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Effective Use of Radar Charts

- Purpose** This tool provides guidelines and tips on how to effectively use radar charts to communicate research findings.
- Format** This tool provides guidance on radar charts and their purposes, and shows examples of preferred practices and practical tips for radar charts.
- Audience** This tool is designed primarily for researchers from the Model Systems that are funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). The tool can be adapted by other NIDILRR-funded grantees and the general public.

The contents of this tool were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90DP0012-01-00). The contents of this fact sheet do not necessarily represent the policy of Department of Health and Human Services, and you should not assume endorsement by the Federal Government.

Radar Charts

- ▶ Radar Charts are used to compare two or more items or groups on various features or characteristics.
- ▶ Example: Compare two anti-depressant drugs on features such as: efficacy for severe depression, prevalence of specific side effects, interaction with alcohol, continuation of relief over time, cost to the consumer etc.
- ▶ Typically the features or factors to be compared are rather different or disparate from each other.
- ▶ Often the scores assigned to each factor are relatively scaled – for example, 0-10, where higher scores indicate better performance or lower risk on the factor under consideration.
- ▶ Scores on each factor or feature radiate outward on spokes from a central zero hub.
- ▶ The scores for the factors for each group (anti-depressants, in this example) are connected to form a “radar image” or “spider web” pattern.
- ▶ The patterns for each group often overlap, so transparent shading of the group patterns and sorting of the scores by group will aid in the visual display of the group “webs” or “radar sweeps”.

Radar Charts

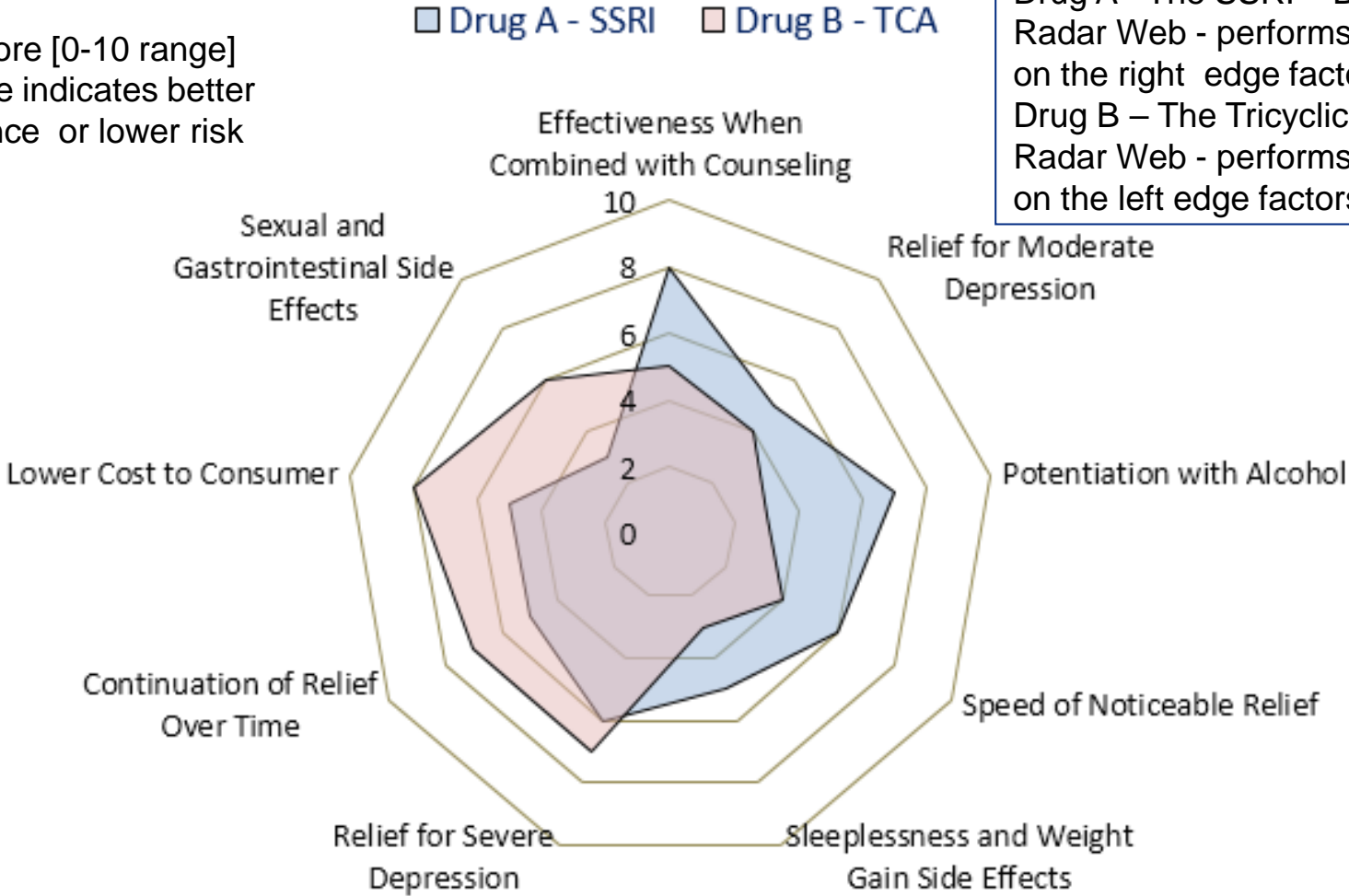
- ▶ Generally do not attempt to compare more than three groups on one radar or web chart.
- ▶ And do not attempt to display more than ten factors on one radar or web chart.
- ▶ Any more groups or factors on one chart becomes too difficult to interpret easily.
- ▶ Variations of Radar Charts are also called Polar Charts or Spider Charts or Spider Web Charts or Star Charts.

