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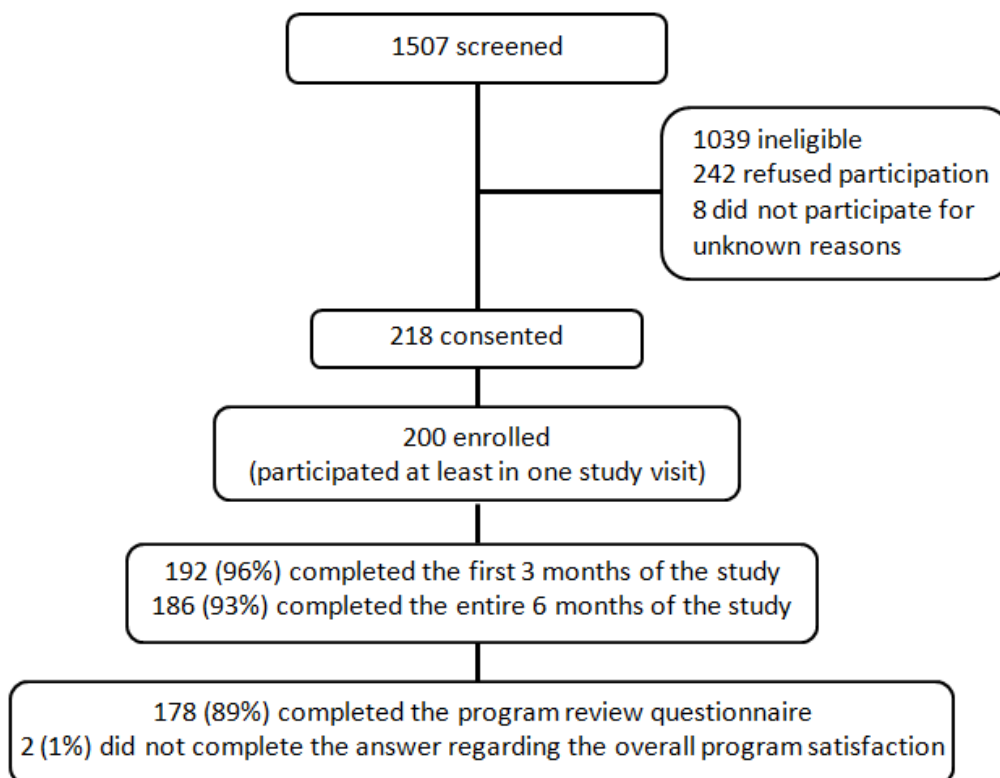


Figure 1. Participant flow

Chi-Square tests revealed no significant difference in sex ($p=0.42$) or race ($p=0.34$) between patients refusing and agreeing to participate in the study.

Table 2. Demographic characteristics of the sample (N=200).

| Variable | N | % | Comments |
|--|-----|------|---|
| Location | | | |
| The Zucker Hillside hospital | 71 | 35.5 | Non-for-profit behavioral health center within NS-LIJ health system which includes inpatient and outpatient units and a clinical research center for the study of schizophrenia. |
| Henderson Behavioral Health | 30 | 15.0 | A privately held company which provides outpatient/recovery behavioral health services for persons with mental illnesses and substance use disorders. |
| Peace Health Medical System | 24 | 12.0 | Not-for-profit health care system. |
| Burrell Behavioral Health | 23 | 11.5 | Not-for-profit organization that provides a wide range of mental health services. |
| The Mental Health Center of Greater Manchester | 16 | 8.0 | A non-profit community mental health center that provides a wide range of mental health services. |
| Cherry Health | 15 | 7.5 | A non-profit Health Center with a primary focus of providing health services to those who have little or no access to health care, regardless of income or insurance status. |
| Community Mental Health Center Inc. | 13 | 6.5 | Privately held company that provides a wide range of mental health services, offering inpatient, outpatient, home-based, school, and community-based programs to individuals and families. |
| University of New Mexico Center for RCBH | 5 | 2.5 | Center located within the UNM Department of psychiatry that aims to increase access to behavioral health services and researches behavioral health services. |
| Care Free Clinic | 2 | 1.0 | A nonprofit organization serving patients without insurance or without access to affordable care offering a collection of primary care, dental care, optometry, and behavioral health care services. |
| UMKC School of Pharmacy | 1 | 0.5 | The School of Pharmacy in University of Missouri-Kansas City is a member of the American Association of Colleges of Pharmacy (AACP) and has several clinical researchers in the field of schizophrenia. |
| Gender | | | |
| Male | 117 | 58.5 | |

