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# **Exploring subjective constructions of quality of life in patients, carers and the healthy general public: a Q-methodological study**

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## Introduction

Health-related quality of life (HRQoL) measures such as EQ-5D and SF-6D, were developed under the conceptual framework of health [1]. Despite being widely used to inform decision-making in health care, HRQoL measures may not be able to sufficiently assess benefits beyond health [2; 3]. For example, HRQoL measures may fail to capture important outcomes, including independence, relationship and confidence, in related sectors of personal care, social care and public health [4; 5]. They also have limited capacity to reflect the broader impact of health and social care interventions on, for example, informal carers [6]. Generic health and wellbeing measures, such as EQ-HWB (EQ Health and Wellbeing), have therefore been developed to bridge the conceptual gap to assess quality of life (QoL) that encompasses the broader benefits of health and social care. The whole development process of the measures took careful consideration of the views of patients, service users and their carers, with regard to how health and social care services and/or caring roles can impact their QoL [5]. Therefore, these generic health and well-being measures are expected to provide a comprehensive list of domains and items associated with not only health but also well-being. As a result, theoretically, they have the potential to be used in various populations and thus, are suitable for outcome measurement of interventions across health and social care.

Evidence has been building up to prove the appropriateness of EQ-HWB in different groups, including patients, carers and the general public [7-11]. Those studies are important to support the feasibility and validity of this instrument. Apart from collecting statistical psychometric properties to know whether EQ-HWB can perform well in not only patients but also service users and carers, it is equally important to know how EQ-HWB can be used across different groups and populations. Evidence from a more conceptual point of view is needed to show why EQ-HWB can have a variety of targeting audiences and how such variety can affect the measurement and

evaluation of QoL. It has been shown by empirical studies that people with different demographic factors can understand, describe, and value QoL very differently [12; 13]. Similarly, whether a person is a patient, carer, or from the general population can influence contextual interpretations and relative importance of the items of a QoL measure [4] and consequently, the reporting and valuation of QoL. However, limited studies have been conducted to test similarities and differences in perceptions of the internal construct of QoL among different population groups, despite the ultimate goal of the instrument being to generate such a measure for use across a variety of audiences.

Previous studies have explored the subjective constructions of health [12], QoL [13], and well-being [14; 15], using Q-methodology. Stenner et al. [13] may be among the first to apply Q-methodology to the QoL domain, identifying a range of diverse viewpoints, but their study was limited to healthy participants. A more recent study [14] also examined the construct of well-being but focused exclusively on an older population. Building on this foundation, the present study aimed to address this important gap by including a broader sample, encompassing patients, carers, or members of the general public with varied roles in health and social care. In addition, none of the previous studies have specifically defined QoL from an operational perspective—that is, as an outcome used to assess the benefits of health and/or social care. In this paper, we adopt an operational definition of QoL: aspects of an individual's QoL or well-being that are influenced by their health conditions, healthcare interventions, public health measures, social care, or informal caregiving roles. The focus of this study is on QoL outcomes, as defined by EQ-HWB [16], distinguishing these from broader determinants of QoL that may not directly reflect outcomes, such as financial conditions or external environments, which were often included as major aspects in the previous studies [13; 14].

The overall aim of this study is to explore similarities and differences in perceptions of

QoL in China, among different groups of populations, including patients, carers and healthy general publics.

## **Methods**

Q-methodology [17], which involves both qualitative and quantitative components, was conducted to explore individuals' opinions and identify patterns of views across a participant group.

### **Q-sample**

Q-sample is a set of statements that includes the diversity of opinions and perspectives about the research topic so that participants may rank statements to express their views. EQ-HWB was developed through comprehensive reviews of qualitative literature and face validation interviews involving patients, social care users, the general public, and carers [5; 16]. As such, it can provide a robust initial foundation for identifying relevant and important aspects of QoL. In order to encompass a comprehensive list of crucial aspects of QoL for use in a Chinese cultural setting, our Q-sample statements also drew inspiration from the EQ-HWB content validity study in China [18], including QoL concepts identified in qualitative interviews with Chinese participants. We developed Q-sample statements based on the aspects of QoL identified in the content validity study, but excluded specific items that were 1) not generic; 2) overlapping with the existing EQ-HWB items; and 3) too broad for use in well-being measurement.

