

Supplementary material

Supplementary S1. PRISMA checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3-4
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3-4
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	4
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	5
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	4, supplementary
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	5
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5

Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	5
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	6
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5-6
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	5-6
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	6
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	5-6
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	7
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	7-8, supplementary
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	11-12, supplementary
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	7-10, supplementary
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	7-11
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Supplementary
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	12-13
DISCUSSION			

Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	13-15
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	13-15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	15
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	16

Supplementary S2. Search terms

Pubmed syntax

(EMA[Title/Abstract] OR ESM[Title/Abstract] OR diary[Title/Abstract] OR diaries[Title/Abstract] OR "momentary assessment"[Title/Abstract] OR "experience sampling"[Title/Abstract] OR "ambulatory assessment"[Title/Abstract] OR "ambulatory monitoring"[Title/Abstract])) AND (schizoph*[Title/Abstract] OR schizoaff*[Title/Abstract] OR psychosis[Title/Abstract] OR psychotic[Title/Abstract] OR "positive symptom*" [Title/Abstract] OR hallucinat*[Title/Abstract] OR "hearing voices"[Title/Abstract] OR "voice hear*" [Title/Abstract] OR delusion*[Title/Abstract] OR paranoi*[Title/Abstract] OR "unusual beliefs"[Title/Abstract] OR persecut*[Title/Abstract])

PsychINFO

((title: (EMA) OR title: (ESM) OR title: (diary) OR title: (diaries) OR title: ("momentary assessment") OR title: ("experience sampling") OR title: ("ambulatory assessment") OR title: ("ambulatory monitoring")) OR (abstract: (EMA) OR abstract: (ESM) OR abstract: (diary) OR abstract: (diaries) OR abstract: ("momentary assessment") OR abstract: ("experience sampling") OR abstract: ("ambulatory assessment") OR abstract: ("ambulatory monitoring"))) OR (Keywords: (EMA) OR Keywords: (ESM) OR Keywords: (diary) OR Keywords: (diaries) OR Keywords: ("momentary assessment") OR Keywords: ("experience sampling") OR Keywords: ("ambulatory assessment") OR Keywords: ("ambulatory monitoring")) AND ((Year: [1980 TO 2020] OR TestYear: [1980 TO 2020])) AND (((title: (schizo*) OR title: (psychosis) OR title: (psychotic) OR title: ("positive symptom*") OR title: (hallucinat*) OR title: ("hearing voices") OR title: ("voice hear*") OR title: (delusion*) OR title: (paranoi*) OR title: ("unusual beliefs") OR title: (persecut*)) OR (abstract: (schizo*) OR abstract: (psychosis) OR abstract: (psychotic) OR abstract: ("positive symptom*") OR abstract: (hallucinat*) OR abstract: ("hearing voices") OR abstract: ("voice hear*") OR abstract: (delusion*) OR abstract: (paranoi*) OR abstract: ("unusual beliefs") OR abstract: (persecut*)) OR (Keywords: (schizo*) OR Keywords: (psychosis) OR Keywords: (psychotic) OR Keywords: ("positive symptom*") OR Keywords: (hallucinat*) OR Keywords: ("hearing voices") OR Keywords: ("voice hear*") OR Keywords: (delusion*) OR Keywords: (paranoi*) OR Keywords: ("unusual beliefs") OR Keywords: (persecut*))) AND ((Year: [1980 TO 2020] OR TestYear: [1980 TO 2020]))

Medline

(EMA) OR ESM) OR diary) OR diaries) OR "momentary assessment") OR "experience sampling") OR "ambulatory assessment") OR "ambulatory monitoring") AND ((((((((((schizo*) OR psychosis) OR psychotic) OR "positive symptom*") OR hallucinat*) OR "hearing voices") OR "voice hear*") OR delusion*) OR paranoi*) OR "unusual beliefs") OR persecut*))

Timespan: 1980-2019. Indexes: MEDLINE.

EBSCOhost

TI ((EMA OR ESM OR diary OR diaries OR "momentary assessment" OR "experience sampling" OR "ambulatory assessment" OR "ambulatory monitoring") AND (schizo* OR psychosis OR psychotic OR "positive symptom*" OR hallucinat* OR "hearing voices" OR "voice hear*" OR delusion* OR paranoi* OR "unusual beliefs" OR persecut*)) OR AB ((EMA OR ESM OR diary OR diaries OR "momentary assessment" OR "experience sampling" OR "ambulatory assessment" OR "ambulatory monitoring") AND (schizo* OR psychosis OR psychotic OR "positive symptom*" OR hallucinat* OR "hearing voices" OR "voice hear*" OR delusion* OR paranoi* OR "unusual beliefs" OR persecut*)) OR SU ((EMA OR ESM OR diary OR diaries OR "momentary assessment" OR "experience sampling" OR "ambulatory assessment" OR "ambulatory monitoring") AND (schizo* OR psychosis OR psychotic OR "positive symptom*" OR hallucinat* OR "hearing voices" OR "voice hear*" OR delusion* OR paranoi* OR "unusual beliefs" OR persecut*))

Web of Science

((EMA OR ESM OR diary OR diaries OR "momentary assessment" OR "experience sampling" OR "ambulatory assessment" OR "ambulatory monitoring") AND (schizo* OR psychosis OR psychotic OR "positive symptom*" OR hallucinat* OR "hearing voices" OR "voice hear*" OR delusion* OR paranoi* OR "unusual beliefs" OR persecut*))

Timespan: 1980-2019. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.

Embase

(EMA OR ESM OR diary OR diaries OR "momentary assessment" OR "experience sampling" OR "ambulatory assessment" OR "ambulatory monitoring") AND (schizo* OR psychosis OR psychotic OR "positive symptom*" OR hallucinat* OR "hearing voices" OR "voice hear*" OR delusion* OR paranoi* OR "unusual beliefs" OR persecut*) {No Related Terms}

