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Community-living older people's interpretation of the Norwegian version of older people's quality of life (OPQOL) questionnaire

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Abstract

The aim of this study is to investigate how community-living older people interpret the Norwegian version of Older People's Quality of Life (OPQOL) questionnaire. The original OPQOL questionnaire was translated based on guidelines for cross-cultural translation. The Three-Step Test-Interview instrument was adopted to investigate how community-living older people interpreted the questionnaire. Data were collected from 14 participants (72–89 years). The questionnaire was filled in under observation. Semi-structured interviews were then conducted to clarify the observational data and elicit the participants' experiences and opinions. Lastly, data were analysed using a hermeneutic interpretation approach. Our findings indicate that most of the participants managed to complete the OPQOL questionnaire without problems. The data analysis resulted in four primary themes: relevance & applicability, formulation, consistency & accuracy and subjectivity. The questionnaire covered all aspects related to the participants' quality of life. However, statements related to religion were found to be irrelevant to their quality of life. Most of the participants thought that religion, philosophy and culture should be separate rather than included in the same statement. The participants missed the option of 'not applicable' when the statements were irrelevant to them. The statements are formulated in both positive and negative ways, which was sometimes confusing to them. The participants perceived phases such as "around me" "local," and "things" as ambiguous, and thus they raised concerns about whether the OPQOL questionnaire could capture consistent data regarding their quality of life. The results of this study pinpoint the issues that community-living older people faced when interpreting and answering the Norwegian version of OPQOL questionnaire. These issues were mostly caused by sociocultural differences. Our work provides an overview of the changes that must be made in the questionnaire in order to address these sociocultural differences while using the OPQOL questionnaire in the Norwegian context.

KEYWORDS
ageing, community dwelling, elderly, older people, OPQOL questionnaire, outcome measurement, quality of life

1 | INTRODUCTION

The proportion of the world's population over 60 years is expected to double from 11% to 22% between 2000 and 2050 (WHO, 2012). This contributes to the growing interest in enhancing and measuring the quality of life (QoL) of older people (Bowling & Stenner, 2011). QoL is defined as "an individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (WHOQOL, 1993, p. 153). It has been used in many studies as a key endpoint of health and social service interventions. With the increasing emphasis on evidence-based clinical practice and the inclusion of patient-based outcomes, patient-reported outcome measures (PROMs) of QoL are increasingly used in research and other evaluations of health and social care. To provide a valid PROMs instrument to measure older people's QoL, Bowling (2009) developed the Older People's Quality of Life (OPQOL) questionnaire, which is the focus of this publication.

Comparing this questionnaire with two existing QoL questionnaires for older people, i.e. the 19-item Control, Autonomy, Self-realisation and Pleasure scale (CASP-19) and the World Health Organization Quality of Life questionnaire–version for older people (WHOQOL-OLD) assessment, the OPQOL questionnaire was found to be a more sensitive instrument for measuring the QoL of older people in Britain as it met all the criteria for internal consistency (i.e. reliability) in an ethnically diverse sample better than CASP-19 and WHOQOL (Bowling & Stenner, 2011). While using the OPQOL questionnaire to predict several adverse health outcomes among older outpatients in Italy, the total OPQOL score and its health-related sub-score were found to be independent predictors of several adverse health outcomes (Bilotta et al., 2011). Additionally, a longitudinal study among 363 community-dwelling older people in Britain by Kojima et al. (2016) demonstrated that frailty was associated with a lower OPQOL score.

The OPQOL questionnaire has been translated and adjusted in various countries to reflect each country's sociocultural traditions. In the Czech version, Mares et al. (2016) reversed the five-grade scale and adopted the Czech school grading system, which is more familiar to older people living there. Similarly, the Chinese version interpreted "leisure and social activities" as two separate dimensions, while the original English version includes them in the same dimension (Chen et al., 2014). Due to difference in cultural norms in Turkey, for the statement "I look forward to things" in the OPQOL-brief version questionnaire, Caliskan et al. (2019) added an explanatory sentence "There are things that will make me happy when they happen" to avoid misinterpretation of the statement as indicative of insatiability.

To measure the QoL of older people living in Norway with a valid and reliable instrument, it is crucial to have a common understanding of the meaning of the questions and response options. A psychometrically sound measurement instrument consistently measures what it intends to measure over time in a specific setting and population. To the best of our knowledge, no study has translated the OPQOL questionnaire into a Norwegian version. Therefore, in this study, we have translated the questionnaire and our aim was to investigate how community-living older people in Norway interpret the entire questionnaire.

