on the Clinical Global Impressions (CGI) scale (Guy, 1976) in the COFI trial, and observer assessed and rated on the Brief Symptom Inventory (BSI) (Derogatis, 1993) in the CONNECT study, and on the Brief Psychiatric Rating Scale (BPRS) (Ventura et al., 1993) in EDEN and EUNOMIA/InvolveE. The BSI and BPRS, being part of patient reported assessments, were collected in the same interview as the MANSA. The CGI, being clinician rated, was collected from clinicians separately. For this analysis, we used a composite variable for overall symptom severity, created from *T*-scores of the CGI, BSI global score and BPRS total score, a method deemed appropriate for variables that are considered equal, whilst preserving the distribution of the original scores. The CGI, BSI global score and BPRS total score all provide a score of general symptom severity and thus were used in this analysis. In this approach, based on recommendations by Song et al. (2013), *z*-scores were first calculated for each scale to obtain a standardised score. In the next step, the standardised scores were summed to create a composite severity variable. To improve interpretability, this composite of *z*-scores was transformed into a *T*-score, with 50 representing the mean and a standard deviation of 10. Thus, values below 50 represent scores below the mean, and those above 50 represent scores above the mean. Raw scale data is provided in Supplementary material 1. No depression-specific severity measures were available in any of the included studies.

2.4. Analysis

Group differences in the demographic characteristics were assessed statistically with Kruskal-Wallis' H test.

Mean satisfaction ratings for each item in the MANSA were calculated for each study and the total sample.

We further explored whether characteristics that are frequently reported as being associated with SQoL in the literature, and were available in our dataset, were associated with each MANSA domain. The characteristics investigated were: age, gender, marital status, employment status, education level, living situation, and symptom severity (Berlim et al., 2008; Daly et al., 2010; Grendas et al., 2017; Jung et al., 2012; Kuehner and Buerger, 2005; Priebe et al., 2010b; Rapaport et al., 2005).

Marital status was dichotomised to "Married v. Unmarried" where married, cohabiting and civil partnership were combined into "Married", and single/unmarried, widowed, divorced and separated were combined into "Unmarried". Employment status was dichotomised into "Paid v. No paid employment" where student, retired, unemployed, voluntary and housewife/husband were combined into "No paid employment". Living situation was dichotomised into "Living alone v. Living with others" where living alone and shared accommodation, specifically accommodation not shared with either family or friends, were combined into "Living alone", and living with partner/family and living with friends were combined into "Living with others".

For the descriptive statistics, means and proportions are reported excluding missing data. Demographic data had <2 % missing data, with only education level having 8.5 % missing data. Given our inclusion criteria no data was missing for any items on the MANSA.

Associations were initially tested using mixed-effect, univariable linear models with the MANSA domains as the dependent variables. Study was fitted as a random effect in every model to account for possible clustering within, and heterogeneity between, the studies included in this analysis. Each individual characteristic in turn was fitted as a fixed effect in separate individual models. Subsequently, multivariable mixed-effect linear models were computed, one for each MANSA domain, including every characteristic. This approach was chosen as it was deemed appropriate given the large sample size and relatively small number of characteristics included in this study. All analyses were conducted in IBM SPSS Statistics version 27.0.

3. Results

3.1. Participant characteristics

Across the four datasets 1710 participants met the inclusion criteria. **Table 1** shows the personal characteristics for participants in each study and the total sample.

Overall, the majority of the sample were female (56.6 %), had a mean age of 42.9 years, were married (56.3 %), lived with others (79.6 %), and were not in paid employment (65.8 %). Every characteristic differed significantly between the included study samples. Which study participants were included from was controlled for in the subsequent models.

3.2. Satisfaction ratings of individual SQoL domains

The mean satisfaction ratings for each life domain are shown in **Table 2**.

Of the 12 life domains assessed by the MANSA, satisfaction with financial situation was rated the lowest. Satisfaction with employment, life as a whole, mental health, leisure activities, and physical health were also rated with mean scores below the mid-point of 4. This means that on average people expressed dissatisfaction with these domains. However, there were also several domains where mean scores were above 4 and indicated a degree of satisfaction. The most positive rated domain was satisfaction with the people they live with, or with living alone, followed by the relationship with their family, accommodation, personal safety, friendships, and sex life.