The final Q sample included 35 statements - 24 from EQ-HWB questions and 11 from the qualitative interviews. Specific criteria for determining and formatting Q-sample statements can be found in Appendix 1. We aimed to ensure that the statements were clear, without double negative, without repetition in contents and understandable to lay people. Initially, our Chinese collaborators reviewed and revised the original content; the updated version was then translated into English for team feedback. Pilot

tests with four Chinese laypeople were conducted before finalising the phrasing.

## Participants

Q methodology does not require a large sampling pool [19], but it is important to obtain a group of participants with diverse demographic background, which can capture a wide range of views and opinions.

We recruited three different groups of participants: a group of the healthy general public (people without any health conditions, n=50), a group of patients (patients with a recent injury or chronic diseases including cancer, hypertension, COPD and asthma, n=50), and a group of carers (people without any health conditions but were taking care of patients, n=50). By defining the three groups, we tried to make each group unique from the others. In each population group, we aimed to diversify the sample in terms of their gender, age, residence place and educational background. Participants were not recruited if they were not able to read or communicate.

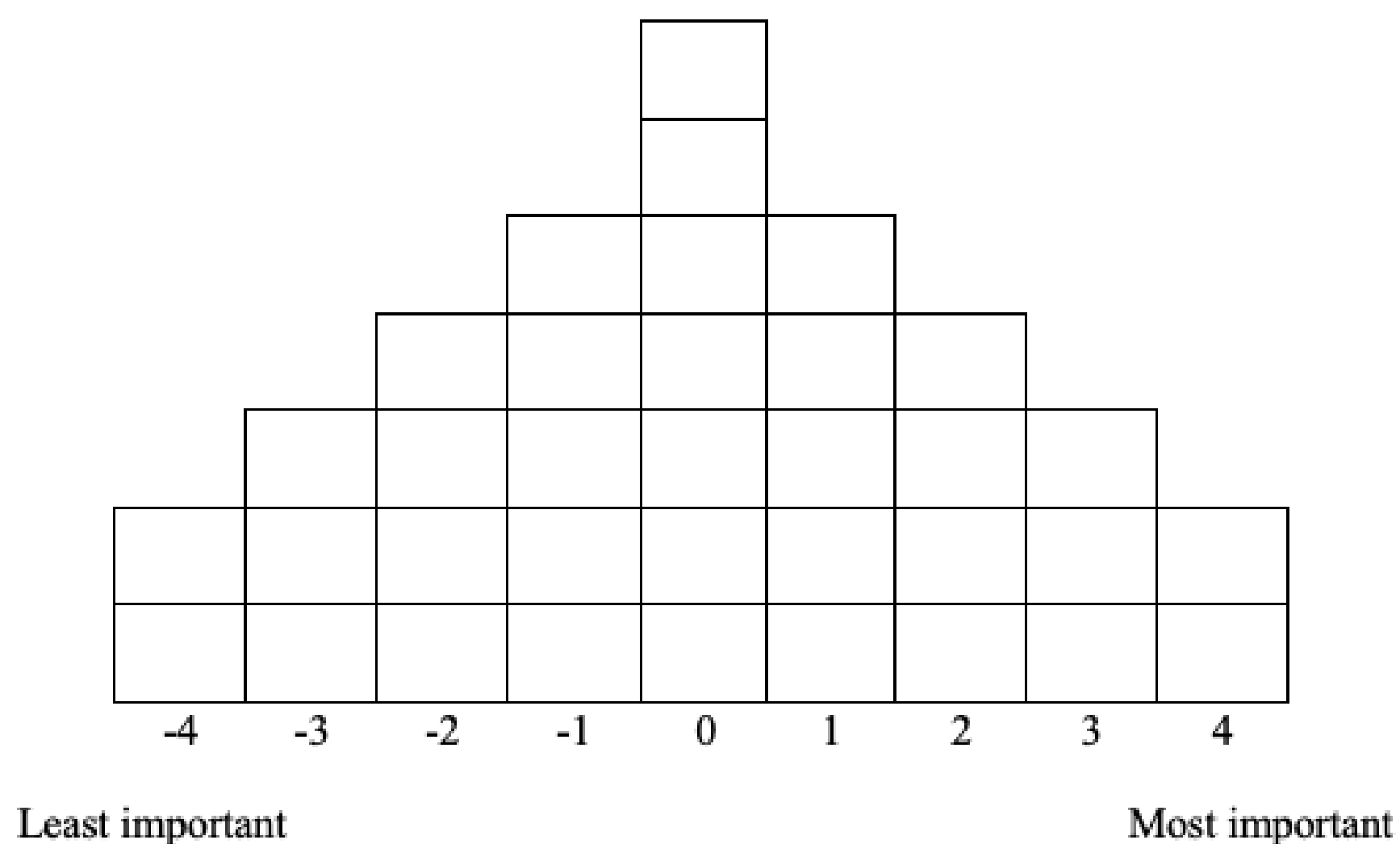
To access potential participants, we adopted purposive sampling (targeting a specific group), snowball sampling (roll out to others) and quota sampling (patients, carers and the healthy general public). For the recruitment of patients and carers, we contacted staff in hospitals and care homes in Chongqing and Guizhou. To recruit healthy general public, gatekeepers (individuals serving as the first point of contact within a community or group who offered help in participant recruitment) were approached. Snowball and purposive sampling were used to recruit participants with specific characteristics (demographic background and/or their role).

