Does Early Sport Specialization Correlate with Future Success in Female Volleyball?

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Introduction

Smith et al. (2020) found that athletes who specialize in both sport and position do so to have the highest chance of playing at the collegiate level.

However, Latorre-Roman et al. (2018) concluded that specializing early in a single sport should be questioned when the peak performance is at the senior level.

This study aims to research the correlation between the future success of young adult female volleyball players and sport specialization in their youth.

Methods

Participants

48 female volleyball athletes aged 18-49 across 4 different teams, with a team representing each categorical success level (Figure 1).

Rec < CCAA < U-Sports < Team Canada

Figure 1: Success level rankings

Survey & Sample Questions

The survey collected discrete and continuous quantitative data adapted from the Sport Specialization Scale and the Sport Success Scale.

1. I would train for the majority of the year in volleyball.

Does not correspond	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly
1	2	3	4	5

2. I am a consistent starter for my team.

Does not correspond	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly
1	2	3	4	5

Results

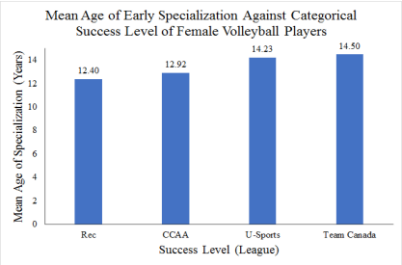

Figure 2: Average age of specialization for each success category

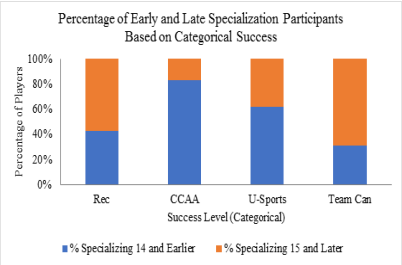

Figure 3: Distribution of early and late specializers by percentage

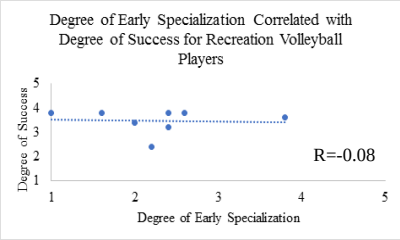

Figure 4: Degree of specialization and degree of success correlated for Rec

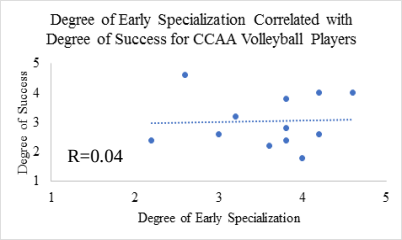

Figure 5: Degree of specialization and degree of success correlated for CCAA

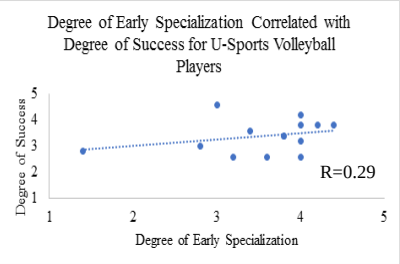

Figure 6: Degree of specialization and degree of success correlated for U-Sports

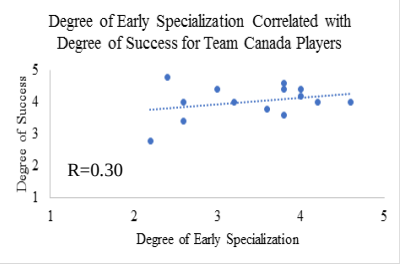

Figure 7: Degree of specialization and degree of success correlated for Team Canada

Discussion

The difference between the CCAA (12.9 years) and the Team Canada (14.5 years) average age of specialization was statistically significant. This suggests that waiting to specialize may help in reaching a greater future success level.

Comparing the number of early and late specializers per success level showed that early specialization is not a determinant factor for future success.

The degree of specialization did not correlate with the degree of specialization for Rec and CCAA, and U-Sports and Team Canada had an extremely low correlation. Suggesting that specializing to a low degree will still allow for future success.

Conclusion

Female volleyball athletes can specialize later and still reach high categorical success.

Early specialization is not a determinant factor in female volleyball for success.

Sport sampling should be encouraged, on average, until 14.5 years-old for female volleyball athletes.

Female volleyball athletes can specialize to an extremely low degree and still experiencefuture athletic success.

References

Latorre-Roman, P. A., Pinillos, F. G., & Robles, J. L. (2018). Early sport dropout: High performance in early years in young?vid=5&sid=6dc59492-ad1e-48fc-9607-04bb9b283b1f%40sdc-v-sessmgr03athletes is not related with later success. Abandono deportivo precoz: el alto rendimiento en edades tempranas no garantiza el exito deportivo en la edad adulta. *Retos: Nuevas Perspectivas de Educación Física, Deporte y Recreación*, *33*, 210-212. https://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer

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