What is known about this topic

- The broad use of the OPQOL questionnaire in measuring the quality of life of older people
- The OPQOL questionnaire was reported as a more sensitive instrument for measuring the quality of life of older people in Britain (an ethnically diverse sample) as compared to CASP-19 and WHOQOL
- The Norwegian population is becoming more ethnically diverse and, therefore, there is a need of the Norwegian version of OPQOL questionnaire as a valid and reliable instrument in measuring the quality of life of older people living in Norway

What this paper adds

- The first translated English-to-Norwegian version of OPQOL questionnaire
- The interpretations of community-living older people in Norway of the OPQOL questionnaire
- The overview of necessary changes to be made in the Norwegian version of OPQOL questionnaire to reflect on the sociocultural differences

2 | METHODS

2.1 | Ethical approval and recruitment

The study was pre-approved and registered by the Norwegian Centre for Research Data (reference number 253,545). Fourteen participants were recruited through a project aiming to use information and communications technology (ICT) to improve the social interaction and QoL of older people living in Norway. An ICT intervention was used by the participants for 3 months. During this period, they were asked to complete the printed Norwegian OPQOL questionnaire three times: before the project started, after 6 weeks using the ICT intervention and after the project ended.

The OPQOL questionnaire was answered together with another questionnaire related to their technology acceptance in using the ICT intervention.

All participants were first briefed about the study with written and oral information. Then, they were required to provide written informed consent prior to participation. The consent form assured participants that they could withdraw their consent without consequences at any time. These participants often visit the senior centre located near their home and have participated in other studies conducted at senior centres.

The inclusion criteria for the ICT intervention project were individuals living alone, aged 70 years or older and being able to walk independently with or without assistive devices indoors. Due to the small number of recruited male participants and difficulties with the recruitment of male persons fulfilling all the inclusion criteria, one male participant who was not living alone was included in the study. Table 1 summarises the participants' information as well as their average OPQOL scores in the ICT intervention study.

2.2 | OPQOL questionnaire

The questionnaire was originally designed based on older people's responses to the positive things contributing to their good QoL and negative things diminishing their QoL (Bowling, 2009). It evaluates the QoL of older people in eight dimensions: life overall; health; social relationships and participation; independence, control over life and freedom; home and neighbourhood; psychological and emotion well-being; financial circumstances; and leisure and activities. A Likert scale is used in this questionnaire. The first question evaluates the respondent's overall QoL, with responses ranging from "very good" (1) to "very bad" (5). The remaining 35 statements are distributed in groups of four to six addressing each of the eight dimensions. Respondents are required to choose a response ranging from "strongly agree" (1) to "strongly disagree" (5) for each statement. Once the items are scored with reverse coding of positive responses, the sum scores are calculated, which can range from 35 (lowest score in QoL) to 175 (highest score).

TABLE 1 Summary of participants

	Age	Gender	Education (years)	OPQOL score
P1	89	M	17	121.33
P2	77	F	11	133.33
P3	77	F	10	140.00
P4	81	F	14	155.67
P5	72	F	12	133.33
P6	82	F	10	152.33
P7	81	F	15	134.33
P8	82	F	13	136.33
P9	81	F	19	141.67
P10	79	F	12	132.33
P11	82	F	21	157.33
P12	83	M	14	156.33
P13	79	F	12	154.67
P14	83	F	12	153.33

Note: P12 lives together with his wife.

2.3 | Cross-cultural translation

The procedure used to produce the Norwegian OPQOL questionnaire was the forward/backward translation method (Beaton et al., 2000). First, the original OPQOL questionnaire in English was translated to Norwegian by two native Norwegian speakers. Each translator independently translated the OPQOL questionnaire and then compared and discussed the results with each other until consensus about the translation was reached. The translated OPQOL questionnaire was then back-translated from Norwegian to English by a native English translator. Lastly, the two native Norwegian speakers reviewed the back-translated OPQOL questionnaire and approved the translation.