The univariable associations between individual characteristics and the MANSA domains are shown in **Table 3**, and the multivariable associations in **Table 4**.

Being male, unmarried, without paid employment, and having higher symptom severity was associated with lower satisfaction across most, if not all, domains. Older age and living alone were also associated with lower satisfaction in some domains. After adjusting for the influence of other variables in the multivariable analysis, the strongest positive associations were found between having paid employment and

Table 1

Participant demographics for the four included studies and the overall sample.

Characteristics	Total N = 1710	COFI N = 628	CONNECT N = 800	EDEN N = 173	EUNOMIA/InvolvE N = 109	Group differences	
						H ^a	p
Age, mean (SD)	42.85 (11.50)	42.01 (12.47)	43.66 (10.50)	43.92 (11.22)	40.04 (12.48)	11.76	0.008
Male, N (%)	742 (43.4)	293 (46.7)	347 (43.4)	54 (31.2)	48 (44.0)	13.30	0.004
Married, N (%)	960 (56.3)	217 (34.7)	597 (74.7)	107 (62.2)	39 (35.8)	250.18	<0.001
Living alone, N (%)	343 (20.4)	215 (34.6)	60 (7.6)	17 (10.6)	51 (47.2)	213.61	<0.001
Paid employment, N (%)	583 (34.2)	281 (44.8)	216 (27.0)	58 (34.1)	28 (25.7)	53.33	<0.001
Education						210.08	<0.001
Primary or lower, N (%)	352 (22.5)	81 (13.0)	249 (31.1)	18 (14.4)	4 (25.0)		
Secondary, N (%)	601 (38.4)	226 (36.2)	371 (46.4)	–	4 (25.0)		
Further education, N (%)	612 (39.1)	317 (50.8)	180 (22.5)	107 (85.6)	8 (50.0)		
Symptom severity							
Overall, mean (SD)	50.37 (9.74)	51.06 (9.61)	50.23 (9.95)	47.61 (8.02)	51.74 (10.55)	31.64	<0.001

^a Kruskal-Wallis H test performed to investigate group differences for each characteristic.

Table 2

Mean satisfaction scores on the MANSA for the four included studies and the overall sample.

Satisfaction with, mean (SD)	Total N = 1710	COFI N = 628	CONNECT N = 800	EDEN N = 173	EUNOMIA/ InvolvE N = 109
Financial situation	3.25 (1.71)	3.83 (1.71)	2.78 (1.52)	3.36 (1.76)	3.28 (1.93)
Employment	3.43 (1.81)	4.02 (1.77)	2.93 (1.68)	3.41 (1.72)	3.80 (2.01)
Life as a whole	3.77 (1.60)	4.20 (1.58)	3.68 (1.51)	3.13 (1.54)	2.94 (1.67)
Mental health	3.78 (1.78)	4.00 (1.63)	3.99 (1.84)	2.51 (1.38)	3.03 (1.67)
Leisure activities	3.85 (1.64)	4.25 (1.62)	3.61 (1.60)	3.49 (1.49)	3.85 (1.85)
Physical health	3.96 (1.67)	4.13 (1.67)	3.88 (1.64)	3.68 (1.73)	3.93 (1.76)
Sex life	4.09 (1.90)	3.82 (1.92)	4.41 (1.85)	3.82 (1.80)	3.73 (1.91)
Friendships	4.57 (1.63)	4.66 (1.74)	4.50 (1.54)	4.48 (1.60)	4.65 (1.72)
Personal safety	4.71 (1.58)	5.00 (1.50)	4.62 (1.55)	4.27 (1.74)	4.50 (1.74)
Accommodation	4.72 (1.71)	5.11 (1.60)	4.52 (1.64)	4.42 (1.90)	4.42 (1.98)
Relationship with family	5.04 (1.61)	4.69 (1.72)	5.47 (1.38)	4.69 (1.52)	4.49 (1.78)
People living with	5.16 (1.60)	5.11 (1.66)	5.39 (1.45)	4.67 (1.69)	4.56 (1.81)

satisfaction with employment, between being married and satisfaction with sex life, and between not living alone and satisfaction with the people they live with.

