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Racial Differences in the Psychosocial Response to the COVID-19 Pandemic in Veterans with Psychosis or Recent Homelessness

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Abstract

The COVID-19 pandemic continues to disproportionately impact people of color and individuals experiencing psychosis and homelessness. However, it is unclear whether there are differences by race in psychosocial responses to the pandemic in vulnerable populations. The double jeopardy hypothesis posits that multiply marginalized individuals would experience worse psychosocial outcomes. The present study investigated the clinical and functional initial responses to the pandemic in both Black (n = 103) and White Veterans (n = 98) with psychosis (PSY), recent homelessness (RHV), and in a control group (CTL) enrolled in Department of Veterans Affairs (VA) healthcare services. Clinical interviews were administered via phone at two time points: baseline (mid-May through mid-August 2020) and follow-up (mid-August through September 2020). The baseline interview also included retrospective measures of pre-COVID status from January 2020. There were no significant differences between Black and White Veterans in depression, anxiety, or loneliness. However, Black Veterans did endorse more fears of contamination (F[1,196.29] = 9.48, p = 0.002). Across all groups, Black Veterans had better family integration compared to White Veterans (F[1,199.98] = 7.62, p = .006). There were no significant differences by race in social integration, work/role productivity, or independent living. In sum, there were few significant differences between Black and White Veterans in initial psychosocial response to the pandemic. The lack of racial disparities might reflect the presence of VA wrap

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around services. The findings also highlight the robust nature of social support in Black Veterans, even in the context of a global pandemic.

Keywords

psychosis; homelessness; Veterans; COVID-19; pandemic

Introduction

The double jeopardy or double disadvantage hypothesis posits that individuals with multiple disadvantaged statuses may experience worse health outcomes compared to individuals of a single or no disadvantage. This hypothesis emerged in the 1970s after findings suggested that older Black Americans experienced worse health outcomes compared to White Americans due to racial discrimination and ageism (Dowd & Bengtson, 1978). Other studies have found worse outcomes for individuals of multiple marginalized identities including increased likelihood of depression, poor physical health, functional limitations, and earlier mortality compared with those who were singly marginalized or not marginalized (Das-Munshi et al., 2016; Grollman, 2014).

With regard to mental health and psychosocial well-being, findings for the double jeopardy hypothesis have been mixed. For example, a national epidemiological survey examined the intersection of race/ethnicity and sexual orientation and found that sexual minority individuals had a higher prevalence of psychiatric disorders compared to heterosexual persons regardless of race/ethnicity (Rodriguez-Seijas et al., 2019). However, the same survey found that Black sexual minority individuals had a lower prevalence of psychiatric disorders compared to White counterparts, suggesting that multiple minority statuses did not lead to worse mental health. Inconsistencies in previous findings also raise important questions about resilience and protective factors that may prevent poor outcomes for some individuals. For example, Black Americans tend to experience robust social support from their families that may be protective against psychological distress (e.g., depression and suicidal ideation) (Compton et al., 2005; Lincoln et al., 2003, 2005; Lincoln & Chae, 2012). In a recent study by our research group, we found that Black Veterans experiencing homelessness (both with and without a history of psychosis) had better social integration with family compared to White Veterans; they also had less severe agitation and manic symptoms (Novacek et al., 2022). Our findings in Veterans align with the literature on the robustness of social support in Black families generally. Thus, an alternative hypothesis would be that Black Veterans would have better social integration compared to White Veterans. However, questions remain about whether racial disparities would emerge among vulnerable Veterans in response to other specific stressors, such as the COVID-19 pandemic.

The COVID-19 pandemic continues to be an unprecedented public health crisis, which has produced multiple surges of infection, hospitalization, and death across the globe. It has been a direct assault on the social fabric of our society, and it has resulted in extraordinary changes to daily life. Across many countries, levels of anxiety, depression, and suicidal ideation increased in the early months of the pandemic (Daly & Robinson, 2021;

Kwong et al., 2020; O'Connor et al., 2020; C. Wang et al., 2020; Yarrington et al., 2021). Shortly after the beginning of the COVID-19 pandemic, our research group began following individuals to examine psychosocial impacts of the pandemic on putatively vulnerable Veterans, including Veterans with psychosis (PSY) and Veterans with a recent history of homelessness (RHV) who received permanent supportive housing prior to the pandemic, as well as a control group of Veterans without any history of psychosis or homelessness (CTL). Initial results from our study suggest that all three Veteran groups reported higher levels of psychiatric symptoms following the onset of the pandemic, but RHV and PSY Veterans rebounded at the follow-up assessment whereas the CTL continued to exhibit higher levels of psychiatric symptoms (Wynn et al., 2021).

