

Why some 10-18 year-old volleyball players did not renew their membership after 2019-2020 season?

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Introduction

Dropout – Why?

An important issue in sport



An important topic in sport science

A project of the federation aiming to struggle against drop-out in young players

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Dropout – Why?

A project of the Wallonia-Brussels Volleyball Federation aiming to struggle drop-out in young players



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Dropout - Definition

- Lack of conceptual definition underlined by Sarrazin and Guillet (2001)
- The definition accepted in this study:

'Dropout' describes participants who have discontinued from a sport across a given assessment time-period, or those who have not re-registered to participate over one or more successive seasons or annual periods'

Balish et al. (2014), Crane & Temple (2015)

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Dropout - Analysis

- Several models
 - ▶ Model of Youth Sport Withdrawal (cost-benefit)(Gould & Weinberg, 2003)
 - ▶ Sport Commitment Model (Scanlan et al., 1993)
 - ▶ Expectancy-Value Model (Eccles et al., 2000)
 - ▶ Self Determination Theory (Decy & Ryan, 2000)
 - ▶ Achievement Goal Theory (Duda, 2001)
 - ▶ Leadership (Chelladurai, 1993)

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Dropout – What the literature says

- 90 factors were extrapolated as being tested for association with youth sport dropout

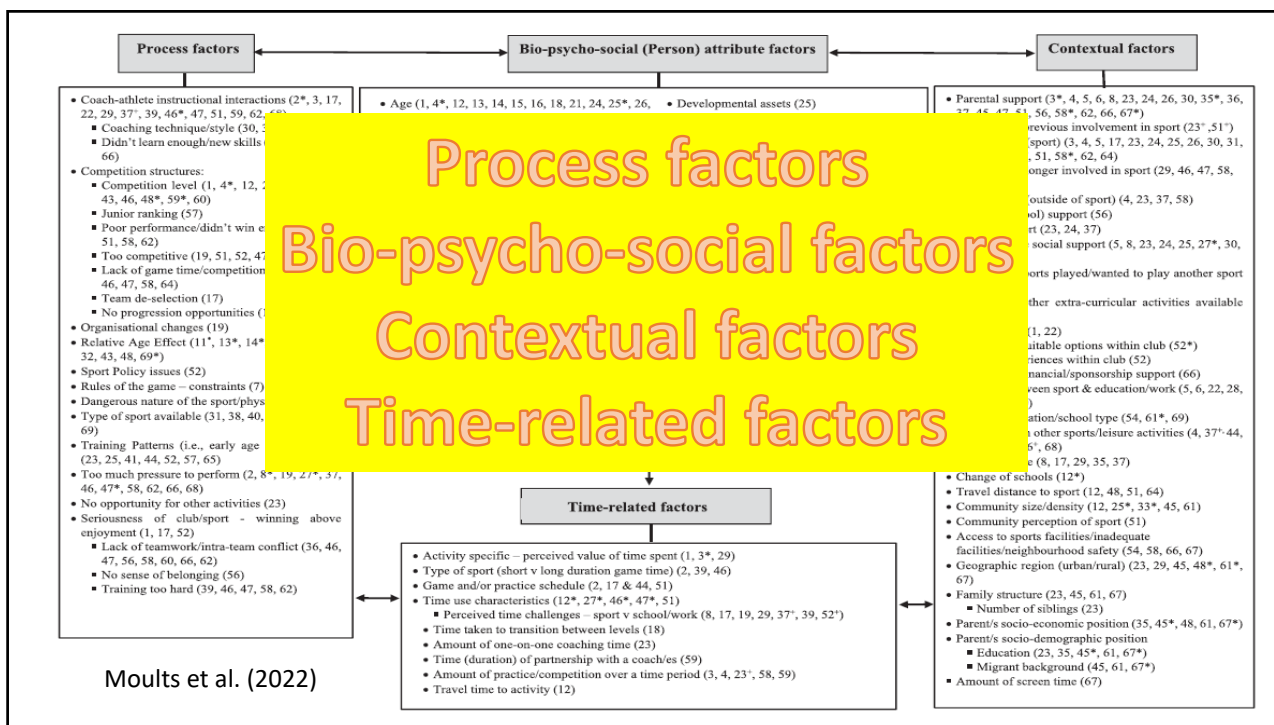
INTERNATIONAL REVIEW OF SPORT AND EXERCISE PSYCHOLOGY (2022)
<https://doi.org/10.1080/1750984X.2021.2012817>



