SCIENTIFIC RESEARCH SUMMARY

"I have prepared a summary report for the study that Hypnoke has sponsored, and I really could not have hoped for better results.

"I am amazed that the equipment is so effective! I expected the effect size to be small-to-moderate, but it is in actuality, very large. Essentially, the system works well and our empirical data supports its efficacy."

Principal Investigator: Dr Costas Karageorghis, Reader in Sport Psychology, Brunel University, West London

Summary of The Hypnoke International Project Results

Prepared by Principal Investigator:
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The purpose of this study was to examine the efficacy of the Hypnoke DRS equipment in enhancing the impact of imagery training among 20 elite breakdancers (mean age = 21.55 ± 1.54 yrs). Participants were exposed to four experimental conditions in a counterbalanced order: 1) Imagery conducted with speech and music delivered via the Hypnoke DRS; 2) Imagery conducted with speech delivered via the DRS; 3) Imagery conducted with speech and music (no DRS); and 4) Imagery conducted with speech only (no DRS). These conditions are labelled 1, 2, 3 and 4 respectively throughout this summary report.

The Sport Imagery Questionnaire (SIQ; Hall, Mack, Paivio, & Hausenblas, 1998) is a valid and reliable psychometric tool designed to assess the vividness of imagery; it was used to assess the impact of the four experimental conditions described above. The SIQ taps the cognitive and motivational functions of imagery: Cognitive Specific, Cognitive General, Motivational Specific, Motivational General-Arousal and Motivational General-Mastery. The motivational function of imagery can represent situations that arouse emotion as well as specific goals and goal-oriented behaviours. The cognitive function entails the mental rehearsal of skills and strategies of play; in this case dance technique. The wording of the SIQ was adjusted slightly by the research team to make it specific to the context of breakdance.

The results reveal a statistically significant ($p < .01$) and very large difference in the mean scores for the SIQ subscales when they are compared across the four experimental conditions. The effect size (_p2 = 0.18) indicates that 18% of the variation in imagery scores can be accounted for by the experimental manipulation. The mean scores for each of the SIQ subscales decrease significantly from Condition 1 through to Condition 4. The most effective condition is Condition 1 (Imagery with Hypnoke DRS speech and music) followed by Condition 2 (Imagery with Hypnoke DRS speech only), and Condition 3 (Imagery with speech and music but no Hypnoke DRS). Condition 4 (Imagery with speech only and no Hypnoke DRS), was the least effective even though this is the most common way in which imagery training and hypnotherapy is delivered (see Figure 1).

Use of the Hypnoke DRS equipment appears to significantly enhance the vividness of imagery and the best results were obtained when relaxing music was delivered as a backdrop to the imagery script. We conclude that use of the Hypnoke DRS with speech and music is highly likely to enhance the vividness of imagery and by extension, the quality of both mental skills training and hypnotherapy.

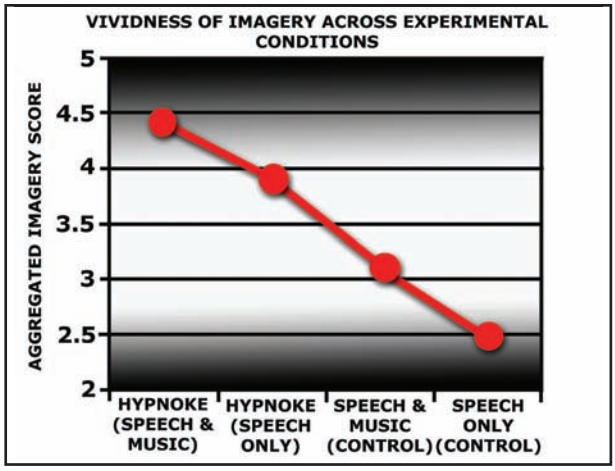

Figure 1. Vividness of imagery across experimental conditions.

Following extensive Peer review, the article, entitled: "Effects of Voice Enhancement Technology and Relaxing Music on the Frequency of Imagery among Dancers," has been accepted by the Journal of Dance Medicine and Science for publication.