## Abstract

The purpose of this qualitative study was to build knowledge about the characteristics, impact, and phenomenology of reclassification as an athletic strategy in the sport of American football. On the basis of 14 findings, numerous themes relevant to the practice of reclassification were identified. First, parents were found to be aware of the existence of the relative age effect, which was the rationale for the strategy of reclassification. Second, parents discussed reclassification as part of an overall strategy of academic competitiveness. The literature review of the study described reclassification in terms of empirical and theoretical knowledge about the relative age effect. The study's findings suggested that student-athletes and their parents will likely take advantage of the policy of reclassification to take better advantage of the relative age effect. Reclassification was discussed in terms of its relation to U.S. American educational policy, and appropriate recommendations were made to various stakeholders.



# Chapter 5. Conclusion

## Introduction

The previous chapter of the study contained a detailed presentation of the study's findings. The purposes of the fifth and concluding chapter of the study are to: (a) discuss the findings of the study in light of past theories and empirical findings; (b) acknowledge the limitations of the study; (c) present suggestions for future scholarship; (d) present suggestions for parents and other stakeholders; (e) discuss the implications of the findings for various audiences; and (f) offer a summative conclusion to the study. Each of these purposes has been addressed in a separate section of the chapter.

#### **Relation of the Findings to Theory and Empirical Findings**

Chapter two, the review of literature, contained an overview of several empirical findings that identified a relative age effect in sports (Bar-Eli, Plessner, & Raab, 2011; Bergeron et al., 2015; Cobley, Baker, Wattie, & McKenna, 2009; Guttenberg, 2014; Helsen, Van Winckel, & Williams, 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie, Schorer, & Baker, 2015). The relative age effect is such that even small periods of time (such as a single year) can confer a significant athletic advantage on young athletes (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). Thus, for example, the difference between an athlete of 15 and an athlete of 16 might be substantial. The theoretical foundations of these empirical findings are well-understood and can be summarized from three perspectives.

First, the typical human developmental process means that young athletes will experience rapid changes in the growth of lean body mass and height (Bar-Eli et al., 2011; Bergeron et al.,



2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). For example, puberty is likely to coincide with both marked increases in the cross sections of skeletal muscles and in height, and these physical challenges are likely to confer advantages in such athletic endeavors as sprinting, cardiovascular endurance, strength, and power. Second, for athletes of a younger age, accumulated practice reaps substantial benefits in the early stages of an athletic career; therefore, one of the advantages possessed by, for example, an athlete of 16 compared to an athlete of 15 is the accumulation of added training time.

Third, from the perspective of overall athletic development, there is an interaction between physical and cognitive maturation (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). From the perspective of a sport such as American football, which was the focus of the current study, athletes have several dimensions. In the physical dimension, athletes must possess attributes such as speed, strength, and height (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). In the cognitive dimension, athletes must be able to demonstrate their physical qualities on the field of play by knowing, and carrying out, what is required of them at any given moment (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). In the cognitive dimension, athletes must be able to demonstrate their physical qualities on the field of play by knowing, and carrying out, what is required of them at any given moment (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). Thus, a good football player, like a good player of any other sport, is one who possesses both purely physical attributes, and a drilled and refined cognitive awareness.



The findings of the study indicated that the relative age effect is uniformly understood by the parents of football players. The practice of reclassifying young football players—in other words, the practice of having young football players repeat the 8<sup>th</sup> grade in order to enter the world of high school football one year older than they would otherwise have been—is a deliberate attempt to take advantage of the relative age effect.

In terms of the relative age effect, the parents surveyed in this study can be classified into three categories. One group of parents—the largest group—believed in the relative age effect and wanted their children to be able to take advantage of it. Another group of parents—a slightly smaller one—believed in the relative age effect but did not want their children to take advantage of it, because of their belief that redshirting would come at the expense of academics. A third group of parents—the smallest one—believed in the relative age effect, but rejected the idea that their children needed to profit from it, as they already believed their offspring to be ahead of their peers in terms of physical qualities.

Thus, regardless of their position on reclassifying, each parent in the sample demonstrated explicit or implicit awareness of, and belief in, the relative age effect. In this context, the study was an important identifier of the relative age effect in American football in particular and in youth sports in general. One of the ways in which previous scholars have measured the existence of a relative age effect is to measure young athletes themselves—for example, in measures of cross-sectional muscle size or through subjective ranking of a player's performance (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). However, the existence of a relative age effect can also be measured through the beliefs of stakeholders in youth sports, and parents in particular. The near unanimous



popularity of the practice of redshirting, and a unanimous hardening of the belief that redshirting was a means of allowing young football players—particularly those that are trained and coached well—to become even better (in terms of both their physical attributes and accumulated experience), indicated the extent to which parents of football players believe in a relative age effect in this sport.