2.4 | Data collection

Our study adopted the Three-Step Test-Interview instrument developed by Hak et al. (2004). The first and second authors were responsible for data collection. Data were collected while the participants completed the Norwegian questionnaire for the third time after using the ICT intervention for 3 months. The first step aimed to collect real-time observational data. The participants were given the printed OPQOL questionnaire to complete by themselves. Using an observation note, the researcher observed and took notes on the participant's response behaviour for each question. There were five options for reporting response behaviour: "quickly read through and answer," "hesitate," "need to clarify," "need to read a few times" and "questions and/or answers are not applicable or relevant." For each question, more than one alternative could be chosen. The researchers were required to write down other observed behaviours that were not covered by the alternatives in the observation note. The way the participants read and navigated through the questionnaire was also observed.

In the second step, a semi-structured interview was conducted after the participants completed the questionnaire. This interview aimed to clarify and complete observational data from the previous step. Based on the observation note, the researcher asked follow-up questions (Table 2) to clarify the observations. In the third step, semi-structured interview continued with asking questions (Table 2) that aimed to elicit the participants' experiences and opinions.

All data were collected from April 12 to May 3, 2019. This study was conducted at the participants' homes with only the researcher and the participant present. This kind of setting is a field interview; it is suitable for our study due to its main advantage, i.e. "ecological validity" which is achieved by conducting the study as closely as possible to the real-life

TABLE 2 Questions included in semi-structured interview

Step	Questions
Two	• Can you tell me why you changed your answer? • What made you hesitate at this question? • You needed clarification when answering this question. What was confusing to you?
Three	• What do you think of using this questionnaire to measure your QoL? • What do you think of the scales? • How did you differentiate between Strongly Agree and Agree? • How did you understand the scale Neither Agree nor Disagree? • What's the difference between Strongly Disagree and Disagree to you? (Take an example and ask why the participant chose them) • You have answered this questionnaire before and you answered it again today. Do you think it is able to measure changes in your QoL? • If you were completing this form yesterday, do you think you might have answered differently? If yes why?

situation in which the instrument is completed (Hak et al., 2004, p. 16). The entire interview (i.e. steps 2 and 3) lasted between 10 and 40 min.

2.5 | Data analysis

All the interviews were transcribed. Then, a hermeneutic interpretation approach was chosen to analyse the text (Alvesson & Sköldberg, 2017, pp. 122–132; Birkeland & Natvig, 2009; Gadamer, 1989; Lindwall et al., 2010) in order to capture community-living older people's deep understandings and reflections on the Norwegian OPQOL questionnaire. A hermeneutic approach emphasises the human experience and implies that interpretation and understanding are based on the researcher's dialogue with others (i.e. the participants) and with the text. Using Ricœur's hermeneutic interpretation (Ricœur, 1981, p. 14), we were allowed to interpret the text while gaining an in-depth understanding of the researched phenomenon, i.e. older people's interpretations of the questionnaire (Alvesson & Sköldberg, 2017, pp. 122–132). The data were interpreted and analysed together with data from the observation note.

The transcripts were read five times using hermeneutic text interpretation (Lindwall et al., 2010). In the first reading, the text was integrated with the reader and the text was allowed to "speak for itself" (Gadamer, 1989). No interpretation or analysis was made during this reading, as the focus was on understanding the text. Interpretations and questions were introduced in the second reading ("fusion of horizons"). The third reading aimed to understand the text and answer questions that could lead to understanding of other elements. Primary, secondary and basic themes were summarised in the fourth reading. Finally, in the fifth reading, the text was read to compare all themes from the previous reading to form a new understanding.

All the authors read the final version of the analysis and themes to ensure the rigor of the analysis (Baillie, 2015). To demonstrate the validity of our interpretations, direct quotations from the semi-structured interviews are presented in our results. All the data analyses were conducted using NVivo 12 Pro.

2.6 | Reflexive statement

The authors of this study are researchers (two professors, one associate professor and two junior researchers) working on health sciences and human–computer interaction focusing on ageing, health and welfare.

3 | FINDINGS

Most of the participants had no problem reading the questions and answering them while completing the questionnaire. However, some sources of misinterpretation were identified. The data analysis resulted in four primary themes: relevance & applicability, formulation, consistency & accuracy and subjectivity (Table 3).

3.1 | Relevance and Applicability

Most participants agreed that the questionnaire covered all aspects related to their QoL. However, two statements received strong reactions from them: statements 34 ("Religion, belief or philosophy is important to my QoL") and 35 ("Cultural/religious events/festivals are important to my QoL"). Most of them mentioned that religion was irrelevant to their QoL, as they were not religious (Table 4, Q1-2). Despite of being irreligious, they still celebrated some events and festivals. However, they considered those celebrations to be traditions instead of religious events or festivals (Q3).

