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Beliefs around luck: Confirming the empirical conceptualization of beliefs around luck and the development of the Darke and Freedman beliefs around luck scale

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ABSTRACT

The current study developed a multi-dimensional measure of beliefs around luck. Two studies introduced the Darke and Freedman beliefs around luck scale where the scale showed a consistent 4 component model (beliefs in luck, rejection of luck, being lucky, and being unlucky) across two samples ($n = 250$; $n = 145$). The scales also show adequate reliability statistics and validity by ways of comparison with other measures of beliefs around luck, peer and family ratings and expected associations with measures of personality, individual difference and well-being variables.

1. Introduction

A number of explanations of belief in luck have been advanced within the research literature and linked to a range of individual difference variables.

The traditional explanation views luck to be akin to chance, in that it is external to the individual and an unpredictable influence upon events. Thus, belief in luck is a perception that individual events are externally triggered, uncontrollable, irrational and have little influence on future expectations (e.g. Rotter, 1966). The majority of the literature supporting this perspective has been undertaken within the context of attribution theory, and research has shown that individuals making external attributions (i.e. seeing events as being due to luck) are less mentally healthy (Rotter, 1966; Weiner et al., 1971).

A more recent explanation posits that some individuals believe luck to be a personal attribute, which is internal, stable, predictable and controllable (Darke & Freedman, 1997a). Within this explanation luck is distinguished from chance (Wagenaar & Keren, 1988). A distinction is made between those who consider themselves to be lucky or unlucky, with perceptions of being lucky being associated with better mental health, while perceptions of being unlucky are associated with poorer mental health (Darke & Freedman, 1997a, 1997b).

Some research within this area frames belief in good luck as adaptive, in that the positive illusions surrounding luck (even in situations where the individual has little control on future expectations) can lead to feelings of confidence, control and optimism (Darke & Freedman, 1997a). This view is theoretically supported by research findings which found dispositional optimism to be a crucial variable in understanding good luck: for example optimism mediates the relationship between belief in good luck and mental health (Day & Maltby, 2003). Wiseman (2004) found that lucky people tended to find hidden messages in scripts pertaining to a reward whereas unlucky people did not. He interpreted this as suggesting that individuals who considered themselves to be lucky unintentionally created opportunities for themselves, whilst those who believed themselves to be unlucky tended to overlook opportunities for themselves. However, there is evidence to suggest that belief in good luck may extend beyond a positive illusion and represent more realistic expectations and ambitions. Day and Maltby (2005) found belief in good luck to be related to positive goal orientated behaviour (i.e. hope). Furthermore, they found that belief

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in good luck was perceived as an important factor when individuals were planning their goals, alongside their intention to work towards a goal, their own abilities and motivation regarding reaching a goal. These findings suggest that belief in good luck may influence cognitions associated with planning goals.

Despite the emergence of different theoretical and empirical contexts within which to consider beliefs around luck, there is an absence of a measure that captures the possible different dimensions concerning beliefs around luck. Currently, a dominant measure being used is the Belief in good luck scale (Darke & Freedman, 1997b) which comprises 12 items used to indicate belief in personal good luck. However, it does not include items reflecting belief in bad luck. Andre (2006) developed a four component model of belief in luck and fortune suggesting that belief in good luck and belief in bad luck comprise two separate components. However, Andre's 3-item measures do not encapsulate all aspects of attitudes and beliefs around luck contained in the Belief in good luck scale. Furthermore, there is little evidence to support the conclusion that a belief in being personally lucky or unlucky is the same as an acknowledgement of the presence of good and bad luck in the world. More importantly there is no measure for a general belief in luck (whether it be belief in good or bad luck) and no current data that relate general beliefs in luck to belief to being lucky or unlucky.

The aim of the two studies reported here was, first, to develop a multi-dimensional measure of beliefs around luck (Study 1). The second was to establish adequate reliability and validity of the measure (Study 2) through expected associations based upon previous findings with measures of personality, irrational beliefs, positive thinking, attribution style and well-being.

2. Study one

2.1. Method

2.1.1. Participants

Participants were 250 adults (118 males, 132 females) aged from 18 to 62 years, (Mean Age = 30.35 years, SD = 10.1) from workplaces and community groups from the South Yorkshire area of the United Kingdom. The ethnicity of the majority of respondents was White (n = 138).

