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# Conspiratorial Beliefs and Well-Being: How Cognitive Worldviews Shape Self-Evaluation, Meaning, and Life Satisfaction Over Time

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## ABSTRACT

Conspiratorial ideation is associated with pessimism, ontological insecurity, and perceived institutional betrayal—cognitive worldviews linked to threat-focused information processing, lower self-esteem, reduced meaning in life, and poorer well-being. However, cross-sectional research limits understanding of the temporal dynamics among these variables. This four-wave study examined whether conspiratorial ideation predicts life satisfaction over time, directly and indirectly via outlook, self-esteem, and meaning in life, in a UK adult sample ($N = 615$). Path analyses showed that conspiratorial ideation predicted higher pessimism, decreased self-esteem, and lower subsequent life satisfaction. Sequential mediation indicated that negative self-esteem and search for meaning mediated the relationship between conspiratorial ideation and declining life satisfaction. Conversely, presence of meaning was positively affiliated with life satisfaction, suggesting that perceived purpose may buffer some negative effects of conspiratorial thinking. These findings identify cognitive–affective pathways through which conspiratorial belief systems shape well-being over time.

## 1 | Introduction

Though scholarly interest in conspiracy theories has a long, established tradition in academic disciplines such as history and political science (see the seminal work of Hofstadter 1965), contemporary psychological interest developed and intensified primarily during the past two to three decades (Drinkwater et al. 2023). Increased attention coincided with the advance of digital media (e.g., websites, blogs, and podcasts) as a platform for reporting major socio-political events (e.g., the 9/11, 2001 and 7/7, 2005 terror attacks). The shift from traditional to new web-based media was important because it extended the reach and speed of news dissemination and facilitated rapid information sharing. The internet concomitantly provided a medium for the propagation of unsubstantiated claims and conspiratorial narratives, a process exacerbated by burgeoning public engagement with social media (Del Vicario et al. 2016). The emergence of social media transformed data sharing into an interactive process, whereby individuals who frequently access news from social media express greater belief in conspiracy theories and concurrently interpret salient events within digital fora as evidence to support conspiratorial ideation (Enders et al. 2023). These factors, by heightening awareness of the societal and personal significance of conspiratorial ideation, stimulated psychological and interdisciplinary research. Beyond societal and political consequences, these narratives provide a unique lens for applied cognitive psychology, as they reveal how cognitive processes (including reasoning biases, pattern detection, and threat appraisal) shape individual perceptions and behaviours.

Despite this, there remains no single, agreed definition of conspiracy theories (Dagnall et al. 2015; Drinkwater et al. 2012,

2023). Thematically, researchers describe conspiracy theories as explanatory accounts that attribute major events or circumstances to the coordinated, purposeful, and covert actions of powerful actors. Such accounts, because they implicitly presume that conspirators intentionally seek to achieve aims or objectives that serve their own interests, comprise features such as planning, deception, collusion, misuse of authority, and strategic manipulation (Denovan et al. 2020; Drinkwater et al. 2012, 2023). These characteristics position conspiracy theories as alternative interpretative frameworks that contradict and challenge institutional narratives. Individuals are particularly drawn to conspiratorial explanations when official accounts appear inconsistent or inadequate, reflecting underlying epistemic motivations and vulnerability to biased reasoning (Drinkwater et al. 2018; Oliver and Wood 2014; Dagnall et al. 2017). Noting these factors, psychologists have adopted a value-laden, rather than a neutral or objective, perspective which conceptualises conspiratorial ideation as a socially divisive belief system arising from epistemic failures.

A principal driver of this approach was the realization that conspiracy theory endorsement involves acceptance of speculative information, which despite lacking validation or being incorrect, possesses the capacity to affect public perceptions, judgments, and behaviours (Sunstein and Vermeule 2009). Since conspiracy theories are resistant to contradictory evidence and have widespread support, this effect can prove pronounced (Irwin et al. 2015). In such extreme instances conspiracy theories can have detrimental socio-political consequences, such as diminishing trust in elected institutions, encouraging radical or extremist attitudes, and weakening the impact of central communications (e.g., public information and advice) (Dagnall et al. 2020; Drinkwater et al. 2021, 2023).

Some scholars contend that this pejoratively negative portrayal of conspiracy theories is reductionist and oversimplistic. Particularly, they argue that by questioning institutional power and uncovering wrongdoing within establishments, conspiracy theories perform a positive social function. A notable recent example in the United Kingdom (UK) was Partygate, the revelation that senior government figures, regardless of denials, held social gatherings in Westminster during periods of COVID-19 lockdown restrictions (Bowman and Roe-Crines 2023). Historical examples include Watergate (1972–1974), which exposed the Nixon administration's high-level conspiracy to obstruct justice and sabotage political opponents, and MKUltra (1953–1973), a covert program where the CIA conducted illegal, non-consensual mind-control experiments on citizens. These illustrations demonstrate that in some instances, theories questioning powerful institutions can facilitate uncovering the truth. Notwithstanding these notable instances, it is true that the majority of conspiratorial claims prove groundless.

