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Authors

Woodberry, Kristen
Powers, Kate
Bryant, Caitlin
[et al.](#)

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Emotional and stigma-related experiences relative to being told one is at risk for psychosis

Kristen A. Woodberry^{1,2,3,4}, Kate S. Powers¹, Caitlin Bryant^{3,5}, Donna Downing¹, Mary B. Verdi¹, Katherine M. Elacqua¹, Audrey R. L. Reuman⁶, Leda Kennedy^{3,7}, Daniel I. Shapiro^{3,4,8}, Michelle L. West^{3,4,9,10}, Debbie Huang¹¹, Francesca M. Crump¹², Margaux M. Grivel¹³, Drew A. Blasco¹⁴, Shaynna N. Herrera¹⁵, Cheryl M. Corcoran^{14,15}, Larry J. Seidman^{3,4}, Bruce G. Link¹⁶, William R. McFarlane^{1,2}, Lawrence H. Yang^{11,13}

¹Center for Psychiatric Research, Maine Medical Center

²Department of Psychiatry, Tufts School of Medicine

³Department of Psychiatry, Beth Israel Deaconess Medical Center

⁴Department of Psychiatry, Harvard Medical School

⁵Department of Psychology, University of Massachusetts Boston

⁶Bowdoin College

⁷New York Psychiatric Institute, Columbia University

⁸Department of Psychiatry and Behavioral Sciences, University of California Davis

⁹Anschutz Medical Campus, University of Colorado

¹⁰Department of Psychiatry, University of Colorado School of Medicine

¹¹Mailman School of Public Health, Columbia University

¹²Department of Psychology, Rowan University

¹³School of Global Public Health, New York University

¹⁴Department of Psychiatry, Icahn School of Medicine at Mount Sinai

¹⁵James J Peter Veterans Affairs Medical Center

Correspondence concerning this article should be addressed to Kristen Woodberry, 509 Forest Avenue, Center for Psychiatric Research, Portland, ME 04102. kwoodberry@mmc.org.

Contributors

KAW was involved in the conceptualization of the study, collecting and analyzing the data, interpreting the data and writing the paper. KSP was involved in the conceptualization of the study, analysis and interpretation of the data, and writing the paper. CB, DD, MBV, LK, DIS, MLW, DH, FMC, MMG, and DAB were involved in collecting and interpreting the data and critical revision of the paper. KME and ARLR were involved in analyzing and interpreting the data and critical revision of the paper. SNH was involved in interpreting the data and critical revision of the paper. CMC, LJS, BGL, WRM, and LHY were involved in conceptualizing and supervising the study, interpreting the data, and editing the paper.

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William R. McFarlane is director of the PIER Training Institute, which provides training and consultation to public and non-profit agencies regarding advanced practices for severe mental disorders. No other authors have any potential conflicts of interest to disclose.

¹⁶Department of Sociology, University of California, Riverside

Abstract

Objective—Despite the appeal of early intervention in psychosis, there is concern that identifying youth as having high psychosis risk (PR) may trigger stigma. This study employed a pre-post design to measure change in PR participants' emotions about PR upon being told of their PR status and according to whether this was the first time receiving this information.

Methods—Participants ($n = 54$) identified as at PR via structured interview rated their emotions about PR before and after being told they were at PR. Qualitative analyses explored the valence of participant reflections on being given this information.

Results—Participants reported significantly less negative emotion after being told of their PR status ($p < .001$), regardless of whether they were hearing this for the first time ($p = 0.72$). There was no change in positive emotions or the predominant belief that they should keep their PR status private. Most participants commented positively about the process of feedback but negatively about its impact on their self-perceptions and/or expectations of others' perceptions of them.

Conclusion—This is the first study to collect pre-post data related to being told one is at PR and to examine quantitative and qualitative responses across and within individuals. For a majority of participants, clinical feedback stimulated negative stereotypes even as it relieved some distress. To actively address internalized stigma, clinicians providing feedback to PR youth must attend to the positive and negative impacts on how youth think about themselves as well as how they feel.

Keywords

Clinical High Risk; Prodrome; Labeling; Pre-Post; Feedback

1. Introduction

Early intervention in major mental illness has shown promising results. Identifying youth at high risk for psychosis (PR) may avert, or at least mitigate, potential lifelong challenges (Woodberry et al., 2016). Despite encouraging advances, significant concerns regarding the risks of identifying youth at PR linger, especially when only a portion will go on to develop a threshold-level psychotic disorder (Fusar-Poli et al., 2012). The central ethical question in this debate is whether the potential benefits of PR identification and disclosure justify the potential risks to all identified (Corcoran et al., 2010). To evaluate the calculus at both population and individual levels, one must appreciate how youth come to specialized PR clinics and research programs.