P5 stated that the aspect of food intake or meals was missing from the questionnaire. For her, this aspect was related to nutrition, which in turn is related to her health and QoL. Besides, P9 pointed out the lack of a work aspect in the questionnaire; although she was over 80 years old, she still worked sometimes.

Statements 6 ("Pain affects my well-being") and 13 ("I have my children around, which is important") were found to not be applicable to all participants. P4 and P12 mentioned that they had no pain,

TABLE 3 Hermeneutic interpretation analysis with primary, secondary and basic themes

Primary themes	Secondary themes	Basic themes
Relevance & Applicability	Value things differently Scope of the questionnaire Different lifestyle	Covers all aspects of life
		The importance of religion
		The importance of tradition
		The importance of food intake/ meals (a necessity in daily life)
		The importance of work
		Not all older people have pain
		Not all older people have children
Formulation	Formulation of statements Words describing scales Formulation of scales Detailed versus. specific	Two questions/statements in one
		"What I want to" versus. "things I would enjoy"
		Confusion when both positive and negative statements are mixed
		Strongly versus. totally
		Tend to answer "3" (midpoint)
		Scales – too many, OK and too little
		Statements not overly detailed
		Psychological statements not specific enough
Consistency & Accuracy	Consistent versus. inconsistent judgement	Today versus. yesterday/today versus. 6 weeks ago
		Weather
		Humour
Subjectivity	Personal characteristics and perceptions Not specific enough	Definition of "around"
		Definition of "local"
		Definition of "things"

so statement 6 was not applicable to them, while P2, P6, P8 and P11 had no children and thus could not find a suitable answer.

3.2 | Formulation

This theme concerns the formulation of the statements and scales in the questionnaire. First, the participants found it difficult to give a score when religion, belief and philosophy (statement 34), and culture and religion (statement 35) were placed together in one statement. They had to read the statements several times and spend more time thinking about them. Although the statements were formulated with the term "or," they insisted that combining these aspects in one statement or the same category made scoring difficult (Q4-5).

The participants were concerned that statements 28 ("I can afford to buy what I want to") and 29 ("I cannot afford to do things I would enjoy") were not specific enough. For some, the term "I want to" could have the same meaning as "things I would enjoy." There was no clearly defined boundary between the two terms, and therefore they appeared unclear (Q6).

Since the questionnaire uses a Likert scale, there was no "not applicable" option when the statements were irrelevant to the participants, such as statements 6 and 13, as mentioned in the previous section.

We noticed that some participants had to change their scores immediately after they had answered. When we asked why, they explained that the statements were formulated with both positive and negative tones, which sometimes confused them (Q7).

Some participants were concerned about the word "strongly" in the scale (1 and 5, strongly agree and strongly disagree). For them, there was no difference between "strongly" and "totally." Therefore, 1 and 5 on the scale were interpreted as extreme (totally agree and totally disagree), and they would only choose 1 if there was no disagreement at all and 5 if there was no agreement at all. In addition, they tended to favour the scale 3 (neither agree nor disagree) because they were unsure about how much they agreed or disagreed when answering the questionnaire (Q8-9).

Regarding the scores in the Likert scale, the participants had varied opinions. Some thought that there were too many scores, some commented that there were too few and therefore it was difficult to differentiate between them, while others were fine with the 5-point Likert scale. The statements were praised for being neither overly detailed nor too general, except for those in the psychological and