Another scholarly concern is that conspiracy theory has become a pejorative label applied by those in positions of power to delegitimize dissent and control knowledge (Pelkmans and Machold 2011). However, independent of these political definitions, psychological research has frequently linked the underlying tendency for conspiracy endorsement to a range of less adaptive individual characteristics (e.g., biased reasoning patterns, distorted worldviews, or susceptibility to cognitive errors; Drinkwater et al. 2012; Dagnall et al. 2015, 2017) and to broader social processes such as mistrust, alienation, and perceived norm violations (Douglas et al. 2019).

As a consequence of psychological interest in conspiratorial ideation, theorists have conceptualised phenomena, developed measurement instruments, and investigated the cognitive, social, and emotional processes underlying conspiracy endorsement. This work has established that belief in conspiracy theories is globally widespread and socially influential (Kuhn et al. 2022; Fotakis and Simou 2023; Kroke and Ruthig 2022). Indeed, theorists now agree that approximately one-quarter to one-third of adults in general populations (i.e., a nontrivial minority), endorse a generic or political conspiratorial ideation (e.g., Freeman and Bentall 2017). In addition to establishing the prevalence of conspiratorial thinking, investigators have linked belief in conspiracy theories to outcomes that undermine democratic political and societal processes that underscore disengagement from conventional political participation (Ardèvol-Abreu et al. 2020). Specific examples being endorsement of political violence (Vegetti and Littvay 2022), increased prejudice and discrimination, and science denialism (Douglas and Sutton 2023; Kroke and Ruthig 2022).

At an individual level, studies report that belief in conspiracy theories affiliates with non-adaptive and negative psychological outcomes. Particularly, endorsement of conspiratorial ideation is associated with lower life satisfaction, heightened negative affect, and elevated anxiety, stress, and depressive symptoms (e.g., Abalakina-Paap et al. 1999; Swami 2012; Bruder et al. 2013). Alongside psychological factors, researchers have observed reduced self-related functioning (e.g., lower levels of personal control, lower self-esteem, and meaning in life), which are indicative of decreased agency and purpose (Van Prooijen and Acker 2015). Conspiratorial ideation is related to undesirable social and emotional factors (e.g., loneliness, social alienation, and interpersonal mistrust) (Bruder et al. 2013). Taken together, these characteristics suggest that conspiratorial ideation functions as a broader cognitive worldview, shaping how individuals interpret threat, evaluate themselves, and derive meaning from life events.

These negative psychological, self-related, and social–emotional factors in individuals high in conspiratorial ideation often cooccur alongside cognitive and personality characteristics (e.g., schizotypal or paranoid traits, threat-focused thinking, intolerance of ambiguity, and a tendency to attribute events to powerful external agents) (March and Springer 2019; Van Prooijen and Acker 2015), which reflect a pessimistic and cynical worldview, characterised by institutional distrust and perceptions of societal corruption or decline (Bruder et al. 2013).

A key reason conspiracy theories demonstrate stronger associations to negative well-being than paranormal beliefs lie in their defining content. Unlike paranormal beliefs, which involve impersonal supernatural forces, conspiracy theories focus on intentional, malevolent actions by human agents. Correspondingly, their thematic core embodies ontological insecurities (i.e., secrecy, deception, institutional betrayal, and deliberate harm), which accord with life concerns such as threat, mistrust, and perceived vulnerability. These intrinsic characteristics ally

conspiratorial ideation with threat-focused cognition, reduced self-esteem, diminished meaning, and poorer psychological outcomes.

Despite consistent evidence linking conspiratorial ideation to poorer well-being, the processes underlying this relationship remain insufficiently specified. Much of the existing literature has relied on cross-sectional, variable-centered approaches that prioritise direct associations, limiting insight into the psychological mechanisms through which conspiratorial worldviews may relate to well-being outcomes (Denovan et al. 2020; Douglas et al. 2019). In the case of the former, such approaches also overlook the fact that conspiratorial ideation co-occurs alongside other scientifically unsubstantiated beliefs (e.g., paranormal and pseudoscientific beliefs). These belief categories overlap when they share themes and/or characteristics (e.g., extraterrestrial influence, suppressed alternative medicine, supernatural elites) but conceptually describe discrete constructs. Indeed, neither paranormal nor pseudoscience are defining features of conspiracies per se. Thus, while conspiratorial ideation reflects aspects of an individual's broader cognitive style, it does not determine it. Demonstrating this, the correlation between conspiracy theory endorsement and paranormal belief shares only around 16%–36% of the variance (Dagnall et al. 2024; Dagnall et al. 2025a). Accordingly, the contemporaneous presence of other types of scientifically unsubstantiated beliefs will influence or reflect perceptions of well-being.

Addressing the co-occurrence of multiple belief systems represents an important direction for future research. However, the present study focuses more narrowly on within-domain mechanisms, examining how conspiratorial ideation relates to well-being through specific psychological pathways. This approach enables a more precise test of the cognitive–affective processes through which conspiratorial thinking is associated with individual functioning.

