

Saliency versus ranking: Exploring the utility of tasks used in qualitative research to identify concepts that are most important to patients

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Introduction & Background

Understanding the key concerns of patients which significantly affect their well-being and quality of life is essential for designing clinical trials and developing therapies that truly improve patient priorities. Qualitative interviews or surveys used in patient-centered research are a fundamental step in collecting this important data.

Concept saliency and ranking tasks are frequently used in patient-centered research to understand the “bothersomeness” or the “relative importance” of disease symptoms and impacts to how patients feel and function.

The findings of these tasks can provide additional context to patient experience or preference data collected in concept elicitation research (Figure 1). The results can also be used to:

- Inform the definition of the Concept(s) of Interest (COI) to include in a Clinical Outcome Assessment (COA) measurement strategy
- Assess coverage of existing COA measures against the COI
- Inform the development of new COA measure items that reflect concepts that are important to patients.

Figure 1. Overview of saliency versus ranking tasks used in patient-centred research

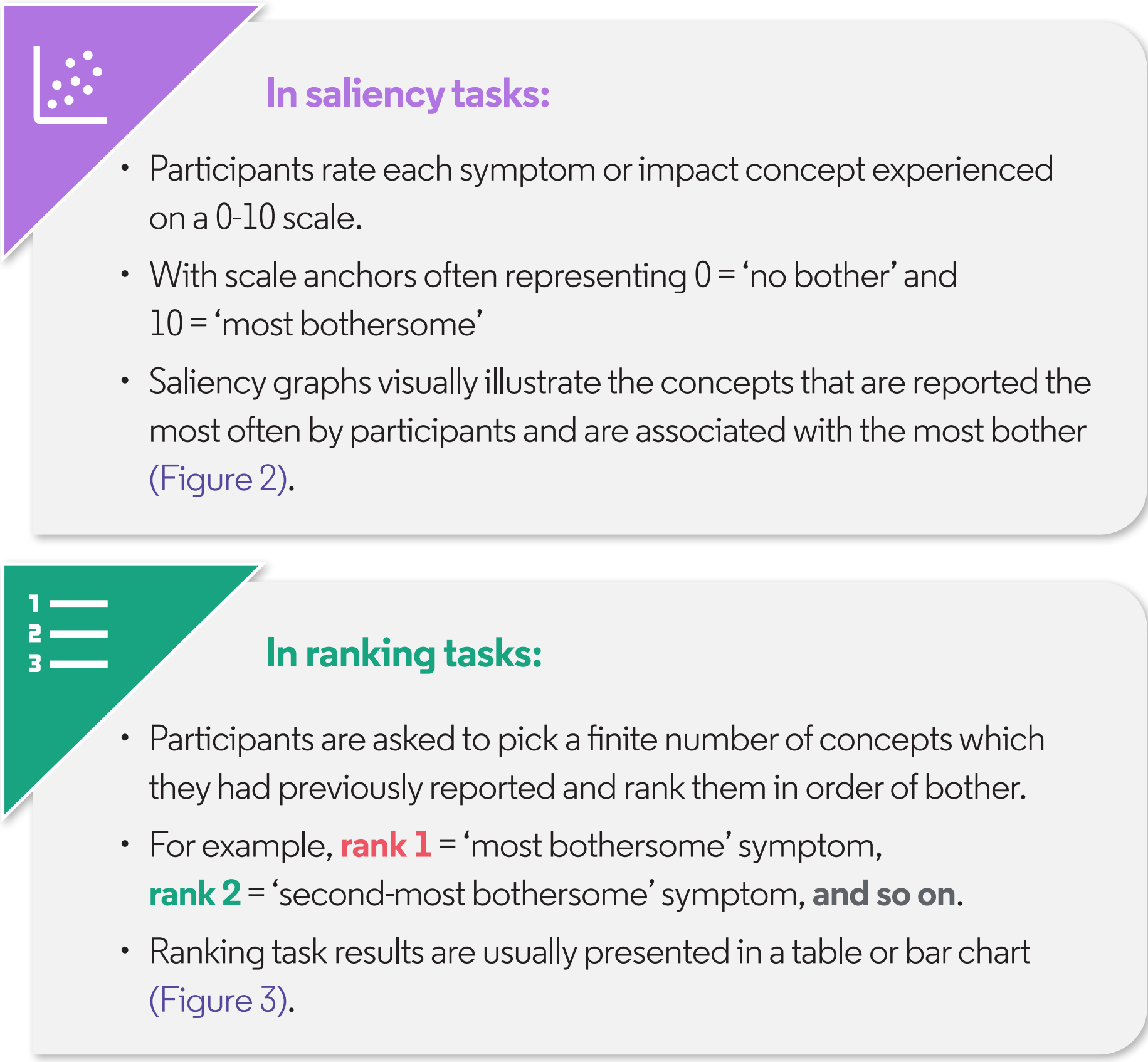


Figure 2. Example saliency task output

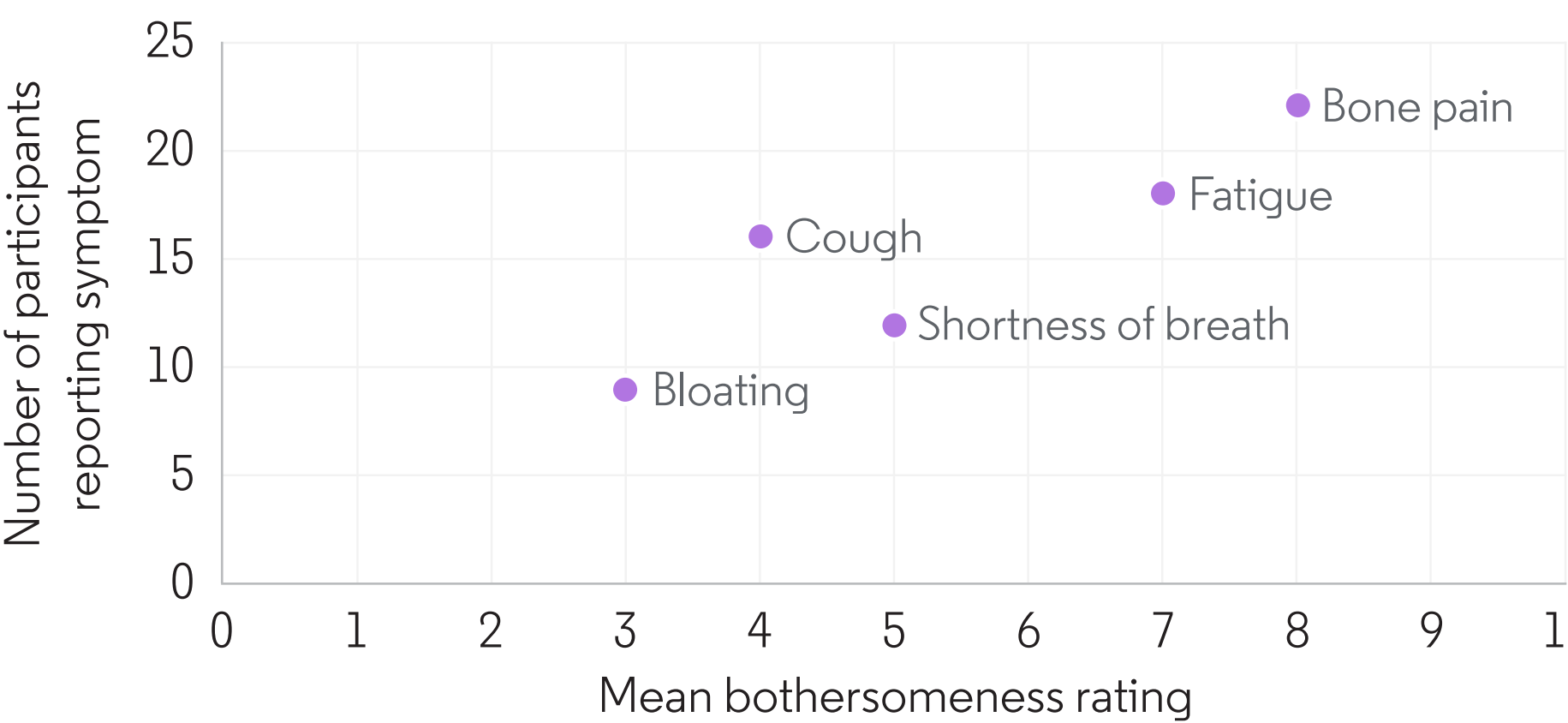
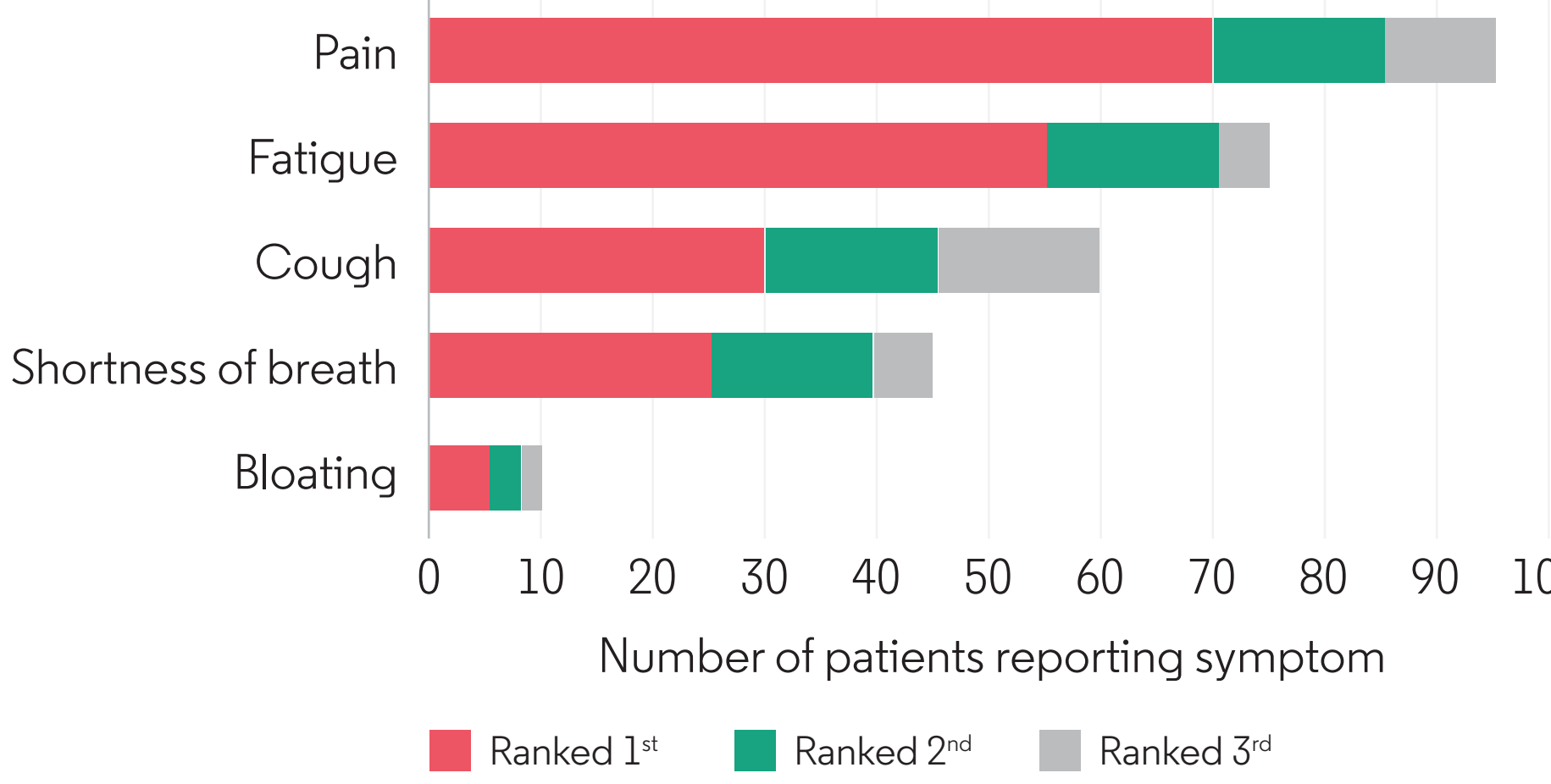