TABLE 4 Illustrative quotes for each theme

Quote no.	Quote	Participant
Q1	I gave a middle score there (referring to the answer "neither agree nor disagree") because I am not so very religious and I am not so very philosophical either.	P3
Q2	Yes, one can think of the cultural and the religious stuff that stands there (referring to the questionnaire), if it had any influences… And for me then, I don't go to the church or something like that, but I have my childhood faith there.	P6
Q3	I believe in neither religion nor philosophy. Of course the traditions with Christmas and…now with Easter. So they are certainly traditions. They have nothing to do with religion.	P5
Q4	So, the cultural part is fine, but with the religious part, I am quite illiterate. They do not belong in the same group, I think, culture and religion. I cannot understand that they are in the same group.	P10
Q5	When it says religion and belief, I am thinking more about one (who) perhaps believes in God then. But with life philosophy, so, it is more about if one has an ethical standard, which is often grounded by religion, of course, isn't it? However, one can have certain ethical rules for oneself, too. For instance, I should never steal, I should never embezzle, I should behave properly…. Belief, life philosophy, and religion, they should be separated a bit.	P11
Q6	Yes, I could think of having a bigger apartment in this area, but I cannot afford that. And really, for me, it is a bit of a luxury side when I say I cannot buy what I want to, and what one wishes to buy. I can say that I don't have financial problems…. I cannot buy the apartment here that costs 23 million. That I can't. But I really want to! (laugh)	P11
Q7	You can fall into the trap of writing (referring to the statements) that is "not" … those you should then disagree … whether you have to agree or disagree … in relation to it, if you read it quickly.	P13
Q8	I am very careful with "strongly agree," because there is always a little bit that you are not totally agreed with…. So with strongly agree, you should then be "very" agree. I have difficulty in being "totally disagree" with things. So it is always this between thing between "agree" and "disagree."	P10
Q9	It could go both ways (referring to "agree" and "disagree"). And then it is better to say "in the middle." Because this is how it is, isn't it? You do something, then you think this is totally fine. But then something happens, and it becomes not fine….	P12
Q10	Yes. It (referring to statement 22) seemed like you just let the bumblebee whine…I have generally program (referring to plans) every day. So I do not take life as it comes and make the best of things, I don't. I plan my days, what should I do, and I have actually proper programs every day.	P4
Q11	No. I am not satisfied with the question. Take things (referring to things in life) as it comes, it sounds like whatever that had to fall from the sky…. I think it seems so imprecise.	P9
Q12	It could be that I have answered very differently on some questions because it has something to do with daily stuff. Yes, not the body condition, but the everyday humor. For some days, one may see things darker than the others.	P3
Q13	It depends very much on the day itself, like how the person's day has been. If the person is in a good mood, then she or she is perhaps more on the edge, and if it is a grey-weather day, so it can be slightly different. And the person is more in the middle part….	P12
Q14	I think one has good days and bad days, but I don't think a bad day would have any impact on the questions (referring to the statements in the OPQOL questionnaire). I don't think so.	P16
Q15	Because if I have the children around me then they should be like within walking distance, but that's not the case. However, I do have kids who are aware of me, so in that way I do have them around me. But I think that the question was asking if I have them within walking distance kind of around. You can have kids who are staying in the United States, and then you do not have them around you. When you have kids staying in the Oslo area, then you have them around you. But when some kids are not in the Oslo area but are still in Norway, so they are in a way near but….	P10
Q16	I feel that I belong to (area x). It is like my little local thing. It takes 15 min to walk there. Otherwise I can take…. I hesitated a bit, because I have the metro here and can use it down to (area y, which is just a few stations from area x), then I am in the middle of centrum. It just takes one minute. But I have no choice…. I have to go to either (area x) or (area y) in order to get a carton of milk.	P11
Q17	So first of all I reacted to the word "things." If I should travel next weekend, then I look forward to it, right? One should have then made a plan for it and booked hotels and a train and whatever it should be…. But then in my opinion, "things" is so unspecific; the word "things" I react to.	P9

emotional well-being dimension. For instance, some commented that statement 22 ("I take life as it comes and make the best of things") was not precisely formulated and could sound both positive and negative. For P4 and P9, having plans was more positive than taking life as it comes (Q10-11).

3.3 | Consistency and accuracy

This theme relates to the concerns raised by the participants with regard to whether the questionnaire could measure their QoL

consistently and accurately. Most of them thought that their way of scoring might be inconsistent and thus the OPQOL scores would not be captured accurately. When asked about how their responses would be influenced by different time spans, all participants except P3 and P12 answered that their scores would not change much from day to day. For P3 and P12, external factors such as weather and humour would influence their responses (Q12-13). However, over a longer period of time, such as 6 weeks, the scores would be different (Q14).

3.4 | Subjectivity

Some of the terms used in the statements in the questionnaire were perceived differently by the participants due to their different characteristics. These findings are presented under the theme of subjectivity. In statement 13 ("I have my children around, which is important"), some thought that the term "around" was ambiguous and could be interpreted in either a physical way (i.e. distance) or a psychological way (Q15). Similarly, the term "local" in statement 19 ("The local shops, services, and facilities are good overall") was unclear, as the definition of "local" varied when they took transportation into consideration (Q16).