The findings of the study were not unexpected. The review of literature in the second chapter of the study had already established that the relative age effect appeared to exist in many sports, and that there were good theoretical reasons, based in both the physiological and training-related aspects of sports science, for explaining the existence of a relative age effect (Bar-Eli et al., 2011; Bergeron et al., 2015; Cobley et al., 2009; Guttenberg, 2014; Helsen et al., 2005; Hirose, 2009; Kannus et al., 1995; Rees et al., 2016; Schilling et al., 2002; Wattie et al., 2015). The findings of the study are complementary to existing findings of, as well as theories related to, the relative age effect. Then, a unique contribution of the study is—and has been from the start—to establish the degree of parents' belief in relative age effects in the sport of football.

Overall, the findings of this study should be interpreted in light of the theory of planned behavior. The study found that parents engaged in long-term planned behavior in order to take advantage of the relative age effect through the policy of reclassification. It implies that parents viewed the football careers of their sons not as a temporary hobby but as a serious athletic endeavor for which a long-term plan was necessary. The long-term planning of parents appears, in this respect, to have been influenced by social cognition related to the observation of other parents and their reclassification experiences, inputs from coaches, intrafamily consultation and other factors.



## **Summative Conclusion**

The purpose of this qualitative study was to examine the phenomenon of reclassification, or redshirting, in the context of American football. After a qualitative interview of 14 parents, the following findings emerged. First, in response to the first research question of the study (Is there academic growth while classifying?), it was found that academic growth was a minor theme in the findings. Most parents who participated in this study were not as concerned with academic growth as a motivator for the reclassification decision as they were with purely athletic reasons. Among the few parents or guardians whose comments were relevant to the first research question of the study, there was mixed evidence, with one parent believing that reclassification would impede academic development of her son by not exposing him to age-appropriate material and concepts, while another parent believed that reclassification could be a step towards academic mastery.

Next, in response to the second research question of the study (Is there athletic growth while reclassifying?), it was found that parents were in near unanimous consensus that there was, in fact, athletic growth while reclassifying. Athletic growth was identified as belonging to the domains of both physical development and accumulated skill. Parents were obviously aware that reclassifying would give their offspring an extra year to develop purely physiological qualities, such as height, weight, muscle mass, and so forth. In addition, parents were also aware that reclassification would allow their sons to build sport- and position-specific motor skills and accumulate specific expertise that would benefit them over the course of their football careers.

In response to the third research question of the study (Is reclassifying a long-term or a short-term strategy?), it was found that parents were in unanimous consensus that reclassifying was a long-term strategy. Several parents identified college scholarships as the eventual goal.



6

In response to the fourth research question of the study (Does the use of the reclassifying strategy affect athletes' motivations for athletic achievement?), it was found that no parents or guardians made direct references to motivation.

In general, the results of the study can be explained through the larger themes of social systems thinking and long-term competitive thinking, both of which are accommodated by the single explanatory category of planned behavior.



### References

- Andersen, R., & Ponti, M. (2014). Participatory pedagogy in an open educational course: Challenges and opportunities. *Distance Education*, *35*(2), 234-249.
- Atkinson, B. M. (2015). Teachers' practices: Responding to governmentality in accountability testing policy. *International Journal of Leadership in Education*, *18*(1), 34-60.
- Bar-Eli, M., Plessner, H., & Raab, M. (2011). Judgment, decision-making and success in sport. New York, NY: John Wiley & Sons.
- Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Côté, J., Emery, C. A., Faigenbaum A., Hall G., Kriemler S., Léglise, M., Malina R. M., Pensgaard A. M., Sanchez A., Soligard T., Sundgot-Borgen J., van Mechelen W., Weissensteiner J. R., & Engebretsen L. (2015). International Olympic Committee consensus statement on youth athletic development. *British Journal of Sports Medicine*, *49*(13), 843-851.
- Bernard, H. R., & Bernard, H. R. (2012). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Bondy, E., Ross, D. D., Gallingane, C., & Hambacher, E. (2007). Creating environments of success and resilience: Culturally responsive classroom management and more. *Urban Education*, 42(4), 326-348.
- Bonner, E. P. (2014). Investigating practices of highly successful mathematics teachers of traditionally underserved students. *Educational Studies in Mathematics*, *86*(3), 377-399.
- Bower, C. B. (2013). Social policy and the achievement gap: What do we know? Where should we head? *Education and Urban Society*, *45*(1), 3-36.
- Cassell, C., & Symon, G. (2004). *Essential guide to qualitative methods in organizational research*. Thousand Oaks, CA: Sage.



