

Outcomes Star™ Psychometric Factsheet: Tenancy Star™

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Background

The Tenancy Star was developed for tenants living in social housing or in private rented accommodation who may be at risk of losing their tenancy or experiencing other difficulties. This Star was developed in collaboration with Loretto Care, with additional contributions from Loretto Housing and Glasgow Housing Association.

More information about the Tenancy Star can be found in the Development Guide (MacKeith, Burns, Lamont & Good, 2017) and the overall principles behind the development of all versions of the Outcomes Star are described in MacKeith (2011).

Method and analytic strategy

Tenancy Star data routinely collected and entered onto the Star Online was analysed by Triangle to test the Star's validity as an outcomes measurement tool. These psychometric tests were conducted using anonymised data ($N = 2228$) collected by an organisation delivering housing support for people who are having difficulty with their tenancies. The average time between 1st and 2nd Star readings was 43 days.

A full explanation of the analytic strategy is provided in the accompanying document – Outcomes Star Psychometric Factsheets: Overview.

Results

Do service users and workers view the Star as appropriate and useful?

Acceptability: 40 service users and 23 staff who took part in the pilot completed feedback questionnaires. The vast majority of service users felt that the Tenancy Star provided a good summary of their life and needs (95%) and all workers reported that the Tenancy Star helped them to get an overall picture of service users' situations and needs, and where to focus next.

Does it make sense for the different outcome areas of the Star to be included in the same tool?

Factor Structure: The Kaiser-Meyer-Olkin value exceeded the recommended minimum value of 0.60 (Kaiser, 1970, 1974) and a significant Bartlett's Test of Sphericity (Bartlett, 1954) supported the suitability of the data for factor analysis. The analysis yielded a unidimensional factor structure explaining 71% of the variance in the data.

Internal Consistency Internal consistency was very good (Cronbach's $\alpha = .83$).

Is each outcome area measuring a unique aspect of the service user's situation?

Item redundancy: No inter-item correlation exceeded the 0.7 threshold, suggesting no redundancy between areas (see Table 1).

Does the Star detect change occurring within a service?

Responsiveness to change: The Wilcoxon Signed Rank Test revealed a statistically significant increase in all outcome areas (see Table 2), with medium effect sizes for all areas except Community and contribution, which was small-medium. However, when the 36% of service users beginning at the highest point in the Community and contribution area (who could not move forward) were excluded, the effect size was also medium for this area ($r = 0.34$).

Conclusions

The results of these initial analyses are encouraging and suggest that the Tenancy Star is a valid outcomes measurement tool, with high acceptability, a unidimensional factor structure, internal consistency and good responsiveness. Research is planned to examine inter-rater reliability and the relationship between Star readings and other measures (convergent and predictive validity).

Additional research

External research about the Star as an outcomes and keywork measure can be found on our website: <http://www.outcomesstar.org.uk/about-the-star/evidence-and-research/research-library/#all>

Table 1. Correlation matrix for outcome areas (N =2228)

	1	2	3	4	5
1 Housing					
2 Money and rent	.38				
3 Looking after your home	.38	.43			
4 Health and well-being	.32	.43	.45		
5 Positive use of time	.29	.41	.45	.56	
6 Community and contribution	.35	.46	.47	.47	.64

Table 2. Responsiveness of the Tenancy Star (N =2228)

	First Star median	Final Star median	Z	Effect size r^2
Housing	3.00	4.00	-29.36***	0.44
Money and rent	3.00	4.00	-25.44***	0.38
Looking after your home	3.00	4.00	-20.33***	0.30
Health and well-being	3.00	3.00	-23.67***	0.35
Positive use of time	3.00	4.00	-20.73***	0.31
Community and contribution	4.00	4.00	-15.79***	0.24 ²

*** $p < .001$

¹ Cohen provided rules of thumb for interpreting these effect sizes, suggesting that an r of .1 represents a 'small' effect size, .3 represents a 'medium' effect size and .5 represents a 'large' effect size

² When the 36% of service users beginning at the highest point on the Journey of Change in this area were excluded this increased to 0.34

References

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