Radar Charts

Features of Two Anti-Depressant Pharmaceuticals

Higher score [0-10 range] per feature indicates better performance or lower risk

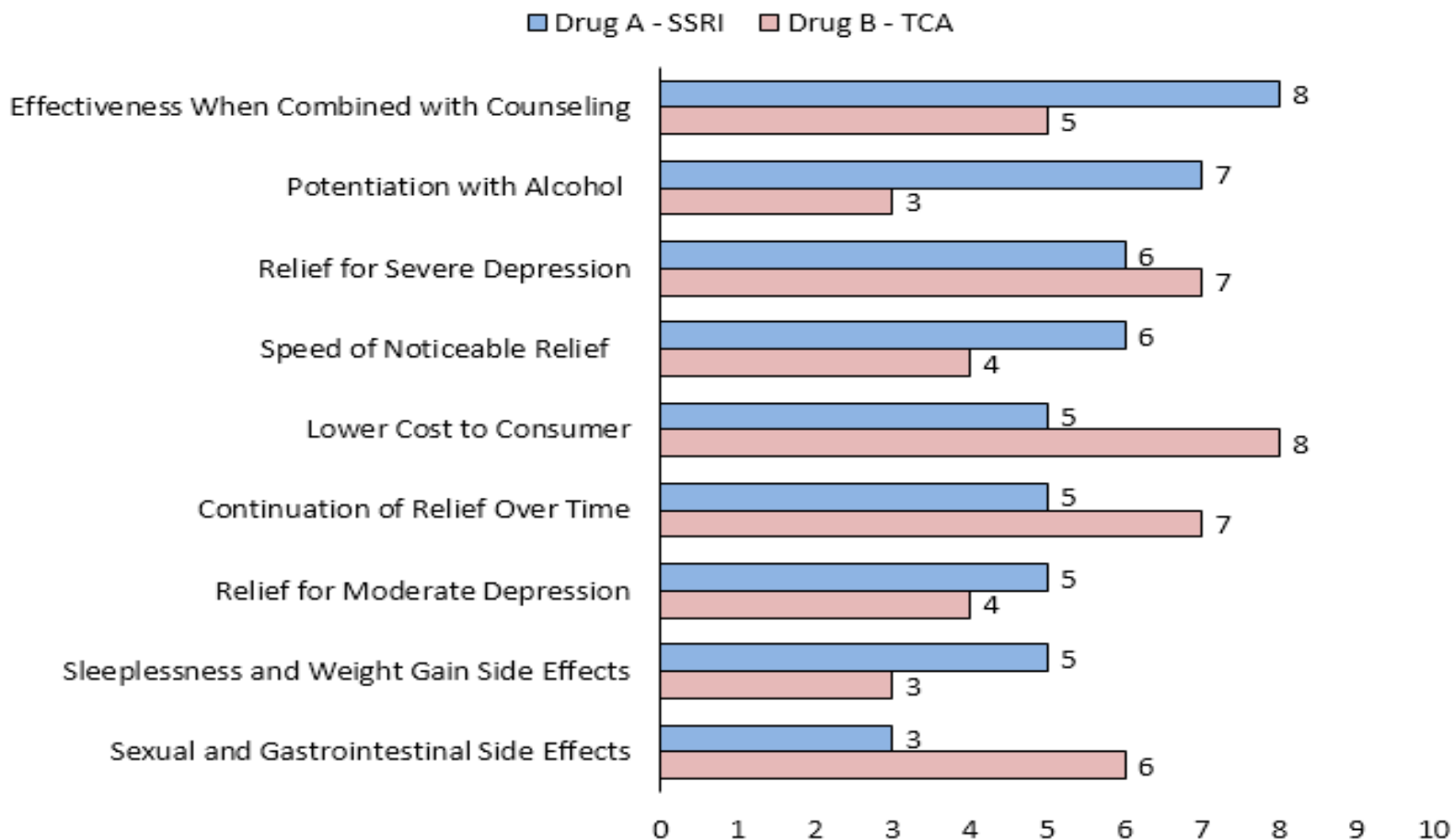
Drug A - The SSRI – Blue Radar Web - performs better on the right edge factors.
Drug B – The Tricyclic – Pink Radar Web - performs better on the left edge factors.



Radar Charts - Alternatives

As always, determine whether a simpler chart communicates equally well or better.

Features of Two Anti-Depressant Pharmaceuticals



Higher score is better