“Identifying” PR youth is a complex and varied process (Sisti and Calkins, 2016) centered around a specific concern about possible psychosis on the part of a young person, their family, or a community-based professional, even if in the context of less specific or longstanding mental health concerns (Woodberry et al., 2018). Referral to a PR clinic or study is typically prompted by disclosure or observation of psychotic-like experiences or behavior (e.g. perceptual abnormalities, suspicious thoughts, disorganized speech) or an unexplained decline in functioning. Some youth are told very little about why they are

referred; others are fully aware there is concern about possible psychosis. The central concern in identifying and communicating about PR is that public stereotypes associated with psychosis (e.g., perceptions of the person as dangerous; Link et al., 1989) will become incorporated into the individual's sense of self (i.e., self-stigma; Corrigan et al 2006). This concern is heightened because identification of PR typically occurs during adolescence and young adulthood, a pivotal period for identity development (DeLuca, 2019).

In the PR population, stigma has been associated with increased emotional distress, social withdrawal, non-engagement in treatment, and suicide risk (Colizzi et al., 2020; Yang et al., 2015), and stigma-related distress with an increased risk of transitioning to psychosis (Rüsch et al., 2015). But, to what degree is this stigma activated by telling someone they are at PR? None of the existing studies examine this question. The cause for caution in disclosing PR status is twofold: 1) might it trigger *unnecessary* distress and developmental consequences for PR youth who *will not* go on to develop a psychotic disorder, even without early intervention? and 2) might it amplify distress, isolation, and disengagement in PR youth who *will* develop a psychotic disorder?

The potential benefits of disclosing PR status are similarly important to consider. Early intervention, reliant on PR identification, and arguably disclosure, can reduce the risk of a threshold-level psychotic episode for PR youth, at least in the short term (van der Gaag et al., 2012). In addition, some qualitative studies have found that diagnostic feedback itself, when delivered in specialized clinical settings, may have predominantly positive effects. In one (Welsh and Tiffin, 2012), PR youth generally felt grateful, sharing that the feedback was a form of support. In another (Uttinger et al., 2018), youth found relief in having a name for their already distressing and stigma-inducing experiences. Indeed, disclosure of PR may not be the primary driver of stigma for PR youth (Anglin et al., 2014; Yang et al., 2015). Personal and interpersonal reactions to or beliefs about the symptoms themselves may elicit stigma prior to any risk-related feedback (Yang et al., 2015). Furthermore, many argue that disclosure of diagnostic information is critical to people's agency over their own health (Corcoran, 2016). There is thus great interest in the contexts and ways PR is communicated (Milton and Mullan, 2014; Mittal et al., 2015) and the experiences and beliefs that PR individuals bring to this communication.

Balancing benefits and risks requires a better understanding of the direct impact of being told one is at PR, and whether this varies between and/or within individuals (the same individual experiencing both positive and negative consequences). Prior research has assessed stigma and general responses to feedback only after, and typically without specific reference to, PR identification. No studies have examined whether responses differ for those receiving this information for the first time within the context of specialized PR programs vs. after having been previously told they might be at PR by a community clinician or parent. One might expect those already worried about psychosis to report reduced stigma and negative affect after an informed discussion of PR and those hearing of their PR for the first time to report increased stigma and negative affect. No study has tested whether individuals experience predominantly positive or negative experiences or, as we expect, a mixture of both.

1.1. Aims of the study

To capture an opportunity afforded within a larger trial, the data reported here were collected to compare PR youth's affective experiences and stigma-related perceptions about being at PR both before and shortly after being given formal feedback about this risk. Prior to the first interview about stigma and in order to test differences in response by those considering their PR status for the first time, we asked participants whether they had been told or thought they were at PR. We coded the valence of qualitative reflections to examine the degree to which participants perceived PR identification as having a positive and/or negative impact on how they saw themselves or expected others to perceive and respond to them.

2. Methods

2.1. Participants

PR participants were a subset of participants in a larger longitudinal study of stigma (see Yang et al., 2019). Inclusion criteria included: age of 12 to 35 years, meeting criteria for a psychosis risk (PR) syndrome defined by the Structured Interview for Psychosis Risk Syndromes (SIPS, version 5, Miller et al., 2002) or a modified PR syndrome (see Supplemental Materials), and being substance-free on the day of assessment. Inclusion in these analyses was restricted to a subsample for whom stigma interview data could be collected both before and after clinician feedback. Exclusion criteria were: current or lifetime psychotic disorder, IQ less than 70, and consensus view that another disorder, including a substance use disorder, clinically significant central nervous system disorder or brain injury better explained PR symptoms. The majority of participants were recruited into the larger study only after having been given formal feedback (typically by clinic rather than research staff). Fifty-four participants from Beth Israel Deaconess Medical Center (BIDMC, Boston, MA), and Maine Medical Center (MMC, Portland, ME) contributed pre- and post-feedback data for these analyses.