| | | |
|---------------------------------------|-------------|------|
| Female | 83 | 41.5 |
| Ethnical Background | | |
| White ^a | 95 | 47.5 |
| Black or African American | 62 | 31.0 |
| Asian | 8 | 4.0 |
| Hispanic or Latino | 22 | 11.0 |
| American/Alaska native | 2 | 1.0 |
| More than one race | 11 | 5.5 |
| Mean Age | 34.6 ± 10.6 | |
| Age <26.7 | 50 | 25.0 |
| 26.7 < Age < 32.5 | 50 | 25.0 |
| 32.5 < Age < 42.0 | 50 | 25.0 |
| 42.0 < Age | 50 | 25.0 |
| Education | | |
| Below high school diploma | 50 | 25.0 |
| High school diploma | 50 | 25.0 |
| Some post secondary school | 84 | 42.0 |
| Finished College/Post Graduate degree | 16 | 8.0 |
| Diagnosis | | |
| Schizophrenia | 99 | 49.5 |

| | | |
|------------------------------|------------|------|
| Schizoaffective disorder | 93 | 46.5 |
| Psychosis NOS | 8 | 4.0 |
| Mean Age of First | 22.0 ± 9.0 | |
| Psychosis (AFP) ^b | | |
| AFP < 16.5 | 47 | 23.5 |
| 16.5 < AFP < 20.5 | 51 | 25.5 |
| 20.5 < AFP < 26.5 | 50 | 25.0 |
| 26.5 < AFP | 41 | 20.5 |
| Missing | 11 | 5.5 |

^a a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

^b mean and standard deviation calculations are based on participants without missing data.

Table 3. Descriptive statistics of Mental Health Technology Coach contacts (N=200).

| | | Mean | SD | % out of total number of meetings |
|------------------------------------|---|-------------|-----------|--|
| | Number of contacts | 28.2 | 2.0 | - |
| | Average minutes per contact | 38.3 | 14.2 | - |
| Contact location | Outpatient setting | 10.0 | 7.0 | 35.5 |
| | Phone call | 7.3 | 7.8 | 25.9 |
| | Patient's home | 4.4 | 5.2 | 15.6 |
| | Phone text messaging | 2.6 | 6.2 | 9.2 |
| | Community | 2.4 | 4.0 | 8.5 |
| | Family member^b | 1.0 | 2.0 | 3.5 |
| | Hospital | 0.3 | 0.8 | 1.1 |
| | Email | 0.2 | 1.1 | 0.7 |
| Contact Content^a | Case management | 14.6 | 15.0 | 51.8 |
| | Relapse prevention plan | 12.5 | 9.6 | 44.3 |
| | FOCUS | 8.3 | 6.8 | 29.4 |
| | Daily Support Website | 5.8 | 6.4 | 20.6 |
| | W-CBTSp^c | 4.2 | 5.5 | 14.9 |
| Digital Tool | Only digital tool^d | 3.5 | 4.2 | 12.5 |
| Discussion | Without digital tool^e | 15.6 | 14.5 | 55.5 |
| | Both in the same contact | 9.0 | 6.9 | 32.0 |

^a in some contacts more than one content was discussed, therefore the accumulated percentage of all contents is more than 100%.

^b contacts with family members were held in changing locations, sometimes without the patients' presence (following the patient's permission).

^c W-CBTSp: Web based Cognitive Behavioral Therapy Skills for Psychosis

^d contacts with only digital content (FOCUS, Daily support, W-CBTSp) being discussed.

^e contacts with only non-digital content (relapse prevention plan, case management) being discussed.

See explanation below and tables 4-5 for moderating effects.

Results of Moderating Effects Analysis

We sought to examine moderating effects of six demographic and illness variables on the results. We dichotomized the specific demographic variables in the following ways: Age was divided into “below” and “above” the median of 32.48 years; age of first psychotic episode was divided into “up to” and “above” the median of 20.0 years; education was divided into “up to” and “above” 12 years; racial background was divided into “white” and “non-white”, and main psychiatric diagnosis was divided into “schizophrenia” and “others”. T-tests for two independent samples were calculated to examine moderation effects of these demographic and illness variables and gender on the continuous outcomes. Chi-square tests were calculated to examine moderation effects on the use of the digital tools, and a series of Mann-Whitney tests for two independent samples was performed to examine moderation effects on perceived usability and helpfulness. Since the statistical examination of the variables included many comparisons, we adjusted the p-values based on Benjamini-Hochberg correction¹, with one correction to the analysis of the continuous variables and the second correction to the analyses of the non-continuous variables.

No moderation effect was found regarding perceived usability or helpfulness. The examination of the potential moderating effects of all demographic and illness variables that were found to have at least one statistically significant difference in MHTC contact characteristics are presented in Tables 4-5. Overall, the MHTC contact characteristics were consistent across

demographic and illness subgroups. Significant differences between racial backgrounds were found, as non-white patients had more meetings in outpatient settings, twice as many meetings over the phone, and twice as many case management meetings. Younger people (age <32.5) had almost twice as many case management meetings in comparison to older people. In addition, females and more educated patients discussed FOCUS in more meetings compared to males and less educated patients. Finally, more educated patients (education >12.0 years) had more conversations about the relapse prevention plan.