Furthermore, psychological factors (e.g., self-esteem, meaning in life, and coping processes) mediate the conspiracy theory endorsement–well-being relationship. Recent work designates that mediating pathways differ as a function of belief type. Conspiratorial ideation is associated with lower self-esteem, reduced presence of meaning in life, and heightened search for meaning. In contrast, paranormal belief is allied to comparatively higher meaning in life and life satisfaction (Dagnall et al. 2024). Additionally, multiple time-point studies reveal that conspiratorial ideation does not reliably predict increases in well-being. Rather, conspiratorial ideation prognosticates greater social identity via avoidant coping, reflecting a pathway that reinforces group-based affiliation without enhancing broader well-being indicators. By comparison, paranormal belief predicts more adaptive outcomes over time (i.e., increases in meaning in life and social identity), with these effects mediated by active coping and a more positive outlook, alongside occasional links with avoidant coping that, in some contexts, facilitate searching for meaning in life.

These findings indicate that conspiracy theory endorsement and paranormal belief operate through distinct psychological mechanisms and display differential associations with well-being outcomes (Dagnall et al. 2025a). Network-analytic and sequential mediation studies similarly highlight the centrality of self-esteem, coping processes, and meaning in life, demonstrating that conspiratorial ideation is affiliated with reduced self-esteem and increased searching for meaning in life (Dagnall et al. 2025b, 2025c). Collectively, the literature suggests three interrelated psychological pathways through which conspiratorial worldviews may influence well-being: outlook, reflected in pessimistic expectations about the future; self-evaluation, reflected in lower self-esteem and perceived personal inadequacy; and meaning-related processes, reflected in a diminished presence of meaning alongside a heightened and unresolved search for purpose.

The selection of mediators in the present study was guided by both theoretical and empirical considerations. Specifically, optimism/pessimism, self-esteem, and meaning in life were chosen to represent three distinct but interrelated psychological domains: outlook on the future, self-evaluation, and existential meaning-making. Each of these constructs has been independently linked to both conspiratorial ideation and well-being outcomes in prior research (Bruder et al. 2013; Dagnall et al. 2024; Van Prooijen and Acker 2015). The aim was not to provide an exhaustive model of all possible mediators, but rather to test a theoretically coherent set of pathways capturing key cognitive–affective mechanisms.

### 1.1 | Present Study

Building on evidence that conspiratorial ideation reflects a maladaptive cognitive worldview, the present study tested a longitudinal pathway model in which conspiratorial ideation predicts life satisfaction over time through its effects on outlook (optimism–pessimism), self-esteem, and meaning in life. This approach was innovative since preceding work has focused on direct relationships (see Barron et al. 2018; Denovan et al. 2020). Moreover, the inclusion of self-esteem, dispositional optimism–pessimism and meaning in life enables comparisons with related studies. Regarding design, since the current investigation employed a multi-time point path model, this advance enabled examination of prospective associations consistent with hypothesised temporal ordering of effects. This approach, by addressing the limitations of prior research, provided a rigorous test of the mediating pathways underlying the conspiratorial ideation–well-being relationship. Although temporal separation strengthens inference by reducing common method bias and allowing for prospective modelling, the present design does not permit strong causal conclusions, as each construct was assessed at a single time point and baseline levels were not controlled. Accordingly, findings are interpreted as consistent with rather than definitive evidence of directional pathways.

Based on previous findings we hypothesised (H1) that higher conspiratorial ideation at T1 would predict lower satisfaction with life at T4. It was anticipated that self-esteem and pessimism at T2 would significantly mediate this relationship (H2). Regarding meaning in life, the authors expected that conspiratorial ideation would predict greater search at T3 (H3). This unresolved heightened search should, in turn, negatively predict subsequent satisfaction with life at T4. Conversely, we

hypothesised that increased presence would positively mediate the relationship (H4). Finally, to capture the cascade of effects, we theorised that self-esteem at T2 and search at T3 would sequentially mediate the conspiratorial ideation and life satisfaction relationship (H5).

## 2 | Method

### 2.1 | Participants

A sample of 615 (*M*age = 49.81, range = 19 to 82) took part: 329 males (*M*age = 50.17, range = 20 to 65), 283 females (*M*age = 49.49, range = 19 to 82), and three non-binary (*M*age = 41.33, range = 36 to 49). Participants completed measures four times, 2 months apart. Recruitment used Bilendi, an established supplier of quality panel data, which is equivalent to that collected using traditional approaches (Kees et al. 2017; Dagnall et al. 2025a). The minimum age for recruitment was 18 years. The researchers specified a representative UK-based sample with a balance of genders and a broad age range.

### 2.2 | Materials

The study used established self-report measures introduced across time points.

### 2.3 | Time Point One Measure

#### 2.3.1 | Five-Item Generic Conspiracist Beliefs Scale

General conspiratorial ideation was assessed using the five-item Generic Conspiracist Beliefs Scale (GCB-5, Kay and Slovic 2025). The five-item scale measures endorsement of broad, non-specific conspiratorial ideation, including perceived hidden motives and covert actions by powerful groups. Items are rated on a 5-point Likert scale ranging from 1 (Definitely not true) to 5 (Definitely true), with higher scores indicating stronger conspiratorial ideation. The GCB-5 has demonstrated good internal consistency and convergent validity through its correlations with political cynicism, distrust, and paranormal beliefs (Kay and Slovic 2025; Dagnall et al. 2023).