Youth sport dropout according to the Process-Person-Context-Time model: a systematic review

Kylie Moulds , Sheila Galloway, Shaun Abbott and Stephen P. Cobley

The University of Sydney, Faculty of Medicine and Health, Sydney Australia



- Process
 - ▶ Relative age (n = 6)
 - ▶ Competition structure (n = 4)
 - ▶ Coach-athlete instructional interactions (n = 3)
- Person
 - ▶ Sex (n = 8)
 - ▶ Competence perception (n = 7)
 - ▶ Age-group (n = 5)
- Contextual
 - ▶ Parental support (n = 4)
 - ▶ Conflicts with other sports/leisure activities (n = 3)
- Time
 - ▶ Time use related characteristics (n = 5)



Moults et al. (2022)

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Dropout – What the literature says

- Constructs related to motivation as well as sport experience had strongest relationship with dropout in **team sport**



Contents lists available at ScienceDirect

Psychology of Sport & Exercise (2022)

journal homepage: www.elsevier.com/locate/psychsport

Review

Drop-out from team sport among adolescents: A systematic review and meta-analysis of prospective studies

Jenny Back^{a,*}, Urban Johnson^a, Petra Svedberg^a, Alan McCall^b, Andreas Ivarsson^a

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^b School of Applied Sciences, Edinburgh Napier University, Edinburgh, UK



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Dropout – What the literature says

- The coach-created mastery climate was negatively associated with dropout – across different sporting levels of Danish **volleyball players**

EUROPEAN JOURNAL OF SPORT SCIENCE
2023, VOL. 23, NO. 3, 393–403
<https://doi.org/10.1080/17461391.2022.2041100>

(2023)

 **Routledge**
Taylor & Francis Group

 Check for updates

The associations between motivational climate, basic psychological needs and dropout in volleyball – A comparison across competitive levels

Peter Elsborg ^{a,b}, Paul Appleton^{c,d}, Johan M. Wikman^e and Glen Nielsen ^f

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Drop-out – What the literature says

- 204 **Flemish volleyball players** (12-18), online survey, 43 items

REDENEN VAN **DROP-OUT** IN DE SPORT. **VOLLEYBAL ALS CASE STUDY.** (2015)



RAF CAMBRÉ,
VRIJE UNIVERSITEIT BRUSSEL
Master in de lichamelijke opvoeding



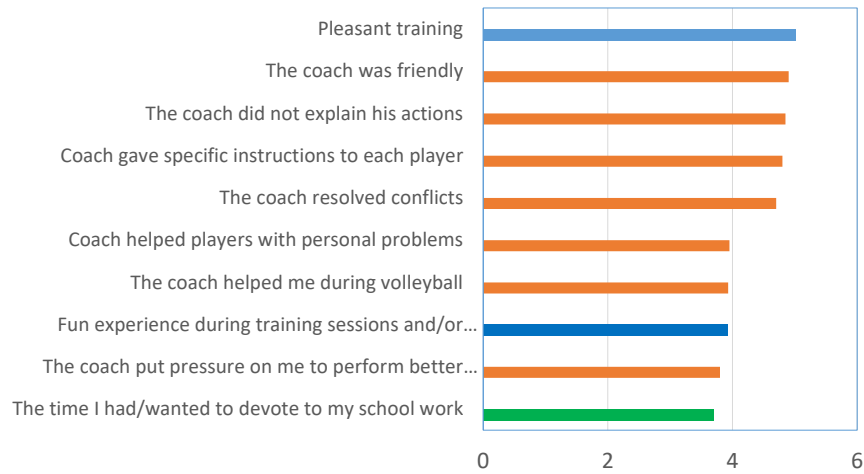
PROF. DR. VEERLE DE BOSSCHER
Vrije Universiteit Brussel
Sportbeleid en -management
en Universiteit Utrecht