We trained five Chinese interviewers who held at least a bachelor's degree. Data collection was conducted face-to-face and one-on-one by the trained interviewers in a quiet venue in a hospital office room or a café. Once prospective interviewees confirmed their willingness to participate, the place, date and time were discussed and arranged.

## Data collection

Participants were provided with 35 Q-sample statements and asked to sort the statements by answering “When thinking of your quality of life, which aspects are important?” They were asked to assign the statements of the Q-sample on a Q-grid (see Figure 1), which contained as many blank cells as the items in the Q-sample. It provided a quasi-normal distribution forcing participants to rank order statements from most important to least important.

Figure 1: Q-grid for the sorting experiment



A post-sorting interview was conducted to further investigate why participants ranked the statements in certain ways. The post-sorting interview was audio-recorded and transcribed. Participants were also asked to provide their socio-demographic information, including age, education level and work status, and to rate their current health status on a scale from 0 to 100, where 0 represents the worst imaginable health status and 100 represents the best imaginable health status.

## Data analysis

Participants' Q-sorts were put into the Ken-Q analysis (version 2.0.1) package for analysis. This study adopted PCA along with Varimax rotation to analyse the data,



because such a combination can automatically and efficiently produce factors that can explain the maximum level of the study variance [19]. It can generate a mathematically superior solution where the similarities within factors and the differences across the factors are maximised [20].

The principal aim of factor extraction is to keep those factors that are reasonably interpretable and each can represent a distinct viewpoint [17]. It is important to acknowledge that Q-methodology strongly relies on a qualitative component, where conceptual distinctiveness and meaning is considered essentially important [19]. Meanwhile, statistical parameters, such as the Scree test using eigenvalues, were also considered in the factor selection process [19]. In this test, eigenvalues would be plotted on a line chart. The slope of the line would indicate which factors should be retained: those factors to the left of the point where the slope is levelling off. Another standard requirement is that a factor should have at least two exemplars whose Q-sorts load strongly on that factor to obtain “shared orientations” among participants [19; 21].

For each factor, exemplars were identified (participants with Q-sorts loading  $+0.4$  ( $p < 0.01$ ) on one factor only). Each factor array was generated based on a weighted averaging calculation, where exemplars' Q-sorts with higher loadings were given more weight. This merged factor array thus can be regarded as a conceptually best estimate of all the Q-sorts of the exemplars clustered under this factor. Interpretation of each factor can be achieved by observing the scores of the Q-sample in its factor array as well as by recognising similarities and differences across the factors. A lower value indicated that the statement was less important ('-4' indicated least important); a higher value indicated more important. The transcribed comments from the post-sorting interviews were thematically summarised and supplemented the interpretation process. Specifically, we analysed the transcripts of exemplars for each factor, using a thematic coding approach to identify their explanations for ranking

certain items as most or least important. These coded concepts were grouped into categories to reflect common reasoning patterns. By comparing and contrasting these across exemplars, we could develop a narrative interpretation for each factor.

## **Results**

We recruited participants from 11 different provinces/cities in China between June and October 2024, but two-thirds of them were living in Chongqing city or Guizhou province. Demographic characteristics of all participants and exemplars clustered in each factor are presented in Table 1.

