Appendix 1: The questionnaire self-completed online or in person by interview (depending on the school) used to survey strength and conditioning practices of rugby coaches at 28 schools among the top 100 rugby schools in South Africa and 15 no-fee paying public schools in the Eastern Cape Province of South Africa (questionnaire designed using www.kwiksurvey.com)
### Section 1 - General

#### Background Information

**1 Name:**

**Surname:**

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**2 Age:**

**Sex:**

- [ ] Male
- [ ] Female

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**3 What school are you currently working at?**

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**4 What category of school does your institution fall under:**

- [ ] Independent Private School
- [ ] Governing body public school
- [ ] Fully Funded public school

---

**5 What is your position at this institution?**

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**6 How long have you occupied this position?**

---

**7 What qualifications do you have (degrees, diplomas, strength and conditioning qualifications etc…)?**

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**8 What experience do you have with strength and conditioning and/or coaching? And for how long respectively?**

---
Physical Testing

9. Do you test your players' physical capabilities and fitness? If no please skip to the next page on flexibility development
   - [ ] Yes
   - [ ] No

10. What fitness parameters are tested and which tests are used for each (e.g. Agility: Illinois Agility Test. Speed: 100m sprint. Body composition: Skinfolds... etc)

11. When are the tests implemented?
   - [ ] Pre-season
   - [ ] In-season
   - [ ] Off-season
   - Other (Please Specify)
### Flexibility Development

12. Do you require your players to partake in flexibility training? If no, please skip to the next page on speed development

- [ ] Yes
- [ ] No

13. What type of flexibility practices do they perform?

- [ ] Static
- [ ] Active
- [ ] Stretch resistance bands
- [ ] Dynamic
- [ ] Proprioceptive neuromuscular facilitation
- [ ] Passive
- [ ] Yoga
- [ ] Band traction
- [ ] Foam rolling
- [ ] Other (Please Specify)

14. When do they perform these stretches?

- [ ] Before practice
- [ ] During practice
- [ ] After practice
- [ ] On their own
- [ ] Before a match
- [ ] After a match
- [ ] Before a workout
- [ ] After a workout
- [ ] Other (Please Specify)

15. Is any specific equipment used to help with flexibility training?

- [ ] Stretch resistance bands
- [ ] Foam roller
- [ ] Other (Please Specify)

16. What is the duration of a typical flexibility/stretching session?

- [ ] 0-5 minutes
- [ ] 5-10 minutes
- [ ] 10-15 minutes
- [ ] 15-20 minutes
- [ ] 20+ minutes
Speed development

17. Do you require your players to partake in speed training? If no please skip to the next page on agility development.
   ☐ Yes  ☐ No

18. What speed development drills are used?
   ☐ Unresisted (free) sprinting  ☐ Resisted sprinting
   ☐ Sprint mechanics and technique  ☐ Improving max strength
   ☐ Other (Please Specify)  ☐ Plyometrics
   ☐ Olympic lifting

19. What equipment is used for speed training (if any)?
   .................................................................................................................................

20. How often are your players subjected to speed training?
   ☐ More than once per week  ☐ Weekly  ☐ Monthly
   ☐ Other (Please Specify)
### Agility Development

21. Do you require your players to partake in agility training? If no please skip to the next page on pyrometrics.

- [ ] Yes
- [ ] No

22. What drills are used for agility development?

23. What equipment is used for agility training?

- [ ] Speed ladder
- [ ] Agility poles
- [ ] Hurdles
- [ ] Resistance bands
- [ ] Other (Please Specify):

24. When is training mainly implemented?

- [ ] Pre-season
- [ ] In-season
- [ ] Off-season
- [ ] Other (Please Specify):

25. On average, how often are your players subjected to agility training?

- [ ] More than once per week
- [ ] Weekly
- [ ] Monthly
- [ ] Other (Please Specify)
## Plyometric training

26. Do you require players to partake in plyometric training? If no please skip to the next page on strength training.

- [ ] Yes
- [ ] No

27. What drills are used for plyometrics training?

- 

28. What equipment is used for plyometric training?

- 

29. When is plyometric training mainly implemented?

- [ ] Pre-season
- [ ] In-season
- [ ] Off season
- Other (Please Specify)

- 

30. On average, how often are your players subjected to plyometric training?

- [ ] More than once per week
- [ ] Weekly
- [ ] Monthly
- Other (Please Specify)
Strength/ resistance training

31. Do you require your players to partake in resistance training? If no please skip to the next page on rugby specific questions.
   
