

A-LEVEL
Physical education

7582/2 : Factors affecting optimal performance in physical activity and sport Report on the Examination

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General Comments

This is the first normal summer exam series since 2019. While we reference this as a normal series there were clear and obvious differences in that students were provided with advance information regarding some of the topics which would be examined.

The mean mark for this paper was approx. 2 marks lower than the 2019 paper in the region of 44 marks. There was a clear difference in the difficulty posed by each section. Section A had a mean mark of approximately 17 while Section B was all the way down at around 12.5. Section C sat in the middle around 14.8.

Some of this difference may be accounted for by the fact Section B had the lowest mean mark for a 15-mark question at 4. This compared to 7 and 6 in Section A and C respectively. In addition, question 11 was also by some way the hardest question on the paper with only 5% of the available marks awarded.

With Section A being the highest scoring section it should be noted that there is a time pressure in the exams for this specification and, as stated in previous reports, students should be aware that time spent writing excessive amounts for any one question can result in them running out of time to complete the remainder of the paper to their full potential. There was evidence of gaps in students' knowledge as a range of questions had a number of non-attempts. This could be due to students focusing their revision on the pre-release material at the expense of other topics.

The main area for improvement on short answer questions continues to be ensuring that students answer the question which has been set. This requires students to understand both the command word used and the assessment objective (AO) which is likely being assessed. Too often the level of detail students provide does not reflect the demand of the question, particularly when questions are assessing AO3. Where sports/activities are referenced in a question the response must be specifically linked to this.

Section A Exercise physiology and biomechanics

Questions 1 and 2

Students performed very well on question 1, with a mean of nearly 0.9, and reasonably well on question 2 at 0.6. On question 2, where approx. 40% of student were incorrect these wrong answers were spread across the other two lever systems.

Question 3.1 and 3.2

Question 3.1 was a 2-mark AO1 question which had a mean mark of around 1.7. While students were generally successful there was a common misconception that quantitative data is factual and objective. While this may be the case most of the time if a coach asks their athlete to give them a perceived rate of exertion (PRE) score the number they give is quantitative, but it is subjective and only an opinion.

Question 3.2 was also a 2-mark AO1 question, this time focused on reliability. The mean mark for this question was considerably lower at approximately 0.8. This was because some students confused reliability with accuracy. A test can be reliable even if it is not accurate. Answers should have shown an understanding it was about getting the same result multiple times, not necessarily the correct result.

Question 4.1 and 4.2

Question 4.1 was a 1-mark AO1 question. The mean mark was approximately 0.4 showing fewer than half of students were able to define what a vector quantity is. While many students knew that there were two key parts to a vector quantity, they were unable to identify the correct terms, often citing alternatives such as speed, thus failing to achieve the mark.

Question 4.2 was a 2-mark AO2 question which also examined students' quantitative skills. The mean mark of around 0.7 showed that students found it difficult to apply their knowledge of acceleration to the given scenario. The most commonly awarded mark was for the correct units with only around 14.5% of students able to access both available marks.

Question 5

Question 5 was a 3-mark AO3 question. The mean mark was around 1. This question was a good example of one where students clearly had the knowledge required to access the question but failed to produce answers of the necessary depth to be awarded marks. The command word evaluate should have signposted the AO3 nature of the question.

Many students were able to make points such as HIIT training improving anaerobic power, without identifying how this would specifically help a netballer or a basketballer. Similarly, students often understood the need to give both sides of the argument when the command word is evaluate, but points such as the high risk of injury were not developed to give the impact on performance eg missed training/games leading to reversibility.

Students frequently used the full answer box to make a single creditworthy point. Students should consider the number of marks available for a question and where they think they have achieved them when constructing answers. The use of bullet points is one strategy which is commonly observed; however, too often this results in students producing limited answers which don't provide the depth required of AO3 responses.