Originally, eight factors were extracted, all with an eigenvalue of 1.00 or more and at least one exemplar. The eigenvalues and percentage of variance explained for each of the eight extracted components are in the Appendix. Inspection of factors five to eight showed that they did not provide distinct viewpoints that were not captured in factors one to four (see Appendix 2). Therefore, a four-factor solution, that explained 44% of the total variance, seemed most appropriate. The scree plot with eigenvalues also suggested that the four-factor solution was potentially eligible for interpretation (Appendix 2). The factor arrays for the four factors are presented in Table 2.

	All sample	Factor 1	Factor 2	Factor 3	Factor 4
Caregiver	50 (33.1%)	15 (44.1%)	8 (53.3%)	4 (26.7%)	10 (34.5%)
Patient	50 (33.1%)	12 (35.3%)	3 (20.0%)	8 (53.3%)	10 (34.5%)
General	51 (33.8%)	7 (20.6%)	4 (26.7%)	3 (20.0%)	9 (31.0%)
Female	97 (64.2%)	21 (61.8%)	6 (40.0%)	11 (73.3%)	17 (58.6%)
Male	54 (35.8%)	13 (38.2%)	9 (60.0%)	4 (26.7%)	12 (41.4%)
Under high school	46 (30.5%)	17 (50.0%)	6 (40.0%)	2 (13.3%)	5 (17.2%)
High school and technical secondary school	26 (17.2%)	4 (11.8%)	4 (26.7%)	3 (20.0%)	4 (13.8%)
College and above	79 (52.3%)	13 (38.2%)	5 (33.3%)	10 (66.7%)	20 (69.0%)
No job	47 (31.1%)	8 (23.5%)	5 (33.3%)	9 (60.0%)	7 (24.1%)
Part-time job	10 (6.6%)	1 (2.9%)	2 (13.3%)	0 (0.0%)	2 (6.9%)
Full-time job	55 (36.4%)	12 (35.3%)	5 (33.3%)	4 (26.7%)	14 (48.3%)
Students	11 (7.3%)	3 (8.8%)	1 (6.7%)	1 (6.7%)	2 (6.9%)
Retired	28 (18.5%)	10 (29.4%)	2 (13.3%)	1 (6.7%)	4 (13.8%)
City	93 (61.6%)	17 (50.0%)	5 (33.3%)	12 (80.0%)	23 (79.3%)
Town	40 (26.5%)	12 (35.3%)	5 (33.3%)	2 (13.3%)	5 (17.2%)
Rural	18 (11.9%)	5 (14.7%)	5 (33.3%)	1 (6.7%)	1 (3.4%)
Age (mean, SD)	42.85 (17.24)	51.21 (16.25)	41.87 (18.22)	35.33 (18.92)	41.55 (15.80)
Health rate (mean, SD)	79.14 (11.16)	80.68 (10.33)	82.53 (6.08)	71.43 (11.84)	79.90 (10.96)

Table 1: Demographic characteristics of the exemplars (participants whose Q-sorts loaded strongly on each factor)

Note: While some categories appear more frequently within certain factors, all factors except Factor 3 include exemplars from a range of participant categories. Interpretations should therefore be made with caution when linking factors to specific demographic or role-based characteristics.

	Statement	Facto r1	Facto r2	Facto r3	Facto r4
1	Free of physical pain	2	2	4	3
2	Free of physical discomfort	3	3	3	4
3	Feeling you have control over your day-to-day life	-1	-1	-1	2
4	Sleep condition	4	1	4	1
5	Ability to see	4	-2	1	1
6	Ability to concentrate	0	1	-1	0
7	Feeling I can cope with my day-to-day life	0	1	-1	3
8	Ability to wash, toilet, get dressed, eat...	2	-2	-3	4
9	Ability to do day-to-day activities	1	0	-2	3
10	Ability to adapt to the social environment	0	4	-3	-1
11	Feeling hopeful	-1	-2	0	0
12	Ability to think things clearly	0	3	0	2
13	Free of feeling lonely	-3	0	0	-4
14	Ability to do enjoyable activities	0	-4	-1	-2
15	Free of feeling stressful	-4	-3	1	-2
16	Ability to socialize	-1	2	-2	-3
17	Spiritual appearance	2	1	2	1
18	Free of feeling sad/depressed	-2	-1	1	-2
19	Free of feeling frustrated	-3	-2	2	-3
20	Ability to remember things	1	0	0	0
21	Feeling supported by people	-1	0	-4	-4
22	Ability to get around inside and outside	2	-4	0	2
23	Ability to control emotions	1	2	0	2
24	Social relations	1	4	-2	-1
25	Desire of having food	3	0	3	0
26	Free of feeling angry	-4	-1	2	-2
27	Free of feeling anxious	-3	-1	2	-1
28	Feeling safe	0	1	1	1
29	Free of negative feelings about yourself	-2	-3	3	-1
30	Feeling accepted by others	-1	0	-3	-3
31	Ability to hear	3	-1	-1	1
32	Feeling I live with dignity	1	3	-4	0
33	Free of feeling to be a burden to others	-2	0	-2	0
34	Ability to communicate with people	0	2	0	0
35	Free of feeling exhausted	-2	-3	1	-1