- Cobley, S., Baker, J., Wattie, N., & McKenna, J. (2009). Annual age-grouping and athlete development. *Sports Medicine*, *39*(3), 235-256.
- Crawford, R. (2017). Rethinking teaching and learning pedagogy for education in the twentyfirst century: Blended learning in music education. *Music Education Research*, 19(2), 195-213.
- Creswell, J. W. (2012). Educational research. Boston, MA: Pearson.
- Creswell, J. W. (2015). Research methods. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Davies, M. B., & Hughes, N. (2014). *Doing a successful research project: Using qualitative or quantitative methods*. New York, NY: Palgrave Macmillan.
- Duffy, M. E. (1987). Methodological triangulation: A vehicle for merging quantitative and qualitative research methods. *The Journal of Nursing Scholarship*, *19*(3), 130-133.
- Gilles, R. P. (2010). *The cooperative game theory of networks and hierarchies*. New York, NY: Springer.
- Given, L. (2008). *The Sage encyclopedia of qualitative research methods*. Thousand Oaks, CA: Sage.
- Griner, A. C., & Stewart, M. L. (2013). Addressing the achievement gap and disproportionality through the use of culturally responsive teaching practices. *Urban Education*, 48(4), 585-621.
- Grosskopf, S., Hayes, K. J., & Taylor, L. L. (2014). Efficiency in education: Research and implications. *Applied Economic Perspectives and Policy*, *36*(2), 175-210.



- Guttenberg, T. J. (2014). Unnecessary roughness: How California Assembly Bill 1309 may leave some injured professional athletes without a workers compensation remedy. *University of La Verne Law Review, 36*, 221-234.
- Helsen, W. F., Van Winckel, J., & Williams, A. M. (2005). The relative age effect in youth soccer across Europe. *Journal of Sports Sciences*, *23*(6), 629-636.
- Hirose, N. (2009). Relationships among birth-month distribution, skeletal age and anthropometric characteristics in adolescent elite soccer players. *Journal of Sports Sciences, 27*(11), 1159-1166.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, *18*(1), 3-20.
- Jeynes, W. (2014). School choice and the achievement gap. *Education and Urban Society*, 46(2), 163-180.
- Kabalak, A., Smirnova, E., & Jost, J. (2015). Non-cooperative game theory in biology and cooperative reasoning in humans. *Theory in Biosciences*, *134*(1-2), 17-46.
- Kohli, R., & Park, H. (1989). A cooperative game theory model of quantity discounts. *Management Science*, *35*(6), 693-707.
- Machin, S. (2014). Economics of education research and its role in the making of education policy. *Fiscal Studies*, *35*(1), 1-18.
- Rees, T., Hardy, L., Güllich, A., Abernethy, B., Côté, J., Woodman, T., Montgomery, H., Laing,
  S., & Warr, C. (2016). The great British medalists project: A review of current
  knowledge on the development of the world's best sporting talent. *Sports Medicine*,
  46(8), 1041-1058.



- Schilling, B. K., Stone, M. H., O'bryant, H. S., Fry, A. C., Coglianese, R. H., & Pierce, K. C. (2002). Snatch technique of collegiate national level weightlifters. *The Journal of Strength & Conditioning Research*, 16(4), 551-555.
- Shevalier, R., & McKenzie, B. A. (2012). Culturally responsive teaching as an ethics- and carebased approach to urban education. *Urban Education*, *47*(6), 1086-1105.
- Stacer, M. J., & Perrucci, R. (2013). Parental involvement with children at school, home, and community. *Journal of Family and Economic Issues*, *34*(3), 340-354.
- Stevenson, I. (2013). Does technology have an impact on learning? A Fuzzy Set Analysis of historical data on the role of digital repertoires in shaping the outcomes of classroom pedagogy. *Computers & Education*, 69, 148-158.
- Strunk, K. O., Marsh, J. A., Hashim, A. K., Bush-Mecenas, S., & Weinstein, T. (2016). The impact of turnaround reform on student outcomes: Evidence and insights from the Los Angeles Unified School District. *Education Finance and Policy*, 3(2), 21-30.
- Tsay, M., & Brady, M. (2012). A case study of cooperative learning and communication pedagogy: Does working in teams make a difference? *Journal of the Scholarship of Teaching and Learning*, 10(2), 78-89.
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide:
   Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37(1), 21-54.
- Von Neumann, J., & Morgenstern, O. (2007). *Theory of games and economic behavior*. Princeton, NJ: Princeton University Press.
- Wattie, N., Schorer, J., & Baker, J. (2015). The relative age effect in sport: A developmental systems model. *Sports Medicine*, *45*(1), 83-94.