   □ Yes □ No

32. What type of training is implemented?

33. When is strength/resistance training implemented?
   
   □ Pre-season □ In-season □ Off season
   Other (Please Specify)

34. What equipment is used for this type of training (if any)? (e.g., machines, dumbbells etc.)

35. On average, how often are your players subjected to resistance training?
   
   □ Once a week □ Twice a week □ 3 times a week
   □ 4 times a week □ 5+ times per week
   Other (Please Specify)
Section 2: Rugby specific

36 Does your program consist of several smaller timeframes in which to achieve certain physical parameters? (periodization)

☐ Yes  ☐ No

37 If yes, please provide insight into the periods and their respective durations (e.g. strength development - 4 weeks)

__________________________________________________________________________

__________________________________________________________________________

38 Do you implement different conditioning practices for different positions on the playing field?

☐ Yes  ☐ No

39 If yes, what is different for each specific position?

Front Row:

__________________________________________________________________________

__________________________________________________________________________

Second Row:

__________________________________________________________________________

__________________________________________________________________________

Back Row:

__________________________________________________________________________

__________________________________________________________________________

Half Backs:

__________________________________________________________________________

__________________________________________________________________________

Center:

__________________________________________________________________________

__________________________________________________________________________

Outside backs

__________________________________________________________________________

__________________________________________________________________________

40 Do you monitor the players' workloads?

☐ Yes  ☐ No
41 If yes, how?

Front Row:

Second Row:

Back Row:

Half Backs:

Centers:

Outside Backs:

42 Are there any unique aspects to your strength and conditioning program specific to rugby as opposed to other sports (e.g. balance, core stability, specificity..)

43 Please outline the structure of a typical training session. ie: what would a session look like in a) pre-season, b) In-Season and c) Off-season.

(Example: session is typically X hours and consists of the following, this is done X days a week) (Ex: Warm up 10 mins, speed work for forwards 15 mins, functional strength work for forwards 20 mins, endurance work for the squad 25 mins, ball handling 15 mins, cool down 5 mins, etc.).

This question is to establish how specific position work may/may not be incorporated into team training

   a) Pre-season

   b) In-season

   c) Off-season
### Section 3 - Injuries/injury prevention

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you keep record of injured players or specific injuries?</td>
<td>Yes</td>
</tr>
<tr>
<td>If yes, which is the most commonly injured position?</td>
<td>Front Row</td>
</tr>
<tr>
<td>What are the most common areas of injury for the front row?</td>
<td>Head</td>
</tr>
<tr>
<td>What are the most common areas of injury for the second row?</td>
<td>Head</td>
</tr>
<tr>
<td>What are the most common areas of injury for the back row?</td>
<td>Head</td>
</tr>
<tr>
<td>What are the most common areas of injury for the half backs?</td>
<td>Head</td>
</tr>
</tbody>
</table>
50 What are the most common areas of injury for the centers?

☐ Head
☐ Lower back
☐ Quadricep
☐ Other (Please Specify)  

☐ Neck & Spine
☐ Groin
☐ Calves
☐ Ankle

51 What are the most common areas of injury for the outside backs?

☐ Head
☐ Lower back
☐ Quadricep
☐ Other (Please Specify)  

☐ Neck & Spine
☐ Groin
☐ Calves
☐ Ankle

52 Do you implement injury prevention exercises?

☐ Yes
☐ No

53 If yes, what exercises are implemented?


54 What part of the season are these exercises implemented?

☐ Pre-Season
☐ In-Season
☐ Off-Season

☐ Other (Please Specify)

55 Are different exercises implemented for different playing positions?

☐ Yes
☐ No
If yes, what is different for each position?

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Row</td>
<td></td>
</tr>
<tr>
<td>Second Row</td>
<td></td>
</tr>
<tr>
<td>Back Row</td>
<td></td>
</tr>
<tr>
<td>Half backs</td>
<td></td>
</tr>
<tr>
<td>Centers</td>
<td></td>
</tr>
<tr>
<td>Outside Backs</td>
<td></td>
</tr>
</tbody>
</table>

Section 4 - Comments

If any, how would you change your current strength and conditioning program?

- [ ] Specific training changes
- [ ] Facility improvement
- [ ] Personal development
- [ ] Staff improvement
- [ ] I would not change anything
- [ ] Other (Please Specify)

If you feel that there are areas of interest that should be taken into account or considered, please provide some information in the area below:

[Blank Space]