Figure 3. Example ranking task output



Aims & Methods

This review aimed to:

1. Provide methodological recommendations for researchers considering the use of saliency or ranking tasks
2. Outline practical considerations for researchers to facilitate optimal data collection when using these methods

Publications and recent relevant experience in qualitative research studies were reviewed and drawn upon to inform understanding of how each task type can be used to identify concepts that are important to patients.

The advantages, disadvantages, and practical considerations for both saliency and ranking tasks were summarized to provide an evidence base of recommended practice for utilizing the tasks.

Results

Advantages and disadvantages of using saliency and ranking tasks in patient centered research are presented in Figure 4 and Figure 5.

Task advantages and disadvantages

Figure 4. Advantages and disadvantages of saliency tasks

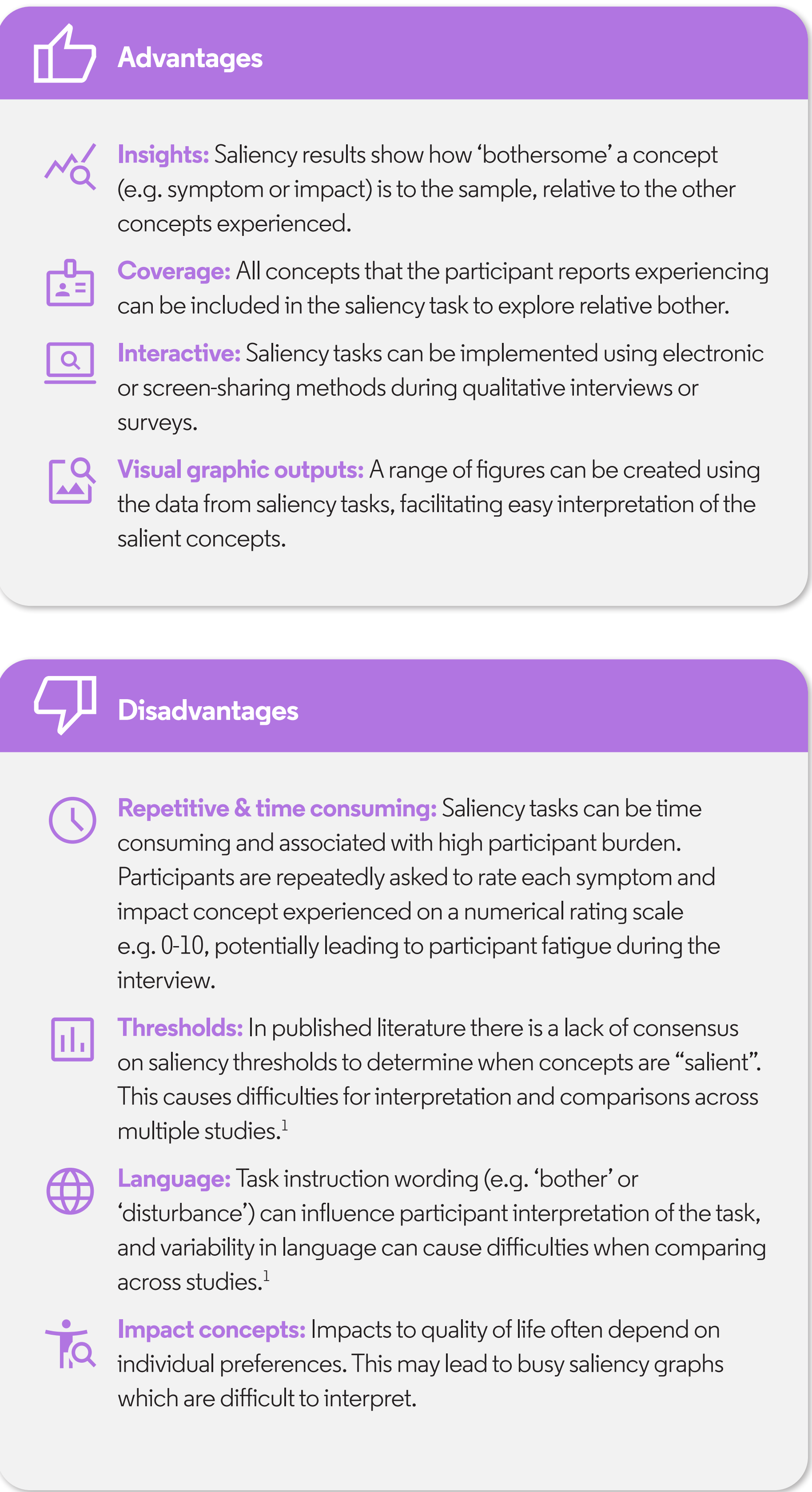


Figure 5. Advantages and disadvantages of ranking tasks



Practical considerations

Suggestions for researchers intending to use one or both tasks during patient centered research are summarized below.

- **Consider the number and type of concepts anticipated:**
 - Conducting preliminary research into the condition can help researchers anticipate the number of concepts which may arise and decide which task is best suited to the study.
 - For example, some rare diseases can include numerous heterogenous signs/symptoms. A saliency task could therefore be time consuming to implement, and a simpler ranking task may be better suited.
 - It can be difficult to gain clear results on the most “salient” or most “bothersome” impact concepts across the sample, as impacts can be varied within the sample and depend on individual experiences and preferences.
 - As impacts that patients experience may vary according to their individual activities and interests, ranking tasks may be more effective at narrowing down impacts that are pertinent to patients, rather than saliency tasks.
- **Consider the planned data collection methods for your study:**
 - Saliency tasks may be effectively implemented in electronic survey methods, as there may be more flexibility with the task time limit compared to interview studies. The survey platform can be programmed to display each sign/symptom selected on the screen to simplify the task process.