The last ambiguous term was "things" in statements 3 ("I look forward to things"), 22 ("I take life as it comes and make the best of things") and 31 ("I try to stay involved with things"). The strongest reactions were observed for P9, who commented that it was difficult for her to answer these questions. She preferred to plan her life and therefore she perceived the term "things" in statements 3 and 22 negatively (Q17).

4 | DISCUSSION

Our findings indicate that the current version of the Norwegian OPQOL questionnaire covered most of the aspects that impact the QoL of older people living in Norway. However, the participants faced some issues answering some of the questions. These issues appeared to be mostly due to sociocultural differences, indicating the need for certain changes to the Norwegian OPQOL questionnaire. First, P5 highlighted the lack of food intake aspect in the questionnaire. A study investigating the relationships between life satisfaction and variables related to mental health and food patterns among older people in Norway suggested that life satisfaction and mental health are associated with food consumption (André et al., 2017). Their results showed that older people with healthier food patterns scored lower in terms of anxiety and depression but higher in terms of life satisfaction. By adding food intake aspect to the Norwegian version, we believe the instrument can achieve higher validity for rating the respondents' QoL.

Although the original OPQOL questionnaire had statement 32 ("I do paid or unpaid work or activities that give me a role in life"), the element of work was found lacking in this study due to the work aspect was not formulated as a clear and distinct dimension by itself. In Norway, there is a pension arrangement that makes it easier for older people (aged 62 and above) to combine work and payment from the general old age pension. The share of older people aged 62–70 combining work and pensions grew significantly since the new pension reform was introduced; the share of those aged 62–66 that did so increased from 9% in the 2nd quarter of 2010 to 46% in the 2nd quarter of 2016 (Nordby & Næsheim, 2017, pp. 7, 13). This statistic corresponds to our findings, of which P9 raised concerns about the lack of work-related questions in the questionnaire. In Kalfoss and Halvorsrud (2009)'s study, older people who were not hospitalised, was reported to value the ability to work as one of the important aspects influencing their QoL.

Our findings indicate that there is potentially a need for a "not applicable" response option. Respondents could interpret the midpoint as "not applicable," but they actually have different meanings (Chyung et al., 2017). For example, for statement 6, the midpoint (3, neither agree nor disagree) denotes that the respondent has pain but the severity of pain might or might not affect the respondent's well-being. For statement 13, the midpoint indicates that the respondent has children but the children's presence might or might not be important. Since not all older people have pain or children, the "not applicable" response option is necessary. Four participants did not have children, and two claimed that they had no pain. It is important to take this into account since a former study showed that 50.7% of older people in Norway did not have any chronic illness at all (Low et al., 2008). Nevertheless, there might be participants who neither had pain nor children, responded to one of the response options without informing us.

Adding the "not applicable" response option would also help non-religious respondents answer statements related to religion. Spirituality was identified as one of the core categories when exploring issues of importance to older people living in Norway (Kalfoss, 2010). Although religious beliefs were included in the category of spirituality, there are other ways of expressing spirituality, such as personal beliefs, peace of mind and so forth. In Kalfoss' study, spirituality was found connected to older people's childhoods. Our findings indicated the same. The participants related the religious aspect to their children faith while stating that they were non-religious. They also mentioned that events such as Christmas and Easter are more of traditions than religious events. Kvande et al. (2015) reported the responses of 594 respondents aged between 18 and 75 years old, 243 of whom were non-religious, to questions regarding their religiousness. A total of 206 respondents identified themselves as religious persons, 21 identified themselves as convinced atheists and 124 answered that they did not know. These findings indicate that a large proportion of people living in Norway are non-religious. Therefore, we suggest making religion a separate statement, such as "Religion and religious events/festivals are important to my QoL." The term "religion" in statements 34 and 35 can be replaced with "tradition."

Some participants made mistakes when answering the questionnaire, as the statements were formulated with both positive and negative tones. The use of positive and negative tones in

questionnaire statements has been studied extensively. Including both tones can help control respondents' bias, reducing the likelihood that they will give untruthful and/or extreme ratings (Sauro & Lewis, 2011). However, the respondents might misinterpret the statements, make mistakes or forget to reverse their scores, and the researcher might forget to reverse the scales when analysing the data. Therefore, Roszkowski and Soven (2010) recommended either formulating all statements with the same tone or including positive and negative statements in equal amounts. Of the 35 statements, there are eight statements with a negative tone: statements 4, 6, 7, 10, 12, 16, 29 and 33. This ratio is unbalanced, and it should be avoided (Roszkowski & Soven, 2010).