Supplementary S3. Final list of included studies

1. Ainsworth, J., Palmier-Claus, J. E., Machin, M., Barrowclough, C., Dunn, G., Rogers, A., ... & Lewis, S. (2013). A comparison of two delivery modalities of a mobile phone-based assessment for serious mental illness: native smartphone application vs text-messaging only implementations. *Journal of Medical Internet Research*, *15*(4), e2328.
2. Bartolomeo, L. A., Raugh, I. M., & Strauss, G. P. (2022). Deconstructing emotion regulation in schizophrenia: The nature and consequences of abnormalities in monitoring dynamics. *Schizophrenia research*, *240*, 135–142. <https://doi.org/10.1016/j.schres.2021.12.043>
3. Bell, I. H., Rossell, S. L., Farhall, J., Hayward, M., Lim, M. H., Fielding-Smith, S. F., & Thomas, N. (2020). Pilot randomised controlled trial of a brief coping-focused intervention for hearing voices blended with smartphone-based ecological momentary assessment and intervention (SAVVy): Feasibility, acceptability and preliminary clinical outcomes. *Schizophrenia Research*, *216*, 479-487.
4. Bell, V., Velthorst, E., Almansa, J., Myin-Germeys, I., Shergill, S., & Fett, A. K. (2023). Do loneliness and social exclusion breed paranoia? An experience sampling investigation across the psychosis continuum. *Schizophrenia research. Cognition*, *33*, 100282. <https://doi.org/10.1016/j.scog.2023.100282>
5. Ben-Zeev, D., Ellington, K., Swendsen, J., & Granholm, E. (2011). Examining a cognitive model of persecutory ideation in the daily life of people with schizophrenia: a computerized experience sampling study. *Schizophrenia Bulletin*, *37*(6), 1248-1256.
6. Ben-Zeev, D., Frounfelker, R., Morris, S. B., & Corrigan, P. W. (2012a). Predictors of self-stigma in schizophrenia: new insights using mobile technologies. *Journal of Dual Diagnosis*, *8*(4), 305-314.
7. Ben-Zeev, D., McHugo, G., Xie, H., Dobbins, K., & Young, M. (2012b). Comparing retrospective reports to real-time/real-place mobile assessments in individuals with schizophrenia and a nonclinical comparison group. *Schizophrenia Bulletin*, *38*(3), 396-404.
8. Ben-Zeev, D., Morris, S., Swendsen, J., & Granholm, E. (2012c). Predicting the occurrence, conviction, distress, and disruption of different delusional experiences in the daily life of people with schizophrenia. *Schizophrenia Bulletin*, *38*(4), 826-837.
9. Berry, N., Emsley, R., Lobban, F., & Bucci, S. (2018). Social media and its relationship with mood, self-esteem and paranoia in psychosis. *Acta Psychiatrica Scandinavica*, *138*(6), 558-570.
10. Brand, R. M., Bendall, S., Hardy, A., Rossell, S. L., Meyer, D., & Thomas, N. (2020). Moment-to-moment associations between posttraumatic stress symptoms and auditory hallucinations in the flow of daily life. *Psychiatry Research*, *285*, 112838.
11. Buck, B., Munson, J., Chander, A., Wang, W., Brenner, C. J., Campbell, A. T., & Ben-Zeev, D. (2022). The relationship between appraisals of auditory verbal hallucinations and real-time affect and social functioning. *Schizophrenia research*, *250*, 112–119. <https://doi.org/10.1016/j.schres.2022.10.015>
12. Cristóbal-Narváez, P., Sheinbaum, T., Myin-Germeys, I., Kwapil, T. R., de Castro-Catala, M., Domínguez-Martínez, T., . . . Barrantes-Vidal, N. (2017). The role of stress-regulation genes in moderating the association of stress and daily-life psychotic experiences. *Acta Psychiatrica Scandinavica*, *136*(4), 389-399.
13. Daemen, M., van Amelsvoort, T., Group Investigators, & Reininghaus, U. (2022). Self-esteem and psychosis in daily life: An experience sampling study. *Journal of psychopathology and clinical science*, *131*(2), 182–197. <https://doi.org/10.1037/abn0000722>

14. Daemen, M., van Amelsvoort, T., GROUP investigators, & Reininghaus, U. (2023). Momentary Self-esteem as a Process Underlying the Association Between Childhood Trauma and Psychosis: Experience Sampling Study. *JMIR mental health*, 10, e34147. <https://doi.org/10.2196/34147>
15. Dokuz, G., Kani, A. S., Uysal, A., & Kuşcu, M. K. (2022). The impact of childhood trauma and daily life experiences on emotional and psychotic symptom intensity in psychosis: An experience sampling study. *Psychiatry research*, 317, 114872. <https://doi.org/10.1016/j.psychres.2022.114872>
16. Dupuy, M., Abdallah, M., Swendsen, J., N'kaoua, B., Chanraud, S., Schweitzer, P., ... & Misdrahi, D. (2022). Real-time cognitive performance and positive symptom expression in schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience*, 272(3), 415-425.
17. Fett, A. K. J., Hanssen, E., Eemers, M., Peters, E., & Shergill, S. S. (2022). Social isolation and psychosis: an investigation of social interactions and paranoia in daily life. *European Archives of Psychiatry and Clinical Neuroscience*, 272(1), 119-127.
18. Fielding-Smith, S. F., Greenwood, K. E., Wichers, M., Peters, E., & Hayward, M. (2022). Associations between responses to voices, distress and appraisals during daily life: an ecological validation of the cognitive behavioural model. *Psychological medicine*, 52(3), 538-547.
19. Gaudio, B. A., Ellenberg, S., Price, L. H., & Moitra, E. (2018). Time-lagged predictors of daily medication nonadherence beliefs during the month post-hospital discharge in patients with psychotic-spectrum disorders. *Psychiatry Research*, 270, 253-256.
20. Geraets, C. N. W., Snippe, E., van Beilen, M., Pot-Kolder, R. M. C. A., Wichers, M., van der Gaag, M., & Veling, W. (2020). Virtual reality based cognitive behavioral therapy for paranoia: Effects on mental states and the dynamics among them. *Schizophrenia Research*, 222, 227-234.
21. Gohari, E., Moore, R. C., Depp, C. A., Ackerman, R. A., Pinkham, A. E., & Harvey, P. D. (2022). Momentary severity of psychotic symptoms predicts overestimation of competence in domains of everyday activities and work in schizophrenia: An ecological momentary assessment study. *Psychiatry research*, 310, 114487. <https://doi.org/10.1016/j.psychres.2022.114487>
22. Granholm, E., Loh, C., & Swendsen, J. (2008). Feasibility and validity of computerized ecological momentary assessment in schizophrenia. *Schizophrenia Bulletin*, 34(3), 507-514.
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24. Hartley, S., Haddock, G., Vasconcelos e Sa, D., Emsley, R., & Barrowclough, C. (2015). The influence of thought control on the experience of persecutory delusions and auditory hallucinations in daily life. *Behaviour Research and Therapy*, 65, 1-4.
25. Hartley, S., Haddock, G., Vasconcelos, E. S. D., Emsley, R., & Barrowclough, C. (2014). An experience sampling study of worry and rumination in psychosis. *Psychological Medicine*, 44(8), 1605-1614.
26. Harvey, P. D., Miller, M. L., Moore, R. C., Depp, C. A., Parrish, E. M., & Pinkham, A. E. (2021). Capturing Clinical Symptoms with Ecological Momentary Assessment: Convergence of Momentary Reports of Psychotic and Mood Symptoms with Diagnoses and Standard Clinical Assessments. *Innovations in clinical neuroscience*, 18(1-3), 24-30.