SWA DEPELCHIN
Vlaamse Volleybalbond

From Cambré et al. (2015)

- 10 most important reasons for dropout in young Flemish volleyball players



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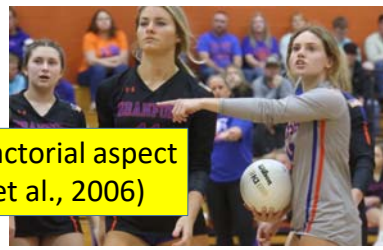
Goals of the study

Questions

- How widespread is the dropout phenomenon among young FVWB players?
- What are the reasons for dropout among young volleyball players?
- Is it possible to identify player profiles affected by dropout?



Considering the multifactorial aspect of dropout (Lefèvre et al., 2006)



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Methods

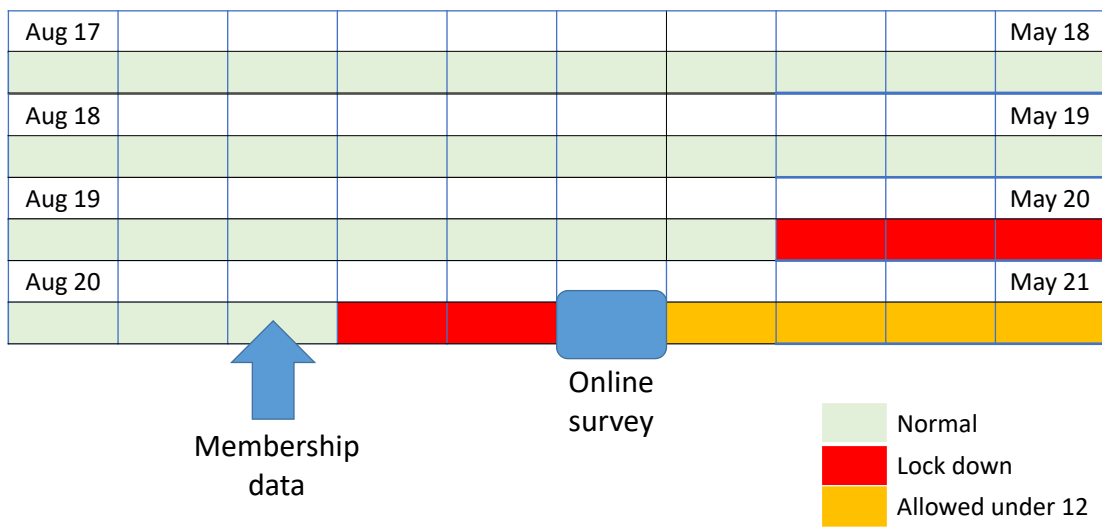
Context

- Collaboration of the Wallonia-Brussels Volleyball Federation
 - ▶ Membership data
 - ▶ Four seasons: 2017-2018 to 2020-2021



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Seasons



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Online questionnaire

- Players aged 9 to 18 who were registered for the 2019-2020 season but not for the 2020-2021 season
- List as of 2020/10/15
- Contact by email or SMS under the umbrella of the VB federation
- January 2021

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Online questionnaire

- Survey Monkey
- 3 parts
 - ▶ General information: birthdate, gender, number of seasons, last club, decision maker (child, parents, both)
 - ▶ Importance of drop out reasons: 13 items (4-Point Lickert scales)
 - ▶ Taking up volleyball again: Do you think you could take up volleyball again (yes/no)? If so, what would encourage you to sign up again?
- 5 to 10 minutes

