Balance and Lucid Dreaming Ability: A Suggested Relationship

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Two lines of evidence support a relationship between balance and lucidity. Balance emerged from the factor structure of the content of lucid dreams but not from the content of ordinary dreams and REM burst have been found to reliably precede lucidity, such bursts resulting from internal stimulation of the vestibular nuclei. Since it is unclear whether the proposed relationship between balance and dream lucidity exists on a gross motor or on a vestibular level both were recently measured by myself.

Students who reported no history of severe ear problems, bodily injury, or motion sickness and who did not report visual problems not correctable by glasses and who differed in the frequency with which they reported experiencing dream lucidity participated in the dynamic and static gross motor balance phase of this study. Subjects were asked to walk on a balance beam (dynamic balance) and to balance on a stabilometer platform (static balance). Some were recontacted and their vestibular sensitivity was assessed using the Hallpike procedure of caloric stimulation. Responsive eye movements constituted the dependent variable.

Sex X dreamer analyses of covariance with dream recall as the covariant were then calculated. It can be seen below that three sex x dreamer interactions reached significance; nystagmus beats/second and length and stabilometer errors. A similar pattern for nonlucid and frequent lucid dreamers emerged for the two vestibular measures. Female frequents were found to exhibit more beats per second and longer nystagmus than female nevers whereas the opposite was the case for males. That is, male nevers exhibited higher scores on these measures than' male frequent lucid dreamers. A slightly different pattern was found with stebilometer errors, female frequent lucid dreamers had fewer balance errors than any of the other sex x dreamer groups. Group differences in spontaneous nystagmus does not account for these interactions as no main effects or interactions were found for these measures.

Means for Sex by Dreamer Interactions						
Sex:		Males			Females	
Dreamer:	Frequent	Infrequent	Never	Frequent	Infrequent	Never
Beats/sec.	2.21	2.15	3.45	3.95	2.63	2.15
Length(sec.)	81.25	107.67	124.97	125.32	83.42	79.17
Errors/min.*	46.35	44.25	44.15	38.54	43.2	45.24

^{*}Body weight was an additional covariant for this analysis.

Additional statistical analysis to further determine the meaning of these results are continuing.