Although modifications in daily living during the pandemic have impacted everyone, the consequences of the pandemic have been anything but equal. For example, people with psychotic disorders have experienced higher levels of infection and mortality rates (Q. Wang et al., 2021). Due to structural racism, Black Americans have suffered disproportionately during the pandemic, with higher rates of infection, hospitalization, and mortality compared to White Americans (Snowden & Graaf, 2020; Yancy, 2020). Findings also suggest that Black Americans have experienced greater economic consequences during the pandemic, including higher job loss and financial insecurity (Snowden & Graaf, 2020). Prior public health crises (e.g., HIV) and natural disasters (e.g., Hurricanes Ike and Katrina) led to a disproportionate increase in mental health needs among Black Americans (Novacek et al., 2020). Similarly, the COVID-19 pandemic may lead to worse mental health outcomes for Black Veterans who have psychosis or who were recently housed.

In the present study, we examined whether there were differences by race in the initial psychosocial response to the pandemic (i.e., during the first several months) among vulnerable Veterans (PSY and RHV), as well as in CTL. These Veterans were all enrolled in VA healthcare services and thus had access to comprehensive healthcare services. The RHV were housed through the Housing and Urban Development—Veterans Affairs Supportive Housing (HUD-VASH) program, which combines rental assistance with case management and clinical services for homeless Veterans. Our primary interest was whether we would see any effects of race or vulnerable status (e.g., RHV or PSY) on psychiatric outcomes among Veterans during the pandemic. Secondarily, we examined whether there were any effects of race or vulnerable status on community integration outcomes. Finally, we examined whether there were any differences in risk and protective factors (which we call "psychological strengths") between Veteran groups. The double jeopardy hypothesis predicts that vulnerable Black Veterans (i.e., RHV or PSY) would have the worst outcomes due to both their racially minoritized and vulnerable statuses. However, with the access to VA healthcare services in these samples, and in line with our previous findings and the social support hypothesis, we hypothesized that the racial differences may be attenuated such that vulnerable Black Veterans might have relatively better social integration.

Methods

Sample

Data collection occurred from mid-May through mid-August 2020 for the baseline assessment and mid-August through September 2020 for the follow-up assessment. Subjects estimated their pre-COVID levels at the initial interview using January 2020 as the retrospective time point. Participants were recruited through two main sources: 1) two VA administrative databases from the VA Informatics and Computing Infrastructure (VINCI) platform; and 2) Veterans who have participated in prior studies in our lab and agreed to be contacted for future studies. Selection criteria for the groups were intentionally broad and relied on chart diagnoses from VA medical records. For PSY, participants required a psychotic disorder diagnosis other than substance induced psychosis which was verified in the VA Computerized Patient Record Systems (CPRS). For RHV, participants required a history of homelessness and attainment of housing with a HUD-VASH voucher within the 12 months prior to study enrollment. CPRS and VINCI were used to determine if the RHV participants had a current housing voucher. For the control group, participants required no history of a psychotic disorder or evidence of homelessness based on codes in VINCI and review of medical records. All participants were enrolled in the local VA healthcare system. Only participants who self-identified as Black/African American or White were included in the present analyses.

A lab research assistant contacted eligible participants by phone. The research assistant provided brief descriptions of the project and then participants who agreed to participate provided verbal informed consent. Each participant's contact information was then provided to one of ten clinically trained interviewers who contacted participants to administer clinical interviews and questionnaires via phone. A weekly clinical consensus meeting was held among the interviewers and principal investigators to enhance consistency in ratings. These procedures were approved by the VA Institutional Review Board. This is the first paper to examine racial differences from the project.

Measures

Community Integration.—The Role Functioning Scale (RFS) (Goodman et al., 1993) provided separate ratings for integration in the domains of working productivity, independent living/self-care, social connections with friends, and family interactions. Ratings were based on a semi-structured interview with standardized probe questions. The domains are rated on a 1-7 scale, with higher scores indicating better functioning and integration.