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Online questionnaire – Validation of the items

	Themes of the questionnaire (reasons)	References identifying these factors of drop out
1	Organizational issues (schedule, route...)	Alfermann (2000); Butcher, Lindner, & Johns (2002); Enoksen (2011); Cambré et al. (2015); Witt & Dangi (2018)
2	A feeling of lack of autonomy (not enough choice left by the coach)	Self-determination theory (Decy & Ryan, 2000; Sarrazin, Cheval & Isoard-Gautheur, 2016) -
3	A feeling of being too comfortable with exercises or matches	"Motivation depends on autonomy, feeling of competence and relationship with other participants".
4	A feeling of too much difficulty with exercises or matches	Basic items of drop out (Seefeldt & Ewing, 1996; Butcher et al., 2002; Mageau & Vallerand, 2003; Enoksen, 2011; Cambré et al., 2015; Hassan et al. 2017; Witt & Dangi, 2018; Combeau & Debanne, 2020)
5	Relationships with the coach	
6	Relationships with the teammates	«Athlete burnout in competitive sport» (Smith, Pacewicz & Raedeke, 2019)
7	A lack of enjoyment	Butcher, et al.(2002); Allender et al. (2006); Sabo et al. (2008); Cambré et al. (2015)
8	An injury or illness	Alfermann (2000); Edouard et al. (2010); Enoksen (2011); Witt & Dangi (2018)
9	Other activity	Carpenter et al. (1993), Boiché & Sarrazin (2009)
10	Financial issues	Witt & Dangi (2018); Schlesinger et al. (2018)
11	Difficulties at school	Enoksen (2011); Hassan et al. (2017)
12	The rules of the sport and the way volleyball is played does not suit you	Anshel & Freedson (1991); Butcher et al. (2002); Cambré et al. (2015)
13	COVID-19 crisis	Impact of COVID-19 on sport habits (Do et al., 2022; Sport England, 2022; Aubert. et al. 2023)

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Data analysis

- Model-based clustering was applied (Fraley & Raftery, 2002; Fraley et al., 2012)
- ClustMD package was applied for clustering the dataset using EM algorithm by statistical software R studio
- On qualitative and quantitative variables, the chi-square test and Mann-Whitney test were performed on 0.05 level of significance