A translation problem was reported in the Chinese version; statement 28 ("I can afford to buy what I want to") had to be grouped under the dimension "home and neighborhood" instead of "financial circumstances." (Chen et al., 2014). This was to eliminate ambiguity and ensure that the term "what I want to" referred more specifically to the goods sold in local shops to meet basic life needs. In contrast, our participants commented that the term "what I want to" indicated no boundaries. It was the same for the term "things I would enjoy" in statement 29 ("I cannot afford to do things I would enjoy"). Mares et al. (2016) amended this term to "things I would like to have" in the Czech version, and these statement was not included at all in the Iranian version (Nikkhah et al., 2018). To make these two terms ("what I want to" and "things I would enjoy") sound more economically realistic to older people in Norway, we suggest changing them to "almost everything I want to" and "things I would really enjoy" respectively.

While validating the Turkish version of OPQOL-brief questionnaire, Caliskan et al. (2019) reported statement 3 ("I look forward to things") was interpreted as indicating insatiability. Our participants did not interpret this statement in the same way, but they thought that the statement could have a negative meaning. They had a similar response to statement 22 ("I take life as it comes and make the best of things"). For them, the term "things" was not precise; it could refer to things that were out of their control, leading them to view these statements as negative. The term "things" in statement 31 ("I try to stay involved with things") was not interpreted negatively, but as unclear. To address these misinterpretations, in statement 3, "they are either plans that have been made or anything unplanned" can be added as an explanatory sentence. In statements 22 and 31, the term "things" can be explained as "things that happen to me or are planned by me" and "things that happen around me" respectively.

The participants commented that the term "around" in statement 13 ("I have my children around, which is important") seemed to describe a geographical context, but they would be more satisfied if they had better contact with their children, as many of these older parents received help from public care institutions when they needed any help and assistance. This finding is consistent with that of Katz et al. (2010), which reported family help was the lowest in Norway among the three countries they had studied (i.e. Norway, Spain and Israel) due to the more central role of the state. Similar findings were obtained by Pettersson and Malmberg (2009). The Nordic welfare states have contributed to the fact that older parents perceive public care institutions as more important than nearness to family members. Thus, to adapt statement 13 to the Norwegian context, it can be rephrased as "I have good contact with my children, which is important."

The term "local" in statement 19 ("The local shops, services, and facilities are good overall") was described as unclear by the participants, as it could include areas accessible to them via either public or private transport but were not in the same area where they lived. In Piro et al. (2006)'s study investigating physical activity among older people living in the city of Oslo, the findings were reported based on "neighborhoods." The term "neighborhood" is more commonly used to describe the area in which a person lives (Næss et al., 2007; Rydland et al., 2014). We therefore suggest rephrasing statement 19 as "The shops, services, and facilities in my neighborhood are good overall."

Prior studies have noted the possibility of mood bias when respondents evaluate their QoL and health (Abele & Hermer, 1993; Atkinson & Caldwell, 1997; Hanestad, 1990; Moum, 1988; Tracy et al., 2007). Our findings support these previous studies, as the participants acknowledged that their responses could be affected by mood and weather. In an investigation of the association between mood score and QoL score, patients' rating of their current emotional state was found to be significantly correlated with their QoL rating (Atkinson & Caldwell, 1997). The self-reported QoL among women was found affected by their "mood-of-the-day" (Moum, 1988). Women above 55 years old had less tendency to let their mood-of-the-day influence their responses than younger women. Another bias we identified is the central tendency bias. Central tendency was defined as reluctance to give extreme scores (Albaum, 1997). Our participants admitted that they avoided extreme response categories. This finding is consistent with those of earlier studies. It is therefore crucial to be aware of these two biases when collecting and analysing OPQOL scores.

Upon reflection on our findings, we suggest that some changes be made to the Norwegian OPQOL questionnaire (Box 1).