27. Jongeneel, A., Aalbers, G., Bell, I., Fried, E. I., Delespaul, P., Riper, H., . . . Van Den Berg, D. (2020). A time-series network approach to auditory verbal hallucinations: Examining dynamic interactions using experience sampling methodology. *Schizophrenia Research, 215*, 148-156.
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31. Kimhy, D., Vakhrusheva, J., Liu, Y., & Wang, Y. J. (2014). Use of mobile assessment technologies in inpatient psychiatric settings. *Asian Journal of Psychiatry, 10*, 90-95.
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33. Klippel, A., Myin-Germeys, I., Chavez-Baldini, U., Preacher, K. J., Kempton, M., Valmaggia, L., ... & Reininghaus, U. (2017). Modeling the interplay between psychological processes and adverse, stressful contexts and experiences in pathways to psychosis: an experience sampling study. *Schizophrenia Bulletin, 43*(2), 302-315.
34. Ludwig, L., Mehl, S., Schlier, B., Krkovic, K., & Lincoln, T. M. (2020). Awareness and rumination moderate the affective pathway to paranoia in daily life. *Schizophrenia Research, 216*, 161-167.
35. Lüdtke, T., Kriston, L., Schroder, J., Lincoln, T. M., & Moritz, S. (2017). Negative affect and a fluctuating jumping to conclusions bias predict subsequent paranoia in daily life: An online experience sampling study. *Journal of Behaviour Therapy and Experimental Psychiatry, 56*, 106-112.
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38. Moitra, E., Park, H. S., Ben-Zeev, D., & Gaudio, B. A. (2021). Using ecological momentary assessment for patients with psychosis posthospitalization: Opportunities for mobilizing measurement-based care. *Psychiatric Rehabilitation Journal, 44*(1), 43-50.
39. Monsonet, M., Rockwood, N. J., Kwapi, T. R., & Barrantes-Vidal, N. (2022). Psychological Pathways to Paranoia and Psychotic-Like Experiences in Daily-Life: The Mediating Role of Distinct Affective Disturbances. *Schizophrenia bulletin, 48*(5), 1053 “1065. <https://doi.org/10.1093/schbul/sbac071>
40. Morgan, O., Strassnig, M. T., Moore, R. C., Depp, C. A., Ackerman, R. A., Pinkham, A. E., & Harvey, P. D. (2022). Accuracy of immediate self-assessment of neurocognitive test performance: Associations with psychiatric diagnosis and longitudinal psychotic symptoms. *Journal of psychiatric research, 156*, 594 “601. <https://doi.org/10.1016/j.jpsychires.2022.10.069>

41. Mulligan, L. D., Haddock, G., Emsley, R., Neil, S. T., & Kyle, S. D. (2016). High resolution examination of the role of sleep disturbance in predicting functioning and psychotic symptoms in schizophrenia: A novel experience sampling study. *Journal of Abnormal Psychology*, 125(6), 788.
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45. Parrish, E. M., Chalker, S. A., Cano, M., Moore, R. C., Pinkham, A. E., Harvey, P. D., . . . Depp, C. A. (2021). Ecological momentary assessment of interpersonal theory of suicide constructs in people experiencing psychotic symptoms. *Journal of Psychiatry Research*, 140, 496-503.
46. Parrish, E. M., Chalker, S., Cano, M., Harvey, P. D., Taylor, C. T., Pinkham, A., Moore, R. C., Ackerman, R. A., & Depp, C. A. (2022). Ecological Momentary Assessment of Social Approach and Avoidance Motivations in Serious Mental Illness: Connections to Suicidal Ideation and Symptoms. *Archives of Suicide Research*, 1-18. <https://doi.org/10.1080/13811118.2022.2137445>
47. Perez, M. M., Tercero, B. A., Durand, F., Gould, F., Moore, R. C., Depp, C. A., Ackerman, R. A., Pinkham, A. E., & Harvey, P. D. (2022). Revisiting how People with Schizophrenia Spend Their Days: Associations of lifetime milestone Achievements with Daily Activities examined with Ecological Momentary Assessment. *Psychiatry research communications*, 2(3), 100060. <https://doi.org/10.1016/j.psycom.2022.100060>
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52. Raugh, I. M., & Strauss, G. P. (2022). Deconstructing emotion regulation in schizophrenia: the nature and consequences of abnormalities at the identification stage. *European archives of psychiatry and clinical neuroscience*, 272(6), 1061–1071. <https://doi.org/10.1007/s00406-021-01350-z>
53. Reininghaus, U., Gayer-Anderson, C., Valmaggia, L., Kempton, M. J., Calem, M., Onyejiaka, A., . . . Morgan, C. (2016a). Psychological processes underlying the association between childhood trauma and psychosis in daily life: an experience sampling study. *Psychological Medicine*, 46(13), 2799-2813.
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Supplementary S4. EMA psychosis items and additional constructs investigated in included studies

	Study	Constructs measures using EMA	EMA psychosis items	Scale anchors
1	Ainsworth et al. (2013)	<ul style="list-style-type: none"> • Hopelessness • Depression • Hallucinations • Anxiety • Grandiosity • Paranoia • Delusions 	<ul style="list-style-type: none"> • I have felt like I could read other people's thoughts • I have felt like other people were reading my thoughts • I have felt like my thoughts were being controlled or influenced • I have felt like my thoughts were alien to me in some way • I have felt like the world is not real • I have felt like I am not real • I have felt like people were not what they seemed • I have felt like things on the TV, in books or magazines had a special meaning for me • I have felt like there was a conspiracy against me • I have felt jealous • I have felt like something bad was about to happen • I have felt distinctly concerns about my physical health 	1(disagree) to 7(agree)
2	Bartolomeo et al. (2022)	<ul style="list-style-type: none"> • Momentary emotion • Emotional events • Emotion regulation • Proposed Moderators • Current Context • Momentary Positive and Negative Symptoms 	<ul style="list-style-type: none"> • Are you hearing voices, or hearing something else other people can't hear? • Are you seeing visions or things that other people can't see? • How suspicious do you feel right now? 	0 (Not at all) to 100 (Extremely)

		<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • How much is something or someone controlling your thoughts? • How much is someone reading your mind or are you reading someone else's mind?" • "How negative are the things that you're hearing/seeing? □ 	
3	Bell et al. (2019)	<ul style="list-style-type: none"> • Context • Positive affect • Negative affect • Company • Surrounding noise • AVH • Paranoia • Coping strategies for AVH 	<ul style="list-style-type: none"> • Right before the beep, I felt that someone was spying on me or plotting against me • Right before the beep, I felt suspicious • Right before the beep, I could hear voice/s that other people couldn't hear • Right before the beep, it was hard for me to do something because of the voice/s • Right before the beep, I was distracted by the voice/s • Right before the beep, the voice/s were distressing me 	0(not at all) to 3(moderately) to 6(very much)
4	Bell et al. (2023)	<ul style="list-style-type: none"> • Loneliness • Social exclusion • Paranoia • Negative affect 	<ul style="list-style-type: none"> • I feel suspicious • I feel safe (reverse scored) • I feel others dislike me • I feel others intend to harm me 	not at all to very (7-point scale)
5	Ben-Zeev et al. (2011)	<ul style="list-style-type: none"> • Anxious • Sad • External events • Anomalous experiences • Persecutory ideation • Persecutory ideation conviction • Persecutory ideation distress 	<ul style="list-style-type: none"> • Since the last questionnaire, have you heard things (such as voices), had visions, or seen things that others could not see or hear? • Since the last questionnaire, have you had the impression that 	1(no) or 2(yes); 1(not at all) to 7(extremely)