Table 4. Number of MHTC contacts in total and by location and contents: distribution in racial and age sub-groups (mean \pm SD).

| | | White (n=95) | | Non White (n=105) | | Age < 32.5 (n=104) | | Age \geq 32.5 (n=96) | |
|-----------------|---------------------------|-------------------|-------|----------------------|-------|-----------------------|-------|---------------------------|-------|
| | | M | SD | M | SD | M | SD | M | SD |
| Total | Contacts number | 25.02 | 15.88 | 31.03 | 16.07 | 30.53 | 18.37 | 25.82 | 13.44 |
| | Average minutes | 37.71 | 13.68 | 38.84 | 14.69 | 38.81 | 15.13 | 37.75 | 13.17 |
| Location | Outpatient | 7.94 ^a | 7.26 | 11.93 ^a | 6.09 | 10.38 | 6.42 | 9.69 | 7.46 |
| | Phone | 4.78 ^a | 5.59 | 9.64 ^a | 8.75 | 8.19 | 8.48 | 6.47 | 6.97 |
| | Patient's home | 4.97 | 6.25 | 3.83 | 3.95 | 4.07 | 4.55 | 4.67 | 5.77 |
| | Phone text | 3.85 | 7.88 | 1.49 | 3.71 | 3.06 | 7.10 | 2.16 | 5.04 |
| | Community | 2.59 | 4.30 | 2.29 | 3.64 | 2.80 | 4.07 | 2.06 | 3.83 |
| | Family member | .58 | 1.62 | 1.30 | 2.28 | 1.31 | 2.24 | .61 | 1.72 |
| | Hospital | .16 | .44 | .37 | 1.01 | .40 | 1.01 | .14 | .47 |
| | Email | .16 | .66 | .18 | 1.45 | .32 | 1.59 | .02 | .14 |
| Content | Case manage | 9.85 ^a | 9.85 | 18.93 ^a | 17.49 | 18.86 ^a | 17.64 | 10.38 ^a | 10.38 |
| | Relapse Prevention | 12.96 | 10.70 | 12.06 | 8.58 | 11.86 | 9.67 | 13.11 | 9.61 |
| | FOCUS | 8.31 | 7.71 | 8.28 | 5.93 | 7.36 | 6.53 | 9.22 | 6.99 |
| | Daily Support | 5.15 | 6.59 | 6.30 | 6.23 | 5.55 | 6.17 | 5.96 | 6.68 |
| | W-CBTSp | 5.17 | 6.25 | 3.31 | 4.46 | 3.39 | 4.31 | 5.00 | 6.31 |

^a the groups differed significantly at Benjamini-Hochberg adjusted $p < .05$ in t-test for two independent samples.

Table 5. Number of MHTC contacts in total and by location and contents: distribution in gender and education sub-groups (mean \pm SD).

| | | Male (n=117) | | Female (n=83) | | Education up to 12 years (n=100) | | Education more than 12 years (n=100) | |
|-----------------|---------------------------|-------------------|-------|--------------------|-------|--|-------|--|-------|
| | | M | SD | M | SD | M | SD | M | SD |
| Total | Contacts number | 27.71 | 17.37 | 28.83 | 14.53 | 26.67 | 15.92 | 29.68 | 16.47 |
| | Average minutes | 38.74 | 14.37 | 37.69 | 14.01 | 38.72 | 13.88 | 37.89 | 14.56 |
| Location | Outpatient | 9.37 | 6.03 | 10.98 | 8.01 | 8.87 | 6.37 | 11.20 | 7.34 |
| | Phone | 7.49 | 8.81 | 7.11 | 6.12 | 7.12 | 7.67 | 7.54 | 7.95 |
| | Patient's home | 3.79 | 4.37 | 5.18 | 6.11 | 4.86 | 5.20 | 3.88 | 5.16 |
| | Phone text | 2.56 | 5.70 | 2.69 | 6.79 | 2.00 | 4.99 | 3.22 | 7.11 |
| | Community | 2.77 | 4.10 | 1.95 | 3.72 | 2.55 | 3.86 | 2.31 | 4.07 |
| | Family member | 1.22 | 2.36 | .59 | 1.35 | .99 | 2.24 | .93 | 1.79 |
| | Hospital | .26 | .89 | .28 | .65 | .12 | .41 | .42 | 1.04 |
| | Email | .25 | 1.45 | .06 | .39 | .16 | 1.40 | .18 | .80 |
| Content | Case manage | 15.67 | 16.10 | 13.14 | 13.38 | 14.91 | 16.22 | 14.33 | 13.85 |
| | Relapse Prevention | 11.43 | 8.95 | 13.98 | 10.40 | 10.05 ^a | 7.45 | 14.92 ^a | 10.92 |
| | FOCUS | 6.94 ^a | 5.75 | 10.19 ^a | 7.72 | 6.89 ^a | 5.66 | 9.69 ^a | 7.57 |
| | Daily Support | 4.91 | 5.96 | 6.95 | 6.86 | 4.74 | 6.18 | 6.77 | 6.51 |
| | W-CBTSp | 3.46 | 4.24 | 5.23 | 6.70 | 3.48 | 4.53 | 4.91 | 6.18 |

^a the groups differed significantly at Benjamini-Hochberg adjusted $p < .05$ in t-test for two independent samples.