Question 6

Question 6 was the first of the 8 mark extended response questions. Student responses received the full range of available marks with a mean of approx. 3.2. Students generally had sound knowledge of what screening was, citing common uses such as identifying muscle imbalances and mobility issues. Too often, however, they discussed cardiac risk screening despite the question being specifically worded to focus on musculoskeletal issues.

In addition to sound knowledge some students were able to make some evaluative points relating to the strengths and weaknesses of using screening in rugby. However, students commonly dropped marks due to a failure to specifically apply their knowledge to the sport in question, and instead producing very generic answers. The importance of students answering the question which has been set cannot be overstated.

Question 7

Question 7 was the first of the 15-mark questions on the paper. Student responses received the full range of available marks resulting in a mean of approx. 7.7. While students' performance in this question may have been boosted by the advance information and the ability to see a clear link between these two topics, it does show that when students possess the knowledge required by the specification, they are able to construct well structured, high scoring responses.

Students' knowledge of the factors affecting the horizontal displacement of projectiles and Bernoulli's principle was strong. They were often able to apply this knowledge specifically to the discus. The best answers went beyond what the discus thrower could do in the circle, highlighting the importance of technical development to optimise release height and physical development to improve speed of release in their AO3 analysis.

Section B Sports Psychology

Questions 8 and 9

Students found both question 8 (mean approx. 0.7) and question 9 (mean approx. 0.9) accessible. This was helped by the fact both were straightforward AO1 recall questions assessing common topics.

Question 10

Question 10 was a 4-mark AO1 question which had a mean mark of around 1.8. Students identified a range of factors which led to the formation of a positive attitude but often these demonstrated a narrow knowledge base, with multiple examples of socialisation given. This lack of breadth of knowledge limited the marks awarded.

Question 11

Question 11 was a 3-mark AO2 question. It was the question students found hardest across the entire series with a mean mark of less than 0.2. In most cases students lacked the fundamental knowledge of Hollander's model required to access the question. This may be indicative of students narrowed focus this exam series on the content contained in the advance information.

Where students did have the knowledge required, they were still unable to consider how this information might be useful to a coach trying to improve performance. As similar questions have been asked in the past staff should be aware that past paper questions are an excellent resource to assist in directing the depth and breadth required from a particular topic area.

Question 12

Question 12 was a 3-mark AO3 question with a mean mark of just over 1. Less than 1.5% of students achieved the maximum mark available, however, nearly 80% were able to access at least 1 mark. The most common mark awarded was for students identifying that extrinsic rewards increased motivation as they gave a performer something to work towards.

Students often gave a description of what extrinsic rewards were and defined the terms tangible and intangible. Given the clear signposting to AO3 provided by the command word evaluate students should have been aware this would not be creditworthy. Where other AOs are targeted in a question they will most commonly be split into separate parts, or it will be clearly stated in the question wording.

The mark scheme was somewhat limited in covering the range of responses provided by students for this question and there were several alternatives which were accepted under the catch all statement accept any other appropriate evaluation.

Question 13

Question 13 was the second of the 8 mark extended response questions. The mean mark of around 3.1 was similar to question 6 but was the lowest scoring of the three 8-mark questions. While the full range of marks were awarded less than 20% of students were able to access bands 3 and 4. This was surprising given that the advance information specifically identified this topic area.

Lower scoring answers often spent too much time describing Weiner's attribution model which was not the focus of the question. The most successful responses focused on the use of attribution retraining, alongside other strategies such as developing self-efficacy. They were able to give sports specific examples from badminton of how the athlete should attribute success and failure to promote a self-serving bias.

Question 14

Question 14 was the second of the 15-mark questions on the paper. Student responses received the full range of available marks, resulting in a mean mark of nearly 5. This was the lowest scoring of the 15-mark questions on the paper. While students generally had very good knowledge of an autocratic leadership style the lowest scoring examples focused solely on the advantages and disadvantages of this approach in the highlighted scenario without reference to Chelladurai's model.