		<ul style="list-style-type: none"> • Substance use 	<p>someone was spying on you or plotting against you?’</p> <ul style="list-style-type: none"> • How strongly do you believe someone was truly spying on you or plotting against you? • How much did your thoughts about people spying on you or plotting against you cause you distress? 	
6	Ben-Zeev et al. (2012a)	<ul style="list-style-type: none"> • Current location • Company • Activity • Positive affect • Negative affect • Psychotic symptoms • Self-stigma 	<p>Delusions:</p> <ul style="list-style-type: none"> • Since the last questionnaire, how strongly did you believe someone was SPYING or PLOTTING against you? • Since the last questionnaire, how strongly did you believe you could READ others peoples THOUGHTS or they could read yours? • Since the last questionnaire, how strongly did you believe others could communicate with you through the TV or RADIO? • Since the last questionnaire, how strongly did you believe you had SPECIAL POWERS and could do things nobody else could do? <p>Voices:</p> <ul style="list-style-type: none"> • Since the last questionnaire, to what extent did you hear VOICES that others could not hear? 	0(not at all) to 4(extremely)
7	Ben-Zeevet al. (2012b)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Psychotic symptoms 	<p>Delusions:</p> <ul style="list-style-type: none"> • Since the last questionnaire, how strongly did you believe someone was SPYING or PLOTTING against you? 	0(not at all) to 4(extremely)

			<ul style="list-style-type: none"> • Since the last questionnaire, how strongly did you believe you could READ others peoples THOUGHTS or they could read yours? • Since the last questionnaire, how strongly did you believe others could communicate with you through the TV or RADIO? • Since the last questionnaire, how strongly did you believe you had SPECIAL POWERS and could do things nobody else could do? <p>Voices:</p> <ul style="list-style-type: none"> • Since the last questionnaire, to what extent did you hear VOICES that others could not hear? 	
8	Ben-Zeev, et al. (2012c)	<ul style="list-style-type: none"> • Anxiety • Sadness • Hallucinations • Delusions of reference (conviction, occurrence, distress, disruption) • Grandiosity (conviction, occurrence, distress, disruption) • Control (conviction, occurrence, distress, disruption) 	<ul style="list-style-type: none"> • Since the last questionnaire, have you heard things (such as voices), had visions, or seen things that others could not see or hear? • Since the last questionnaire, have you felt: ...you were possessed or that someone or something was putting thoughts into your mind? ---that someone could communicate with you through the television or radio? ...you had special powers to do something nobody else can do? • How strongly do you believe (X)? How much did your thoughts about (X) cause you distress? 	1(no) or 2(yes); 1(not at all) to 7(extremely)

			<ul style="list-style-type: none"> • How much did your thoughts about (X) interfere with what you were doing? 	
9	Berry et al. (2018)	<ul style="list-style-type: none"> • Social media use • Perceived social rank • Mood • Self-esteem • Paranoia 	<ul style="list-style-type: none"> • I feel that others dislike me • I feel that others might hurt me • I feel suspicious • I feel safe 	1(not at all) to 7(extremely)
10	Brand et al. (2020)	<ul style="list-style-type: none"> • Auditory hallucinations • Trauma symptoms 	<ul style="list-style-type: none"> • Just before the beep went off I was hearing voices (that other people cannot hear) 	1(not at all) to 7(a lot)
11	Buck et al. (2022)	<ul style="list-style-type: none"> • Presence of AVHs • AVH appraisals • Feelings of safety • Negative affect 	<ul style="list-style-type: none"> • Are you experiencing voices right now? Y/N • How much power do the voices have? (AVH power) • How much power do you have over the voices? (AVH controllability) • How safe do you feel right now? 	1(not at all) to 4(extremely)
12	Cristóbal-Narváez et al. (2017)	<ul style="list-style-type: none"> • Psychotic experiences • Appraisals of situational stress • Appraisals of social stress 	<ul style="list-style-type: none"> • Right now I fear losing control • Right now I feel weird • Right now I have difficulty controlling my thoughts • Right now my thoughts are strange or unusual • Right now I feel suspicious • Right now I feel mistreated • Right now my sight or hearing seem strange or unusual • Since the last beep, I have heard or seen things others could not • Right now I feel that someone or something is controlling my thoughts or actions 	1(not at all) to 7(very much)

			<ul style="list-style-type: none"> • Right now familiar things seem strange and unusual 	
13	Daemen et al. (2022)	<ul style="list-style-type: none"> • Momentary self-esteem • Fluctuations in self-esteem • Psychotic experiences • Paranoia • Event anhedonia • Social anhedonia • Negative affect • Altered affective experiences 	<ul style="list-style-type: none"> • My thoughts are influenced by others, • I can't get these thoughts out of my head, • I feel unreal, • My thoughts can't be expressed in words, • I feel suspicious, • I hear voices, • I see things that aren't really there, • I am afraid I will lose control • I feel suspicious 	1 (not at all) to 7 (very much)
14	Daemen et al. (2023)	<ul style="list-style-type: none"> • Momentary self-esteem • Psychotic experiences 	<ul style="list-style-type: none"> • My thoughts are influenced by others, • I can't get these thoughts out of my head, • I feel unreal, • My thoughts can't be expressed in words, • I feel suspicious, • I hear voices, • I see things that aren't really there, • I am afraid I will lose control 	1(not at all) to 7 (very much)
15	Dokuz et al. (2022)	<ul style="list-style-type: none"> • Daily activities and events • Mood states • Psychotic experiences 	<ul style="list-style-type: none"> • I hear voices that others do not hear • I see images that others do not see • I am suspicious • My thoughts are controlled and influenced by others • I feel uncomfortable and threatened by the looks and behaviors of those around me. 	1(none) to 7(very intense)

16	Dupuy et al. (2021)	<ul style="list-style-type: none"> • Mood • Activity • Location • Cognition • Psychotic symptoms 	<ul style="list-style-type: none"> • NA 	NA
17	Fett et al. (2021)	<ul style="list-style-type: none"> • Social company • Positive affect • Negative affect • Paranoia 	<ul style="list-style-type: none"> • I feel suspicious • I feel safe (reverse scored) • I feel that others dislike me • I feel that others intend to harm me 	1(not at all) to 7(very)
18	Fielding-Smith et al. (2020)	<ul style="list-style-type: none"> • AVH dimensions • Behavioural responses to AVH • Cognitive responses to AVH • Emotional responses to AVH 	<ul style="list-style-type: none"> • Right before the beep, I could hear a voice or voices that other people couldn't hear • Right before the beep, the voice/s was/were saying negative things 	1(not at all) to 7(very much)
19	Gaudio et al. (2018)	<ul style="list-style-type: none"> • Positive and negative affect • Psychotic Symptoms • Medication side effects • Life dissatisfaction • Functional impairment • Beliefs about medication • Medication non compliance • 	<ul style="list-style-type: none"> • NA 	NA
20	Geraets et al. (2020)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Paranoia 	<ul style="list-style-type: none"> • Right now, I feel suspicious • Right now, I feel that others might hurt me • Right now, I feel that others dislike me 	1(not at all) to 7(very)
21	Gohari et al. (2022)	<ul style="list-style-type: none"> • Location • Social company • Mood • Positive symptoms of SZ 	<ul style="list-style-type: none"> • NA 	1 to 7 (higher scores mean worse severity)
22	Granholm et al. (2008)	<ul style="list-style-type: none"> • Location • Social company 	Since the last questionnaire....	1(no) or 2(yes)

