Research Paper

Name

Date

The fair use of lower-limb running prostheses: A Delphi study

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In 2011, Dyer, Noroozi, Sewell, and Redwood jointly conducted a research study which was entitled as “The fair use of lower-limb running prostheses: A Delphi study.” The research study was published in the journal entitled, “*Adapted Physical Activity Quarterly*.” The basic purpose of the research study was to explore the controversies around the use of lower-limb running prostheses and if it provided the users, who are the disabled athletes, with the unconventional power and ability which could improve their performance as compared to those participants of the disability sports who do not use the same technology. The researchers have highlighted in their study that for almost past six decades, the technological advancement in the field of disability sports has not only changed the lives of the athletes, but also the standards of the disability sports, where athletes are now making the new records with their improved performances. The researchers have presented the example of “spaghetti stringing” in tennis and “Polara golf ball" in golf, which did not just assist the disabled athletes, but played a crucial role in improving the performance of the athletes. In other words, it would not be wrong to say that the performance of the disabled athletes improved due to the advanced technology utilized in the equipment. The researchers have presented the notion that lower-limb running prosthesis is also playing a significant role in the improved performance of the disabled athletes, which is significant to the point that the disabled athletes can compete with the able-bodied athletes and win the game (Dyer, Noroozi, Sewell, & Redwood, 2011).

The researchers conducted a Delphi study which consisted of three rounds, in order to get the opinion of the experts in the field regarding the nature of the issue. Another important purpose of utilizing this research model was to explore the opinion of the experts regarding the developing knowledge in the field. The participants of the research study were the experts in the field of disability sports who were aware of the use of the modern technology in the field, as well as its impacts on the performance of the athletes. The hypothesis of the research study was that initially wood or fiberglass was utilized in the lower-limb running prosthesis, however, the modern technology has introduced the use of carbon fiber, which is much more effective and influences the positive performance of the athletes, which is not fair for those who are unable to utilize the most modern and recent technology in the field. The expected results of the study were that the modern technology being utilized in the field of disability sports is influencing the performance of the disabled athletes and causing drawback for those who are not able to use it. The results highlighted that technological advancement is impacting the performance of the disabled athletes and causing issues for those who are not able to access it. The research study drew the conclusion that the use of technology should be monitored to make the conditions workable for both the athletes and the stakeholder (Dyer et al., 2011).

There is a number of strengths of the research study and the most important out of them is that it has utilized the Delphi research method, which provides the opportunity to frame the results after analyzing the respondent reviews at least twice. Another important thing in this regard is that the opinions of the experts, who are quite familiar with the field and its processing, have been regarded for conducting the study. The research does advance the field and not merely replicate the existing research as it has focused on a new area which is lower-limb running prosthesis. It has brought the new knowledge that the carbon fiber technology used in the lower-limb running prosthesis is effective enough to enable the disabled athletes to compete with able-bodied athletes and depict astonishing performance. Another important strength of the research study is that the tables have been presented in a clear manner, which adds to the understanding of the readers.

The statistics utilized in the research study are also appropriate as they have been framed according to the data and opinions provided by the experts in the field of sports disability. Conclusions drawn in the research study are also appropriate and have been farmed according to the results of the Delphi research study. The researchers have highlighted that the all of the disabled athletes are not able to afford and access the most recent technological equipment in the field and thus competing with those who have utilized the carbon fiber technology in the lower-limb running prosthesis, will be the matter of unfairness towards them. It is so because they will not be competing with other athletes who are similar to them but with technology and due to it, they would never be able to depict the remarkable performance. Moreover, the research study has been composed in a very clear manner, which is free of grammatical or other errors. Apart from all these strengths, there is a weakness of the research study as well, which is that it is limited research which focuses only on a moment of time. The lower-limb running prosthesis would advance in the future and the focus of the study would not matter anymore. Moreover, the experts have also shared their opinion according to the present practice in the field (Dyer et al., 2011).

 The research conducted by Dyer at al. has highlighted one of the most pressing concerns of the disability sports which are the impact of the technology on the performance of the disabled athletes. The research has been conducted and presented in a very composed manner, which adds to the knowledge of the readers. The research study fits into the larger literature of the field of adapted physical activity in the way that it has highlighted one of the most important aspects of the field which is technological advancement and its impact on the disabled athletes.

Reference

Dyer, B., Noroozi, S., Sewell, P., & Redwood, S. (2011). The fair use of lower-limb running prostheses: A Delphi study. *Adapted Physical Activity Quarterly*, *28*(1), 16-26.