2.2. Procedures

The Institutional Review Boards at the NYSPI at Columbia, BIDMC and MMC approved this study. Adult participants provided written consent prior to beginning study procedures and, in the case of minors, a parent or guardian provided written consent while the participant provided assent. Baseline assessments followed procedures for the larger study and included an in-depth interview regarding participants' mental health attitudes (Core Stigma Interview, Yang et al., 2019). Participants in these analyses received in-person individualized feedback about their risk status only after this interview was completed. Consistent with real world practice, the nature of this feedback was allowed to vary by clinician style and in response to participants' symptoms and understanding. Following this feedback, participants were asked a selection of questions from the Core Stigma Interview a second time along with two open-form questions (see Figure 1).

2.3. Measurement

2.3.1. Structured Interview of Psychosis-Risk Syndromes (SIPS, version 5.6).

—The SIPS is one of the leading international interviews for assessing the presence

or absence of PR syndromes. It uses a semi-structured interview format to assess five positive symptoms, six negative symptoms, four disorganized symptoms, and four general symptoms. Each symptom is rated on a scale from 0 [absent] to 6 [severe and psychotic]. The SIPS has demonstrated good predictive validity (Miller et al., 2002; Woods et al., 2019). Study eligibility and PR syndrome were established by multisite clinician consensus after review of written vignettes (See Supplemental Materials for modified criteria relevant to six participants).

2.3.2. Core Stigma Interview.—This interview-based assessment gauged young people’s current perception of their own mental health status, and their attitudes toward mental health more broadly (see Yang et al., 2019). Only select portions were appropriate for assessing changes over time (see Figure 1). An initial module asked participants whether they had ever been *told* they were at risk for five conditions, including psychosis and schizophrenia, and whether they *thought* they were at risk for each (see Supplemental Figure 1). They were subsequently asked to rate their emotions in response to being told or thinking they were at risk for [psychosis or schizophrenia, combined here as “PR”]. For individuals who had neither been told nor thought they were at PR, these questions were framed hypothetically at baseline (see Supplemental Figure 1). They rated six negative emotions (Cronbach’s alpha = 0.85 baseline, 0.90 post feedback) and six positive ones (Cronbach’s alpha = 0.76 baseline, 0.77 post feedback). Additionally, participants were asked whether they thought they should keep their PR status private. To probe qualitative aspects of the experience of being told they were at PR, participants were asked two open-form items in the post-feedback version of this interview (see Figure 1). These asked how they expected the PR feedback to impact their self-perception and others’ perceptions of them, and how it felt to receive this feedback. Verbal responses to these questions were documented by the interviewer.

2.3.3. Functioning Scales.—The Global Functioning: Social Scale measures level of closeness and connection with others while the Global Functioning: Role Scale measures school or work functioning. Both scales were rated on a 1–10 scale, with 10 being superior functioning (Cornblatt et al., 2007). The modified Global Assessment of Functioning scale from the SIPS was used to assess overall functioning (Hall, 1995).

2.4. Quantitative Analysis

We calculated between group differences (Table 1: Told vs. Not Told) in demographic and clinical factors using two-tailed independent *t* tests and Chi square tests. For each stigma interview (pre- and post-feedback), we calculated separate mean ratings for positive and negative emotions, and mean total emotion, with positive emotions reverse-coded. We conducted linear mixed effects modeling (lme in package nmle in R version 3.6.1) with mean total emotion as the dependent variable (DV), two interaction terms as fixed effects, and ID as a random effect. Fixed effects included the interaction of timepoint (pre-post) with 1) whether participants had or had not been previously told they were at risk and 2) the number of days between pre- and post-feedback interviews (to explore the degree to which changes were associated merely with the passage of time). As post-hoc exploratory analyses to better understand our findings, we repeated the regressions, first replacing the mean total

emotion with mean negative and mean positive emotions; second, replacing (for each mean) whether the participant had been *told* with whether they *thought* they were at risk and then with whether participants were asked to consider PR *hypothetically*, and third, including the interaction term of timepoint (pre-post) and site as a fixed effect. We also examined potential correlates (Table 1 variables and valence codes from qualitative analyses, dummy coded) of pre-post changes in emotion (total, negative, positive) applying the Benjamini-Hochberg procedure (p_{adjust} in R) to control for a False Discovery Rate (FDR) of 0.10 given multiple comparisons. To test changes in binary responses (yes/no), we used a mixed effects logistic regression (`glmer` in R package `lme4`) with the interaction of site and pre-post timepoint as a fixed effect and ID as a random effect.

