Delusional Thinking and Reasoning: Perceiving Meaning in Randomness

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Background

Coincidences
How often have you come across curious or meaningful coincidences, like having a dream that later comes true or an old friend calls, just as you were thinking of them? Coincidences are fairly common but while some people attribute coincidences to pure chance, others may search for an alternative explanation, believing that coincidences are meaningful and must be due to other factors, such as, intuition, destiny or divine intervention.

Evidence suggests that those who have unusual experiences (Brugger et al., 1993), paranormal believers (Bressan, 2002) and those with schizotypal personality traits (Farias, Claridge & Lalljee, 2005) make more of these meaningful associations and see patterns where none exist. This had led to the suggestion that apophenia (see Figure 1) may be an underpinning factor for the formation of both paranormal and delusional beliefs (Fyfe, Williams, Mason & Pickup, 2008).

Reasoning

Recent findings indicate that those in the general population who engage in delusional thinking reason differently when making decisions. They display cognitive biases, similar to patients with clinical delusions, to liberally accept even implausible information (Jones, Galbraith & Manktelow, in prep; LaRocco & Warman, 2009) due to a lowered threshold of acceptance (Moritz & Woodward, 2004; Moritz, Wood & Lambert, 2007).

Figure 1. ‘Apophenia’ - The tendency to perceive meaningful patterns and causal connections where none exist (Fyfe et al., 2008)

Findings

The high delusional thinking group rated both delusional and neutral narratives as more likely to be true compared to the low delusional thinking group.

Significant positive correlations were found between delusional thinking score and both general and specific types of coincidences, such as, perceptions distant in space and time and guardian angel experiences.

Furthermore, those high in delusional thinking tend to prefer explanations such as destiny, divine intervention and the fact that everything is connected to everything else in the universe for coincidences; while those low in delusional thinking tend to attribute coincidences to pure chance.

Aims

Liberal acceptance has only been investigated in patients with schizophrenia. The current research aimed to investigate liberal acceptance in those high and low in delusional thinking in the general population and examine factors that may underpin this type of acceptance such as apophenia.

Method

Participants (N = 101) completed the Coincidences Questionnaire (Bressan, 2002) and assessed a series of narratives containing either delusional or neutral content on how likely they thought they could be true or possible.

Example Delusional Narrative

While working, Reece began to feel that he had such enormous insight into subject areas he hadn’t previously studied. He began to think of himself as being somewhat special and having a special mind to be thinking these things. He thought he was ‘chosen’ (Chapman, 2002).

Participants also completed the Peters et al., Delusions Inventory as a measure of delusional thinking (Figure 2; PDI; Peters, Day & Garety, 1996).

Figure 2. The Peters et al; Delusions Inventory

Implications

The findings provide the first tentative support of a liberal acceptance bias in a general population sample. Apophenia and liberal acceptance enable those who engage in delusional thinking to make more meaningful associations and see patterns where none exist and to then accept this information as plausible - potentially leading to the formation of aberrant beliefs.

It is anticipated that liberal acceptance and apophenia have important implications for the understanding of delusional formation and the application of cognitive therapies.

References


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