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The influence of psychotic-like experiences on intent to seek treatment: Findings from a multi-site community survey of mental health experiences

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Abstract

Psychotic-like experiences (PLEs) may reflect elevated risk for serious mental illness, including psychosis. Although some studies report an association between PLEs and increased service utilization, there is evidence of unmet need among individuals with PLEs, with few studies exploring the relation between PLEs and intent to seek treatment. Characterizing factors that underlie intent to seek treatment in individuals not otherwise engaged in treatment may assist in determining the role of PLEs and future intentions, and help prioritize symptoms of greatest significance. Non-help-seeking participants ages 16–30 years ($n_{analysis} = 2529$) in a multi-site study completed online questionnaires of PLEs (PRIME with distress), depression (CES–D), anxiety (STAI), and intention to seek mental health treatment. Associations between PLEs

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Credit authorship contribution statement

All authors were involved in the conceptualization of this paper. M. A.B. cleaned, analyzed, and processed all data and conducted the literature review and synthesis. M.A.B. and J.S. wrote the original draft of the manuscript. M.J.K. provided additional supervision of the methodology and formal analysis. S.P. provided additional supervision of statistical analyses. E.P., P.R.R., A.E., F.K., A.B., and N.D.A., provided review and editing of the manuscript. Funding for this project was provided by grants from L.E.M., V.M., and J.S.

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and intent to seek treatment were analyzed through multiple linear regressions. PRIME scores predicted intent to seek treatment, and item-level analyses suggested that this association was driven by items 12 (“going crazy”), 7 (wondering if people may hurt me), 5 (confused if things are real or imagination/dreams), and 1 (odd/unusual things going on). When accounting for the effects of anxiety and depression, PLE sum scores as well as individual experiences remained statistically significant, although effect sizes were negligible. Findings suggest that PLEs can play a role in identifying individuals who intend to seek mental health services and warrant further research in independent samples.

Keywords

PLEs; Psychotic-like experiences; Service utilization; Psychosis risk; Intent to seek treatment

1. Introduction

Psychotic-like experiences (PLEs) are more prevalent than psychotic disorders in the general population, with lifetime prevalence estimates ranging from 5 % to 12.25 % (Barragán et al., 2016; Kelleher et al., 2012; van Os et al., 2009). By definition, PLEs are less severe, distressing, and functionally impairing than full-threshold psychosis; however, they can cause distress or impairment and are thought to confer risk for serious mental illness, including psychosis (Healy et al., 2019; van Nierop et al., 2012). Those who endorse PLEs are more likely to rate their mental health as “fair” or “poor” in comparison to those without (Lewis-Fernández et al., 2009), and PLEs have been found to negatively impact functioning (Armando et al., 2010, 2012; Oh et al., 2018; Yung et al., 2006, 2009). Considering these potentially unfavorable outcomes, understanding the role of PLEs in people’s intentions to seek mental health services (MHS) could have important public health implications.

A recent meta-analysis and systematic review of self-reported PLEs and MHS use in general population samples reported that those who endorsed PLEs were almost twice as likely to endorse MHS utilization than individuals who did not (Bhavsar et al., 2018). DeVlyder et al. (2014) reported that 30 % of a general population sample who endorsed PLEs had used MHS in the 12-months prior. Factors such as the frequency and types of PLEs endorsed may be relevant to understanding the nuanced nature of service use in people with PLEs. In a New Zealand national survey, Gale et al. (2011) reported that lifetime utilization of MHS significantly increased with increasing PLEs. Specific PLEs may be more associated with service use than others, as though control, paranoia, and “strange experiences” have been associated with a two-to-three-fold increase in MHS utilization (Murphy et al., 2012). In an independent study, endorsement of persecutory ideas was significantly and positively associated with help-seeking behaviors (Armando et al., 2012).

An area of service utilization research among those with PLEs that has received less attention is the individual’s perceived need for, and intent to seek, care. Assessing perceived need and intent to seek treatment may be important in more accurately identifying clinically relevant PLEs, in addition to providing an opportunity to examine the very earliest stages of PLEs transitioning from common mental health phenomena to mental health concerns.