Table 2: Factor arrays, representing the shared viewpoint of the exemplars associated with each factor

Note: The numbers represent the ranking of each item from each perspective/factor, where 4 indicates the most important and -4 indicates the least important. Items indicated as most important are in red colour (+4, +3); Items indicated as least important are in green colour (-4, -3).

#### Factor 1: **Eat, sleep and other basic needs**

Q-sorts of 34 participants exemplified this factor. Compared with the exemplar structure in other factors, this factor seemed to be favoured by a large proportion of participants with low educational attainment, who also had the highest average age.

This factor represents a perspective that prioritised basic well-being and physical health, particularly sleep (+4) and appetite (+3), as the most important aspects of QoL. Exemplars in this factor emphasised the foundational role of sleep, often describing it as something that "affects everything" and "every aspect of life" (No.9, carer, male). One exemplar explained that "When I sleep well, my work goes well and I can socialise well", which suggested that sleep can be associated with negative impacts on work performance and social well-being. Participants also shared the belief that a good appetite can bring good physical health and a happy mood: "When you do not eat well, you do not have strength, you cannot do things" (No.37, patient, female) and "If you do not eat well, if you do not have a good appetite, your mood is bad" (No.44, caregiver, female).

The highlight of "sleep" and "appetite" was frequently supported by the explanations that "Physical body is the foundation of success" (No.70, healthy, female). This also explained why physical functioning items such as "ability to see" (+4) and "ability to view" (+3) as well as physical feelings such as "Free of physical discomfort" (+3) were rated as the most important by this group.

In contrast, emotional and mental well-being were rated as less important to quality of life by this group. Negative emotions, such as "feeling stressful" (-4), "feeling angry"

(-4), “feeling anxious” (-3), and “feeling lonely” (-3) were perceived as least important. Participants noted that bad emotions are common and can even enhance the appreciation of positive feelings (No. 6, healthy, male). Some also mentioned that these problems could be resolved (No.25, patient, female). Some participants reported experiencing these negative emotions infrequently, making these aspects less important to their perspective (No.3, patient, male). Some participants thought negative emotions were temporary which did not impact their quality of life that much: “emotions are temporary, when they pass, it will be okay” (No.91, carer, female).

## Factor 2: **Positive relationships, belongings and well-being**

Q-sorts of 15 participants exemplified this factor. This factor seemed to be predominantly favoured by carers, as more than 50% of the exemplars were participants in this category.

This factor reflects a perspective where social relations and a sense of belonging are viewed as central to QoL. Exemplars of this factor emphasised the importance of “social relations” (+4), “ability to adapt to the social environment” (+4), “ability to communicate” (+2) and “ability to socialise” (+2). Participants expressed that “individuals are part of a larger society. We need good social relationships to live” (No. 79, healthy general, male). One carer participant also shared that while her primary responsibility was caregiving at home, she was eager to have more interaction with the outside world, “I hope to go out to work... I am at home most of the time, taking care of the patient at home, but I want to communicate more with the outside world” (No.29, carer, female).

“Feeling I live with dignity” (+3) also emerged as a valued aspect of well-being for this group. Participants expressed a strong desire for independence, stating that they wished to help others but did not want to trouble or burden anyone (No.14, patient, female). They illustrated that “I do not want other people to say what to do or not to do

in my life, I want my dignity” (No.67, carer, male).

On the other hand, physical functioning items, such as “ability to get around inside and outside” (-4), “ability to do enjoyable activities” (-4), and “ability to wash, toilet, get dressed, eat or care for your appearance” (-2), were rated as less important by this group. Many participants explained that these concerns were not personally relevant, and these items were typically associated with elderly individuals. For enjoyable activities specifically, participants explained that a lack of energy, time, or access to facilities can make such pursuits less central to their lives (No. 106, carer, male). Negative emotions, such as “negative feelings about yourself” (-3), “stressful” (-3) and “frustrated” (-2), were also regarded as less important, with similar reasons illustrated by Factor 1.