### 2.4 | Time Point Two Measures

#### 2.4.1 | Life Orientation Test-Revised

Dispositional optimism was measured using the Life Orientation Test-Revised (LOT-R, Scheier et al. 1994). The LOT-R consists of 10 items, including six scored items and four fillers, forming two subscales that assess optimistic expectations (three items) and pessimistic expectations (three items). Items are rated on a 5-point Likert scale ranging from 0 (Strongly disagree) to 4 (Strongly agree). After reverse scoring the pessimism items, higher total scores reflect greater dispositional optimism. The LOT-R has demonstrated acceptable internal consistency and strong predictive validity in relation to well-being, coping, and physical health outcomes (Scheier et al. 1994).

#### 2.4.2 | Rosenberg Self-Esteem Scale

Global self-esteem was assessed with the Rosenberg Self-Esteem Scale (RSES, Rosenberg 1965). This 10-item measure evaluates one's overall sense of self-worth using a 4-point Likert scale from 1 (Strongly disagree) to 4 (Strongly agree). Higher scores indicate greater self-esteem. The RSES demonstrates concurrent, predictive, and construct validity (Sinclair et al. 2010).

### 2.5 | Time Point Three Measure

#### 2.5.1 | Meaning in Life Questionnaire

The Meaning in Life Questionnaire (MLQ, Steger et al. 2006) includes two 5-item subscales: Presence of Meaning (e.g., "My life has a clear sense of purpose") and Search for Meaning (e.g., "I am looking for something that makes my life feel meaningful"). Items were rated on a 7-point Likert scale ranging from 1 (Absolutely untrue) to 7 (Absolutely true). The MLQ demonstrates strong reliability and robust construct and criterion validity, showing expected associations with well-being, life satisfaction, and depression (Steger et al. 2006).

### 2.6 | Time Point Four Measure

#### 2.6.1 | Satisfaction With Life Scale

Life satisfaction was measured using the Satisfaction with Life Scale (SWLS; Diener et al. 1985). This five-item scale assesses global cognitive judgments of one's life satisfaction. Participants responded using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree), with higher scores indicating greater life satisfaction. The SWLS shows solid psychometric adequacy, including strong internal consistency, high test–retest reliability, and substantial convergent validity with other measures of subjective well-being (Pavot and Diener 2008).

### 2.7 | Procedure

Participants completed the survey on four time occasions 2 months apart. Prior to involvement, participants received information detailing procedures. Consenting individuals clicked a box indicating written consent. An ID number managed by BILENDI facilitated response matching (deleted after data collation). At baseline (Time Point One), completion of the GCB-5 occurred. Participants responded to LOT-R and RSES 2 months later (Time Point Two), MLQ at 4 months (Time Point Three), and SWLS at 6 months (Time Point Four).

To limit order effects, questionnaire rotation occurred, using the in-built Qualtrics randomiser. Instructions told participants to complete the measures at their own pace, and no correct/incorrect responses existed. These remedies targeted evaluation apprehension and socially desirable responding. The researchers employed procedural strategies to reduce common method variance, evaluation apprehension, and social

desirability (see Dagnall, Denovan, and Drinkwater 2022; Dagnall, Denovan, Drinkwater, and Escolà-Gascón 2022). The Manchester Metropolitan University Research Ethics Committee (ID# 47784) provided ethical approval. Study procedures adhered to the standards of the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

## 3 | Results

### 3.1 | Analysis Plan

Analysis comprised data screening before path model testing. The model assessed relationships between conspiratorial ideation (as an exogenous variable), optimism, self-esteem, presence and search for meaning (mediators), and life satisfaction (endogenous variable). Prior to model evaluation, confirmatory factor analysis evaluated measurement model adequacy and scale composite internal reliability was determined. Subsequently, structural equation modelling (SEM) tested structural relationships using maximum likelihood with robust standard errors estimation.

Path model evaluation employed Confirmatory Fit Index (CFI), Standardized Root-Mean-Square Residual (SRMR), and Root-Mean-Squared Error of Approximation (RMSEA). CFI $>0.90$, SRMR $<0.08$, and RMSEA $<0.08$ signify good data fit, while CFI $\geq 0.95$, SRMR $\leq 0.05$, and RMSEA $\leq 0.05$ indicate excellent fit (Hu and Bentler 1999). Computation of mediating relationships used bootstrapping with 95% bias-corrected confidence intervals (1000 resamples) (Preacher and Hayes 2008).

### 3.2 | Data Screening and Confirmatory Factor Analysis

Normality assessment found acceptable skewness (i.e., between −2.0 and + 2.0), and kurtosis (i.e., between −7.0 and + 7.0) (Hair et al. 2010). Confirmatory factor analysis involved testing a priori factor solutions for the GCB-5, LOT-R, RSES, MLQ, and SWLS. Previous research defined scale structure. The GCB-5 contains a single factor (Dagnall et al. 2023), and results supported this (see Table 1). Disagreement exists for both the LOT-R and RSES, with research supporting unidimensional and two-factor models (Herzberg et al. 2006; Supple et al. 2013). The two-factor LOT-R model designates optimism and pessimism factors, and the RSES includes positive and negative self-esteem factors. Hence, comparison of both models occurred with greater support for a two-factor structure in each instance. The MLQ includes a two-factor structure, containing presence and search facets (Steger et al. 2006), and the SWLS contains a single dimension (Chinni and Hubley 2014). Findings supported these structures (i.e., good model fit existed). In addition, all measures exhibited satisfactory composite and alpha reliability (Table 1).

