

# Psychiatric Services

## THE BENEFITS OF INCORPORATING PEER-TO-PEER INTERACTIONS INTO DIGITAL INTERVENTIONS FOR PSYCHOTIC DISORDERS: A SYSTEMATIC REVIEW

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Table 1. Characteristics of included studies.

Studies	Author(s), year, location	Intervention	Study design	Duration	Retention	Adherence	User experience	Reported benefits
UNNAMED	Kaplan et al., 2011, <sup>13</sup> U.S.	2 intervention groups: unmoderated internet peer support listserv (n=101) unmoderated peer support bulletin board (n=99), groups merged in the analysis vs waiting list (n=100)	RCT: 2 conditions: Peer support forum; Waiting list	12 months	18% listserv, 10%bulletin board, 12% waitlist	57/190 (30%) reported having read the messages at least weekly and sent at least 5 messages at the 12 month post baseline point	Perceived relevance, perceived support and satisfaction in the experimental groups were in the mid-range (3.1/6). Participants in the high participation group had significantly higher scores than those who participated less	No differences between 3 groups on quality of life, empowerment scale, and symptoms
<b>Schizophrenia Online Access to Resources (SOAR)*</b>	Rotondi et al., 2005, 2010, <sup>14,15</sup> U.S.	In-person psychoeducation followed by online psychoeducation, therapy groups, moderated peer discussion forums and questions via email	RCT: 2 conditions: Telehealth website; Usual care	18 months	97% retention rate in the experimental arm	16/16 (100%) 'engaged' with treatment (contribution in forum on ≥13 visits & use of educational material on ≥4 visits).  the mean number of therapy forum page views: 1,838 (2,795); the mean number of views on the questions page: 113 (217); the mean number of views on article page: 69 (59)  the mean amount of time spent online the SOAR therapy forum: 1,874 (2,728); the mean amount of time spent on the educational questions page: 124 (198)	Nearly half of the participants with schizophrenia reported feeling some level of stress (44.7%)  68.8% to 81.4% participants found SOAR <i>moderately to extremely</i> easy to use.  93.8% participants would have liked to be involved in SOAR after study conclusion	Reduction in positive symptoms, improvements in perceived social support and stress, and increase in schizophrenia knowledge in intervention group
	Rotondi et al., 2015, <sup>16</sup> U.S.	As above	Usability testing of SOAR compared with other websites	N/A		N/A	Participant ratings (n = 38) 4.0/5 – mean rating for 'easy to use'	Easiest application to use of the 5 websites reviewed
<b>HORYZONS</b>	Alvarez-Jimenez et al., 2013, <sup>17</sup> Australia  Gleeson et al., 2013, <sup>18</sup> Australia	Online interactive psychosocial interventions & moderated social networking	Uncontrolled pilot study (quantitative and qualitative analysis)	4 weeks (7 modules)	100%	12/20 - used HORYZONS for full 4 weeks (60%); 14/20 - used HORYZONS for ≥3 weeks (70%). 3/20 - completed all 7 modules (15%); 9/20 - completed ≥4 modules (45%); 12/20 - completed ≥3 modules (60%); 19/20 - completed ≥1 module (95%)  95% used the social network with a total of 371 postings and 4170 social page views or actions	15/20 - had a positive experience (75%); 18/20 - would recommend to others (90%); 14/20 - felt it would be a useful long-term treatment option (70%).  20/20 - 'agreed' or 'strongly agreed' that HORYZONS was safe & confidential (100%);  18/20 - felt moderation had contributed to safety (90%).	after 1-month using the online platform:  moderate to large reductions in depression.  60% of patients reported increased perceived social connectedness and  55% felt empowerment in their recovery process  70% found the system to be useful, beyond their discharge.
<b>Personalized Real-Time Intervention for Motivation Enhancement (PRIME)</b>	Schlosser et al., 2016, <sup>19</sup> U.S.	SMS-based motivational coaching from trained therapists; individualized goal setting in various psychosocial domains; and social networking via direct peer-to-peer messaging, community "moments feed" to capture and reinforce rewarding experiences and goal achievements	Uncontrolled pilot study	12-weeks	100%	average number of logins per week: 4.1, challenge completion rate (%): 84.9%, average number of user-initiated peer interactions: 74.2, average number of user-initiated coach interactions: 56.6, average number of challenges completed: 19.4, average times active per week: 7.52.	Mean overall satisfaction 8/10	n/a

<p>1 <b>Creating Live</b>  2 <b>interactions</b>  3 <b>to Mitigate</b>  4 <b>Barriers</b>  5 <b>(CLIMB)</b></p>	<p>6 Biagianni  7 et al.,  8 2016,<sup>20</sup>  9 U.S.</p>	<p>10 Computerized social  11 cognition training  12 program, remote  13 weekly group  14 therapy sessions,  15 and moderated  16 group texting</p>	<p>17 Uncontrolled  18 pilot study</p>	<p>19 6 weeks</p>	<p>20 78%</p>	<p>21 Participants attended 84% of the group  22 therapy sessions, completed a median of 9.5  23 hours of training, and posted a median of 5.2  24 messages per week on the group text chat.</p>	<p>25 Participant ratings (n=21)  26 Enjoyment/Satisfaction  27 2.99/5  28 Program Clarity / Ease of use  29 4.18  30 /5  31 Ease of fit into daily schedule  32 2.91/5  33 Perceived benefits  34 3.25/5</p>	<p>35 Significant pre-  36 to post  37 improvements  38 in social  39 emotion  40 identification  41 abilities.  42 Trend-level  43 improvements  44 on aspects of  45 quality of life.  46 No  47 improvements  48 for symptoms.</p>
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9 a Study included data from caregivers or clinicians, or both; results from these participants are not reported in this review.  
10 US: United States; RCT: Randomized Clinical Trial

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