2.5. Qualitative Analysis

Participants' responses to each question were evaluated separately. After training and practice, two coders (KE, AR) assigned valence codes (positive, negative) to participants' responses to each question according to whether content of specific valence arose in each passage. Interrater reliability was calculated after both coders had coded all passages. Coding disagreements were settled by discussion, until a consensus was reached among the team (KE, AR, KP, KW). Passages were coded as having mixed (both positively and negatively valenced content), positive only, negative only, or no valence (see details in Supplemental Materials).

3. Results

3.1. Sample Characteristics

Fifty-four participants had valid pre-post data and were included in the present study. Of these participants, thirty reported having already been told about their PR before baseline. Those "told" did not differ from those "not told" on demographic or clinical characteristics (see Table 1).

3.2. Quantitative

3.2.1. Pre-post change in emotions.—Participants' total emotion ratings were significantly less negative after, relative to before, receiving formal PR feedback (timepoint $b = -0.29$, $se = .06$, $p < .001$, see Figure 2). This was accounted for by a significant reduction in mean negative emotion ratings (timepoint $b = -.62$, $se = 0.10$, $p < .001$) as there was no significant change in positive emotions. The number of days between pre and post assessments (m [days] = 19, $sd = 24$) partially explained the decline in overall negativity of emotion ratings (days*pre-post $b = -.0046$, $se = .0015$, $p = .005$). This, too, was specific to a significant drop in mean negative emotion ratings (days*pre-post $b = -.0076$, $se = .0026$, $p = .006$) rather than an increase in positive emotions (see Figure 2).

3.2.2. Impact of being told for the first time?—Contrary to our predictions, we found no significant differences in emotional responses between those who had been told about their PR status prior to study entry and those first told by study staff (told*pre-post $b = .027$, $se = .075$, $p = 0.72$).

3.2.3. Privacy: Is it better not to tell people?—We found no change in rates of “yes” answers to the item, “It is better that I not tell people that I am at-risk for or developing [psychosis or schizophrenia]” (69% before, 67% after).

3.3. Post-Hoc Exploratory Analyses

3.3.1. What participants thought.—Thinking they were at high risk for psychosis or schizophrenia at baseline (61%, 33/54) was not entirely aligned with whether they had already been told (Supplemental Figure 1, Yang et al., 2019). Of those already told they were at risk 17% (5/30) did not think they were; 33% (8/24) of those who had *not* been told, *did* think they were, including 4 who thought that they *already had* schizophrenia or psychosis. Although individuals who thought that they were at high risk reported less negativity overall (thought $b = -0.27$, $se = 0.12$, $p = .026$), we found no significant overall effect on change in emotions by what participants thought or by whether questions were asked in the hypothetical at baseline.

3.3.2. Site effects.—There was a trend-level site effect for negative emotion ($b = 0.42$, $se = 0.22$, $p = .06$, Boston>Maine), but site did not have a significant effect on change in emotions over time.

3.3.3. Demographic and Clinical Correlates.—Only a baseline depression diagnosis was significantly correlated with the pre-post change in emotion ratings ($r = 0.29$, $p = .04$; depressed individuals reporting a smaller decline in negative emotion) and not after control for multiple comparisons.

3.4. Qualitative

Strong interrater reliability was found for both positive (Kappa = 0.67) and negative (Kappa = 0.83) valence. As expected, the majority of participants’ responses contained content with mixed valence rather than solely positive or solely negative content. In participants’ responses to two open-response questions (Will this affect how you see yourself and how others see you? How was it to get this feedback? Figure 1), 32 of 54 individuals made statements with both positive and negative valence, while ten participants had only negative responses, and ten participants had only positive responses (see Figure 3). The following is an example of a mixed valence response:

“Now I have a word for it...It does worry me a little bit, but it doesn’t keep me awake at night. ... I worry that people will see me in the ‘crazy category’ and how far people will take it. The people I have told are nice and fond of me so I don’t think they will run from me or from it. They are more concerned than anything.”

(For more examples of mixed, positive, and negative responses, see Supplemental Materials.) We then analyzed the responses by question. A majority of responses to the question regarding the impact of feedback on self-perception and/or others’ perceptions of them were exclusively negative (31/ 54). By contrast, a majority of responses to the question regarding the impact on participants’ feelings were exclusively positive (30/54, see Figure 4).

3.5. Relationship of quantitative and qualitative data

There was one significant correlation between the degree of change in emotion ratings and the valence of qualitative responses: participants reporting exclusively negatively valenced responses regarding their experience of feedback reported less reduction in negative emotions ($r_{pb} = -.359$, $p = .008$, ns after Benjamini-Hochberg) pre- to post-feedback.