Psychiatric Symptoms.—Participants completed the Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001), a 9-item self-report measure of depressive symptoms. Participants were asked to indicate whether they experienced any of the queried symptoms within the past month at each interview period or in January 2020 for the pre-COVID estimate. Higher scores indicated the presence of more depressive symptoms. We also administered the Generalized Anxiety Disorder 7-item scale (Spitzer et al., 2006) to assess for generalized anxiety and worry in the past month. Higher scores indicated greater levels

of anxiety. For both the PHQ-9 and the GAD-7, participants rated their responses on a scale from "not at all" to "nearly every day" in the past month. In addition, participants completed the five-item "germs and contamination" section of the Dimensional Obsessive-Compulsive Scale (DOCS) to assess for intrusive thoughts, compulsions, avoidance, and functional impairment related to fears of contamination and germs (Abramowitz et al., 2010). Each item had five response options. Higher scores on the DOCS indicated a greater severity of contamination fears. The UCLA Loneliness Scale was used to assess subjective feelings of loneliness and social isolation (Russell et al., 1980). Participants rated the degree to which they experienced each of the described statements in the past month ranging from "never" to "often". Higher scores indicated higher subjective feelings of loneliness.

Psychological Strengths.—Four scales of two risk and two protective factors were combined to create a composite "psychological strengths" variable. This included: the Perceived Stress Scale, a measure of self-reported stress experienced in the past month, at the baseline and follow-up assessments (Cohen et al., 1983); the Brief COPE, a 28-item self-report measure, was also completed by participants to assess the use of both adaptive (e.g., "I've been taking action to make the situation better") and maladaptive (e.g., "I've been using alcohol or other drugs to make myself feel better") coping strategies in the past month (Carver, 1997); the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), a 25-item self-report questionnaire in which participants rated statements designed to reflect perceptions of their own resilience, was also administered; and the Intolerance of Uncertainty Scale – Short Form (IUS-SF), a 12-item self-report measure of responses to uncertainty, ambiguous situations, and the future (Carleton et al., 2007). The total scores for each scale were standardized and averaged to create the composite psychological strengths score. The PSS, IUS-SF, and maladaptive coping scale were reverse coded so that higher scores indicated better psychological outcomes. A higher score on psychological strengths indicates the presence of more protective factors and lower risk factor levels.

Statistical Analysis

For demographics, we used either a Chi-square test (for sex) or an F-test associated with an Analysis of Variance (ANOVA) model with race and group (CTL, PSY, RHV) factors to examine race and group differences at the initial assessment. Four clinical ratings were examined as primary outcomes with the four community integration variables as secondary outcomes. The psychological strengths factor was considered as an exploratory outcome. The variables were analyzed using linear mixed models (LMM) with main effects of race (Black, White), group (CTL, PSY, RHV) and time (pre-COVID, initial, follow-up), along with their two-way and three-way interactions. Subject-specific random intercepts were included to model dependency due to repeated measures within subjects. LMMs were fitted using restricted maximum likelihood (REML) in R version 4.0.2 with the lme4 package version 1.1–23 (Bates et al., 2015). LMMs account for correlations between repeated measures within subjects and automatically handle missing data, thereby producing unbiased estimates as long as observations are missing at random. Accordingly, all available observations from each subject were utilized in modeling via LMM.

Results

Sample Characteristics

Demographic and clinical characteristics of the sample are presented in Table 1. Participants enrolled in the study included 103 Black (35 RHV, 40 PSY, 28 CTL) and 98 White Veterans (31 RHV, 29 PSY, 38 CTL). There were no significant effects of race on age ($p = .290$), sex ($p = .109$), participant education ($p = .481$) or parental education ($p = .562$). However, there was a significant group by race interaction for participant education ($p = .037$), in that Black RHV and CTL had slightly more years of education than their White counterparts. However, in CTL, White Veterans had slightly higher education. Notably, rates of self-reported COVID infection across groups were quite low (about 3%).

Psychiatric Symptoms

The descriptive data and tests of significance for the four symptom variables are shown in Table 2. LMM revealed that for depression (PHQ-9) there was no significant main effect of race, $p = 0.811$, nor any interaction with race. There was also no main effect of group, $p = 0.149$. There was, however, a significant main effect of time, $p < .001$, in that depression scores were highest at the baseline assessment. There was also a significant group by time interaction, $p = 0.005$ which seemed to be driven by a sharper increase followed by a sharper decrease in the RHV. However this effect was consistent across race.