		<ul style="list-style-type: none"> • Social communication • Current activity • Mood • Stressful event • Psychotic symptoms 	<ul style="list-style-type: none"> • Have you had the impression that someone was spying on you or plotting against you? • Have you had the impression that people could read your thoughts, or that you could read theirs? • Have you felt you were possessed or that someone or something was putting thoughts into your mind? • Have you felt that someone could communicate with you through the television or radio? • Did you feel you had special powers to do something nobody else can do? • Have you heard things (such as voices), had visions, or seen things that others could not see or hear? 	
23	Hanssen et al. (2020)	<ul style="list-style-type: none"> • Psychotic symptoms • Mood • Social functioning 	<ul style="list-style-type: none"> • I feel like others do not like me • I feel like others want to harm me • I am hearing voices • I am seeing things that others cannot see • How suspicious do you feel right now? 	1(not at all) to 7(very much so)
24	Hartley et al. (2015)	<ul style="list-style-type: none"> • Thought control • Hearing voices • Delusional ideation 	<ul style="list-style-type: none"> • Just before the beep went off I was hearing voices that other people cannot hear • Just before the beep went off I was feeling that someone may try to cause me harm • Since the last beep I have been trying to stop unwanted thoughts 	0(not at all) to 3(moderately) to 6(very much)

25	Hartley et al. (2014)	<ul style="list-style-type: none"> • Rumination • Worry • Hearing voices • Delusional ideation 	<p>Persecutory delusional ideation:</p> <ul style="list-style-type: none"> • Just before the beep went off I was feeling that someone may try to cause me harm <p>Auditory hallucinations:</p> <ul style="list-style-type: none"> • Just before the beep went off I was hearing voices (that other people cannot hear) 	0(not at all) to 3(moderately) to 6(very much)
26	Harvey et al. (2021)	<ul style="list-style-type: none"> • Location • Social company • Mood • Symptoms of SZ 	<ul style="list-style-type: none"> • NA 	1 (absent) to 7 (extreme)
27	Jongeneel et al. (2020)	<ul style="list-style-type: none"> • AVH • Paranoia • Negative affect • Positive affect • Uncontrollable thoughts • Self-esteem • Dissociation 	<ul style="list-style-type: none"> • I hear voices • I am suspicious 	1(not at all) to 7(very)
28	Kammerer et al. (2021)	<ul style="list-style-type: none"> • Negative affect • Paranoia • Sleep 	<ul style="list-style-type: none"> • I'm on my guard against others • People try to make me upset • Strangers/friends look critically • I feel suspicious • My thoughts are influenced by someone else • I feel others intend to harm me 	1(not at all) to 7(very much so)
29	Kimhy et al. (2020)	<ul style="list-style-type: none"> • Emotion regulation strategies • Emotion awareness • AVH • VH • Paranoia • Thought insertion • Mind reading 	<ul style="list-style-type: none"> • NA 	NA

		<ul style="list-style-type: none"> • Daily functioning 		
30	Kimhy et al. (2014)	<ul style="list-style-type: none"> • Psychotic symptoms • Mood • Thoughts • Social context • Location on the unit 	<ul style="list-style-type: none"> • I see things (that other people can't see) • I hear voices (that other people can't hear) • My thoughts are suspicious 	VAS from 1(not at all) to 100(very much)
31	Kimhy et al. (2017)	<ul style="list-style-type: none"> • Mood • Psychotic symptoms • Activities • Social context 	<ul style="list-style-type: none"> • I hear voices (that other people can't hear) 	VAS from 1(not at all) to 100(very much)
32	Kimhy et al. (2006)	<ul style="list-style-type: none"> • Psychotic symptoms • Mood • Thoughts • Social context 	<ul style="list-style-type: none"> • I see things (that other people can't see) • I hear voices (that other people can't hear) • My thoughts are suspicious 	VAS from 1(not at all) to 100(very much)
33	Klippel (2018)	<ul style="list-style-type: none"> • Stress • Negative affect • Aberrant salience • Threat anticipation • Psychotic experiences 	<ul style="list-style-type: none"> • I feel paranoid • I feel unreal • I hear things that aren't really there • I see things that aren't really there • I can't get these thoughts out of my head • My thoughts are influenced by others • It's hard to express my thoughts in words • I feel like I am losing control 	1(not at all) to 7(very much)
34	Ludwig et al. (2020)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Emotion regulation • Paranoia 	<ul style="list-style-type: none"> • I need to be on my guard against others • Strangers and friends look at me critically • People try to upset me 	1(not at all) to 7(very much)
35	Lüdtke et al. (2017)	<ul style="list-style-type: none"> • Negative affect • Paranoia 	<ul style="list-style-type: none"> • Do you think that something strange is going on at the moment? 	1(0% conviction) to 2(25% conviction) to

			<ul style="list-style-type: none"> Do you feel persecuted at the moment? 	3(50% conviction) to 4(75% conviction) to 5(100% conviction)
36	Lüdtke et al. (2022)	<ul style="list-style-type: none"> Emotional valence Emotional arousal Anxiety Self-esteem Worrying Sadness Paranoia Voice hearing Aberrant salience 	<ul style="list-style-type: none"> I feel suspicious I hear voices no one else can hear 	VAS from not at all to completely
37	Miller et al. (2020)	<ul style="list-style-type: none"> Mood Psychotic symptoms 	<ul style="list-style-type: none"> NA 	NA
38	Moitra et al. (2021)	<ul style="list-style-type: none"> Positive affect Negative affect Psychotic symptoms Perceived social support Functioning Alcohol and/or drug consumption Medication adherence 	<ul style="list-style-type: none"> Was someone spying on you or plotting against you? Can people read your thoughts, or can you read theirs? Do you feel possessed or is someone or something putting thoughts into your head? Are you getting special messages that are intended only for you? Do you have special powers to do something nobody else can do? 	1(not at all) to 5(very much so)
39	Monsonet et al. (2022)	<ul style="list-style-type: none"> Stress Self-esteem Psychotic-like experiences Paranoia Anxiety and depressive experiences 	<ul style="list-style-type: none"> Right now I feel weird Since the last beep, I have heard or seen things others could not Right now I feel suspicious Right now I feel mistreated 	not at all to extremely (7-point scale)
40	Morgan et al. (2022)	<ul style="list-style-type: none"> Mood Positive symptoms 	<ul style="list-style-type: none"> NA 	1(not at all) to 7(extreme)
41	Mulligan et al. (2016)	<ul style="list-style-type: none"> Mood 	<ul style="list-style-type: none"> NA 	NA

