## **Technical Paper No. 6**

# Mania and its Relationship to the Sheep-Goat Variable

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ABSTRACT: In this study the focus was on the correlations between belief in, and alleged experience of, the paranormal (the so-called sheep-goat variable) and measures of hypomania and of mania. In all 4 analyses examined sheep were significantly more hypomanic than goats, and in 7 out of 10 significantly more manic. Mental health implications are discussed.

In a previous note (Thalbourne, submitted), an analysis was reported of studies in which belief in, and alleged experience of, the paranormal (the so-called "sheep-goat variable", sheep being the believers, goats the disbelievers) was correlated with two measures of depressive experience. It was concluded that some sheep are at a very slight risk for depressive experience. In the present note we consider the flip side of the coin, mania.

Conceiving of mania as a continuous scale, at the low end we have hypomania ("hypo" means "under"), which may be characterised by upbeat mood, gregariousness, and indeed creative thinking (American Psychiatric Association, 1980, p. 220). At the high end of the scale we have mania: when the hypomanic symptoms escalate and get out of hand we may find, according to the *Diagnostic and Statistical Manual of Mental Disorders Fourth Edition* (APA, 1994), elation (or irritability), reckless spending, indiscriminate sexuality, overactivity, a general loudness, and delusions of grandeur, the most famous of which is the delusion that one is Christ. Manic psychosis almost always leads to hospitalisation and treatment with one or more drugs such as lithium and/or other anti-psychotics.

The question that we are posing here is, Are sheep more prone to hypo/mania? Seven studies are available in which this question is addressed, 2 studies for hypomania and 6 for mania. In two studies (Windholz & Diamant, 1974; Thalbourne & French, 1995), the measure of belief in the paranormal was the 35-item Survey of Belief in Extraordinary Phenomena (SOBEP), while in all but two of the rest of the studies the 16-item Rasch Australian Sheep-Goat Scale was used (Lange & Thalbourne, 2002: see Thalbourne, submitted, for further details). One study (Thalbourne & French, 1995) also used the forced choice version of the Australian Sheep-Goat Scale (Thalbourne, 1995), one study used the 18-item visual analogue Australian Sheep-Goat Scale (Thalbourne & Delin, 1993), and one study used the Paranormality Subscale derived from the Magical Ideation Scale (Thalbourne, 1985).

The hypomania scale (Ma) employed was from the Minnesota Multiphasic Personality Inventory (MMPI: Dahlstrom, Welsh, & Dahlstrom, 1972). The results of our survey may be found in Table 1.

Table 1. Pearson correlations between hypomania and the sheep-goat variable.

Study	N	r	p
Windholz & Diamant (1974)	72	.36	< .01
Thalbourne & Delin (1994):			
Students	241	.30	< .001
Manic-depressives	86	.52	< .001
Schizophrenics	38	.41	< .001

In four samples stretching over 20 years, four correlations have all been positive and significant. The range is r = .30 to r = .52. Sheep were to a moderate extent more likely to display hypomania, as measured by the MMPI scale Ma. The results are remarkably consistent.

Table 2 contains the 7 studies where the 9-item Mania (or Manic Experience) Scale was used (Thalbourne, Delin, & Bassett, 1994; Thalbourne & Bassett, 1998). People with manic-depression (also known as bipolar disorder) tend to score higher on this scale than do supposedly

normal university students (Thalbourne et al., 1994) and higher than unipolar depressives (Thalbourne & Bassett, 1998).

Table 2. Pearson correlations between mania and the sheep-goat variable.

Study	Sample		Mania Scale		
		N	r	p	
Thalbourne & Delin	Students	241	.29	<	
(1994)				.001	
Thalbourne & Delin	Manic-	86	.08	.229	
(1994)	depressives				
Thalbourne & Delin	Schizophrenics	38	.42	.012	
(1994)					
Thalbourne & Delin	Students	57	.14	.151	
(1995)					
Thalbourne & French	Students:	114	.14	.073	
(1995)	SOBEP				
Thalbourne & French	Students FC	114	.19	.023	
(1995)	ASGS				
Thalbourne, Bartemucci,	Students/General	370	.34	<	
Delin, Fox & Nofi (1997)	public			.001	
Thalbourne (1998)	Students	242	.29	<	
				.001	
Thalbourne, Keogh &	Students	250	.26	<	
Crawley (1999)				.001	
Thalbourne (2004)	Students	227	.32	<	
	(Paranormality				
	Scale)			.001	

Note that the *p*-value in the first row is two-tailed, while all the rest are one-tailed.

The 7 studies contain 10 analyses, all positive (indicating more mania in sheep), ranging from r = .08 (p = n.s.) to r = .42 (p = .012), with a median r of .275, which may be considered weak.

In two studies (Thalbourne, 1998, and Thalbourne, Keogh & Crawley, 1999) the Eysenck measure of Neuroticism was also available, but in neither was the correlation with the Rasch Sheep-Goat Scale significant. Sheep may need to bear in mind that high scores on the Mania Scale put them at greater risk of psychopathology. The findings are consistent with

the direct though weak correlations between the sheep-goat variable and neuroticism reported by Windholz and Diamant (1974: r = .21, p < .05) and by Thalbourne, Dunbar and Delin (1995: r = .20, p < .01).

Four of the 9 items of the Mania Scale survived the statistical process of "top-down purification", and, together with 8 depressive items, have become an unbiased 12-item scale (Lange, Thalbourne, Houran & Lester, 2002) measuring atypical depression or general psychoticism—general because people with schizophrenia score as high on the scale as do people with manic-depression (Thalbourne & Houran, 2002). As such the findings tend to contribute to the blurring of the distinction between schizophrenia and manic-depression (already recognised in the syndrome schizo-affective disorder). More work needs to be done to find a measure of pure mania, if that is possible.

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