For anxiety (GAD-7) the analyses revealed no significant effect of race, $p = 0.792$, nor any interaction with race. However, there were significant main effects of group, $p = 0.019$, and time, $p < .001$. RHV endorsed higher levels of anxiety compared to both the PSY and CTL groups. Anxiety was highest at the baseline assessment across groups.

For obsessive-compulsive symptoms related to germs and contamination, the LMM demonstrated a significant effect of race, $p = 0.002$, in that Black Veterans endorsed more obsessive-compulsive symptoms compared to White Veterans (see Figure 1). There were no significant interactions with race. There was no main effect of group, $p = 0.441$, but there was a significant main effect of time, $p < .001$, in that obsessive-compulsive symptoms were highest at the baseline assessment.

For loneliness, analyses revealed no main effect of race, $p = 0.254$, nor any significant interaction with race. There were, however, significant main effects of group, $p = .001$, and time, $p < .001$. RHV endorsed higher levels of loneliness compared to CTL and loneliness was highest at the baseline assessment.

Community Integration

The summary statistics and tests of significance for community integration are presented in Table 3. For family integration, analyses revealed a significant main effect of race, $p = .006$, with Black Veterans having higher integration with family compared to White Veterans. There was also a significant race by time interaction, $p = .002$. As seen in Figure 2, the interaction seemed to be driven by a slight increase over time in family integration across groups by Black Veterans, and a slight decrease in family integration in White Veterans.

There was also a main effect of group, $p < .001$, with CTL having better social integration with family than RHV and PSY.

For social integration with friends, there was no main effect of race ($p = .236$), nor any significant interaction with race. However, there was a main effect of group, p < .001, with CTL having better social integration with friends compared to RHV and PSY. There was no main effect of time, $p = .209$.

For work integration, there was no main effect of race ($p = .101$), nor any significant interaction with race. There was, however, a main effect of group, $p < .001$, with CTL having better work integration compared to RHV and PSY. There was no main effect of time, $p = .424$.

For independent living, there was no main effect of race ($p = .081$), nor any significant interaction with race. There was a main effect of group, p < .001, with CTL having better independent living scores compared to RHV and PSY. There was also a main effect of time, $p < .001$, as independent living improved from the baseline to the follow-up assessment. The group by time interaction was also significant, p < .001, as independent living increased more in RHV from the baseline to follow-up assessment than in CTL and PSY.

Psychological Strengths

Summary statistics and tests of significance for psychological strengths are presented in Table 1. There was no main effect of race or race by group interaction. There was, however, a significant main effect of group, $p = .034$. Pairwise comparisons revealed that CTL had more psychological strengths compared to RHV, $p = .028$.

Discussion

This study investigated possible racial differences in psychiatric and functional responses to early stages of the COVID-19 pandemic across three groups (PSY, RHV, CTL) of Black and White Veterans. We found relatively few differences by race. Black Veterans endorsed more obsessive-compulsive concerns related to germs and contamination. In contrast, Black Veterans also had higher levels of social integration with family. There were no significant differences between Black and White Veterans for other clinical symptoms (depression, anxiety, and loneliness) or functioning (social integration with friends, work, or independent living). Similarly, there were no racial differences in psychological strengths (i.e., composite measure of perceived stress, coping, resilience, and intolerance to uncertainty).

These results do not support the double jeopardy hypothesis, which would predict that individuals who have two marginalized identities (i.e., Black and homeless or Black with serious mental illness) would experience especially poor clinical and functional outcomes in response to the pandemic compared to vulnerable White Veterans or control Black Veterans. For most of the variables examined, there were no differences in race. We also did not find any significant race by group interactions. In the two examples in which we found significant differences by race, one showed an advantage (better family integration), and the other, a possible disadvantage (a greater severity of OCD symptoms) for Black Veterans.

Hence, overall, our findings did not support the double jeopardy hypothesis in this instance. Rather, the present findings were consistent with the social support hypothesis and with our previous findings that showed homeless Black Veterans benefit from greater family integration compared with homeless Whites Veterans (Novacek et al., 2022). Together, these findings indicate that social integration, with family in particular, is a relative strength for Black Veterans. This could be due to higher levels of collectivism and communalism in Black communities (Coon & Kemmelmeier, 2001; Gaines et al., 2005).