4.1 | Limitations

We acknowledge that the amount of participants is small. However, the study's main aim was to investigate how the community living older people interpreted the translated OPQOL questionnaire instead of the translation process. We recruited the participants based on their previous involvement in other studies at the senior centre, which resulted in their sociodemographic backgrounds being similar. These senior centres are located in Oslo, and they are residential area based. All the participants were ethnic Norwegian. Hence, another limitation is the lack of representation of the diversity of older people in Norway in terms of sociodemographic background.

The number of older people over 66 years of age in Norway is 806,694 (SSB, 2019a). Of this population, 41,933 are immigrants

and/or Norwegian born with immigrant parents (SSB, 2019b). This population is expected to increase; in 30 years, it might reach 15% of the total population of older people (Johannessen et al., 2017). This group of older people does not go often to senior centres (Moen et al., 2015). Instead, they meet other older people at meeting places such as mosques and cafés. They are very different from ethnic Norwegians in terms of their needs and desires regarding QoL in old age. Although the questionnaire has been determined to be reliable and valid in an ethnically diverse population in Britain, it is crucial to validate the Norwegian OPQOL questionnaire with older people of different ethnicities in Norway (Bowling, 2009).

In Bilotta et al. (2011)'s study using the questionnaire to predict several adverse health outcomes in older outpatients living in a community in Italy, the mean for OPQOL total score was 116.20 ($n = 210$). Kojima et al. (2016) investigated the associations between baseline frailty status and subsequent changes in QoL, and the mean OPQOL score was 130.82 ($n = 363$). In comparison, our participants' OPQOL scores were higher; the median score is 140.84 and the range is 121.33–157.33. This might indicate that older people living in Norway with a lower QoL were not included in this study, and it is possible that the population represented in this study values things differently than other populations.

Our study's design could be more comprehensive if quantitative data were collected. Previous studies validating the OPQOL questionnaire in their native languages used a quantitative approach (Caliskan et al., 2019; Chen et al., 2014; Mares et al., 2016; Nikkhah et al., 2018). Of these four studies, the one conducted by Nikkhah et al. (2018) was the only validation study using a mixed-methods approach. The qualitative content validity and qualitative face validity were stated in their methods, but not in the results.

BOX 1 Suggestions for changes to the current version of the Norwegian OPQOL questionnaire

The following changes can be made to take into account the sociocultural context of Norway:

- Include food intake and work aspect;
- Address religion in a separate statement (i.e. "Religion and religious events/festivals are important to my quality of life")
- Replace the term "religion" in the original statement with "tradition"
- Add a "non-applicable" response option
- Balance the amount of statements with positive and negative tones
- Rephrase "what I want to" as "almost everything I want to" in statement 28
- Rephrase "things I would enjoy" as "things I would really enjoy" in statement 29
- Add an explanatory sentence, "They are either plans that have been made or anything unplanned," in statement 3 ("I look forward to things")
- Rephrase "make the best of things" as "make the best of things that happen to me or are planned by me" in statement 22
- Rephrase "stay involved with things" as "stay involved with things that happen around me" in statement 31
- Rephrase "my children around" as "good contact with my children" in statement 13
- Rephrase "local shops, services, and facilities" as "shops, services, and facilities in my neighborhood" in statement 19

5 | CONCLUSION AND FUTURE WORK

This study aims to investigate how community-living older people interpret the Norwegian version of OPQOL questionnaire. Our findings provide an overview of the changes that can be made to the questionnaire to potentially address sociocultural differences for application among community-living older people in Norway. The original questionnaire was designed based on input from older people in the United Kingdom (Bowling, 2009) and the current Norwegian version (i.e. the one used in this study) was translated without making any changes to reflect sociocultural differences. Fourteen community-living older people were asked to interpret and answer the questionnaire, and then they were interviewed. Four primary themes were identified and changes to be made to the Norwegian OPQOL questionnaire are presented. In the future, using both qualitative and quantitative approaches, we hope to further examine whether the suggested changes can assist respondents in understanding and answering the questionnaire. The suggested changes will be investigated to determine whether they are favoured by the older people living in Norway. For statements with amendments, both the original and amended versions will be presented to the respondents, who will choose which one they think is easier to understand and answer. To ensure that the diversity of older people living in Norway is taken into consideration, older people from diverse sociodemographic backgrounds (e.g. ethnicity, education level, living area, health condition) should be included in future studies.

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CONFLICT OF INTEREST

All authors declare that they have no conflicts of interest in this work.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available upon request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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