In a nationally representative general sample of US adults, DeVlyder and colleagues noted that adults with PLEs were significantly more likely to endorse a self-perceived need for MHS and to have been encouraged by others to utilize services compared to those without PLEs (DeVlyder et al., 2014). In another study, auditory disturbance PLEs were significantly associated with self-perceived need for treatment while accounting for symptoms of anxiety, depression, and neuroticism (Demmin et al., 2017).

Although perceived need for services and intent to seek treatment are similar, we suggest that intent to seek treatment conveys unique information beyond perceived need. Because the process of service utilization likely occurs over many stages (Mojtabai et al., 2002), it is possible that the realization that one may benefit from MHS (perceived need) precedes the development of intention to seek care. There is conflicting evidence regarding the relation between intention to seek care and actual help-seeking behaviors, with some studies reporting positive associations (Tomczyk et al., 2020), and others reporting null findings (Chin et al., 2015) among young people experiencing a variety of mental health concerns.

Elucidating the link between PLEs and intention to seek treatment can offer important insight into the trajectory of experiences that begin as non-problematic and progress towards psychopathology, providing clues as to when to encourage treatment and potentially improving rates of service utilization. The present study sought to examine the relations between PLEs, distress associated with PLEs, and intent to seek mental health treatment overall in a community sample of non-help-seeking young people. Additionally, we aimed to identify specific types of PLEs and distress due to specific types of PLEs that may be associated with intent to seek treatment. We hypothesized that higher PLE scores and higher PLE distress scores would predict stronger (i.e., higher) intent to seek mental health treatment. Finally, we explored whether this influence would hold when accounting for ratings of anxiety and depression.

2. Methods

2.1. Recruitment and sample characteristics

Participants in this multi-site study of general community mental health experiences, the Multisite Assessment of Psychosis-Risk (MAP study, $N = 3234$), were recruited from the surrounding regions of three sites: Temple University (Philadelphia, PA), Northwestern University (Chicago, IL), and University of Maryland, Baltimore County (Baltimore, MD). The larger MAP study aims to improve psychosis-risk identification and evaluation within the general population. Recruitment was conducted via community outreach, flyers, and online sources such as social media advertisements and craigslist. Two participants were removed for outlier responses on the PRIME based on visual inspection of scatter plots of clinical measures. For the current study, inclusionary criteria included aged between 16 and 30 years old and not receiving MHS at the time of participation ($n_{analysis} = 2529$). Participants in the analysis sample were in their early 20s, majority female, and largely identified as White, Asian, or Black/African American (see Table 1 for detailed descriptive characteristics of the sample). Thirty-five percent of the sample reported an annual household income of less than \$50,000, and 35 % reported an annual income of \$100,000 and over. Consistent with the rationale for excluding those participants currently

receiving treatment for mental health, those receiving treatment were more likely to be White female participants who reported greater PLEs (small effect) and greater depression and anxiety (medium-large effects).

2.2. Study procedures

Data was collected from October 2017 to February 2020 utilizing a Qualtrics survey that took 45 min to 1 h to complete. Prior to data collection, participants (or their legal guardians for minor participants) were required to read and sign an online informed consent form and an online assent form, when applicable. Participants were required to answer all items, but each item included a “Prefer not to respond” option, which was treated as missing. Participants were compensated with a \$10 Amazon gift card (or course credit based on study recruitment method). All study procedures were approved by the Institutional Review Boards (IRB) of Temple University, Northwestern University and University of Maryland, Baltimore County.

2.3. Statistical analysis plan

Simple bivariate correlations were conducted between the main variables of interest: Overall PLEs and individual PLE items, overall PLE-related distress, and individual PLE distress, Depression, Anxiety, and intent to seek treatment. The following multiple linear regressions analyses were conducted with intent to seek treatment regressed on: 1) the 12 individual PRIME items, 2) the 12 individual PRIME Distress items, 3) overall PLEs (PRIME sum) controlling for Depression and Anxiety, 4) the 12 individual PRIME items controlling for depression and anxiety, 5) overall PRIME Distress controlling for depression and anxiety, and 6) the 12 individual PRIME Distress items controlling for depression and anxiety. Because of the large sample size and inflated risk of Type I error, α was set to 0.01 for all analyses. Moreover, effect sizes will be reported and interpreted alongside p -values. Effect sizes of: $f^2 < 0.005$, $|r| < 0.07$, or Cohen’s $d < 0.10$ will not be interpreted, regardless of p -value.