		<ul style="list-style-type: none"> • Psychotic symptoms • Functioning 		
42	Nittel et al. (2018)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Use of adaptive (reappraisal, acceptance, distraction, social sharing, reflection) and maladaptive emotion regulation strategies (rumination, expressive suppression) • Paranoia 	<ul style="list-style-type: none"> • I feel that others dislike me • I feel that others might hurt me • I feel suspicious 	1(not at all) to 7(very much)
43	Orth et al. (2022)	<ul style="list-style-type: none"> • Paranoid ideation • Negative affect • Positive affect • Social context • Social perceptions and motivations 	<ul style="list-style-type: none"> • I worry that others are plotting against me, • I feel that I can trust no one, • I believe that some people want to hurt me deliberately, • I feel suspicious • I feel mistreated. 	1 (not at all) to 7 (very much)
44	Palmier-Claus et al. (2012)	<ul style="list-style-type: none"> • Guilt • Hopelessness • Depression • Social withdrawal • Conceptual disorganisation • Excitement • Hallucinations • Anxiety • Grandiosity • Hostility • Somatic concern • Guilt ideas of reference • Suspicious Thoughts • Delusions (11 types) 	<ul style="list-style-type: none"> • I have heard voices • I have seen things that others have not seen • I have felt like I could read other people's thoughts • I have felt like other people were reading my thoughts • I have felt like my thoughts were being controlled or influenced • I have felt like my thoughts were alien to me in some way • I have felt like the world is not real • I have felt like I am not real • I have felt like people were not what they seemed 	1(disagree) to 7(agree)

			<ul style="list-style-type: none"> • I have felt like things on the TV, in books or magazines had a special meaning for me • I have felt like there was a conspiracy against me • I have felt jealous • I have felt like something bad was about to happen 	
45	Parrish et al. (2021)	<ul style="list-style-type: none"> • Mood • AVH • Suspicious thoughts • Social context • Perceived burdensomeness 	<ul style="list-style-type: none"> • Since the past alarm how much have you been bothered by voices? • Since the past alarm how much have you had thoughts that you really can't trust other people? 	1 to 7 (anchors not specified)
46	Parrish et al. (2022)	<ul style="list-style-type: none"> • Voices, • Mistrust, • Mood (happy, sad) • Social approach • Avoidance motivations 	<ul style="list-style-type: none"> • NA 	1 to 7 (higher scores means higher levels of the construct)
47	Perez et al. (2022)	<ul style="list-style-type: none"> • Activities • Psychosis 	<ul style="list-style-type: none"> • NA 	1 to 7 (anchors not specified)
48	Pieters et al. (2023)	<ul style="list-style-type: none"> • Mood • Psychopathology • Context • Physical well-being 	<ul style="list-style-type: none"> • I feel suspicious • I feel unreal • I hear voices • I see things • I feel in control • My thoughts are difficult to let go • My thoughts are influenced by others 	1(not at all) to 7(very)
49	Pos et al. (2018)	<ul style="list-style-type: none"> • Mood • Negative self-esteem • Hallucinations • Disorganization • Paranoid ideation 	<ul style="list-style-type: none"> • I feel paranoid • Others influence my thoughts • Others are watching me • Others are not what they seem 	1 to 7 (anchors not specified)

		<ul style="list-style-type: none"> • Delusion conviction • Social context 		
50	Radley et al. (2022)	<ul style="list-style-type: none"> • Negative affect • Positive psychotic symptoms • Activity stress • Event stress • Social stress 	<ul style="list-style-type: none"> • I feel like I can trust people (reversed scored) • I feel safe (reversed scored) • I feel like I'm detached from reality • I'm preoccupied by my thoughts • I'm having difficulty expressing my thoughts • I'm more sensitive than usual to the world around me • I'm finding it easy to concentrate (reversed scored) • I'm hearing or seeing things that other people cannot 	VAS from 0 to 100 (anchors not specified)
51	Raugh et al. (2021)	<ul style="list-style-type: none"> • Momentary Affect • Significant Event • Emotion Regulation • Mindfulness • Current Activity • Event • Infrequency • Defeatist Beliefs • Psychosis • Video 	<ul style="list-style-type: none"> • Are you hearing voices, or hearing something else other people can't hear? Yes/No (Proceed to 9.3) • How negative are the things that you're hearing? • Are you seeing visions or things that other people can't see? Yes/No (Proceed to 9.5) • How negative are the things that you're seeing? • Please rate the following: <ul style="list-style-type: none"> ○ How suspicious do you feel right now? ○ How much is something or someone controlling your thoughts? ○ How much is someone reading your mind or are 	VAS from 0 to 100 (anchors not specified)

			you reading someone else's mind?	
52	Raugh et al. (2022)	<ul style="list-style-type: none"> • Momentary Affect • Significant Event • Emotion Regulation • Mindfulness • Current Activity • Event Infrequency • Defeatist Beliefs • Psychosis Video 	<ul style="list-style-type: none"> • Are you hearing voices, or hearing something else other people can't hear? Yes/No (Proceed to 9.3) • How negative are the things that you're hearing? • Are you seeing visions or things that other people can't see? Yes/No (Proceed to 9.5) • How negative are the things that you're seeing? • Please rate the following: <ul style="list-style-type: none"> ○ How suspicious do you feel right now? ○ How much is something or someone controlling your thoughts? ○ How much is someone reading your mind or are you reading someone else's mind? 	VAS from 0 to 100 (anchors not specified)
53	Reininghaus et al. (2016a)	<ul style="list-style-type: none"> • Stress • Threat anticipation • Negative affect • Psychotic experiences 	<ul style="list-style-type: none"> • I feel paranoid • I feel unreal • I hear things that aren't really there • I see things that aren't really there • I can't get these thoughts out of my head • My thoughts are influenced by others • It's hard to express my thoughts in words • I feel like I am losing control 	1(not at all) to 7(very much)

54	Reininghaus, et al. (2016b)	<ul style="list-style-type: none"> • Stress • Negative affect • Aberrant salience • Threat anticipation • Psychotic experiences 	<ul style="list-style-type: none"> • NA 	1(not at all) to 7(very much)
55	Reininghaus et al. (2019)	<ul style="list-style-type: none"> • Psychotic experiences • Paranoia • Aberrant salience • Negative affect 	<ul style="list-style-type: none"> • I feel paranoid • I feel unreal • I hear things that aren't really there • I see things that aren't really there • I can't get these thoughts out of my head • My thoughts are influenced by others • It's hard to express my thoughts in words • I feel like I am losing control 	1(not at all) to 7(very much)
56	Sa et al. (2016)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Psychotic symptoms • Contact with relative • Controlling interactions with relatives 	<ul style="list-style-type: none"> • Just before the beep went off I was... • Hearing voices • Seeing things (that other people cannot see) • Feeling that someone may try to cause me harm • Suspicious • Afraid I could lose control • Unable to get rid of my thoughts • Feeling unreal • Feeling that my thoughts are being influenced or controlled • Finding it difficult to express my thoughts 	1(not at all) to 7(a lot)
57	Schick et al. (2022)	<ul style="list-style-type: none"> • Stress • Affect 	<ul style="list-style-type: none"> • I see things that aren't really there, • I hear things that aren't really there, 	1(not at all) to 7(very much)