Results and discussion

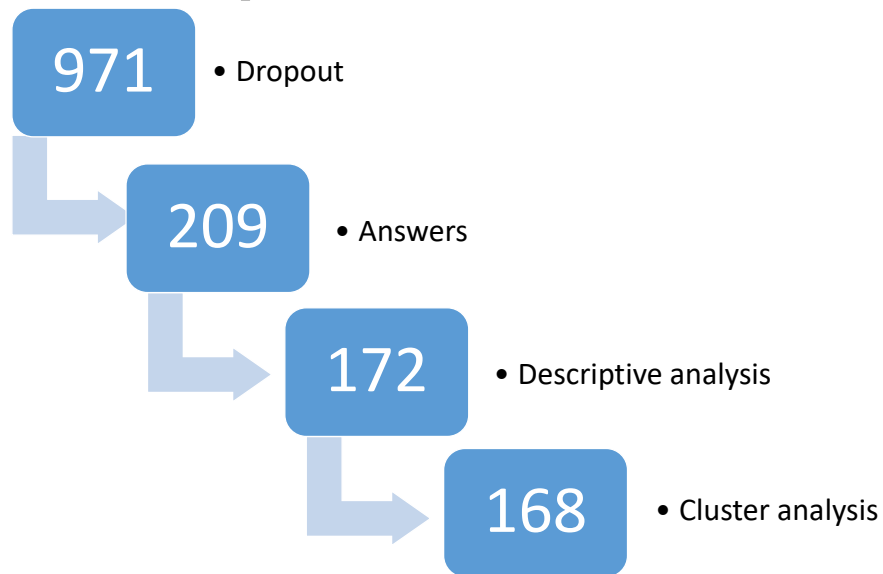
Evolution of the members

Season	2017-2018	2018-2019	2019-2020	2020-2021
Membership (n)	10275	11529	11418	10742
9-18 year-old (n/%)	4739 (46.1%)	5208 (45.2%)	5142 (45.0%)	4895 (45.6%)
9-18 year-old boys	1262 (26.6%)	1396 (26.8%)	1368 (26.6%)	1270 (25.9%)
9-18 year-old girls	3477 (73.4%)	3812 (73.2%)	3774 (73.4%)	3625 (74.1%)
9-18 year-old drop-out (n/%)	/	841(17.8%)	1124 (21.6%)	971 (18.8%)
9-18 year-old boys drop-out	/	211 (16.7%)	276 (19.8%)	269 (19,7%)
9-18 year-old girls drop-out	/	630 (18.1%)	848 (22.3%)	702 (18.6%)

- Relatively stable number of members (little COVID-19 effect) *+/-4x less than in Flanders*
- +/- 45% of 9-18 year-old players (even after COVID-19)
- Girls represent 3 out of 4 young players *slightly less boys than in Flanders*
- Little difference of dropout rate between boys and girls : 1 out of 5 to 6 players leave each season *much more boys than girls in Flanders*

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Reasons of dropout – Available data

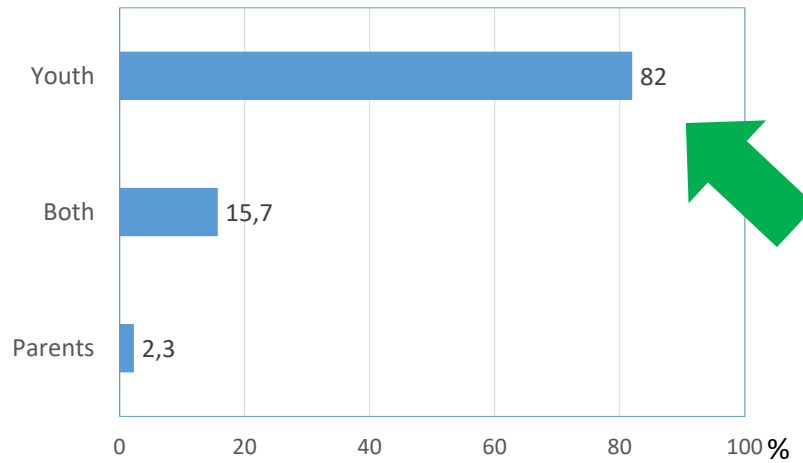


Reasons of dropout – Descriptive analysis

Variable	Median (IQR) / Percentage (Frequency)
Age (Year)	15 (14 - 18)
Sex (Female)	74.4% (128)
Playing volleyball duration (Year)	3 (2 - 5)
Number of club members	114 (84 - 155)
Young people in the club (%)	57.7 (47.2 – 63.6)