2.4. Tools and measures

2.4.1. PRIME screen—The PRIME Screen is a self-report tool that assesses the presence of psychosis-risk symptoms in the past year (Miller et al., 2004) that has demonstrated psychometric reliability and validity with interview diagnosis of psychosis-risk (Kline et al., 2012). Though the PRIME Screen was designed to measure attenuated positive psychotic symptoms, the structure of the items and response options are appropriate for a non-clinical, community sample such as this one. Participants completed the PRIME with Distress (*in preparation*), an extension of the PRIME Screen. Participants reported their level of agreement with each individual PRIME item (PLEs) on a 7-point scale ranging from 0 (“definitely disagree”) to 6 (“definitely agree”). For any response other than 0, participants were asked to report their level of agreement that the experience was distressing using the same 7-point options described above. Overall PLE was defined as the sum of the 12 PRIME items whereas overall PLE-distress was defined as the sum of the 12 PRIME distress items; each measure theoretically ranged from 0 to 72. Each scale, as well as the individual items, were used for hypothesis testing, though original and distress items were never included

in the same analysis. Both the PRIME Screen and PRIME Distress demonstrated strong internal reliability in the present sample ($\alpha = 0.89$ and $\alpha = 0.91$, respectively) which is in line with other similar studies of the PRIME Screen (e.g., Kline et al., 2012, 2015).

2.4.2. Mental health service utilization—Participants reported their intent to seek treatment by responding to a single five-point item (1 “Not at all” to 5 “Very Much”) asking participants “Please indicate how strongly you are considering seeking some type of mental health care by selecting a number below:”.

2.4.3. Center for epidemiologic studies - depression scale (CES-D)—The CES-D is a 20-item self-report assessment measure of depressive symptoms over the past week (Radloff, 1977). A 14-item version with scores of 10 representing likelihood of clinically-relevant depressive symptoms was used in the present study (Andresen et al., 1994). Items are rated on a 4-point scale (0 “Rarely or none of the time” to 3 “All of the time”), with total scores ranging from 0 to 42.

2.4.4. State-trait anxiety inventory (STAI)—The STAI is a brief, self-report assessment of anxiety symptoms (Spielberger, 1983). To address issues of conflation with depression, a 7-item version that excludes items that strongly overlap with measures of depression and may not strictly assess anxiety was used (Bieling et al., 1998; Spielberger, 1983). Items are rated on a 4-point scale (1 “Not at all” to 4 “Very much so”), with total scores ranging from 7 to 28, and a score of 16 suggesting the respondent likely meets diagnostic criteria for an anxiety disorder (Bieling et al., 1998).

3. Results

3.1. Log-transformations and multicollinearity

Given the low prevalence of psychosis-spectrum experiences in the general population, it is not surprising that individual PRIME items (original and distress) were positively skewed. Though not all items showed evidence of high skew, we elected to perform a log transformation on each of the PRIME items (original and distress) as well as each of the overall PRIME measures for ease of interpretation (a constant of 1 was added to each measure prior to transformation). There was no evidence of pronounced non-normality in CES-D, STAI, nor intent to seek treatment. All analyses, including descriptive statistics provided in Table 1 were based on the transformed variables.

For each of the regression models described above, VIF (Variance Inflation Factor) estimates were calculated. Though none of the VIF values suggested multicollinearity (i.e., $VIF > 10.0$) results may still be interpreted with caution. Specifically, given the high inter-item correlations among the PRIME items (original and distress) as well as with measures of depression and anxiety (Table 2), there may be instability in the estimates evaluating PLEs at the item level. Despite this, the 12 individual items were entered jointly in the respective regression models. Though it is not mathematically correct, the reader can consider the zero-order relations in Table 2 as an upper bound estimate and standardized coefficients in subsequent tables as lower bound items of item-level prediction.

3.2. Bivariate correlations

Bivariate correlations between PRIME Sum, PRIME Distress Sum, CESD, STAI, PRIME individual items, and intent to seek treatment scores were conducted; all relations were in the hypothesized direction and, given the sample size, statistically significant (Table 2). For brevity, the individual PRIME Distress items were not included in the table as they displayed similar patterns of relation as the original PRIME items (see Supplementary Table 1). Correlations between the individual PRIME items were medium-large in magnitude. The PRIME sum scores had somewhat larger relations with intent to seek treatment than did the individual items, but they also had somewhat larger relations with the measures of psychopathology. Though items were related to intent to seek treatment, the relations with anxiety and depression were somewhat higher suggesting that instability in the estimates might increase in the models including those measures. While the measure of anxiety and depression had larger relations with intent to seek treatment than the PRIME sum scores, the statistically significant, positive, small-medium relations of the PRIME measures with intent to seek treatment offer support for the hypotheses that these experiences might impact individuals' intentions to seek treatment.

