Paranoia and conspiracy thinking

Anna Greenburgh, Nichola J. Raihani

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1 2	Paranoia and conspiracy thinking
3 4	Anna Greenburgh <sup>1</sup> and Nichola J Raihani <sup>1</sup>
5 6 7 8 9	<ol> <li>Department of Experimental Psychology, University College London, 26 Bedford Way, London WC1H 0AP</li> </ol>
10	Corresponding author:
11 12 13	Nichola Raihani; nicholaraihani@gmail.com
14 15 16	Abstract
17	Paranoia and conspiracy thinking share many risk factors, such as victimization, poverty and
18	social isolation. They also have many phenomenological features in common, including
19	heightened tendency to attribute negative outcomes to malevolent agents and idiosyncratic
20	pattern detection. Nevertheless, paranoia and conspiracy thinking also differ in key respects.
21	Specifically, paranoid thoughts tend to be held in isolation and involve perceptions of harm to
22	the self. Conspiracy beliefs, on the other hand, are shared by others and involve the
23	perception of collective rather than personal harm. We discuss the similarities and
24	differences between paranoia and conspiracy thinking and outline fruitful avenues for future
25	research.
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31 1.1 Introduction 32 33 Conspiracy theorists are often described as being paranoid - and paranoid thoughts often 34 35 involve perceptions of conspiracy. Despite conceptual similarities and the robust association between paranoia and conspiracy thinking, recent research suggests that these constructs 36 37 are distinct (van Prooijen & Douglas 2018; Imhoff & Lamberty 2018; Greenburgh et al. 2021; 38 Alsuhibani et al., 2022). To better understand conspiracy thinking and paranoia across the 39 continuum of severity, we highlight the similarities and differences in their presentations, risk 40 factors, and associated cognitive mechanisms. 41 42 1.1.1 What is paranoia? 43 44 In contemporary psychology, paranoia is typically characterised by the concern that one will 45 be intentionally harmed by others (Freeman & Garety, 2000). Paranoia is thought to exist 46 along a continuum: it shows full taxometric continuity in the population with persecutory 47 delusions lying at the extremity of the continuum (Elahi et al., 2017, but see David, 2010; 48 Feyaerts et al., 2021). Persecutory delusions are conceptualised as beliefs that are held with 49 high conviction and that preoccupy the individual, causing distress and daily impairment 50 (Freeman, 2016, but see David, 1999). Persecutory delusions are a transdiagnostic 51 phenomenon but frequently appear in psychosis, where they are detected in over 70% of 52 people experiencing a first episode (Coid et al., 2013). In the general population, the 53 distribution of paranoid thoughts is highly skewed, such that many people typically 54 experience mild suspicious thoughts and only a small minority of people harbour frank 55 persecutory delusions (Bebbington et al., 2013; Freeman et al., 2005). 56 57 Paranoid thoughts tend to cluster into four themes of mistrust, interpersonal sensitivity, ideas 58 of reference, and ideas of persecution (Bebbington et al., 2013). For example, a common 59 idea of reference is that others are talking about you, and a typical persecutory belief is that 60 others are trying to confuse you. These thoughts likely form a heterarchical network (Bell & 61 O'Driscoll, 2018) where mild socio-evaluative concerns are most common and underpin 62 more severe persecutory thoughts (Freeman et al., 2005). 63 64 Perception of conspiracy is a key phenomenological feature of paranoia, which often 65 involves concerns about being persecuted by a group of others who are coordinated in their 66 attempts to harm the individual (Raihani & Bell, 2019). Importantly, this group of people may

not correspond to any known group in reality - or may correspond to a group that is not