4. Discussion

4.1. Key Findings

Prior studies examining stigma in PR youth have measured stigma at a single time point after participants were told their risk status and often without specific reference to the PR (e.g., typically referencing “mental health problems”, “emotional problems”) or feedback about PR. Qualitative studies asking participants about their experience of being told of their PR have involved small samples and focused on affective experience. This is the first study to assess PR youth both before and after feedback about their PR status. In contrast to expectations, all PR participants, regardless of whether they were receiving feedback about their PR for the first time, reported significantly less negative emotion after hearing about their risk status. Time between interviews was a significant predictor of decreased negativity, suggesting that after an initial PR assessment, participants’ negative emotions become less intense over time, possibly independent of feedback. This would be consistent with a modal decline in symptom severity and associated distress, although the mean time (19 days) may be short to fully support this interpretation.

Notably, participant ratings reflected a significant reduction in negative emotion ratings but not a significant increase in positive emotions. Negative emotions were still rated more strongly than positive emotions after feedback (paired $t[53] = 5.77$, $p < .001$; $M/SD_{neg} = 1.93/0.10$, $M/SD_{pos} = 1.29/0.37$). Furthermore, a strong majority (67–69%) believed it was better not to tell others of this status both before and after feedback. Giving feedback about PR status, although it may not make people feel good or want to share the news with others, does not appear to make most people feel worse. These findings appear to support and expand on a prior study by a few of the current authors (Yang et al., 2015), finding that PR participant stigma was greater in relation to the experience of symptoms than to being told they were at PR.

However, responses to open-ended questions indicated that, although PR youth generally felt positive about the experience of receiving feedback, being identified as at PR still seemed to have a predominantly negative impact on how youth saw themselves and/or expected others might view them. Clinicians and researchers must continue to grapple with the fact that disclosing PR status to youth can simultaneously lead to positive experiences (Welsh and Tiffin, 2012, e.g. engendering a sense of connection, stimulating greater self-understanding, and helping youth see a hopeful path forward) and trigger negative impacts related to stigma (Rüsch, Corrigan, et al., 2014; Rüsch, Muller, et al., 2014; Yang et al., 2015, e.g. increasing identification with negative stereotypes, igniting fear of how they may be treated or seen in the world).

4.2. Clinical Implications

Just as “identification” of psychosis risk is a process rather than an event, understanding the stigma associated with this identification will likely require attention to process, content, and context. Although preliminary and in need of replication in a larger sample, current findings suggest that PR youth, as a group, do not feel worse after PR feedback. The data are consistent with the hypothesis that feedback containing validation and normalization of symptoms may have the intended effect: reducing symptom-based stress. In discussing PR with young people, however, clinicians need to attend to more than the individuals’ feelings. Directly inquiring about what people think this means about them and their future---and addressing these thoughts at the time of feedback is critical to mitigating the potential harm of early identification. Although these data suggest that providing feedback may not be harmful by itself, considering oneself as at risk for psychosis certainly may be. Clinicians are urged to carefully balance both positive and negative implications of disclosing PR status to a specific young person in determining if, how, and when such disclosure is made. Treatments for PR that facilitate access to positive role models and stories of recovery in addition to addressing the cognitive and behavioral mechanisms that translate societal stigma into problematic outcomes may hold particular promise.

4.3. Limitations

Although these data offer new information relevant to an important research question, their interpretation must be considered preliminary in light of the methodological limitations of the small sample and naturalistic design. While the notes taken by clinicians were sufficient for coders to ascertain the valence of participants’ responses, transcribed recordings of these interviews would have provided greater detail and consistency. Additionally, we were able to detect more negative valence in response to the question that asked about youths’ perceptions of themselves and others’ perceptions of them, but the question format and our coding strategy did not allow us to separate content referring to self-perception from content referring to others’ perceptions. Furthermore, although clinicians conveyed many of the same core themes with all PR youth who received feedback, the feedback was not standardized. Clinicians in both sites provided feedback individualized to address, e.g., each participant’s risk indicators, risk factors, concerns, and context, consistent with good clinical practice. Similarly, the availability or receipt of interventions between the pre- and post-feedback interviews varied but was not captured and its potential impact is thus unknown.

4.4. Future Directions

Exploring specific themes within participant responses would help us better understand the mix of positive and negative responses to feedback. Further research is needed to understand the specific effects of different types of information and styles of feedback, including the role of rapport and initial exploration of concerns and beliefs, on different individuals and on different aspects of identity and experience. This should include evaluation of feedback provided by family members and community professionals. Assessment of implicit (e.g., stigma-related beliefs outside of a person’s awareness) as well as explicit stigma (openly endorsed stigmatizing beliefs) is likely to be particularly fruitful. Additionally, assessment of

family and social context, as well as expectations of and response to the SIPS interview may offer important insights. Finally, let us not forget to directly ask each young person what is and is not helpful to them in coping with and managing their PR, and to actively combat stigma by testing and employing anti-stigma interventions with PR youth.