### Factor 3: **My own physical and mental health first**

Q-sorts of 15 participants exemplified this factor. This factor presents a perspective, where personal physical health and mental feelings precede external social considerations. This group tended to have the lowest average age and the lowest self-rated health scores and were primarily patients and unemployed individuals.

In this viewpoint, participants emphasised the critical impact of being free from physical pain (+4) and discomfort (+3), as well as negative emotional feelings (+3), such as anxious (+2), angry (+2), and frustrated (+2). Pain and discomfort were described as a great barrier to daily life, with participants stating that when they were in pain, they could not engage in any meaningful activities (No.13, patient, female and No.43, patient, male). Additionally, they were seen as influential factors for mental well-being: “Pain and discomfort can also affect my mood” (No.73, healthy general, female).

Similarly, participants described how mental feelings can negatively affect their lives. For example, a participant described that “bad mood will affect my physical health,



experiencing anger or unhappiness will produce bad things, which are not good for family and body” (No.27, patient, male). One patient participant also explained that effectively managing negative emotions, such as depression or anxiety, not only eased emotional distress but also reduced physical discomfort (No.68, patient, male).

In contrast, items related to how others perceive them, such as “feeling I live with dignity” (-4), “feeling supported” (-4), or “feeling accepted” (-3), were rated as least important by this group. Similarly, “ability to adapt to the social environment” (-3), “social relations” (-2), and “ability to socialise” (-2) were considered not that important compared to other factors. Participants explained that these aspects were closely related to external opinions and had limited influence on their personal sense of well-being: “This (subjective evaluation by others) is not determined by me, but by others. If others lack the quality to accept me, it doesn’t matter to me... I won’t let others judge what’s right or wrong about me” (No.27, patient, male). Also, a participant mentioned, “Support from others is just psychological comfort. If your health is poor, nothing else matters” (No.31, patient, female).

However, this factor also included four negative exemplars who held a completely different viewpoint. While the positively loading participants prioritised physical and emotional feelings, the negative exemplars believed that pain could be endured, and emotional distress was either infrequent or well-managed. For example, one participant noted, “even when such emotions arise, I don’t let them affect my life” (No.8, patient, female). This perspective on negative emotions was more closely aligned with viewpoints expressed in Factors 1 and 2. In addition, these negative exemplars placed greater emphasis on social well-being and physical functioning, which overlapped with the views expressed in Factors 2 and 4, respectively.

#### Factor 4: **Physical health is the foundation of well-being**

Q-sorts of 29 participants exemplified this factor, which was equally valued across all

three categories of participants: healthy general public, patients and carers.

This factor reflects a viewpoint where physical health—including physical senses: “free of physical discomfort” (+4) and “free of physical pain” (+3), as well as physical functioning: “ability to wash, toilet, get dressed, eat or care for your appearance” (+4), “ability to do day-to-day activities” (+3), “ability to get around inside and outside” (+2), cope (+3) and control day-to-day life (+2)—is considered the most important aspect of quality of life. Participants emphasised the importance of the capacity to perform physical functioning, such as self-care and mobility. For them, maintaining good physical health was regarded as the foundation that can support other aspects of life: “This is the basic ability to survive, this is the basic condition for living” (No.115, carer, male).

In contrast, items related to mental well-being and social connections were regarded as less important. Similar to the reasoning in Factor 1, participants in this factor viewed mental health issues, such as feeling lonely (-4), frustrated (-3) and stressful (-2) as secondary to physical health. They believed that while physical health challenges were the primary concern, mental or emotional states had less influence on their overall QoL. Additionally, similar to Factor 3, social considerations such as feeling supported (-4), accepted (-3), or the ability to socialise (-3) were seen as less important. These participants did not feel that external factors, like social approval or relationships, had a major impact on their QoL.

## **Discussion**

This study is the first to explore the subjective constructions of QoL across a diverse population, including patients, the general public and carers in China. It provides findings on whether and to what extent people with different roles (being a patient, carer, or the general public) can understand and evaluate QoL differently. Through a direct, head-to-head comparison of preferences across various QoL domains, this

study also strengthens the evidence base of EQ-HWB, particularly strengthening its validity in assessing QoL across heterogeneous population groups.