### 3.3 | Path Analysis

Path analysis found the preliminary model (Model 1) showed good fit for CFI and RMSEA but poor SRMR, $\chi^2$ (567, $N=615$) = 1594.20, $p<0.001$, CFI = 0.93, SRMR = 0.11, RMSEA = 0.05 (95% CI of 0.05 to 0.06). Inspection revealed non-significant paths from conspiratorial ideation to optimism (−0.07, $p=0.205$) and positive self-esteem (−0.06, $p=0.312$). These paths were removed in Model 2, which improved overall fit, $\chi^2$ (335, $N=615$) = 914.89, $p<0.001$, CFI = 0.95, SRMR = 0.06, RMSEA = 0.05 (95% CI of 0.04–0.05).

**TABLE 1** | Confirmatory factorial analysis: Fit indices and composite reliability.

| Scale | Model type | $\chi 2$ | df | CFI | SRMR | RMSEA (90% CI) | Composite reliability | Alpha reliability |
|---|---|---|---|---|---|---|---|---|
| Five-item generic conspiracist beliefs scale | One-factor | 18.24* | 5 | 0.99 | 0.02 | 0.06 (0.03, 0.09) | 0.87 | 0.87 |
| Life orientation-revised | One-factor | 135.49** | 8 | 0.91 | 0.08 | 0.16 (0.13, 0.18) | | 0.88 |
| | Two-factor | 24.91* | 8 | 0.99 | 0.02 | 0.05 (0.03, 0.08) | Optimism = 0.84 | 0.84 |
| | | | | | | | Pessimism = 0.90 | 0.90 |
| Rosenberg self-esteem scale | One-factor | 712.45** | 35 | 0.74 | 0.10 | 0.17 (0.16, 0.18) | | 0.91 |
| | Two-factor | 106.78** | 34 | 0.97 | 0.03 | 0.05 (0.04, 0.07) | Positive self-esteem = 0.88 | 0.88 |
| | | | | | | | Negative self-esteem = 0.91 | 0.91 |
| Meaning in life questionnaire | Two-factor | 203.73** | 34 | 0.94 | 0.09 | 0.09 (0.08, 0.09) | Presence = 0.90 | 0.90 |
| | | | | | | | Search = 0.94 | 0.94 |
| Satisfaction with life scale | One-factor | 15.14* | 5 | 0.99 | 0.01 | 0.05 (0.02, 0.09) | 0.95 | 0.95 |

*Note:* *$\chi^2$ significant at $p<0.05$; **$\chi^2$ significant at $p<0.001$.