 - During interviews, saliency tasks are often completed multiple times, as participants rate each individual concept they report. In comparison, ranking tasks are generally completed once. Therefore, saliency tasks are better suited to longer interviews (≥60 minutes), whereas ranking tasks are often quicker and can be completed in shorter interviews (≥30 minutes).
- **Consistently apply language when completing tasks with participants:**
 - The language used for the instructions of saliency and ranking tasks can influence how participants respond. For example, participants may have different interpretations of ‘bothersome’ versus ‘burdensome’ versus ‘disturbing’.
 - The language that is used should be selected based on the study objectives and applied consistently throughout data collection, such as all participants asked to rate concepts according to ‘bothersomeness’.
- **Plan for interpretation of task findings:**
 - Researchers may choose to consider a concept salient if it meets a pre-defined threshold (e.g., reported by >50% of the study population, with a mean bother rating of >5).
 - However, there is a lack of consensus in published literature on the use of a-priori saliency thresholds in patient centered studies¹ and whether a threshold is necessary at all.
- **Recommendations to support patient engagement²:**
 - Confirm with the participant that they can see the activity (if using screen-sharing), and check they understand what they need to do during the task.
 - Provide wording for the interviewer to explain the terminology which can be used if the participant struggles to understand the task (e.g., “‘most bothersome’ means the thing that bothers you the most”).
 - Offer interview breaks to the participant as needed.

Conclusion

- The considerations in this poster have been provided to help researchers make an informed selection of saliency and/or ranking tasks in their patient centered research.
- The considerations can also help to improve patient engagement in these tasks, improve data quality, and potentially lead to better understanding of patient priorities for their health.

References:

1. Carmichael C, McKee S, Makin H, Aldhouse N. How do we know if a concept is salient to the patient experience? A review of qualitative interview and analysis techniques in concept elicitation studies. ISOQOL 31st Annual Conference; 2024; Cologne, Germany.
2. Burns D, Edge H, Collins E, & Carmichael C. Recommendations for conducting cognitive debriefing (CD) interviews in clinical outcomes assessment (COA) research to alleviate researcher and participant burden. PROMs UK; 2024; Exeter, UK.

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