2.1.2. Questionnaire

Twenty-two items (see Table 1) were constructed by the authors, based upon original items from the Belief in good luck scale, and designed to reflect 6 aspects of beliefs concerning luck; a general belief in luck (e.g. item 22), a rejection of a belief in luck (e.g. item 13), general belief in good luck (e.g. item 19), general belief in bad luck (e.g. item 20) belief in personally being lucky (e.g. item 9) and belief in personally being unlucky (e.g. item 1). As with the Beliefs in good luck scale responses are scored on a scale from *Strongly disagree* (1) through *Strongly agree* (6). We suggest the name of Darke and Freedman Beliefs Around Luck Scale for these 22 items and also suggest that users of the scale also cite Darke and Freedman (1997b).

In addition to completing these items, all of the respondents took part in one of four further studies to which they were allocated randomly until a quota of 60 (or 70 in the case of one study) was achieved. Respondents were not asked to complete all measures due to possible attrition from the study arising from being asked to perform multiple tasks.

The first two studies examined the test-retest reliability of the 22 items over a 2 week period (Sample 1; 29 males, 31 females), and a 4 week period (Sample 2; 28 males, 32 females). A further sample (Sample 3; 25 males, 35 females) received elicited ratings of themselves for each of the items from one peer and one family member.

The final 70 respondents (Sample 4; 36 males, 34 females) completed the existing 12-item belief in good luck scale (Darke & Freedman, 1997a) and the 3-item good luck/bad luck scales (Andre, 2006).

2.2. Results

The first step of the analysis was to determine the factor structure of the data. We submitted the 22 items to principal components analysis (Kaiser–Meyer–Olkin measure of sampling adequacy = .849; Bartlett's Test of sphericity, x^2 = 2684.14, df = 231, p < .001).

The decision on the number of factors to retain was based on parallel analysis of Monte Carlo simulations (Horn, 1965) that allow the comparison of the eigenvalues to those that might be

Table 1
Principal components analysis with oblimin rotation of all the belief in good luck items

	2 factor		4 factor			
	1	2	1	2	3	4
1. I consider myself to be an unlucky person	.15	*.80*	*.83*	−.12	.04	.05
2. I consistently have bad luck	*.30*	*.74*	*.80*	−.16	.06	.12
3. Even the things in life I can control in life don't go my way because I am unlucky	.28	*.64*	*.79*	.05	−.07	.06
4. Luck works against me	.30	*.64*	*.67*	−.20	.07	.27
5. I often feel like it's my unlucky day	.26	*.53*	*.65*	.09	−.11	−.02
6. I mind leaving things to chance because I am an unlucky person	*.33*	*.52*	*.63*	−.23	.05	.24
7. Even the things in life I can't control tend to go my way because I'm lucky	*.39*	−*.72*	−.01	*.79*	.08	.10
8. I consistently have good luck	*.38*	−*.71*	−.05	*.77*	.09	.07
9. I often feel like it's my lucky day	*.42*	−*.68*	.11	*.71*	−.22	−.15
10. Luck works in my favour.	*.44*	−*.67*	−.24	*.71*	.01	.19
11. I consider myself to be a lucky person	*.41*	−*.53*	−.36	*.65*	−.09	.05
12. I don't mind leaving things to chance because I'm a lucky person	*.50*	−*.41*	−.07	*.59*	.08	.20
13. It's a mistake to base any decisions on how unlucky you feel	−*.47*	−.20	−.09	−.01	*.70*	.04
14. Being unlucky is nothing more than random	−*.42*	−.11	.08	.16	*.68*	−.27
15. It's a mistake to base any decisions on how lucky you feel	−*.40*	−.07	−.22	−.32	*.68*	.23
16. Being lucky is nothing more than random	−*.50*	−.04	.24	.19	*.58*	−.41
17. Some people are consistently lucky, and others are unlucky	*.73*	.10	.16	.06	.08	*.78*
18. Some people are consistently unlucky, and others are lucky	*.74*	.09	.15	.05	.05	*.76*
19. There is such a thing as good luck that favours some people, but not others.	*.72*	−.11	.21	.04	−.16	*.60*
20. There is such a thing as bad luck that affects some people more than others.	*.73*	−.13	.20	.15	−.13	*.59*
21. Luck plays an important part in everyone's life	*.73*	−.10	.02	.19	−.04	*.58*
22. I believe in Luck	*.60*	−.02	.01	.15	−.34	*.52*
Cronbach's alpha (Study 1)	.85	.71	.88	.85	.68	.85
Cronbach's alpha (Study 2)			.85	.87	.69	.89