

Testing the limits

The DANCE ON ENSEMBLE from a sports science perspective

Patrick Rump / GJUUM Movement Progressive

From the beginning, the DANCE ON concept included optimal sports science-based supervision consistent with the dancers' age and physical needs. The aim is to evaluate the knowledge gained scientifically and to make it available for everyone to use. Data, measurement values, statistics and results are not only interesting for dancers of all ages but also for teachers and trainers, teaching institutes and companies, as well as generally for anyone who wants to move or move more.

I had already worked closely with Christopher Roman earlier when he was a dancer with The Forsythe Company as well as its Associate Director. A sports scientist specialising in dance, I have been working with The Royal Ballet, English National Ballet, the Hofesh Shechter Company and many other leading dance companies in the area of training, prevention and rehabilitation since 2013, supported by my interdisciplinary team – the GJUUM Movement Progressive. Our work with classical and contemporary dance companies across Europe has given us a unique dataset for dancers. We believe in measurability, particularly in such a fleeting art form as dance: everything is measurable, from the effectiveness of daily training to the effects of adrenaline surges shortly before a performance. Together with my colleague Frank Appel, I formulated a few initial research questions specifically tailored to the DANCE ON ENSEMBLE:

What does it mean for professional dancers – both physically and psychologically – when they exceed the age of 40? Is it possible to measure dance experience? Should dancers be eligible for special medical care? Is it possible to remain 40 for 20 years? What are the social and health benefits of dance as a movement culture?

The dancers asked their own questions and formulated wishes and needs:

Working on their own limits and constraints, physical or psychological, is of great importance to them. Another concern is naturally the avoidance of injuries and painful habits. The wish behind this is to be able to work pain-free. The dancers worked with us to develop approaches for improving balance, agility, speed and flexibility. Even aspects of preparing for and following up performances were discussed and both mental and physical strategies considered. Optimal rest phases and behaviour *after* performances also had a role to play in this. Last but not least, the dancers were moved by the question of why they were still active in their profession while colleagues had often already given dance up.

We then worked with the dancers on the abovementioned tasks.

Heart-rate monitors were used to help compare data from training and rehearsal situations, performances and rest phases. Even the mentally intensive phases of group artistic work to

produce a new dance piece in the studio were taken into account. Our aim was to quantify the impacts of stress on physical capacity and to analyse them in the interaction with variables such as training intensity, the artistic process or the number of performances or tours.

Sports science can confirm what DANCE ON wants to show, namely that there is no physical reason why professional dancers over the age of 40 shouldn't continue to dance. Strength, stamina, agility, co-ordination and balance can be trained. Mental capacities such as stress management, self-assessment and efficiency increase rather than decrease with advancing age.



The Dance On Ensemble training with Patrick Rump

Patrick Rump is a sports scientist who has been advising choreographers and dance companies as the head of the interdisciplinary GJUUM team for ten years.