3.3. PRIME items and intent to seek treatment

To consider the unique effects of the individual PLEs, intent to seek treatment was regressed on the 12 individual items. The 12 items significantly predicted intent to seek treatment, $R^2 = 0.08$, $F(12, 2482) = 17.15$, $p < .001$, $f^2 = 0.08$ (95 % CI [0.05, 0.09]), consistent with a small-to-medium effect (where $f^2 = 0.02, 0.15, 0.35$ correspond to small, medium, and large effects; (Cohen, 1988).

Four of the 12 individual PRIME items demonstrated unique prediction of intent to seek treatment with $p < .01$ (Table 3). This is consistent with the zero-order relations observed in Table 2 as the four items (1, odd/unusual things; 5, confused about reality; 7, wondering if people may hurt me; and 12, "going crazy") were the items with the largest correlations with intent to seek treatment. That said, with the exception of PRIME 12 ($f^2 = 0.03$), effect sizes were all $f^2 < 0.01$, though the overall relations were small in magnitude ($r_s > 0.17$).

3.4. PRIME distress ratings and intent to seek treatment

Subsequently, in the model in which intent to seek treatment was regressed on the 12 PRIME distress ratings, significant overall prediction was observed, $R^2 = 0.09$, $F(12, 2482) = 20.65$, $p < .001$, $f^2 = 0.10$ (95 % CI [0.07, 0.11]), also consistent with a small-medium effect.

Three of the 12 individual PRIME Distress ratings displayed a unique relation with intent to seek treatment at $p < .01$; of note, they were three of the same PRIME items seen above (PRIME items 1, 7, and 12; Table 4). The p -level for PRIME 5 was $p = .022$ and an additional item (3, something controlling thoughts, feelings, actions) also had $p = .030$. Also as before, item 12 ($f^2 = 0.025$) and the remaining items had $f^2 < 0.01$.

3.5. PRIME, PRIME distress, anxiety, depression, and intent to seek treatment

Due to the high comorbidity between anxiety, depression, and psychosis-spectrum symptomatology (Armando et al., 2010; Barragan et al., 2011; DeVlyder et al., 2013) and the small-medium correlations between the PRIME Sum and measures of depression and anxiety, additional separate multiple linear regressions were conducted to examine the unique association of PRIME and PRIME Distress Sum with intent to seek treatment, when accounting for depression and anxiety. Follow-up exploratory analyses were conducted in which intent to seek treatment was regressed on all 12 PRIME items accounting for anxiety and depression as well as on the 12 PRIME Distress items accounting for anxiety and depression. Results of these models are described though not tabulated as they were not uniquely informative. Not surprisingly, inclusion of anxiety and depression greatly increased R^2 in each model ($R^2 = 0.24$ in each model). Of note, overall PRIME sum ($f^2 = 0.004$) and overall PRIME distress sum ($f^2 = 0.007$) each offered unique prediction controlling for depression and anxiety. Only PRIME item 12 achieved statistical significance ($p < .01$) in the respective exploratory model, though $f^2 = 0.004$. In the PRIME distress item model, distress for item 12 continued to be statistically significant, though with a negligible effect size ($f^2 = 0.008$). In this model, distress for item 4 (doing things differently because of superstitions) was also a statistically significant predictor ($p < .01$, $f^2 = 0.003$), though it was not in the hypothesized direction. Though a negative unique relation of distress rating for item 4 distress with intent to seek treatment was observed, it is likely this effect was an artifact given the small, positive zero order relation and the collinearity between anxiety and depression ($r = 0.74$; Table 2). Nonetheless, it bears noting for future research.