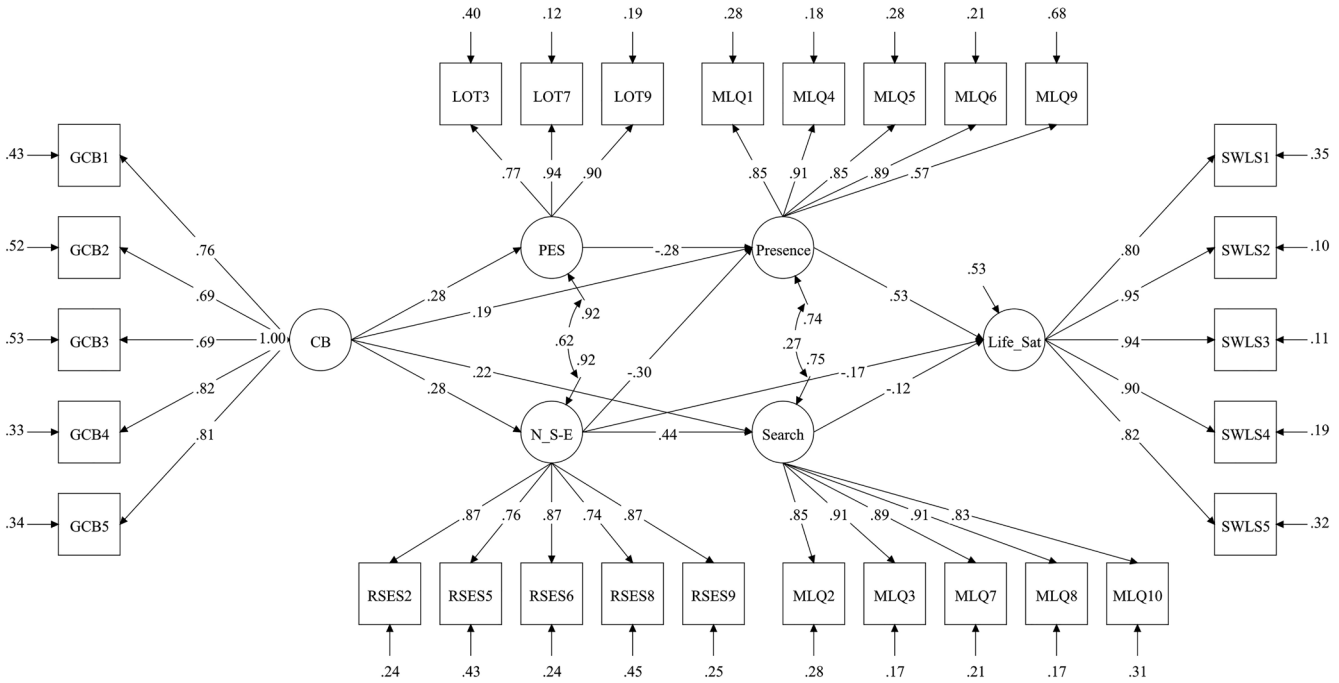


**FIGURE 1** | Multiple time point mediation model depicting putative relationships between conspiratorial ideation, pessimism, negative self-esteem, meaning in life, and life satisfaction. CB, Conspiratorial Ideation/Belief; Life_Sat, Life Satisfaction; N_S-E, Negative Self-Esteem; PES, Pessimism. Standardized regression weights between variables are shown. Error is not indicated but was specified for all variables. Only significant relationships at $p < 0.05$ are depicted to ease interpretation. Analysis used Bootstrapping significance estimates (1000 resamples).

Relationship scrutiny revealed that conspiratorial ideation was a significant positive predictor of pessimism and negative self-esteem (both 0.28, $p < 0.001$) (Figure 1). Similarly, conspiratorial ideation positively predicted presence (0.19, $p < 0.001$) and search (0.22, $p < 0.001$), with a stronger relationship evident for search. Pessimism and negative self-esteem negatively predicted presence (−0.28, $p < 0.001$ and −0.30, $p < 0.001$ respectively), and negative self-esteem predicted greater search (0.44, $p < 0.001$) (pessimism was non-significant). Presence predicted greater life satisfaction (0.53, $p < 0.001$), while negative self-esteem and search predicted lower life satisfaction (−0.17, $p = 0.011$ and −0.12, $p = 0.003$ respectively) (conspiratorial ideation and pessimism were non-significant). Model 2 explained 8% respectively of pessimism and negative self-esteem, 25% respectively of presence and search, and 47% of life satisfaction variance.

Mediation analyses (Table 2) indicated that negative self-esteem and search for meaning negatively mediated the relationship between conspiratorial ideation and life satisfaction, whereas presence of meaning served as a positive mediator. Pessimism was not a significant mediator. Sequential mediation via negative self-esteem and search also reduced life satisfaction, highlighting key cognitive pathways linking conspiratorial ideation to well-being.

**TABLE 2** | Specific indirect effects of conspiratorial ideation on life satisfaction through pessimism, negative self-esteem, and meaning in life (for brevity, only significant indirect paths are displayed).

| Indirect path | $\beta$ | SE | 95% CI |
|---|---|---|---|
| Conspiratorial ideation > negative self-esteem > life satisfaction | −0.05* | 0.02 | −0.08, −0.02 |
| Conspiratorial ideation > presence > life satisfaction | 0.10** | 0.03 | 0.06, 0.14 |
| Conspiratorial ideation > search > life satisfaction | −0.03* | 0.01 | −0.05, −0.01 |
| Conspiratorial ideation > pessimism > presence > life satisfaction | −0.04** | 0.01 | −0.07, −0.02 |
| Conspiratorial ideation > negative self-esteem > presence > life satisfaction | −0.04** | 0.01 | −0.07, −0.02 |
| Conspiratorial ideation > negative self-esteem > search > life satisfaction | −0.02* | 0.01 | −0.03, −0.01 |

*Note:* *indicates $p < 0.05$, **indicates $p < 0.001$ using Bootstrapping significance estimates (1000 resamples).

## 4 | Discussion

This study examined how conspiratorial ideation is prospectively associated with life satisfaction through a set of cognitive–affective pathways. By employing a multi-time point design with temporally separated measures, the study extends prior cross-sectional work and enables examination of relationships consistent with hypothesised temporal ordering. However, because each construct was assessed at a single time point, the findings should be interpreted as indicative of prospective relationships rather than definitive evidence of

causal direction. It is important to note that, although temporal separation reduces common method bias and allows for prospective modelling, the present design does not capture within-person change or reciprocal effects. Future research using cross-lagged or intensive longitudinal designs would be required to more rigorously test directionality (Hamaker et al. 2015).

Path analyses supported the supposition that conspiratorial ideation is affiliated with non-adaptive and negative psychological outcomes. As expected, conspiratorial ideation at T1 predicted lower satisfaction with life at T4 (H1). In line with H2, conspiratorial ideation predicted higher negative self-esteem and pessimism, although only negative self-esteem predicted life satisfaction in the full model. Consistent with H3 and H4, conspiratorial ideation predicted greater search for meaning and higher presence of meaning, which showed opposing associations with life satisfaction. Finally, the sequential pathway through negative self-esteem and search for meaning was significant (H5), indicating that these processes represent key mechanisms linking conspiratorial ideation with reduced life satisfaction.