The relative lack of differences by race in response to pandemic stressors might be due to the fact that all participants were Veterans enrolled in VA services. The VA offers a range of health care and social services, including mental health services, case management, financial and housing assistance, and outreach. Moreover, while racial differences in mental health care service utilization exist among the general population, this is not the case among Veterans enrolled in VA services (Tsai et al., 2014). Prior to the pandemic, the VA had started to provide telehealth services, and rapidly transitioned to providing extensive remote healthcare when the pandemic began. For example, the local mental health clinics at VA medical centers shifted immediately to remote services (both phone and video) early in the pandemic. A nationwide study of VA outpatient services found that by June 2020, 58% of outpatient services were provided by phone or video compared to 14% prior to the pandemic (Ferguson et al., 2020). Furthermore, Veterans with lower income and higher disability, two factors which characterize our sample, have been more likely to receive virtual care during the pandemic (Ferguson et al., 2020). The services provided by the VA provided an overall platform of support that was available to all Veterans. These services may have mitigated racial differences in outcomes that might have emerged in other healthcare systems.

Along these lines, a recent study found that, despite having higher COVID-19 infection rates, Black and Hispanic/Latino Veterans did not have higher mortality rates compared to White Veterans (Rentsch et al., 2020). This contrasts with the general population, in which both Black and Hispanic/Latino Americans have been considerably more likely to contract and die from COVID-19 according to the Centers for Disease Control and Prevention. Access to VA healthcare may have mitigated racial/ethnic disparities in COVID-19 mortality. Further comparison with non-Veterans is needed to better understand the role of VA services in mitigating clinical and functional responses to the pandemic.

Our findings raise several implications for assessment and treatment. First, our finding that Black Veterans endorsed more contamination concerns is consistent with previous literature showing that despite a lack of racial disparities in obsessive compulsive disorder, Black Americans may report more contamination concerns than White Americans (Williams et al., 2005). One theory has attributed this discrepancy to cultural differences in cleaning attitudes stemming from Jim Crow-era stereotypes about Black Americans contaminating White Americans (Williams et al., 2008). Consistent with this theory, a study found that priming Black Americans with Jim Crow stereotypes increased washing behaviors (Olatunji et al., 2014). Thus, clinicians working with Black Veterans who express fears related to contamination and germs should not pathologize what may be cultural differences in attitudes due to the historical legacy of segregation. Additionally, higher levels of contamination fears may be an adaptive response in the pandemic, particularly for Black

communities who have been hit hard by the infection rates. Clinicians should try and harness family integration, which is a relative strength for Black Veterans, in rehabilitative interventions. Family involvement could be formal (e.g., family-based interventions) or informal (e.g., including family in appointments or having occasional family meetings to enhance support for Veteran recovery). Partnering with the family in recovery could increase patient buy-in and engagement with services, ultimately leading to better rehabilitative outcomes.

This study had several limitations. There were very few women Veteran participants, which limits the generalizability of the results. Due to small sample sizes, we are also limited in our ability to understand how other Veterans of color (e.g., Hispanic/Latino and Indigenous/ Native American) fared during the pandemic in the context of disproportionate COVID-19 related outcomes. We also did not have the ability to differentiate important subgroups of Black individuals (e.g., African American versus Black Caribbean Americans) of which there may be important differences in health outcomes (Hope et al., 2020). Additionally, our pre-COVID period was a retrospective assessment collected at baseline and thus not the ideal prospective time point. Lastly, it is always possible that there could be potential confounding variables influencing our findings which we did not include in our statistical models.

In summary, our findings are not consistent with the double jeopardy hypothesis but do suggest that family integration is a relative strength for vulnerable Black Veterans, even in the context of the COVID-19 pandemic. Recovery-oriented interventions should consider harnessing this strength to improve psychosocial outcomes in Veterans who have experienced psychosis or homelessness. In addition, culturally sensitive assessments are needed to determine how to best address increased contamination concerns in Black Veterans during and after the pandemic.