4. Discussion

This is the first study to suggest that PLEs (as measured by the PRIME), depression, and anxiety are independently associated with intent to seek mental health treatment in a general community sample of adolescents and young adults not currently receiving treatment. When considering PLEs, feeling that odd or unusual things were happening, confusion about reality, imagination, or dreams, wondering if people may hurt me, and particularly feeling as if one is “going crazy” were the most stable item-level predictors, though effect sizes for these items suggest that item 12 (“going crazy”) is the item with the most potential to be clinically-meaningful ($f^2 = 0.025$). The findings for PLE distress ratings were similar, with PLE distress ratings for items 1, 7, and 12 predicting intent to seek treatment representing statistically significant predictors, while distress ratings for item 12 continued to have a small, but potentially clinically meaningful effect size ($f^2 = 0.025$). When accounting for the effects of depression and anxiety, as measured by the CES-D and STAI, respectively, PLEs and PLE distress ratings remained statistically significant predictors, as did PRIME item 12, item and distress ratings; effect sizes reflect notable attenuation when accounting for anxiety and depression in the model. These results support the use of the PRIME Screen as a mental health screening tool that relates to intent to seek treatment and provides preliminary evidence that PLEs in the context of depression and anxiety may independently contribute to intent to seek mental health treatment.

Although statistically significant predictors of intent to seek treatment, PRIME items 1 (odd/unusual things), 5 (confused about reality), and 7 (wondering if people may hurt me) had negligible effect sizes (less than $f^2 = 0.02$), suggesting that the clinical implications of these items should be interpreted with caution. PRIME item 12 (“I have been concerned that I might be “going crazy.”) was a more robust predictor, with a small but meaningful effect size ($f^2 = 0.025$). Item 12 may capture both PLE and non-PLE phenomena for participants. Some participants may have endorsed it in response to general mental health concerns unrelated to psychosis (e.g., “I’m so depressed and anxious, I feel like I’m going crazy”). Consistent with this hypothesis, item 12 had the highest correlations of the PRIME items with both anxiety and depression. Other participants, however, may have connected the adjective “crazy” from this item to the psychosis spectrum, representing a specific PLE that they fear could portend future mental health deterioration. The fact that this item was administered in the context of 11 preceding psychosis-risk items and that it correlated with all other PRIME items lends credibility to this notion (Table 2). In a qualitative study of the subjective experiences of young people at clinical high risk for psychosis, feeling as if one was “going crazy” was a commonly reported theme, suggesting that for those at risk for psychosis, this belief may represent an important clinical factor (Ben-David et al., 2014). Items 1, odd or unusual things, and 5, confusion about reality vs. imagination or dreams, may suggest early forms of impaired reality testing, which has been proposed as a key factor in models of hallucinations in schizophrenia (Mintz and Alpert, 1972) and in animal models of schizophrenia (McDannald et al., 2011). Item 7, wondering if people may hurt me, may represent the early stages of later persecutory delusions, which are some of the most common forms of delusions, particularly during the first episode of psychosis (Paolini et al., 2016). As the field moves towards developing shorter, more clinically efficient psychosis screening tools (Phalen et al., 2018), these results suggest that administering a brief PLE screener may be especially important when assessing degree of consideration of care.

Considering distress associated with PLEs, distress associated with PRIME items 1, 7, and 12 were also statistically significant predictors of intent to seek treatment, though the effect sizes for items 1 and 7 were negligible. The effect size for item 12 continued to demonstrate a small but meaningful effect ($f^2 = 0.025$), suggesting this particular item may be clinically relevant. Given that item 12 may capture both psychosis-spectrum and non-psychosis spectrum mental health concerns, it is not surprising that distress associated with item 12 was positively associated with higher intent to seek treatment. Armando et al. (2010) similarly reported that among a general population sample, “bizarre experience” PLEs (e.g., thought insertion, thought control, delusions of control, etc.) were significantly associated with increased distress. The same study reported that “persecutory ideas” PLEs were strongly associated with increased distress. It has been estimated that up to 90 % of PLEs reported by young people are transitory and may not reflect elevated risk for psychosis unless the experiences become persistent or impairing (van Os et al., 2009), suggesting that distress associated with PLEs may be an important clinical factor to assess when considering need for treatment.