5. Conclusion

Although young people may understandably experience greater negative than positive emotion about being at PR, findings from this study suggest that this likely precedes the formal disclosure of PR. In fact, after receiving feedback about being at PR within the specialized PR programs participating in this study, participants (even those hearing this for the first time) reported less negative emotion than before. A majority of participants provided exclusively positive responses about their experience receiving this feedback. Yet a majority also reported exclusively negative responses about how this feedback impacted their self-perceptions and their expectations of how others might perceive them. Understanding the complexity of young people's feelings and beliefs about being at PR both before and after disclosure of PR status, and directly addressing internalized stigma, will be critical to the ethical care of this population.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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At-risk diagnosis module (Pre-feedback):

1. Has anyone told you that you were ‘at risk for’ or ‘developing’
[depression, anxiety, bipolar disorder, psychosis, schizophrenia]?

2. Do you think you are ‘at risk for’ or ‘developing’
[depression, anxiety, bipolar disorder, psychosis, schizophrenia]?

Core stigma interview (Pre-post elements):

3. About being told[§] I am at-risk for or developing
[psychosis or schizophrenia],
I have felt [embarrassed, proud, different from others, hopeful, angry, relieved,
ashamed, empowered, sad, understood, worried, sense of belonging]

Response Options: “Not at all” – “A little” – “Moderately” – “A lot”

4. It is better that I not tell people that I am at-risk for or developing
[psychosis or schizophrenia].

Response Options: “Yes” “No”

Qualitative questions (Post-feedback):

5. You were told you were at-risk for psychosis. Will this affect how you see yourself and how others see you? If so, how?
Are there any other experiences that you would like to share?

6. How was it to get this feedback?
Did it feel like I accurately understood your experiences?
How do you think you’ll feel when you leave here?

Figure 1.

Core Stigma Interview elements for these analyses (Yang et al., 2019)

[§]At baseline, individuals who had not been already told that they were at risk for or developing either psychosis or schizophrenia (PR), “being told” was replaced with “thinking”. For those who had neither been told nor thought they were at PR, the entire item stem was replaced with “If you were told you were at-risk for psychosis, you would feel [emotion]”. This allowed for some, albeit not equivalent, assessment of responses to the PR concept across all participants and subsequent analysis of real world differences in response patterns.