Acknowledgments

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Public Policy Relevance Statement

There were very few differences between Black and White Veterans in mental health and functional outcomes during the early stages of the COVID-19 pandemic This could be due in part to the VA's wrap around healthcare and social services. Rehabilitative interventions should use the familial connections of vulnerable Veterans to improve mental health and other psychosocial outcomes.
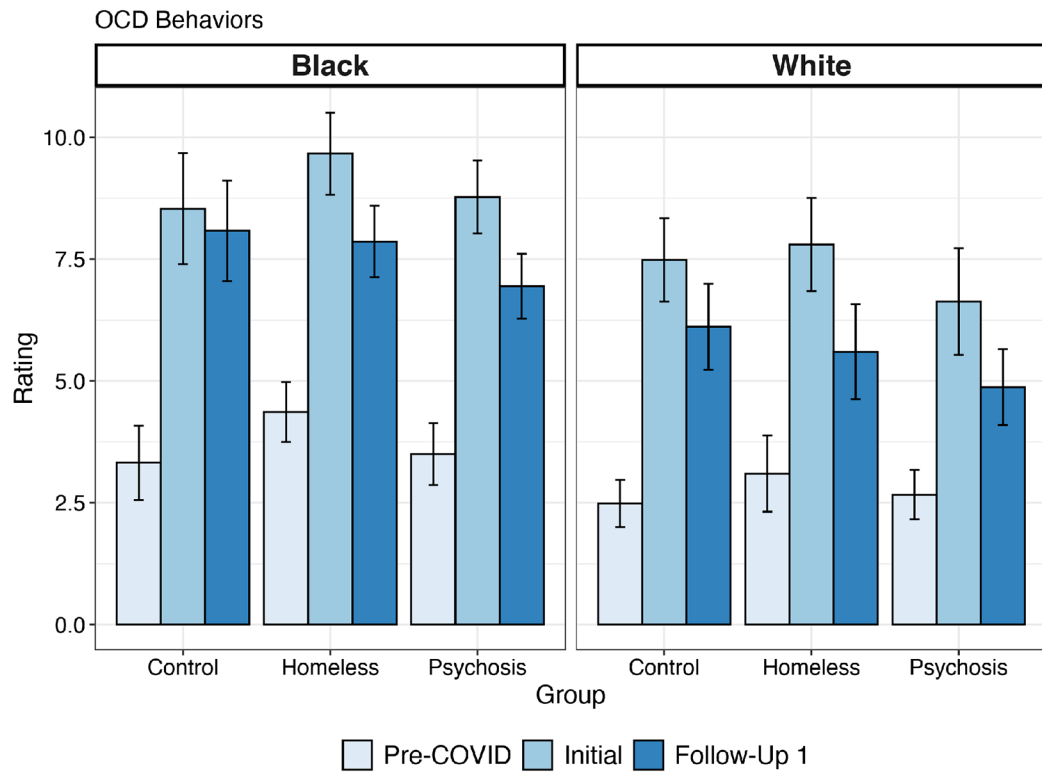
OCD Behaviors