		<ul style="list-style-type: none"> • Psychotic experiences • Burden of assessment 	<ul style="list-style-type: none"> • I feel suspicious/paranoid, • I feel unreal, • My thoughts are influenced by others, • I can't get these thoughts out of my head, • I cannot express my thoughts, • I feel like I am losing control 	
58	Smelror et al. (2019)	<ul style="list-style-type: none"> • Hallucinations phenomenology: content (emotional), localization (perceptual), control (cognitive), intensity (intensity), and influence (influence) 	<ul style="list-style-type: none"> • Are you hearing voices (Y/N)? • What the voices are saying is (VAS, 0=negative to 1=positive) • The voices are coming from (VAS, 0= outside head to 1= inside head) • I have control over voices (VAS, 0=none to 1=full) • The voices are (VAS, 0= very loud to 1=quiet) • The voices are disturbing (VAS, 0=not at all to 1=very much) 	VAS from 0 to 1 (anchors specific to item)
59	So et al. (2021)	<ul style="list-style-type: none"> • Positive affect • Negative affect • Current activity • Environment • Psychotic symptoms 	<ul style="list-style-type: none"> • Do you hear voices that other people cannot hear right now? 	1(not at all) to 7(very much)
60	So et al. (2018)	<ul style="list-style-type: none"> • Negative affect • Aberrant salience • Paranoia 	<ul style="list-style-type: none"> • How suspicious do you feel right now? 	1(not at all) to 7(very much)
61	So et al. (2013)	<ul style="list-style-type: none"> • Current location • Company • Activity • Positive affect • Negative affect • Psychotic symptoms 	<ul style="list-style-type: none"> • Other than conversations with other people, do you hear voices right now? • Do you see images right now? • How suspicious do you feel right now? 	1(not at all) to 7(very much)

			<ul style="list-style-type: none"> • How well can you concentrate right now? • How safe do you feel right now? (Referring to core delusion set by researcher at baseline): • At this moment, to what extent do you believe this concern is true? • At this moment, how much does this concern upset you? • At this moment, to what extent does this concern go round and round in your mind? • At this moment, to what extent does this concern interfere with what you are doing? 	
62	So et al. (2014)	<ul style="list-style-type: none"> • Current location • Company • Activity • Positive affect • Negative affect • Psychotic symptoms 	<ul style="list-style-type: none"> • Other than conversations with other people, do you hear voices right now? • Do you see images right now? • How suspicious do you feel right now? • How well can you concentrate right now? • How safe do you feel right now? (Refer to core delusion set by researcher at baseline): • At this moment, to what extent do you believe this concern is true? • At this moment, how much does this concern upset you? • At this moment, to what extent does this concern go round and round in your mind? 	1(not at all) to 7(very much)

			<ul style="list-style-type: none"> At this moment, to what extent does this concern interfere with what you are doing? 	
63	Steenkamp et al. (2023)	<ul style="list-style-type: none"> Social relationships Functional aspects of social relationships Psychotic symptoms 	<ul style="list-style-type: none"> NA 	1(not at all) to 7(very much)
64	Strauss et al. (2019)	<ul style="list-style-type: none"> Emotional intensity Emotion regulation Context Psychotic symptoms 	<ul style="list-style-type: none"> Are you hearing voices? How negative are the things that the voices say/ said? Are you seeing things that other people can't see? How distressing is what you see/what you saw? How suspicious do you feel right now? How much are your thoughts being controlled? How much is someone reading your mind or are you reading someone else's mind? 	1(not at all) to 5(extremely)
65	Swendsen et al. (2011)	<ul style="list-style-type: none"> Psychotic symptoms Substance use Negative affect Perceived event negativity 	<ul style="list-style-type: none"> NA 	NA
66	Vilardaga et al. (2013)	<ul style="list-style-type: none"> Current context Number of interactions Psychotic experiences Stressful events Psychological coping style Functional outcome Positive affect Negative affect Self-esteem 	<ul style="list-style-type: none"> I heard things that others could not hear I saw things that others could not see I felt that someone was spying or plotting against me (Paranoia) I felt that people could read my thoughts 	Multiselect: 1(yes) or 2(no)

		<ul style="list-style-type: none"> • Anhedonia • Social support • Autonomy • Physical wellbeing 	<ul style="list-style-type: none"> • I felt possessed or controlled by someone or something • I felt that someone could communicate with me thru the TV/radio • I felt I had special powers to do something nobody else could do • I felt stressed 	
67	Westermann et al. (2017)	<ul style="list-style-type: none"> • Emotional arousal • Emotional valence • Emotional state • Environment • Symptom related distress 	<ul style="list-style-type: none"> • NA 	NA
68	Wright et al. (2023)	<ul style="list-style-type: none"> • Meta-cognition • Hallucinations • Mood • Self esteem • Current situation • Significant events 	<ul style="list-style-type: none"> • Have you had any unusual experience since the last time you completed these questions? Yes/No • If yes, then: • Which sense is this experience involving? If more than one, please select the most distressing experience. • Visual, touch, smell, taste, auditory • For that experience, then: • Please rate how distressing you found this experience (1 = Not distressing at all to 5 = Extremely distressing) • Please rate the content of this experience (1 = Very positive to 5 = very negative) • Please rate the intensity of this experience (1 = Not intense at all to 5 = Extremely intense) 	Item specific Likert Scale

			<ul style="list-style-type: none"> • Please rate the duration of this experience (1 = Seconds to 5 = Constant) • Please rate how much control you felt you for this experience (1 = No control to 5 = Full control). 	
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Supplementary S5. Number of reviewed studies fully meeting, partially meeting or not meeting the criteria outlined in the 16 items of the CREMAS methodological quality checklist, with a descriptive summary of the range of reporting practices

	CREMAS checklist item	Fully met	Partially met	Not met	Summary of the range of reporting practices
1	Title/key words Include ecological momentary assessment in title and/or key words	55	4	9	Most studies included <i>Ecological Momentary Assessment (EMA)</i> , <i>Experience Sampling</i> or <i>Experience Sampling Methodology (ESM)</i> in the key words. These terms were less often included in the title. Alternative phrases, used occasionally, included <i>ambulatory self-report</i> , <i>Electronic Ambulatory Monitoring</i> or the more general phrase <i>in daily life</i> .
2	Rationale Briefly introduce the concept of EMA and provide reasons for utilizing EMA for this study or topic of interest	41	19	8	All studies introduced EMA appropriately and most provided a robust rationale for its use, including study-specific advantages as well as a summary of general advantages. Examples of the latter included: <ul style="list-style-type: none"> • EMA reduces recall bias and increases ecological validity compared to standard assessments, by allowing researchers to assess fluctuations in experiences in the flow of daily life. • EMA minimizes the possibility of observer bias and socially desirable answers. • EMA can allow a fine-grained examination of temporally linked phenomena (micro-longitudinal). • EMA can be used for in the moment interventions. • EMA can collect passive data.