When accounting for the effects of anxiety and depression, PLE sum scores and PLE Distress sum scores remained statistically significant predictors ($ps < 0.01$) of intent to seek treatment, though effect sizes were small ($f^2 = 0.004$ and $f^2 = 0.007$); particularly in

comparison to the effect sizes for depression ($f^2 = 0.06$) and anxiety ($f^2 = 0.02$). Findings were similar for the individual PRIME and PRIME distress ratings, such that item 12 was statistically significant for either rating type ($ps < 0.01$); though effect sizes were each < 0.01 . Considering the distress items, there was a counterintuitive effect for PRIME item 4, though $f^2 = 0.003$. Given rates of comorbidity of depression, anxiety, and psychosis-spectrum experiences, particularly among adolescents and young adults (Armando et al., 2010; Barragan et al., 2011; DeVylder et al., 2013) and evidence that those at risk for psychosis tend to list depression or anxiety as their primary mental health concerns above those related to psychosis (Falkenberg et al., 2015), it may not be surprising that the effect sizes for PLEs diminished when anxiety and depression were added to the models. In fact, the magnitude of correlations among all predictors might be the reason the directionality of the effect of PRIME item 4 was flipped.

4.1. Limitations and future directions

The current sample was predominantly female identifying and enrolled in college, which may limit generalizability. Given the cross-sectional design of the study, longitudinal examinations of intent to seek treatment and actual rates of service utilization over time are warranted. As there is no gold-standard or validated measure of intent to seek in the context of risk for psychosis, we used a non-validated (albeit with strong face validity) item intended to measure of intent to seek treatment. This single item may not allow for a nuanced understanding of intent to seek treatment and may not be as reliable as a multi-item scale. Moreover, the item was intentionally general for the larger study, but may have been too general for elucidating effects of specific PLEs. Future work should consider using multi-item assessments of intent to seek care with differing aspects of the intention. It is presumed the negative relation of PRIME item 4 distress was an artifact; future research should continue to consider this effect to determine if further consideration is warranted. Future studies should work to address these methodological limitations, in addition to exploring differences in mental health care utilization by race, gender, and other sociodemographic factors.

5. Conclusions

Findings suggest that PLEs impact intentions to seek treatment among older adolescents and young adults. We should note, however, that, in line with previous research (Falkenberg et al., 2015), depression and anxiety may be more clinically relevant concerns to youth and young adults. This study provides preliminary evidence for using the PRIME with distress when assessing intention or need for mental health care, particularly in light of its brief, self-report format. These results provide the groundwork for developing more comprehensive assessment of treatment-seeking decisions and intentions, barriers and beliefs about mental health treatment, and service utilization, in addition to providing evidence of unmet clinical need among some young people endorsing PLEs.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Differences between the analysis and excluded samples on psychotic-like experiences, depression, anxiety, and simple demographic measures.

Table 1

	<i>n</i> _{analysis} = 2529 <i>M</i> (<i>SD</i>)	<i>n</i> _{excluded} = 683 <i>M</i> (<i>SD</i>)	<i>t</i> (<i>df</i>)	Cohen's <i>d</i>
Age	20.26 (2.27)	20.37 (2.22)	1.13 (3202)	0.05
PRIME Sum Score *	6.63 (10.83)	9.32 (12.55)	5.53 (3210)	0.24
PRIME Distress Sum Score *	5.44 (10.54)	8.83 (12.52)	7.16 (3210)	0.31
CES-D Total Score *	13.24 (7.86)	18.90 (7.90)	16.06 (3146)	0.70
STAI Total Score *	13.41 (5.09)	16.73 (5.51)	14.81 (3189)	0.64
Sex (Female) *	%	%	χ^2 (<i>df</i>)	<i>W</i>
Ethnicity (Hispanic or Latino)	67	76	28.85 (1)	0.09
Race ^a , *	10	11	0.98 (1)	0.02
American Indian/Alaska Native	<1	<1	119.99 (3)	0.20
Asian	28	11		
Black/African American	15	9		
More than one race	6	8		
Native Hawaiian or Pacific Islander	<1	<1		
White	50	69		

* $p < .01$.

^aDue to sparse data, participants who identified as American Indian/Alaska Native or Native Hawaiian or Pacific Islander were omitted from chi-square analysis.