Figure 1.
OCD-related fears of contamination and germs between Black and White Veterans across groups and time points.
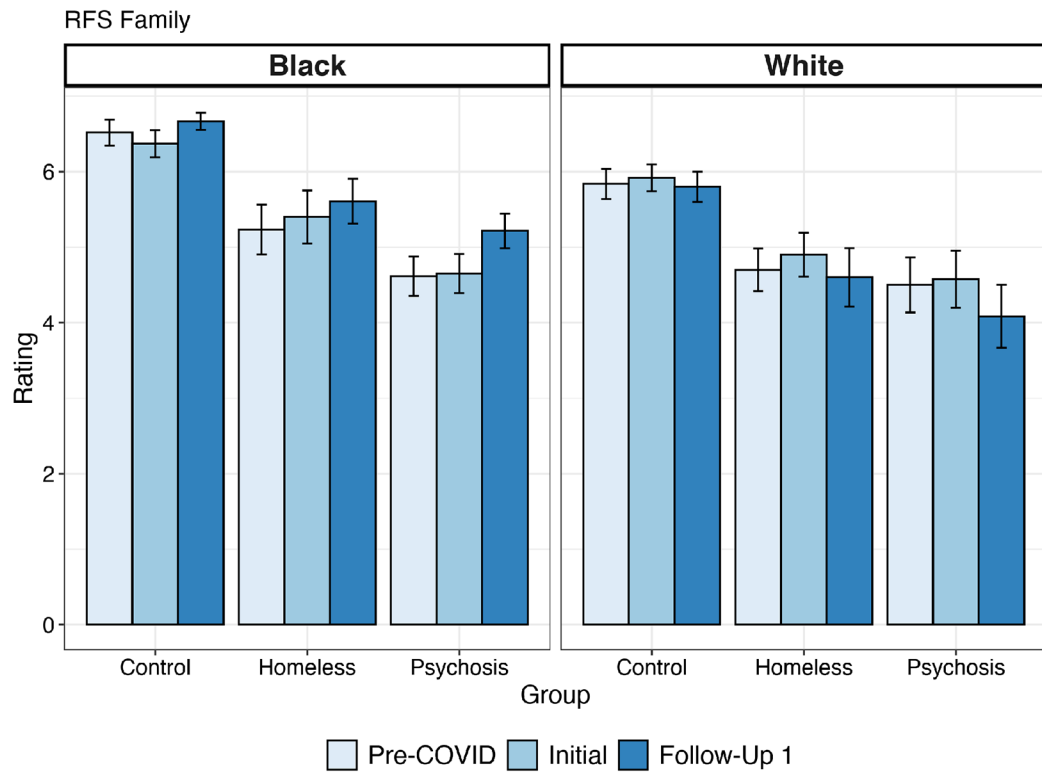
Figure 2.
Family integration ratings between Black and White Veterans across groups and time points.

Table 1.

Descriptive data at baseline for demographic factors and psychological strengths between Black (B) and White (W) Veterans. All values are mean (standard deviation); sex is count.

	Race	Psychosis	Recently Homeless	Control	Test Statistic
Age	B	55.70 (9.59)	53.09 (13.05)	56.89 (10.38)	Group: F = 3.679, p = 0.027
	W	54.10 (10.23)	50.10 (12.45)	56.13 (9.50)	
Sex (M/F)	B	37/3	27/8	22/6	NS
	W	37/3	30/1	34/4	
Years of Education	B	13.05 (1.32)	13.69 (1.49)	14.93 (2.43)	Group: F = 11.499, p < .001; Group*Race: F = 3.354, p = 0.037
	W	13.76 (1.92)	13.00 (1.29)	14.37 (1.84)	
Parental Education	B	12.11 (4.18)	13.84 (3.12)	13.27 (3.04)	NS
	W	13.03 (3.76)	12.62 (3.18)	12.61 (3.25)	
Psychological Strengths	B	0.02 (0.72)	−0.14 (0.76)	0.21 (0.77)	Group: F = 3.456, p < 0.034
	W	−0.06 (0.81)	−0.17 (0.80)	0.18 (0.72)	

Table 2.

Descriptive data and results for psychiatric symptoms between Black (B) and White (W) Veterans. All values are means (standard deviation).

	Race	Control			Recently Homeless			Psychosis			Statistics
		Pre-COVID	Baseline	Follow-Up	Pre-COVID	Baseline	Follow-Up	Pre-COVID	Baseline	Follow-Up	
Depression (PHQ)	B	4.21 (3.99)	6.54 (5.55)	5.33 (5.26)	6.42 (5.90)	9.82 (6.65)	7.72 (5.06)	7.50 (6.36)	9.55 (7.07)	6.70 (5.33)	**Time:** $F[2,360.90] = 41.30$, $p < 2.2$ e-16
	W	6.08 (5.87)	7.21 (5.71)	7.69 (6.50)	5.60 (4.63)	10.07 (6.65)	7.08 (6.09)	6.07 (4.94)	8.14 (6.02)	6.79 (5.99)	**Group*Time:** $F[4,360.89] = 3.81$, $p = 0.005$
Anxiety (GAD-7)	B	3.71 (4.18)	6.43 (6.12)	5.58 (5.43)	6.42 (6.03)	9.15 (6.64)	6.31 (5.83)	5.60 (5.76)	6.75 (5.94)	5.68 (5.51)	**Time:** $F[2,361.23] = 26.02$, $p < .001$
	W	3.89 (4.81)	5.84 (5.78)	5.69 (5.26)	6.58 (5.58)	10.10 (5.99)	7.20 (5.07)	5.44 (4.70)	7.33 (7.06)	5.62 (6.02)	**Group:** $F[2,190.93] = 4.06$, $p = 0.019$
OCD (DOCS)	B	3.32 (4.02)	8.54 (6.02)	8.08 (5.06)	4.36 (3.54)	9.67 (4.83)	7.86 (3.96)	3.50 (4.01)	8.78 (4.73)	6.95 (4.04)	**Race:** $F[1,196.29] = 9.48$, $p = 0.002$;
	W	2.49 (2.94)	7.49 (5.22)	6.11 (5.23)	3.10 (4.29)	7.80 (5.23)	5.60 (4.88)	2.67 (2.63)	6.63 (5.70)	4.88 (3.83)	**Time:** $F[2,362.19] = 111.12$, $p < .001$
Loneliness (ULS)	B	15.15 (10.11)	17.22 (12.54)	15.54 (16.07)	24.52 (15.00)	28.36 (16.17)	22.86 (15.32)	24.60 (16.03)	25.00 (15.88)	21.32 (15.04)	**Time:** $F[2,356.27] = 17.62$, $p < 5.0$ e-8
	W	14.97 (14.59)	14.78 (10.77)	12.29 (12.26)	22.87 (15.45)	26.73 (15.95)	20.36 (14.55)	22.73 (14.24)	25.58 (13.18)	18.79 (16.74)	**Group:** $F[2,186.79] = 9.38$, $p = 1.3$ e-4