3	Training Indicate if, and by what methods, training of participants for EMA protocol was used	46	7	15	Seven studies mentioned EMA training without stating what this involved, whereas 35 gave full descriptions of EMA training, including details such as: <ul style="list-style-type: none"> • The typical length of training sessions; • Whether participants practiced EMA questions in the session; • Whether a written instruction handout was provided; • The amount of guidance given on operating the study device.
4	Technology Describe what technology, if any, was used. Include the following information: device, model, operating system, and EMA program name	58	9	1	All studies but one, mentioned the type of device used to deliver the EMA (e.g. PDA, smartphone, computer). Nine studies did not mention the EMA program/app name. We did not extract data on whether studies reported details of the model and operating system of devices.
5	Wave number and duration State the number of waves for the study (eg, 2 monitoring periods over the course of 1 year)	68	0	0	Studies did not explicitly use the word “wave” to describe the pattern of EMA monitoring. However, all studies described EMA procedures in sufficient detail to enable the reader to understand whether one (44 studies) or more (7 studies) waves of monitoring were used.
6	Monitoring period State the number of days each wave of the study lasted, and how many weekdays versus weekend days	1	67	0	All studies specified the number of days of EMA monitoring but specifics of how many of these were weekdays or weekend days were mentioned in one study only.
7	Prompting design Indicate the prompting strategy used for the study (eg, event-based and/or interval based). If interval-based, indicate what type of schedule is used (eg, fixed, random, hybrid)	65	0	3	All but three studies fully described the prompting strategy, with most studies using an interval-based strategy of randomised or pseudorandomised prompts.

8	<p>Prompt frequency Intended frequency of prompts per day. Break down by weekdays and weekend days if applicable</p>	1	67	0	<p>All studies specified the number of prompts per day. Only one study specified whether this was the same on weekdays as weekends.</p>
9	<p>Design features Describe any design feature to address potential sources of bias (eg, reactivity) or participant burden (eg, EMA questions appearing in different orders)</p>	27	9	32	<p>Regarding design features to address potential sources of bias:</p> <ul style="list-style-type: none"> • Fifteen studies examined reactivity to the EMA method: in a debrief at the end of the EMA period (n=11), using an EMA item asking about reactivity (n=3) or statistically (n=3). • Other studies described measures taken to reduce reactivity such as explicitly instructing participants not to alter their usual habits to fit the EMA schedule or locking the PDA between EMA prompts to avoid other PDA use affecting participants' behaviour. • Three studies examined fatigue effects. • Several studies statistically examined the difference between completers and non-completers to assess the representativeness of the final sample. • It was noted that computerised EMA improves EMA practice by reducing human error and enabling time stamping of responses. • Two studies stated using fewer items, such as two items, to reduce reactivity. <p>A variety of measures put in place to ease participant burden, for example:</p> <ul style="list-style-type: none"> • Studies described efforts to keep the EMA survey as brief and easy as possible, e.g. by including only essential items, by dividing items across two alternating item sets, and by using branching items. • Some studies allowed the EMA schedule to be personalised to fit in with the participant's own daily schedule. • In fourteen studies, researchers contacted the participants during the EMA period to check understanding of the EMA instructions, help overcome barriers and identify any distress related to the method.

					<ul style="list-style-type: none"> Some studies had lived experience and health experts provide feedback on the EMA design prior to conducting the study.
10	Attrition Indicate participant attrition throughout the study; report attrition rates both by monitoring days and waves, if applicable	3	43	22	Three studies stated reasons for attrition including tech issues, participant drop-out, and baseline questionnaires not completed. Studies most often reported attrition in terms of the number of participants completing less than 33.3% (or occasionally 30%) of EMA items (20 studies). Other studies reported attrition at other EMA completion thresholds (16 studies), or did not report attrition (22 studies). No studies reported attrition rates by monitoring days or wave.
11	Prompt delivery Report number of EMA prompts that were planned to be delivered. If possible, also report the number of EMA prompts that were actually received by participants and indicate reasons for why prompts were not sent out.	10	58	0	Although studies did not always explicitly list the number of prompts that were planned, in all cases this was calculable by multiplying the prompt frequency (prompts per day) and duration (days of EMA). Ten studies also specified the number of prompts either planned to be delivered or actually delivered. However, number of prompts delivered tended to be reported only when a technical error had prevented some of the prompts from being delivered.
12	Latency Report the amount of time from prompt signal to answering of prompt	1	43	24	Only one study (Granholm et al, 2008) reported how long it <i>actually</i> took participants to complete the EMA surveys. On the other hand, many studies did report latency in terms of the number of minutes during which participants <i>were allowed</i> to answer the EMA items after each prompt. Generally, around 15 minutes were allowed, although seven studies allowed up to an hour. In earlier studies using PDAs, participants were not always informed of the time limit but any EMA responses that fell outside the time limit were excluded. In later studies that used smartphone apps, the questions were usually programmed to become unavailable after the specified length of time.
13	Compliance rate Report total answered EMA prompts across all subjects and the average number of EMA prompts answered per	4	53	11	Four studies reported the exact number of surveys completed. Most other studies reported either the total number of EMA prompts answered across all participants in the study or the average number of EMA prompts answered per person (or gave enough information for these figures to be calculated). However, studies rarely reported both of these

	person. Report compliance rate both by monitoring days and waves, if applicable. Indicate reasons for noncompliance, if known				figures, no studies reported completion rate by monitoring days or wave, and reasons for non-completion were rarely reported.
14	Missing data Report whether EMA compliance is related to demographic or time-varying variables	25	0	43	<p>Twenty-five studies examined whether certain demographic, clinical, device-related or time-varying variables were associated with EMA completion (see Table 3 for a full description). Two studies discussed that participants were more likely to miss surveys towards the end of the study (Radley et al., 2022; Raugh et al. 2021).</p> <p>One study investigated the use of cut-offs and found no difference in using 20 to 33% cut-offs but found a difference in using 50% cut-offs (Raugh et al. 2021).</p> <p>Some other studies found that differences between groups on clinical conditions and demographic variables did not influence completion rates.</p>
15	Limitations Discuss limitations of the study, taking into account sources of potential bias when using EMA methods (eg, reactivity, use of technology)	46	4	18	<p>Most studies provided a detailed discussion of limitations, including potential sources of bias when using EMA methods. The most frequently cited limitations relating to EMA methods were that:</p> <ul style="list-style-type: none"> • Lack of validity in EMA items. For example, the EMA items used to assess psychotic symptoms were often simplistic and, therefore, they may not have captured the multidimensional experience of hallucinations and delusions. • As with any correlational analysis, the causal nature and direction of effects could not be confirmed. • EMA data collection is time-intensive and relatively burdensome for participants, introducing the possibility of selection bias (higher functioning individuals are more likely to take part, and less likely to drop out). • EMA is based on subjective self-reported data • Other, unmeasured, concurrent symptoms may have impact the outcomes measured (unknown confounding factors)

					<ul style="list-style-type: none"> • Sample size was sometimes small, for statistical methods possibly resulting in Type I error. Also may not be representative of other patients with psychosis • No power analyses were conducted
16	<p>Conclusions</p> <p>Provide a general interpretation of results and discuss the benefits of using EMA (eg, improving understanding of daily behaviors)</p>	48	9	11	<p>All studies provided a general interpretation of the results and most discussed the benefits of using EMA specifically. Many also discussed new ways that EMA has already been used or could be used in the future. For example:</p> <ul style="list-style-type: none"> • Using EMA as part of an intervention (i.e. EMI; Bell et al., 2019) • Delivering in-the-moment cognitive tasks (Reininghaus et al, 2019) • Queries on geolocation and gather information on activities (Harvey et al., 2021)