4. Discussion

This study demonstrates that individuals with major depression can and do distinguish between their satisfaction with different life domains. On average, people expressed dissatisfaction with their financial situation, employment, life as a whole, mental health, leisure activities, and physical health, with financial situation being the lowest rated domain. However, again on average, they were satisfied with the people they live with or with living alone, their relationship with family, accommodation, personal safety, friendships and sex life. The more positive ratings applied mainly to domains reflecting or influenced by close social relationships.

Whilst we found people with major depression tend to be dissatisfied with some life domains, they are on average satisfied with others. This indicates the appraisal of SQoL in individuals who suffer from depression is more complex than just reflecting a global negative bias as has been posited in the past. Although some domains were rated poorly, some domains were rated positively, even more positively than has been

Table 3
Univariable associations of participant characteristics with satisfaction ratings of every domain (showing fixed effect coefficients).

	MANSA domain											
	Finance	Employment	Life as a whole	Mental health	Leisure	Physical health	Sex life	Friendships	Safety	Accommodation	Family	People living with
Sociodemographic												
Female v. male	0.21*	0.14	0.13	−0.07	0.03	−0.06	0.01	0.19*	−0.04	0.10	0.17*	0.11
Age	0.00	0.00	−0.01	−0.01*	0.00	−0.02*	−0.03*	−0.01*	0.00	0.01*	0.00	−0.01
Unmarried v. married	−0.34*	−0.16	−0.33*	0.12	−0.11	0.02	−0.76*	−0.02	−0.24*	−0.21*	−0.43*	−0.74*
Education level												
Primary v. further	−0.23*	−0.32*	−0.05	−0.10	0.07	−0.46*	−0.04	0.04	−0.04	0.03	0.08	−0.04
Secondary v. further	−0.15	−0.15	0.05	−0.04	0.02	−0.09	0.14	0.12	−0.07	0.02	−0.04	−0.07
Living alone v. with others	−0.04	−0.19	−0.21*	−0.14	0.07	0.01	−0.73*	0.06	−0.22*	0.03	−0.44*	−1.15*
Paid v. no paid employment	0.53*	0.90*	0.26*	0.32*	0.23*	0.46*	0.23*	0.26*	0.23*	0.28*	0.11	0.27*
Symptom scales												
Overall severity	−0.01*	−0.02*	−0.03*	−0.06*	−0.03*	−0.04*	−0.04*	−0.03*	−0.04*	−0.01*	−0.02*	−0.02*

* p value < .05.

Table 4
Multivariable associations of participant characteristics with satisfaction ratings of every domain (showing fixed effect coefficients).

	MANSA domain											
	Finance	Employment	Life as a whole	Mental health	Leisure	Physical health	Sex life	Friendships	Safety	Accommodation	Family	People living with
Sociodemographic												
Female v. male	0.20*	0.16	0.17*	−0.07	0.04	0.00	−0.04	0.18*	−0.08	0.07	0.11	0.03
Age	−0.00	0.00	−0.01	−0.01*	−0.00	−0.02*	−0.03*	−0.01*	0.00	0.01*	0.00	−0.00
Unmarried v. married	−0.41*	−0.02	−0.29*	−0.06	−0.12	−0.08	−0.79*	−0.06	−0.15	−0.18	−0.31*	−0.41*
Education level												
Primary v. further	−0.12	−0.13	−0.01	0.04	0.10	−0.30*	0.07	0.10	−0.03	0.02	0.08	−0.02
Secondary v. further	−0.11	−0.07	0.08	0.01	0.03	−0.06	0.15	0.15	−0.05	0.03	−0.04	−0.09
Living alone v. with others	0.23	−0.08	0.00	−0.02	0.20	0.17	−0.15	0.22	−0.05	0.13	−0.22	−0.84*
Paid v. no paid employment	0.49*	0.85*	0.22*	0.26*	0.22*	0.42*	0.16	0.27*	0.20*	0.30*	0.10	0.22*
Symptom scales												
Overall severity	−0.01	−0.02*	−0.03*	−0.06*	−0.03*	−0.04*	−0.03*	−0.03*	−0.04*	−0.01*	−0.02*	−0.02*

* p value < .05.

found in other diagnostic groups (Laxhman et al., 2017). This supports the importance of measuring and targeting specific SQoL domains in individuals with major depression as opposed to assuming all domains are equally affected by an overall negative bias.