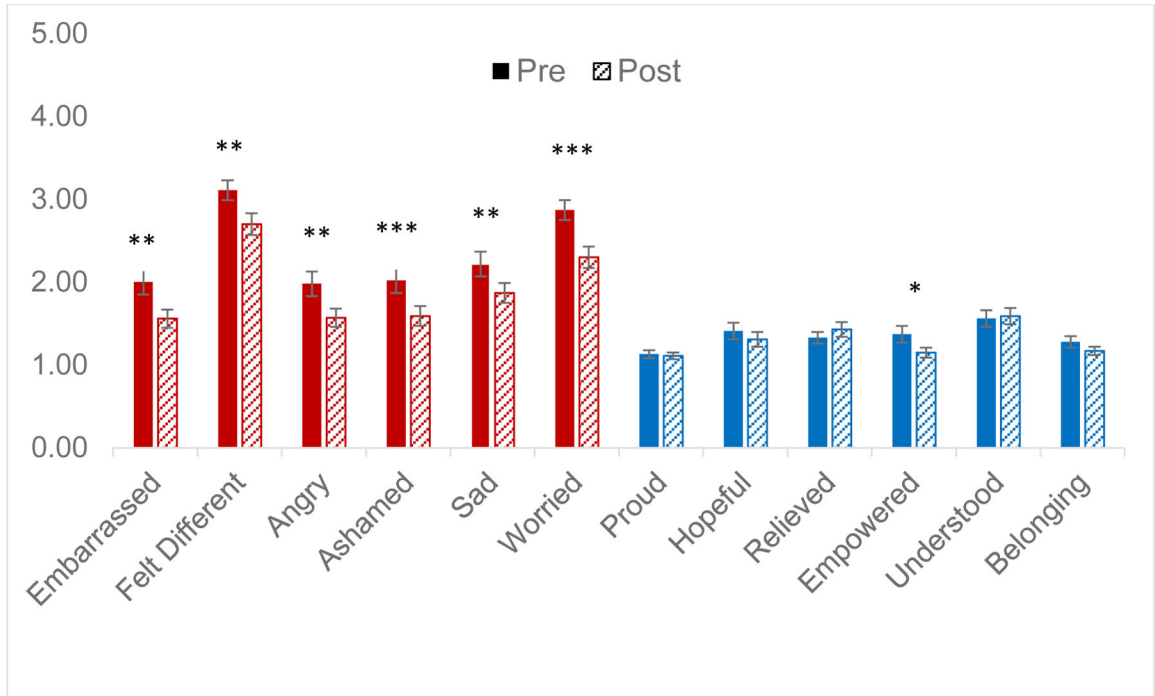


Figure 2. Mean negative (red) and positive (blue) emotion ratings of participants ($n = 54$) before and after receiving feedback about PR. Error bars reflect standard errors. * $p < .05$, ** $p < .01$, *** $p < .001$ for dependent samples t tests. All but Empowered survived Benjamini-Hochberg control for FDR of 0.10.

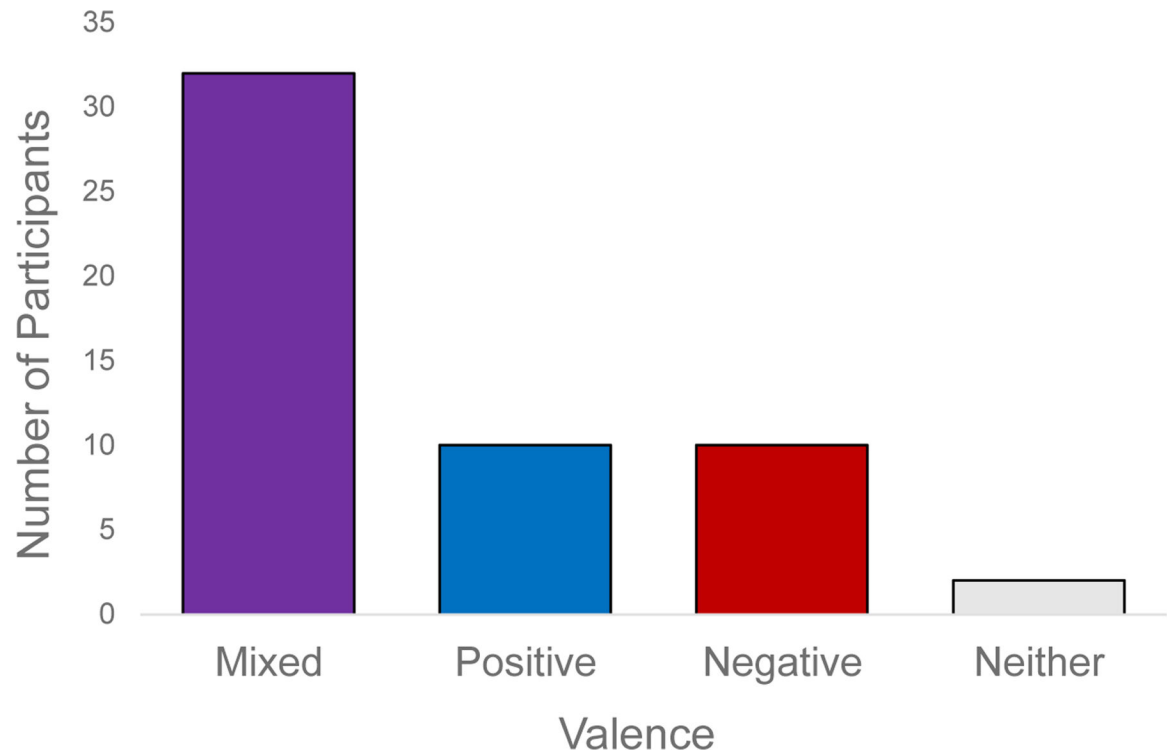


Figure 3.

The valence of open-ended responses about the impact of PR feedback, by participant. Note: Mixed: including both positively- and negatively-valenced content; Positive: including only positively-valenced content; Negative: including only negatively-valenced content; Neither: including no content of positive or negative valence

