

Mobile therapeutic attention for treatment-resistant schizophrenia: a prospective multicenter feasibility study in patients, caregivers and clinicians.

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Aim: to assess adherence, acceptability, user experience, satisfaction and empowerment with the m-RESIST solution (see figure 1), in treatment-resistant schizophrenia (TRS) patients, caregivers and professionals. Participants performed a 3-months feasibility study in which they tested the m-RESIST solution, a new therapeutic program based on mHealth technology, using wearable computing solutions and offering high modular and flexible functioning. The sample was composed by 37 TRS patients, 11 caregivers and 8 clinicians. The study was carried out in Gertner Institute (Tel-Aviv), University of Semmelweis (Budapest), and Hospital de la Santa Creu i Sant Pau (Barcelona).

| SAMPLE OF PATIENTS (N) | GERTNER | SANT PAU | SEMMELWEIS |
|--------------------------------|----------|----------|------------|
| Patients approached n=81 | 30 | 15 | 36 |
| Willingness n= 40* (49%) | 14 (47%) | 11 (73%) | 15 (42%) |
| Started intervention n= 37 | 14 | 10 | 13 |
| Finished intervention n= 32 | 11 | 9 | 12 |
| Drop outs (Total= 20%) | 21% | 18% | 20% |

| Outcomes | Instruments | Time of administration |
|-----------------|--|------------------------------------|
| Acceptability | Adapted version of the TAM questionnaire (1) | End of the study |
| User Experience | Questionnaire developed for the m-RESIST study | Start, middle and end of the study |
| Satisfaction | CSQ-8 (2) | End of the study |
| Empowerment | BUES (3) | End of the study |

Results: Patients' acceptance of m-RESIST ranged from moderate to high, with a mean score for *perceived use* and *ease of use* of 5.16 and 5.36, respectively. Regarding user experience, patients indicated that m-RESIST facilitates easier and quicker communication with clinicians. Also the feeling of having a clinical team concerned and involved in their wellbeing made patients feel more protected and safe. Caregivers were unanimous about the sense of security and also reported that there was more and better support for patients and a better follow-up. Clinicians reported that the m-RESIST system was easy and intuitive to use and felt that it opened up a new communication pathway with their patients. Satisfaction and empowerment results are showed in figures 2 and 3.

Figure 2: Satisfaction (CSQ-8)

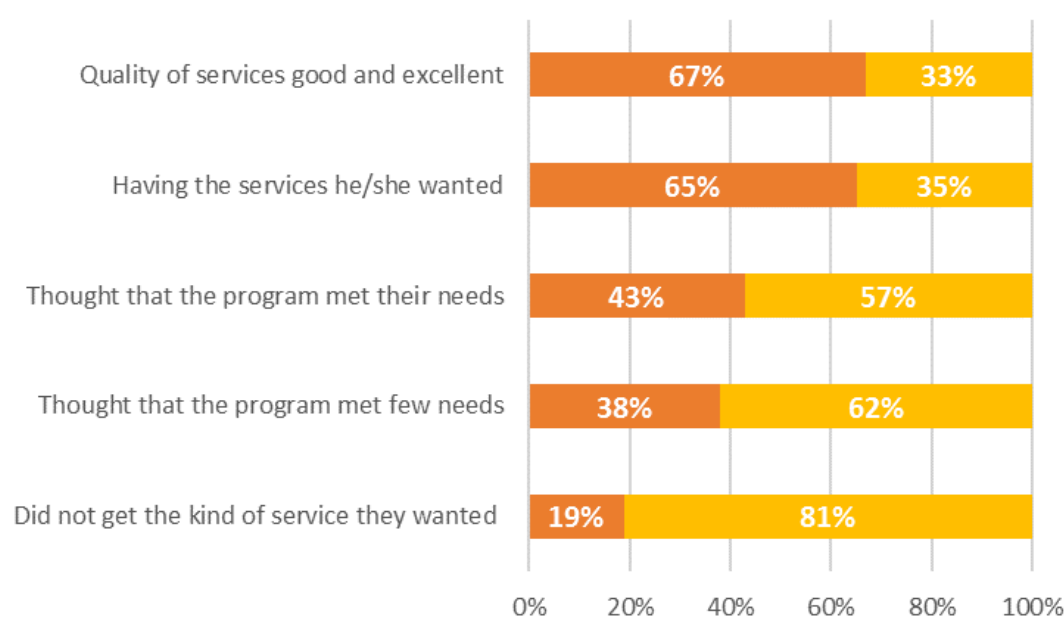
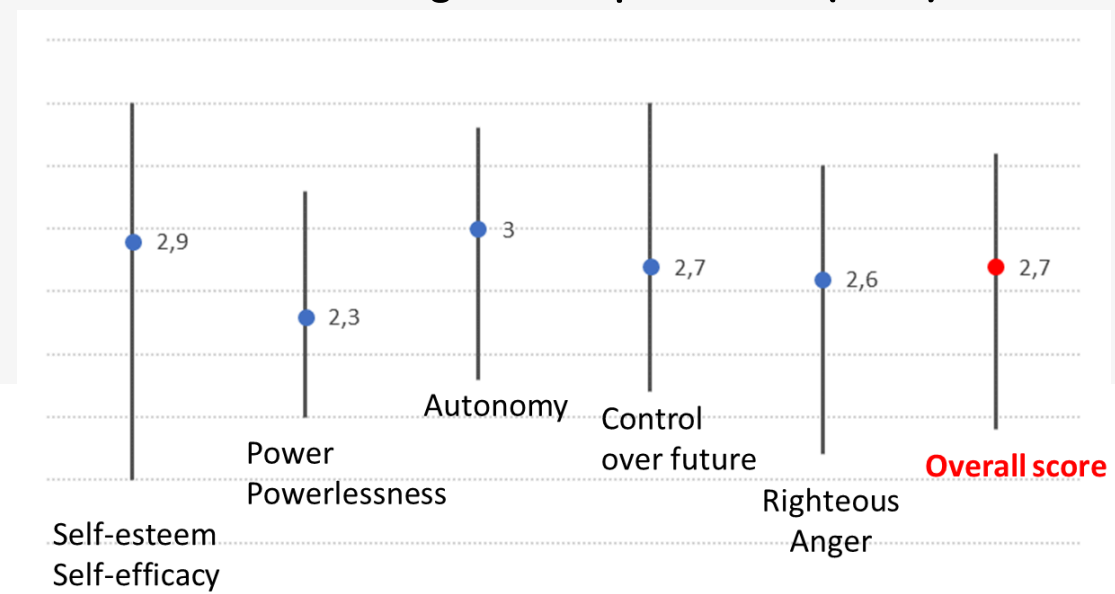


Figure 3: Empowerment (BUES)



Conclusions: The m-resist solution achieved good retention and adherence rates according to previous literature. The solution was also well accepted by patients, caregivers and clinicians in terms of acceptability, usability and satisfaction. These results offer an encouraging starting point concerning mHealth technologies in TRS patients, involving clinicians and caregivers.

References

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