Those students who were able to recall Chelladurai's model commonly drew it in the planning box. Only a limited number of students were able to fully work through it, however, giving examples of each aspect from the question and analysing the impact on group performance and satisfaction. It was those students who understood that while the coach's autocratic style was likely at odds with the groups preferred style, it matched the required behaviour of the situation. This would maximise performance but at the cost of group satisfaction, a necessary trade off given the situation.

Section C Sport and Society

Questions 15 and 16

The mean mark on question 15 was just under 0.6, with option B UK Sport often selected as the incorrect alternative. UK Sport is solely focused on the development of elite sport in the UK. Despite assessing AO2, students were more successful answering question 16, with a mean mark of just over 0.8. Those students who scored zero used the full range of distractors as incorrect alternatives.

Question 17

Question 17 was a 3-mark AO1 question which had a mean mark around 0.75. Students answers too often focused on aspects of data collection more closely linked to validity and reliability which were not relevant to the question and did not consider the key aspects of data input and storage.

Students' answers were often too closely linked to be awarded separate marks. Students should endeavour to demonstrate their breadth of knowledge when answering questions such as this one. Examiners will also only mark the first 3 answers so adding additional points below these lines, as some students did, is not advised.

Question 18.1 and 18.2

Question 18.1 was a 1-mark AO1 question which required students to define negligence. The key point here was that, for someone to be deemed negligent, harm (or foreseeable harm) must occur. Students frequently failed to access the mark as they simply referenced a failure to meet the duty of care or conduct which fell below required standards with no reference to harm having occurred (or being foreseeable). This resulted in a mean mark of less than 0.2.

18.2 followed on from this as a 3-mark AO2 question which required examples of negligence by a rugby referee. As the definition above clearly identifies, these examples had to referce that harm had occurred or was clearly foreseeable for students to get the mark.

The most commonly awarded mark awarded was for failure to stop play when an injury had occurred, as harm had already occurred and foreseeable harm was implied if treatment was not forthcoming/further injury occurred.

In the vast majority of cases student simply highlighted dangerous situations, eg failure to check the pitch or not penalising high tackles, with no reference to the harm which had or could have occurred eg a player cuts themselves on glass on the pitch when an official has failed to carry out a pitch inspection.

Question 19

Question 19 was a 3-mark AO3 question with a mean mark of nearly 1.4. This was the best answered short answer AO3 question across the series. Over 13% of student were able to access full marks.

Students understood the requirement of evaluate to give both sides of the argument. There was a sub max of two for either side. In a handful of situation students failed to achieve full marks, despite having made three creditworthy points, as they all came from one side of the argument. Students should ensure their responses are balanced.

Students were also more frequently able to make points with the depth required of AO3, perhaps as the scenario was generic and non-sports specific. Where responses failed to register a mark was typically when brief points, such as 'levels the playing field', were stated with no depth of understanding demonstrated.

Question 20

Question 20 was the final 8 mark extended response question. It had a mean mark of over 4.3 which was the highest of the 8-mark question on the paper. While less than 8% of students made it into the top band, over 45% of responses were awarded 5 marks or higher.

Students' knowledge of the key terms was good, and the majority were also able to provide specific examples from football. The key differentiator was whether students were able to provide a balanced evaluation, giving both positives and negatives, of each coach viewpoint. Commonly answers where skewed toward one view or the other failing to consider alternative viewpoints.

Question 21

Question 21 was the final 15-mark question on the paper and was also synoptic. The mean mark of slightly over 6 placed this question in-between the other two 15-mark questions in terms of difficulty. Students recorded scores across the full range of marks and there was a U-shaped distribution of marks with the peak between 6 and 8 marks where over 30% of students were located.

Students' knowledge of Bandura's model was generally good and referred to by most students. The best answers where those which were able to combine this knowledge with and understanding of the role the media play in modern day tennis. This most commonly took the form of referencing pre match TV interviews and the impact they would have on self-efficacy. Better answers showed a greater breadth of knowledge and considered other forms of media such as online video streaming and social media.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results Statistics</u> page of the AQA Website.