68	coordinated to achieve any specific harmful aims (Cameron, 1959; Harper, 1994; Oyebode,
69	2015). In general population samples, higher proneness towards paranoid ideation is
70	positively associated with the belief that others share harmful intentions (A. Greenburgh et
71	al., 2019). The frequency of such conspiracy concerns varies along the paranoia continuum,
72	becoming more common as paranoia intensifies (Freeman et al., 2021). For example, in one
73	clinical study 81.7% of individuals with current persecutory delusions believed that their
74	persecutors were organized into a conspiracy against them (Green et al., 2006). Such
75	notions of conspiracy are typically included in clinical measures of persecutory delusion (e.g
76	Andreasen, 1984).
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79	2.1 Similarities between paranoia and conspiracy thinking
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81	Conspiracy thinking, or the tendency to believe in conspiracy theories, shares several
82	characteristics with paranoia (Freeman & Bentall, 2017; Imhoff & Lamberty, 2018). Both
83	involve ideas that harmful outcomes can be attributed to malevolent agents rather than to
84	more benign or non-agentive causes (see Douglas & Sutton, 2018; Freeman & Garety,
85	2004; van der Tempel & Alcock, 2015); and the perception that people are coordinated in
86	their aims to bring these negative outcomes about (Douglas et al., 2019; Raihani & Bell,
87	2019; van Prooijen & Douglas 2018). Other similarities in concept are notable, for example,
88	both paranoia and conspiracy thinking represent suspicions that can be hard to falsify and
89	may concern events or theories that later emerge to be true.
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91	2.1.1 Associations with social, psychological and cognitive factors
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93	Paranoia and conspiracy thinking share several risk factors and concomitants. At a socio-
94	environmental level, both are associated with experiencing negative life circumstances, such
95	as victimisation, poverty, abuse, and social isolation (Bentall et al., 2012; Freeman et al.,
96	2011; Freeman & Bentall, 2017; Greenburgh et al., 2021; Lamster et al., 2017; McElroy et
97	al., 2019; Varese et al., 2012). At a psychological level, both are negatively associated with
98	perceived social status, feelings of control, happiness, sleep quality; and positively
99	associated with loneliness, suicidal ideation, social avoidance, anxiety, depression, and
100	anomalous experiences (Alsuhibani et al., 2022; Freeman, 2016; Freeman et al., 2008,
101	2011; Freeman & Bentall, 2017; Imhoff & Lamberty, 2018; van der Tempel & Alcock, 2015).
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103	Paranoia and conspiracy thinking also seem to have similar cognitive antecedents, in

particular anomalies in processes of pattern detection and reasoning biases. These include

variation in belief updating processes (Suthaharan et al., 2021), reduced analytical reasoning, and a tendency to "jump to conclusions" (Bronstein et al., 2019; Brotherton & French, 2014; Dudley et al., 2016; Garety & Freeman, 2013; Pytlik et al., 2020; van Dael et al., 2006; but see Alsuhibani et al., 2022; Feyaerts et al., 2021; Tripoli et al., 2021; van Dael et al., 2006 for contrasting results).

Paranoia and conspiracy thinking also share similarities in threat processing mechanisms, specifically being associated with lower threat detection thresholds but intact responsivity to social threat. In experimental settings, more paranoid individuals maker stronger harmful intent attributions when faced with neutral opponents, indicating a lowered threshold (or a higher baseline) for perception of threat. Nevertheless, paranoia doesn't seem to impinge upon responses to threat: in more socially-threatening scenarios (e.g. playing against an outgroup partner or someone who is higher status), individuals tend to revise their attributions of harmful intent upwards to the same extent, irrespective of their pre-existing levels of paranoia (A. Greenburgh et al., 2019; Saalfeld et al., 2018). Similar patterns have been found in those scoring high in conspiracy thinking (Meuer & Imhoff, 2021). It is not yet clear whether people who experience more severe forms of paranoia (e.g. clinical populations) may show dysregulated responses to social threat.

## 3.1 Distinguishing conspiracy thinking and paranoia

Despite their similarities, paranoia and conspiracy thinking are distinct constructs (Imhoff & Lamberty, 2018; Alsuhibani et al., 2022). For example, conspiracy thinking involves an element of perceived secrecy (van Prooijen & van Vugt, 2018) whereas paranoia does not (necessarily). Paranoid ideation tends to peak in adolescence and thereafter wanes with age, whereas conspiracy thinking has shown no association with age (Freeman & Bentall, 2017; although see Freeman et al., 2022). In a multi-trait, multi-method study, Imhoff & Lamberty (2018) found that conspiracy thinking is more closely related to socio-political constructs (e.g., low trust in government, control over social events) whereas paranoia is more closely related to self-relevant constructs (e.g., certain personality traits such as neuroticism, and perception of interpersonal control). Furthermore, conspiracy thinking in the general population is independently associated with risk factors such as low social support, psychiatric distress, and negative childhood experiences. In other words, the association between these risk factors and paranoia does not fully account for their association with conspiracy thinking (Freeman & Bentall, 2017). Although both paranoia in the general population and conspiracy thinking have been associated with right wing political orientation (Saalfeld et al., 2018; van der Linden et al., 2021), conspiracy thinking is thought to be tied