Being male, unmarried, without paid employment, and having higher overall symptom severity were consistently associated with lower ratings of most domains, suggesting that – although people distinguish between their satisfaction with different life domains – some characteristics have a general influence across domains. Exceptions with specific stronger influences on SQoL were found in three domains in a plausible direction: people with paid employment were more satisfied with their employment situation, married people were more satisfied with their sex life, and people not living alone were more satisfied with

their living situation.

4.1. Strengths and limitations

This study has several strengths. SQoL was measured in all samples using the MANSA. The MANSA has well-established psychometric properties with good construct validity, and good reliability and internal consistency (Björkman and Svensson, 2005; Priebe et al., 1999). The total sample size included in this analysis was large with over 1700 participants. There was no missing data for any MANSA domains, meaning satisfaction ratings were not influenced by imputed data.

Further, by including samples from a variety of countries and settings our findings convey an overall reflection of SQoL in individuals with

major depression, as opposed to being specific to one particular study or setting. Whilst the analysis focused on the total dataset, satisfaction ratings varied across the included studies. However, participants in all studies distinguished in their satisfaction between life domains, and there were some important consistencies across all included studies: satisfaction with financial situation was rated with dissatisfaction in every included study, and satisfaction with friendships, personal safety, accommodation, relationship with family, and the people they live with were rated above 4 in every study. This suggests some consistency of our main findings across different studies and settings. Although our dataset includes participants from a variety of countries and settings, they are all European and predominantly high income countries. Future research would benefit from investigating the same measures in non-European and lower and middle income countries to identify if there are any differences based on other geographical, cultural, and economic factors.

The study also has some limitations, mainly in the analysis of influential participant characteristics. First, there was no consistent measure of general symptomology across all studies meaning the scales used were transformed to create a composite variable, which may have underestimated the impact of symptom severity. Moreover, no depression-specific severity measure was available in any of the studies, meaning measuring the impact of depression-specific symptoms was not possible in this study. We recognise the creation of the composite severity variable in this study is not ideal and only provides a crude estimate of severity. However, we deemed it important to include given the association of symptom severity with quality of life found in previous studies, and in order to be able to explore whether other characteristics remain associated with SQoL when severity is controlled for.

Second, we investigated a set of characteristics that have been suggested as influential in the literature and were available in our dataset. Whilst limiting the number of tested variables reduced the risk of spurious findings, we may have missed important influential characteristics. Third, in order to have sufficiently large subgroups for the analysis, several of the considered characteristics were dichotomised, thus potentially losing information about the influence of less frequent characteristics. Additionally, this study used a convenience selection of full datasets that were available to the authors and used a consistent methodology. Although such a selection meant consistency in how the assessments and outcomes were completed and ensured a full dataset for our main outcome of interest, the MANSA, this also meant that other relevant and eligible studies may have been omitted.

4.2. Comparison with existing literature

The findings from this study challenge the notion of a global negative bias of perception in depression. Although there is extensive evidence to support the notion of a negative view of self in depression, [Anderson and Skidmore \(1995\)](#) suggest there is less direct evidence for a negative view of the world and the future. This may be consistent with our analysis, which found domains more related to the individual such as physical health and financial situation were negatively appraised, whilst domains related to relationships and the environment such as friendships, relationship with family and accommodation were rated more positively.

The differences between ratings of different life domains in this study are even larger than in other diagnostic groups. In a meta-analysis of SQoL ratings of 1404 patients with schizophrenia and related disorders ([Laxhman et al., 2017](#)), which used a similar approach as in this study, mean satisfaction scores on the MANSA ranged from 3.8 to 4.9 on the seven-point scale, whilst they ranged from 3.25 to 5.16 in people with major depression in our analysis, indicating both lower and higher ratings of specific life domains. Both groups expressed overall dissatisfaction with their financial situation, but patients with schizophrenia were most dissatisfied with their sex life and, on average, did not rate a single life domain as 5 ('mostly satisfied') or higher. In contrast, people with major depression were on average not dissatisfied with their sex life and rated two life domains, relationship with family and people they live

with, as above 5.