By identifying these sequential links, this study revealed indirect pathways that explained the conspiratorial ideation–life satisfaction link. Particularly, analysis supported the primary path mediated by reduced negative self-esteem and the sequential pathway (H5), which examined the effects of negative self-esteem and subsequent search for meaning in life. Analysis also revealed a positive meaning path, which involved presence of meaning in life and increased satisfaction with life. Overall, the model indicated that the conspiratorial ideation–life satisfaction relationship was complex and mediated (directly and indirectly) by negative self-esteem, pessimism, and meaning in life.

Beyond primary findings, analysis of specific indirect effects provided additional nuance regarding the role of pessimism and sequential pathways. Although conspiratorial ideation successfully predicted higher pessimism (H2), pessimism was not a significant predictor of lower life satisfaction in the full model, meaning simple two-step mediation via pessimism was not supported. Additionally, the model identified two further, complex sequential paths influencing the conspiratorial ideation–life satisfaction relationship. The first involved pessimism and presence, and the second negative self-esteem and presence. These paths illustrated the complex interplay between negative cognition and existential stability as drivers of well-being within a conspiratorial framework. This interpretation was supported by the failure of conspiratorial ideation to predict either optimism or positive self-esteem.

Collectively, results aligned with studies reporting that conspiratorial ideation was associated with reduced self-related functioning (e.g., lower self-esteem, lowered agency, and maladaptive cognitive styles; Abalakina-Paap et al. 1999; Bruder et al. 2013; Van Prooijen and Acker 2015). This effect was consistent with research linking conspiratorial ideation to threat-focused cognition, mistrust, and reduced personal control (Drinkwater et al. 2012; Dagnall et al. 2015, 2017; March and Springer 2019).

The finding that conspiratorial ideation predicted increased pessimism extended cross-sectional work evidencing associations between conspiratorial thinking and negative affect (e.g., stress, anxiety, and depressive tendencies; Swami 2012; Bruder et al. 2013). Although in the full structural model, pessimism predicted neither search nor life satisfaction, pessimism's relationship with conspiratorial ideation aligned with the conceptualisation of conspiratorial worldviews as a pessimistic orientation toward societal structures and human intention (Douglas et al. 2019; Bruder et al. 2013).

The mediating role of meaning in life, particularly the observed increase in search, supported recent evidence designating that conspiratorial ideation is attendant with unresolved existential concerns and the desire to impose coherence on complex events (Dagnall et al. 2024; Dagnall et al. 2025a, 2025b, 2025c). Explicitly, the stronger conspiratorial ideation-search (vs. presence) association corresponded with the notion that conspiracy theories provide epistemic closure, while concurrently facilitating uncertainty and threat vigilance (Douglas et al. 2019; Denovan et al. 2020). The negative indirect effect of search on life satisfaction concurred with Steger et al.'s (2006) finding that elevated searching, particularly in the absence of meaning fulfillment, predicts poorer psychological outcomes.

Furthermore, positive mediation through presence indicated that although conspiratorial ideation heightens existential striving, it also affords a sense of structure or coherence. This concurs with evidence that conspiratorial ideation appeals to meaning-making motives under conditions of uncertainty (Van Prooijen et al. 2018). In the short term, this is psychologically positive; however, over time, as evidenced by the observed negative pathways, maladaptive consequences surpass benefits.

The finding that conspiratorial ideation failed to predict optimism or positive self-esteem corresponded with previous studies reporting that the conspiratorial worldview is attendant with negative, rather than positive, self- and world-related schemas (Drinkwater et al. 2018; Bruder et al. 2013). This supports the notion that conspiracy ideology allies with defensive, threat-driven processes rather than with adaptive or resource-promoting psychological characteristics.

These results illustrate that variable-centered approaches fail to fully consider the mechanisms by which conspiratorial ideation influences well-being (Denovan et al. 2020). Furthermore, the temporally structured design provides evidence consistent with the proposed ordering of variables, suggesting that negative self-esteem and unresolved existential searching form key pathways through which conspiratorial ideation contributes to lower life satisfaction. The present study advanced understanding of why conspiratorial ideation, despite occasional claims of adaptive or socially functional elements (Pelkmans and Machold 2011; Bowman and Roe-Crines 2023), is associated with negative well-being outcomes.

These findings highlight potential avenues for intervention, particularly those targeting maladaptive self-evaluative processes and meaning-making. For example, approaches that promote

more balanced self-perceptions or support adaptive meaning construction may be beneficial. However, given the correlational nature of the present design, such implications should be considered preliminary and require validation through experimental or intervention-based research.

### 4.1 | Limitations

This study has limitations that ensuing research should address. A potential issue was reliance on self-report instruments. Due to the automatic and inaccessible nature of cognitive processes, self-report data are vulnerable to cognitive biases. While the present study employed procedural remedies to reduce social desirability and common method variance, future studies could establish concurrent validity by triangulating self-report with objective indices such as behavioural observations on relevant tasks, physiological measures (e.g., heart rate variability or galvanic skin response for emotional variables), or Implicit Association Tests (IATs). Implementing methodological diversification would yield a comprehensive and robust assessment of the constructs under investigation.