Table 3.

Descriptive data and results for community integration/functional domains (RFS) between Black (B) and White (W) Veterans. All values are means (standard deviation).

	Race	Control			Recently Homeless			Psychosis			Statistics
		Pre-COVID	Baseline	Follow-Up	Pre-COVID	Baseline	Follow-Up	Pre-COVID	Baseline	Follow-Up	
Family Integration	B	6.52 (0.89)	6.37 (0.93)	6.67 (0.56)	5.23 (1.81)	5.40 (1.92)	5.61 (1.57)	4.62 (1.62)	4.65 (1.63)	5.22 (1.40)	**Race:** $F[1,199.98] = 7.62$, $p = 0.006$ **Group:** $F[2,184.11] = 20.95$, $p = <.001$ **Race*Time:** $F[2,351.58] = 6.48$, $p = 0.002$
	W	5.84 (1.21)	5.92 (1.09)	5.80 (1.18)	4.70 (1.56)	4.90 (1.58)	4.60 (1.94)	4.50 (1.86)	4.58 (1.92)	4.08 (2.04)	
Social Integration	B	6.19 (1.14)	6.11 (1.09)	6.04 (0.95)	5.00 (1.68)	4.83 (1.88)	4.64 (1.89)	4.72 (1.92)	4.70 (1.88)	5.03 (1.82)	**Group:** $F[2,183.85] = 17.81$, $p = 8.52$ e-8
	W	5.92 (1.52)	5.81 (1.39)	5.94 (1.28)	5.13 (1.66)	4.87 (1.68)	4.80 (1.66)	4.15 (1.57)	4.12 (1.58)	4.00 (2.04)	
Work / Productivity	B	5.83 (2.18)	5.78 (2.24)	5.62 (2.46)	3.28 (2.52)	2.86 (2.28)	2.85 (2.27)	2.69 (2.16)	2.53 (2.14)	2.29 (2.02)	**Group:** $F[2,167.39] = 34.89$, $p = 2.2$ e-13
	W	5.27 (2.49)	4.80 (2.66)	5.00 (2.57)	2.04 (1.78)	2.23 (1.80)	2.57 (2.00)	2.46 (2.26)	2.50 (2.21)	2.19 (1.89)	
Independent Living	B	6.67 (0.55)	6.70 (0.54)	6.79 (0.41)	5.93 (1.11)	5.97 (1.10)	6.32 (0.90)	5.38 (1.37)	5.28 (1.38)	5.46 (1.35)	**Time:** $F[2,351.83] = 7.30$, $p < 0.001$ **Group:** $F[2,184.92] =16.21$, $p < .001$ **Time*Group:** $F[4,351.82] = 6.24$, $p < .001$
	W	6.43 (1.30)	6.43 (1.07)	6.40 (1.19)	5.10 (1.75)	5.53 (1.36)	5.96 (1.31)	5.42 (1.63)	5.38 (1.65)	5.29 (1.76)	