The perception of positive close and group relationships and of emotional support has repeatedly been found to be a protective factor against developing depression ([Jacobson and Newman, 2016](#); [Santini et al., 2015](#)), and the simple presence of others has been suggested to dilute depressive emotion regulation ([Marroquín and Nolen-Hoeksema, 2015](#)). One might therefore expect that people with major depression perceive their relationships as negative, but in our analysis this has not been the case. On the contrary, relationships were rated as particularly positive. One can only speculate about the reasons. Individuals with major depression may have developed a low threshold for expressing satisfaction with their relationships, or they may have learned over time to appreciate social and emotional support from close relationships more, regarded those relationships as having a more important role in their life, engaged more in them and subsequently drawn more benefit from them. This would be consistent with the finding that the satisfaction with relationship related domains is more positive when the objective situation is more favourable – e.g. not living alone and having a married partner - and provides more options for drawing such benefits.

That more depressive symptoms are linked to poorer SQoL ratings is a consistent finding in the literature, and it has been suggested that SQoL scores in individuals with depression are a reflection of depressive symptoms ([Goppoldova et al., 2008](#)). We found an influence of general symptom severity on SQoL ratings across all domains, but other factors still had a significant impact even when in multivariable analyses the associations were adjusted for the impact of symptoms.

Paid employment was significantly linked with more positive SQoL scores across all domains, and these associations - apart from the one with the relationship with family – held true in the multivariable analyses. Paid employment can provide financial resources to allow access to activities and a more desirable lifestyle ([Pynnönen et al., 2021](#); [Rapaport et al., 2005](#)). Not being able to afford an expected or desired lifestyle may cause the use of negative coping strategies such as resignation and hopelessness, that are overused in individuals with depression and in turn relate to a lower SQoL ([Holubova et al., 2017](#)).

Older people were less satisfied with some domains. This is in contrast to findings in the general population in which satisfaction with life increases with older age ([Campbell et al., 1976](#); [Sarvimäki and Stenbock-Hult, 2000](#)). In older age, SQoL has been found to be affected by health problems ([Weber et al., 2015](#)), particularly those that are long-standing and limiting ([Blane et al., 2004](#)), and depression may represent such an ongoing health problem. Another potentially influential factor may be social isolation which has been suggested to be connected to poorer SQoL in older adults and might affect people with depression more than others ([Hawton et al., 2011](#); [Hussenoeder et al., 2021](#)).

4.3. Implications

Interventions for improving SQoL in people with major depression might primarily target areas with low satisfaction, in which case they would focus on social interventions and support to obtain and maintain paid employment and to improve their financial situation. They may also try and mobilise existing resources in domains with higher satisfaction ([Priebe et al., 2014](#)). In the latter case, interventions would identify and utilise strengths of the patients in close relationships. In any case, future research on SQoL in people with major depression should go beyond considering global or composite scores and benefit from people's ability to provide differentiated ratings of their satisfaction with different life domains. SQoL scores should also be evaluated for different domains separately in routine care, since such data are obtained routinely in some services ([Mosler et al., 2020](#)), and treatments could be targeted at areas of low satisfaction.

5. Conclusion

The findings demonstrate that individuals with a diagnosis of major

depression distinguish between SQoL domains and are, on average, satisfied with several areas of their lives, particularly with their close relationships with family and with the people they live with. This is inconsistent with the assumption that people with major depression have a global negative perception of all aspects of their life, and highlights the importance of investigating and assessing individual SQoL domains. Whilst – depending on the purpose of the analysis – there can be a value in analysing factors that influence satisfaction with specific domains, some influential factors appear similar across domains. Symptom levels, paid employment, marital status and living alone should be considered as influencing SQoL scores in most or all domains.

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jad.2023.06.037>.

CRedit authorship contribution statement

Lauren Jerome collated the datasets for this analysis, conducted the analysis, and wrote the manuscript. Philip McNamee, Aleksandra Matanov, Victoria Bird, and Stefan Priebe provided extensive guidance, feedback, and support in writing the manuscript. Aleksandra Matanov, Victoria Bird, and Stefan Priebe contributed to the design, conduct, and data collection for the studies included in the analysis, and Lauren Jerome, Victoria Bird and Stefan Priebe contributed to the design of the analysis in this study. All authors have approved the final manuscript.

Declaration of competing interest

None.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Ethical standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

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