Another limitation pertains to the unidimensionality of the five-item Generic Conspiracist Beliefs Scale (GCB-5). Though this scale effectively captures general conspiratorial ideation, subsequent investigations should consider whether relationships between conspiracy theory endorsement and well-being vary as a function of belief type. Researchers could achieve this by using the full Generic Conspiracist Beliefs Scale (GCBS), which includes Government Malfeasance (i.e., routine criminal conspiracy within governments), Extraterrestrial Cover-up (i.e., deception of the public about the existence of alien), Malevolent Global Conspiracies (i.e., small, secret groups exert control over global events), Personal Well-being (conspiracist concerns over health and liberty), and Control of Information (unethical control and suppression of information of by organizations).

While the intervals between the measurement points provided a longitudinal framework, the causal structure implied by the path model (e.g., conspiratorial ideation at T1 predicting outcomes at T4 via subsequent mediators) is heavily dependent on theoretical justification. Although the current model supports the hypothesized directionality, this design fails to eliminate the possibility of bidirectional or reversed causal effects. To determine direction of influence within the interdependent network, subsequent investigations should employ designs that assess short-term changes. Specifically, experimental studies that systematically manipulate exposure to conspiratorial narratives to measure subsequent changes in mediating factors. This would provide strong evidence for the causal role of conspiratorial ideation. Alternatively, utilizing intensive longitudinal designs with frequent assessments (e.g., weekly or daily) would enable the use of lagged models to identify precise temporal relationships and potential reciprocal effects.

While the introduction noted that conspiratorial ideation occurs concomitant with other scientifically unsubstantiated beliefs (e.g., paranormal and pseudoscientific beliefs), and that these belief types operate through distinct mechanisms, this study, due to a focus on conspiratorial ideation and the complexity of the tested model, did not include other beliefs. In this context, though not a limitation per se, proceeding work should include additional beliefs as they will provide a comprehensive test of the distinct psychological pathways of various non-adaptive belief systems. Alternatively, since the different beliefs exist in parallel, researchers could look at how the beliefs operate in tandem. This would allow the field to move beyond isolating single variables to understanding the cumulative, interactive effect of holding multiple unsubstantiated worldviews on psychological adaptation and life satisfaction.

Despite using a large, UK-based, representative sample, caution is required when generalising the outcomes. Since the complex relationships identified between conspiratorial ideation and well-being reflect specific psychological, social, and cultural factors, outcomes may not generalise to other cultural and national contexts. Hence, prospective studies should examine populations characterised by factors such as distinct political systems, varying degrees of institutional trust, and/or differing levels of cultural cohesiveness (i.e., where adherence to social norms is emphasised). Cross-cultural comparisons would test the robustness of the current model and identify context-specific moderators that amplify or attenuate the negative effects of conspiratorial ideation on psychological adjustment.

Finally, the present study focused on satisfaction with life. Despite this being an important well-being measure and a principal component of subjective well-being, satisfaction with life is principally a cognitive assessment of life circumstances. To achieve a holistic understanding of the impact of conspiratorial ideation, future research should include measures of affective well-being (e.g., assessing the frequency of positive and negative emotions, such as stress, anxiety, or depressive symptoms). Furthermore, including scales that assess eudaimonic well-being (e.g., personal growth, thriving, and flourishing) provide a broader operationalisation of psychological health. By widening the scope of the outcome variables, researchers can more fully map the extent to which conspiratorial ideation influences facets of psychological and existential state.

## 5 | Conclusion

This study provides longitudinal evidence that conspiratorial ideation is associated with lower psychological well-being through identifiable cognitive and self-related pathways. Conspiratorial ideation predicted reduced life satisfaction over time indirectly via heightened negative self-esteem and increased searching for meaning, while the presence of meaning showed a protective association. These findings indicate that the impact of conspiratorial thinking on well-being is not simply direct but operates through interconnected cognitive–affective processes that unfold over time. By clarifying temporal ordering, the study advances understanding of how maladaptive belief systems influence psychological adjustment and highlights potential applied cognitive targets for intervention, including strengthening self-esteem and fostering more adaptive meaning-making. Overall, conspiratorial ideation functions not only as social narratives but also as cognitive frameworks with measurable consequences for individual psychological functioning.

### Author Contributions

**Andrew Denovan:** conceptualization, methodology, software, data curation, investigation, validation, formal analysis, visualization, project administration, resources, writing – original draft, writing – review and editing. **Zoe Hughes:** methodology, writing – original draft, writing – review and editing. **Danny Powell:** writing – original draft, writing – review and editing. **Neil Dagnall:** conceptualization, data curation, investigation, visualization, writing – original draft, writing – review and editing, project administration, resources.


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### Ethics Statement

The study was approved by the Manchester Metropolitan University Research Ethics Committee (ID# 47784). The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

### Consent

Informed consent was obtained from all individual participants included in the research.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

The data that support the findings of this study are openly available in figshare at https://doi.org/10.6084/m9.figshare.30999568.

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