Table 2

Relations among intent to seek treatment, depression, anxiety, and psychotic-like experiences (in sum and individual items).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Intent to Seek Treatment	–	0.467	0.432	0.232	0.266	0.183	0.096	0.150	0.098	0.174	0.135	0.177	0.094	0.163	0.122	0.124	0.246
2. Depression		–	0.743	0.334	0.374	0.251	0.134	0.221	0.165	0.212	0.180	0.256	0.090	0.275	0.196	0.176	0.342
3. Anxiety			–	0.351	0.393	0.270	0.147	0.242	0.216	0.226	0.177	0.270	0.099	0.292	0.191	0.184	0.336
4. PRIME Sum				–	0.908	0.765	0.643	0.668	0.670	0.706	0.638	0.657	0.618	0.751	0.576	0.598	0.638
5. PRIME Distress Sum					–	0.672	0.531	0.677	0.574	0.651	0.607	0.680	0.527	0.728	0.568	0.604	0.666
6. PRIME 1 – odd/unusual things						–	0.481	0.477	0.451	0.468	0.406	0.426	0.426	0.523	0.377	0.375	0.421
7. PRIME 2 – predict the future							–	0.427	0.418	0.350	0.450	0.370	0.560	0.359	0.311	0.349	0.318
8. PRIME 3 – something controlling thoughts, feelings, actions								–	0.420	0.445	0.479	0.461	0.423	0.499	0.411	0.483	0.435
9. PRIME 4 – doing things differently because of superstitions									–	0.406	0.407	0.375	0.386	0.448	0.295	0.352	0.317
10. PRIME 5 – confused about reality										–	0.407	0.415	0.371	0.543	0.395	0.429	0.416
11. PRIME 6 – mind reading											–	0.450	0.476	0.440	0.434	0.475	0.398
12. PRIME 7 – wondering if people may hurt me												–	0.409	0.496	0.404	0.424	0.419
13. PRIME 8 – supernatural gifts/talents													–	0.401	0.389	0.423	0.357
14. PRIME 9 – mind “playing tricks”														–	0.447	0.483	0.528
15. PRIME 10 – hearing voices															–	0.558	0.410
16. PRIME 11 – thoughts out loud																–	0.459
17. PRIME 12 – “going crazy”																	–

Note - All $ps < 0.001$; $N = 2529$.

Table 3

Multiple linear regression predicting intent to seek treatment from the 12 individual psychotic-like experiences.

	Standardized β	t	P	f^2
PRIME 1: odd/unusual things	0.086	3.33	<0.001	0.004
PRIME 2: predict the future	-0.022	-0.88	0.379	0.000
PRIME 3: something controlling thoughts/feelings/actions	0.015	0.59	0.555	0.000
PRIME 4: doing things differently because of superstitions	-0.026	-1.16	0.264	0.000
PRIME 5: confused about reality	0.066	2.67	0.008	0.003
PRIME 6: mind reading	0.018	0.72	0.472	0.000
PRIME 7: wondering if people may hurt me	0.075	3.07	0.008	0.004
PRIME 8: supernatural gifts/talents	-0.036	-1.41	0.157	0.001
PRIME 9: mind "playing tricks"	-0.022	-0.80	0.423	0.000
PRIME 10: hearing voices	-0.007	-0.28	0.775	0.000
PRIME 11: thoughts out loud	-0.024	-0.91	0.358	0.000
PRIME 12: "going crazy"	0.191	7.81	<0.001	0.025

Note – $N = 2494$.

Table 4

Multiple linear regression predicting intent to seek treatment from the 12 psychotic-like experience item distress ratings.

	Standardized β	t	p	f^2
PRIME 1D: odd/unusual things	0.110	4.28	<0.001	0.007
PRIME 2D: predict the future	-0.020	-0.752	0.452	0.000
PRIME 3D: something controlling thoughts/feelings/actions	0.059	2.18	0.030	0.002
PRIME 4D: doing things differently because of superstitions	-0.037	-1.42	0.155	0.001
PRIME 5D: confused about reality	0.062	2.30	0.022	0.002
PRIME 6D: mind reading	-0.003	-0.111	0.912	0.000
PRIME 7D: wondering if people may hurt me	0.063	2.63	0.009	0.003
PRIME 8D: supernatural gifts/talents	-0.039	-1.39	0.166	0.001
PRIME 9D: mind "playing tricks"	-0.005	-0.182	0.855	0.000
PRIME 10D: hearing voices	-0.040	-1.54	0.124	0.001
PRIME 11D: thoughts out loud	-0.015	-0.539	0.590	0.000
PRIME 12D: "going crazy"	0.196	7.88	<0.001	0.025

Note – $N = 2435$.