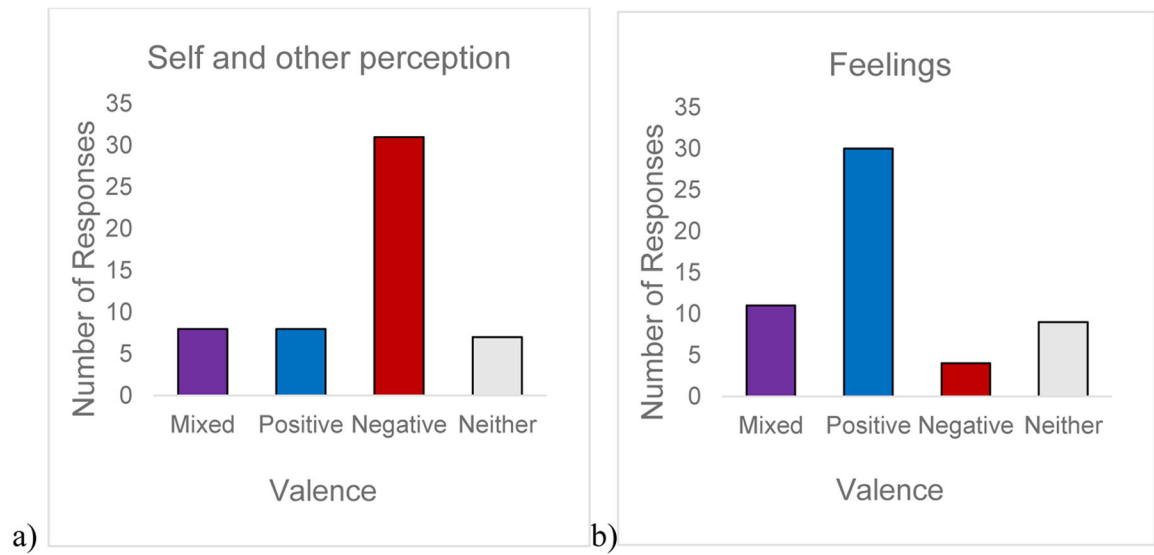


Figure 4.

The valence of responses to open-ended questions about a) the impact of feedback on self- and other-perceptions and b) the experience of receiving the feedback.

Note: Mixed: including both positively- and negatively-valenced content; Positive: including only positively-valenced content; Negative: including only negatively-valenced content; Neither: including no content of positive or negative valence

Table 1:

Sample Characteristics

	Total (n=54)	Told (n=30)	Not Told (n=24)
	<i>N (%)</i>		
Sex assigned at birth-male	33 (61.1)	18 (60.0)	15 (62.5)
Site			
Massachusetts	31 (57.4)	16 (53.3)	15 (62.5)
Maine	23 (42.6)	14 (46.7)	9 (37.5)
Mother a college graduate	18 (36.0)	9 (33.3)	9 (39.1)
Household income > \$60k/year	37 (68.9)	22 (75.9)	15 (62.5)
Currently employed	14 (25.9)	10 (34.5)	4 (16.7)
Enrolled as a student	46 (85.2)	24 (82.8)	22 (91.7)
Race/ethnicity			
White	36 (69.2)	21 (72.4)	15 (65.2)
Black	8 (15.4)	3 (10.3)	5 (21.7)
Asian/Middle East	4 (7.7)	2 (6.8)	2 (8.7)
First Nations	2 (3.8)	2 (6.9)	0 (0.0)
Interracial/Other	1 (1.9)	1 (3.4)	0 (0.0)
Hispanic	3 (5.7)	1 (3.4)	2 (8.3)
Axis 1 Disorders (Current)			
>1 Axis 1 disorder	25 (47.2)	13 (43.3)	12 (52.2)
Depressive disorder	27 (50.9)	15 (50.0)	12 (52.2)
Anxiety disorder(s)	31 (58.5)	18 (60.0)	13 (56.5)
Bipolar disorder	7 (13.2)	4 (13.3)	3 (13.0)
Substance use disorder	2 (3.8)	2 (6.7)	0 (0.0)
No Axis 1 disorder	9 (17.0)	4 (13.3)	5 (21.7)
	Total	Told	Not Told
	Mean(SD)		
Age (years)	17.9 (3.6)	17.8 (3.2)	18.0 (4.2)
Years of education	11.2 (2.7)	11.4 (2.8)	10.8 (2.6)
SIPS Symptom Scale Scores			
Total positive	13.6 (4.0)	12.8 (3.5)	14.5 (4.4)
Total negative	14.2 (6.6)	13.4 (6.4)	15.1 (6.9)
Total disorganized	6.3 (3.2)	5.6 (3.3)	7.1 (2.7)
Total general	11.1 (3.9)	10.6 (3.7)	11.7 (4.1)
Functioning			
Global Assessment	46.9 (11.8)	48.6 (12.1)	44.75 (11.3)
Social *	6.0 (1.5)	6.5 (1.5)	5.4 (1.3)
Role	5.9 (2.0)	6.1 (2.3)	5.8 (1.6)

Note: Told/Not Told: Subgroups who had/had not been told they were at high risk for psychosis (PR) *prior* to the baseline core stigma interview; Axis I Disorder: Diagnostic Statistical Manual - IV Axis I Diagnosis; SIPS: Structured Interview of Psychosis Risk Syndromes. Missing data (*n*): education (1), maternal education (4), household income (1), employment (1), race (2), ethnicity (1), age (5), Axis I Disorders (1)

* Told and Not Told subgroups differed at $p < 0.01$ (not surviving Benjamini-Hochberg procedure)

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