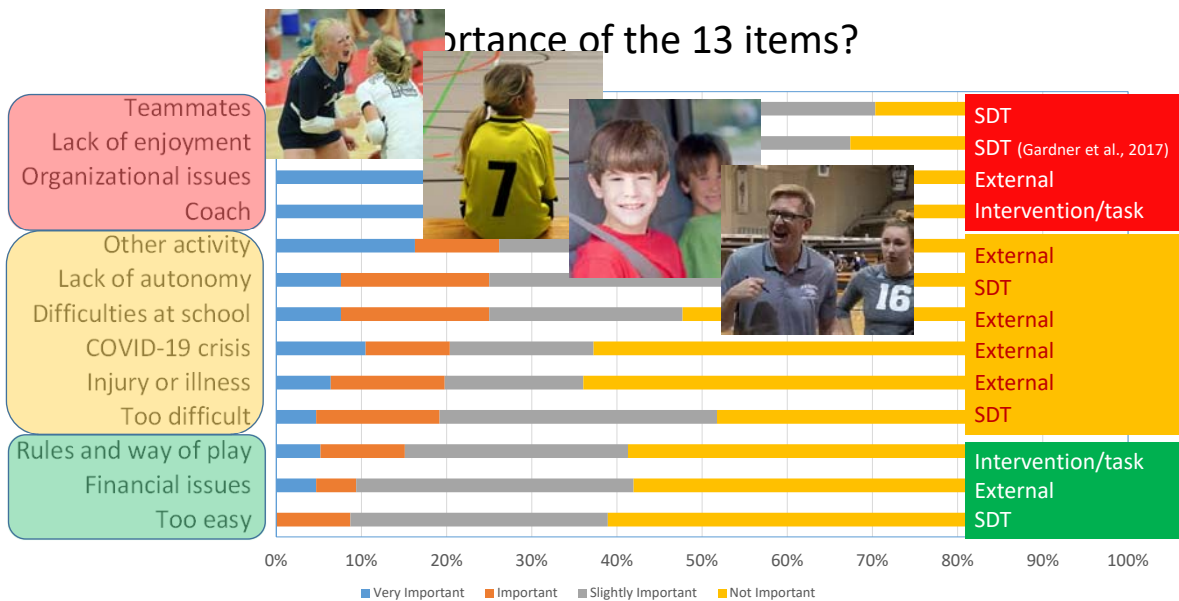
Reasons of dropout – Descriptive analysis

Who took the decision?



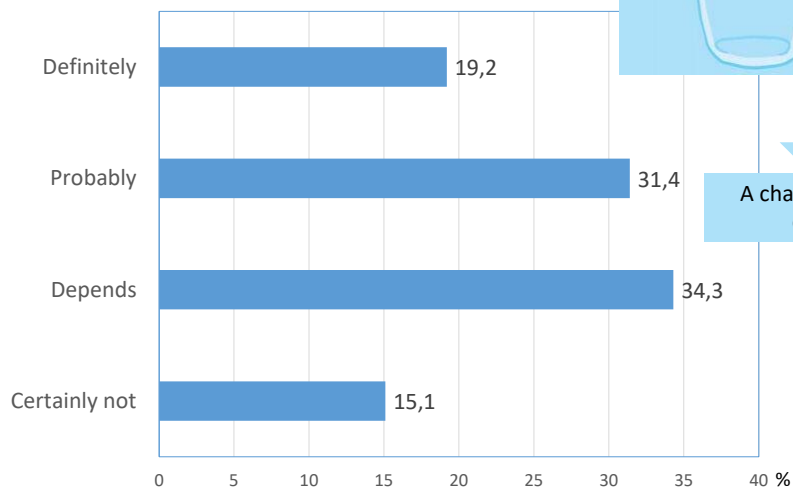
Reasons of dropout – Descriptive analysis

Importance of the 13 items?



Results – Descriptive analysis

Re-registration?



Reasons of dropout – Cluster analysis

Two clusters Differences ($p \leq .002$)

