



Exploring Developmental Factors for Overcoming Relative Age Effects in Ice Hockey



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Relative Age Effects in sport

- Relative Age Effects (RAEs) are developmental advantages experienced by those born in the initial months of the year relative to an age-defined cut-off date (Barnsley et al., 1985).

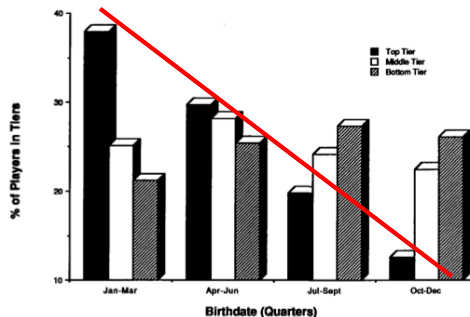
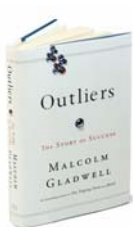
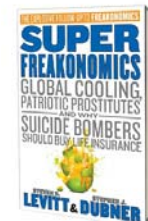


FIGURE 2
 Relationship between birthdates and hockey tier.



Relative Age Effects in education

- Relatively younger students tend to experience:

Lower

- **Grades** (Bedard & Dhuey, 2006; Cobley et al., 2009; Smith, 2009)
- **Attendance rates** (Cobley et al., 2009)
- **Selection to gifted programs** (Cobley et al., 2009)
- **Leadership roles & experience** (Dhuey & Lipscomb, 2008)
- **Likelihood of pursuing a university education** (Bedard & Dhuey, 2006)
- **Self-esteem** (Thompson et al., 2004)

Higher

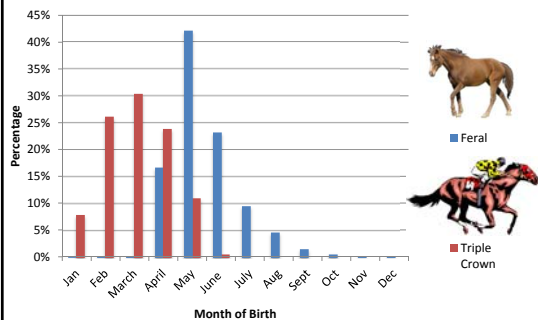
- **Need for learning support** (Cobley et al., 2009)
- **(Mis)Diagnosis of ADHD** (Elder, 2010; Evans et al., 2010)
- **Suicide rates** (Thompson et al., 1999)

Source: Alphonso (2017)

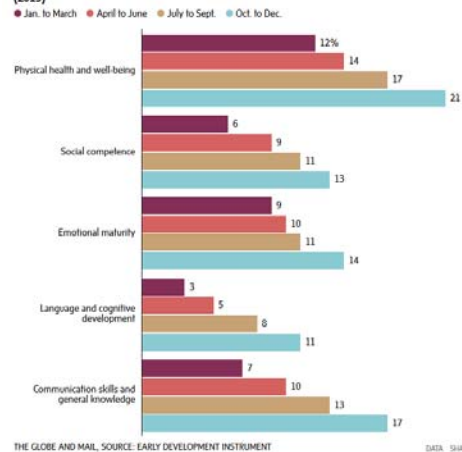
Relative Age Effects in education



Toronto District School Board



Percentage of TDSB senior kindergartners who scored below the 10th percentile of the provincial distribution on all Early Development Instrument domains, by month of birth (2015)



Source: Alphonso (2017)

Our Study...

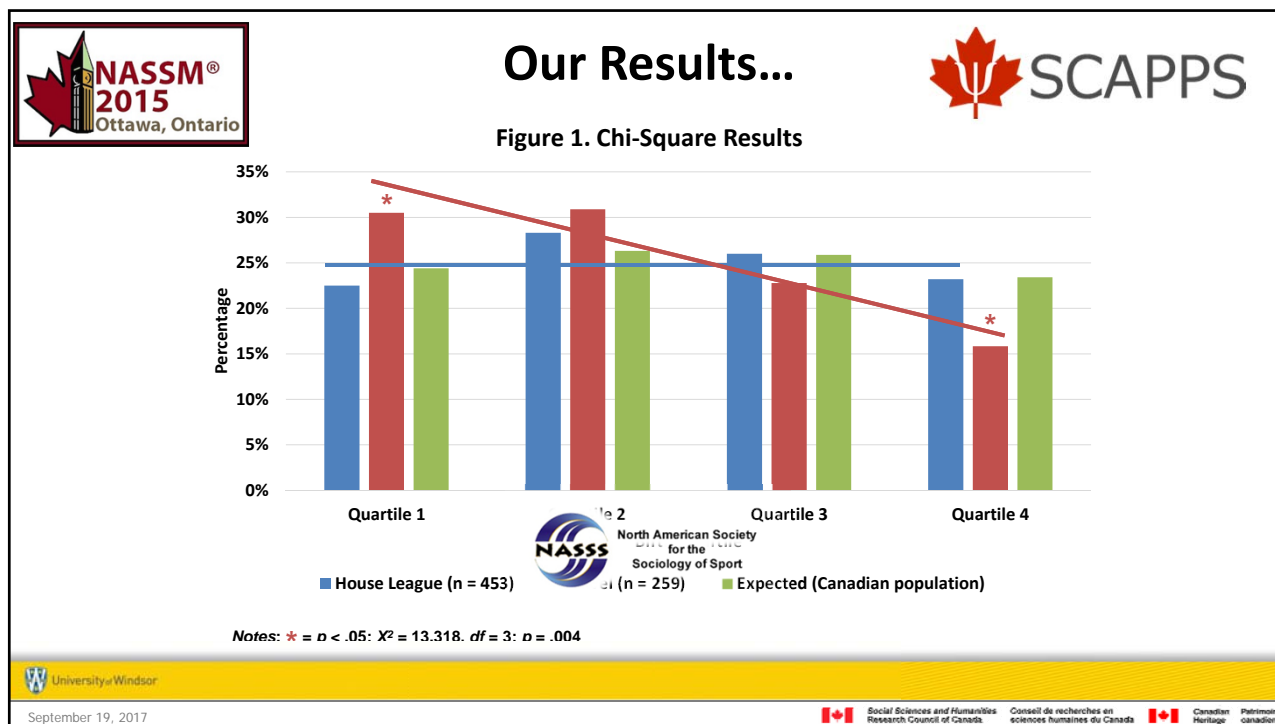
- Investigated the accumulated advantage of RAEs among Canadian male adolescent ice hockey players at different competitive levels in hopes of:
 - a) assessing the leadership behaviours and other developmental outcomes among hockey players within the context of RAEs, and;
 - b) comparing the attributes of relatively younger and older hockey players.



Our Methods...

- Surveyed male ice hockey players from across Ontario:
 - Demographics, including date of birth
 - Leadership Scale for Sport (LSS) (Chelladurai & Saleh, 1980)
 - Youth Experience Survey for Sport (YES-S) (MacDonald et al., 2012)
- Data analyses:
 - Athletes grouped into quartiles (i.e., Jan-Mar = Q1; Apr-Jun = Q2...) and competitive levels (i.e., travel vs. house league)
 - Chi-square goodness of fit tests to determine evidence of RAEs
 - MANOVA tests to assess differences across quartiles on the LSS and YES-S





Discussion

- Leadership behaviours and other developmental outcomes were not influenced by relative age or competitive level
- These null results are worthy of celebration!
- Future research:











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