142	to political orientation to a greater degree (Imhoff & Lamberty, 2018) where this relationship
143	may not be linear (Imhoff et al., 2022). We note that belief in specific conspiracy theories is
144	often content-contaminated and driven by ideological concerns to a greater degree than
145	generalised conspiracy mentality (Imhoff et al., 2022).
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#### 3.1.1 Self-referentiality and distress

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Perhaps the most important distinction between paranoia and conspiracy thinking is the extent of self-referential concerns. While both conspiracy thinking and paranoia can involve the perception of groups that have malevolent intentions, paranoia typically involves perceptions of being personally targeted by others; whereas conspiracy thinking involves the perception that one's group or society in general will be harmed. For example, in one study where participants were asked to indicate their endorsement of various conspiracy theories, individuals who scored higher in trait paranoia tended to endorse conspiracy theories more strongly when these described harm to the believer compared to when the harm was described as occurring to society in general (Greenburgh et al., 2022). This raises the question as to what extent paranoia and conspiracy thinking reflect differences in subjective perceptions of social identity and isolation. It is possible that the self-referential beliefs that are more characteristic of paranoia are more common when individuals perceive themselves as being socially isolated or as not belonging to any specific social group (see Fett et al., 2021; Lamster et al., 2017) whereas conspiracy thinking may be more common when individuals feel a stronger sense of belonging and group identity (e.g., Sternisko et al 2020). This high degree of self-referential content - and the belief that personal safety is at stake may help to explain why paranoid beliefs are often distressing (Harper & Timmons, 2021; Lamster et al., 2017); whereas conspiracy beliefs are not always followed by heightened anxiety (Liekefett et al., 2021), and may take hold based on their entertainment value (van Prooijen et al., 2022).

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#### 3.1.2 Sensitivity to social context

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The perception of specifically self-referential harm in paranoia (compared to perception of collective harm in conspiracy theories) may be reflected in differential sensitivity to what others believe. Frank paranoid delusions frequently show resistance to social context: they can be impervious to the beliefs of a shared community and may result in social exclusion and impairment (Bell et al., 2021; Williams, 2020). Conspiracy beliefs are often different, in that they are highly influenced by social context (Sternisko et al., 2020; Cookson et al. 2021), and are typically spread socially (Bentall, 2018). For example, people are more likely to

endorse conspiracy theories that implicate outgroup members as conspirators (Enders & Smallpage, 2018), and are more likely to believe conspiracy theories that they perceive their ingroup to believe (Cookson et al., 2021; Greenburgh et al., 2022). Furthermore, unlike persecutory delusions, belief in conspiracy theories can offer more potential for short-term social benefits for an individual, such as finding a sense of belonging within conspiracy communities (Franks et al., 2017). Nevertheless, we note that conspiracy beliefs are often damaging at the societal, and longer-term individual, level (Douglas, 2021) and can result in social exclusion by individuals or communities who do not share these beliefs (van Prooijen et al. 2021). Future research can do more to investigate how sensitivity to social context varies with type and strength of conspiracy belief.

#### 4.1 Conclusion

The emerging picture is that paranoia and conspiracy thinking are distinguishable but related constructs. While perception of conspiracy is a common feature of paranoia, belief in conspiracy theories cannot be classed as paranoia in a general sense. Equally, it is certainly not the case that those who are paranoid necessarily believe in conspiracy theories. Paranoia tends to involve idiosyncratic, self-focussed beliefs, whereas conspiracy beliefs are more likely to be shared with others and involve the perception of collective harm. Indeed, perhaps unsurprisingly, conspiracy thinking is particularly associated with paranoia where it involves harm that is self-referential and intended. The distinctions between these two concepts cautions against any assumption that individuals who believe in conspiracy are also paranoid or experiencing a form of psychosis. Indeed, such assumptions can be stigmatising for those with mental health problems. A plethora of personal, societal and political factors drive belief in conspiracy theories above and beyond paranoia. We highlight several directions for future research, including the need for research on the causal relationships between paranoia and conspiracy thinking, and how sensitivity to social context and social threat varies differentially with conspiracy thinking and paranoia.

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S	ocially adaptive rather than accurate or rational and can help to explain why
р	eople might adopt seemingly unjustified beliefs.
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# Paranoia and conspiracy thinking

Anna Greenburgh<sup>1</sup> and Nichola J Raihani<sup>1</sup>

 Department of Experimental Psychology, University College London, 26 Bedford Way, London WC1H 0AP

We declare no conflict of interest.