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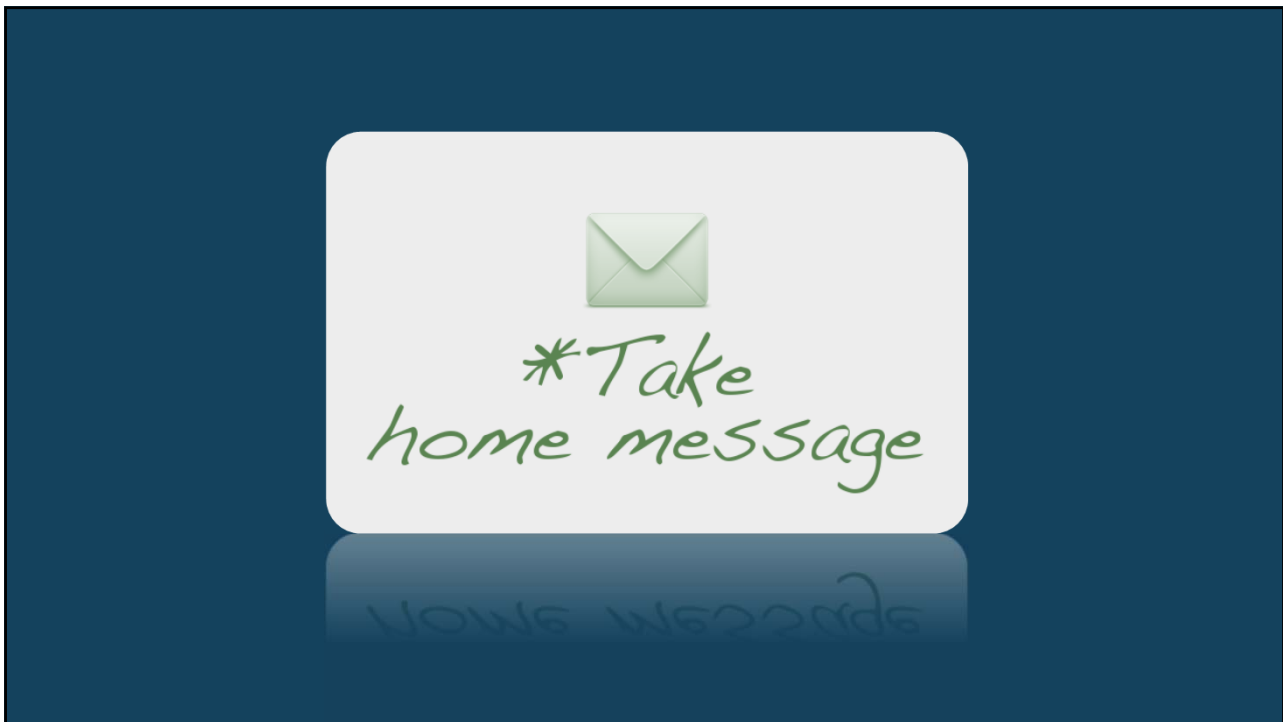
- Older (17)
- Longer VB experience (4)
- Organizational issues

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- Younger (15)
- Shorter VB experience (2)
- Rules, Autonomy, Teammates, Financial issues, Injury or illness, Fun, Too difficult, Too easy, Coach, Other activities

No differences

- Club's location
- Gender
- Number of club members
- Percentage of young people in the club
- Decision maker
- School issues
- COVID-19



Five key messages



Dropout rates are relatively stable from season to season and concern girls as well as boys

Five key messages



The young players are mainly involved in the decision to not re-register for a new season

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Five key messages



Data confirmed the key role of lack of enjoyment, poor interpersonal relationships and organizational issues (4 to 5 players/10)

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Five key messages



Older and more experienced players are less influenced by usual factors and abandon when facing organizational issues

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Five key messages for PETE



To fight against dropout, FVWB could focus on coaches education to promote a positive motivational climate, mainly with beginners

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In that perspective...

Priority #1

Priority #2

Priority #3

PAMIA principles are highly recommended

Cloes (2022)

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The PAMIA principles

Cloes (2017)

- P** Pleasure - Foster enjoyment by giving meaningfulness and positive climate
- A** Achievement – Foster self-esteem and learning by guaranteeing ‘delicious uncertainty’
- M** Movement – Foster activity by proposing situations that lead students to expand energy
- I** Interaction – Foster contact with others and with the environment
- A** Autonomy – Foster learners’ opportunities to take decisions

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Images

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