Notably, free from physical pain, free from physical discomfort, and sleep conditions were consistently rated towards the "important" end of the scale across all viewpoints.

**This highlights a common, underlying theme that physical well-being is a universal aspect of QoL among the participants.** Regardless of whether participants were patients, carers, or members of the healthy general population, there was a shared recognition of how greatly sleep and physical pain/discomfort can impact daily life and overall well-being. Similar to our results, in a recent Dutch study exploring well-being among older adults in the Netherlands, physical health—though referring to different aspects—was also explicitly identified as the most important factor or deemed more important than mental health [14]. Another study found that physical health, particularly items related to physical independence, consistently ranked as important for QoL [13]. This contrasts with our findings, where we found sleep to be the most important aspect in two factors, while pain was ranked as most important across all factors. However, it is important to mention that the British study that was conducted 20 years ago was an initial attempt to explore the QoL subjective construct, and the study primarily included white, English-speaking participants and did not attempt to recruit retired, unemployed, or unhealthy individuals.

Different views prioritised various aspects of QoL. These differences may be explained by a range of socio-demographic factors that shape individuals' perceptions of well-being, as noted in the literature [22; 23]. For instance, individuals with poorer health or younger age often prioritised personal feelings—including both physical discomfort and mental distress—as the most crucial aspect of their QoL. This may be because negative physical and emotional experiences have a more immediate and profound impact on their daily life compared to those in better health or older. Additionally, a large proportion (50%) of the participants in Factor 1 had relatively low

levels of educational attainment. Participants in this factor seemed to view QoL through a more pragmatic lens, where elements such as sleep and appetite were rated as most important. This aligns with traditional health beliefs in China that the basic bodily functions (e.g. sleep and eat) as essential to overall well-being [24].

This study revealed important variations in the perspectives of patients, carers, and the healthy general population regarding what they perceive as essential to QoL. We found that Factor 2, which places a high value on positive relationships, was predominantly represented by carers. This may be due to the nature of their role, as they provide ongoing support to patients and their families. Their role can make them value more about the importance of social connections and support networks in life. Additionally, as some carers mentioned, their time was occupied by the patients, which could be otherwise spent on social life. Many of them were taking care of patients at home and did not have external employment. Thus, they may have a strong desire to engage with the outside world and value social relationships. In contrast, Factor 3, which was dominated by patients, focuses on individual feelings, including emotional and physical distress, which may have largely impacted QoL of the patients. As a result, they may consider these as critical factors in thinking of QoL. These findings therefore present the importance of tailoring QoL assessments to reflect the unique needs and perspectives of diverse populations. Moreover, this study highlights the variations in preference over different aspects of QoL across diverse population groups.

This study has several limitations. First, it was challenging to completely distinguish the general public and carers within our sample. Participants who were identified as carers in this study can have varied caregiving responsibilities and its associated burden. These differences could influence how they interpret and prioritise different aspects of QoL. Second, our sample was not fully balanced in terms of sex, education, and residence place. For example, most participants in our study were recruited from

Chongqing and Guizhou and regional differences in economic development, social and cultural norms as well as health care experiences [25], can shape how QoL is understood. Consequently, the transferability of our findings to other regions in China may be limited. Meanwhile, this study is limited to the context of China, where cultural values may have influenced the preferences of QoL aspects; future research can aim to explore these findings in broader cultural and geographical settings. In addition, although the Q-sample statements were carefully written and checked for clarity, some participants reported difficulty comprehending or interpreting specific statements. This was particularly mentioned for items related to emotions, where phrases like “free of feeling...” were more challenging to interpret compared to others. In addition, due to the subjective and exploratory nature of Q methodology, we acknowledge that the factors identified are not statistically representative of specific participant categories, and therefore our findings should be understood as interpretive rather than predictive. Although some participant categories are more prominent in certain factors, it is important to note that each factor includes exemplars from a range of participant backgrounds. As such, these factors should be interpreted primarily in terms of shared viewpoints rather than demographic or role-based distinctions. Future quantitative studies are recommended to further investigate the assumptions and patterns proposed in this study.

## **Conclusion**

This study explored the subjective constructions of QoL among a diverse population, including patients, carers, and the general public, identifying four distinct perspectives. Physical health items including sleep, free of pain and discomfort were universally recognised as important. We identified the emphasis on social well-being by carers and personal feelings by patients. This study also shows the importance of tailoring QoL assessments to reflect the unique needs and perspectives of diverse populations.

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