

Running Title: Physical & technical measures in Gaelic football

Article Title: Match-play running demands and technical performance among elite Gaelic footballers: Does divisional status count?

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1 Abstract

2 The aim of the current study was to compare positional differences in running demands and
3 technical performance variables among elite Gaelic football teams from separate Divisions.
4 Data were obtained from a Division 1 (26.7 ± 2.9 years, 179.2 ± 21.3 cm, 89.9 ± 21.2 kg) and
5 a Division 3 (25.7 ± 3.5 years, 183.0 ± 4.7 cm, 84.4 ± 6.5 kg) team. Match-play running
6 variables were collected using 4-Hz global positioning system (GPS) units (VX Sport, New-
7 Zealand) (Match data sets; Division 1: $n = 107$, Division 3: $n = 97$). Selected variables
8 assessed were high speed running distance (HSR) (≥ 17 km·h⁻¹), number of high-speed efforts
9 (HSE) (≥ 17 km·h⁻¹), relative high-speed distance (RHSD) (≥ 17 km·h⁻¹; m·min⁻¹) and
10 percentage of time at high speed (%HS). Each variable was analysed across the 5 positional
11 groups in Gaelic football (full-back, half-back, midfield, half-forward, full-forward). The
12 same 25 competitive games were analysed using GPS and the Sports Code video analysis
13 system (Sports Code Elite V9, Sportstec, NSW, Australia). Technical performance variables
14 selected for analysis were total kick/hand passes, tackles, shots and percentage of time in
15 possession. HSR running demands were differentiated between the divisions; the Division 3
16 team demonstrated significantly greater HSR, HSE, RHSD and %HS than the Division 1
17 team ($p < 0.05$). Positional-specific analysis found that the Division 3 fullback and midfield
18 positional lines had significantly greater HSR, RHSD and %HS than their Division 1
19 counterparts. The Division 1 team made a greater number of total tackles, with significantly
20 more tackles in the middle third ($p < 0.05$). The Division 3 team performed a significantly
21 greater number of hand passes and unsuccessful shots per game ($p < 0.01$). The results of the
22 present study indicate that overall technical proficiency, rather than high-speed running
23 profiles, differentiate Division 1 and 3 Gaelic football teams.

24 **Key words:** GPS, Divisional-differences, Gaelic games, Video-analysis

25 INTRODUCTION

26 Gaelic football is an amateur field-based sport and is the most popular sport in
27 Ireland. (2, 9, 12) The best Gaelic footballers in each of the 32 counties in Ireland are selected
28 to represent their county team who compete in the All Ireland Championship and the National
29 League competitions.(2) The All Ireland Championship competition, the most prestigious
30 competition in Gaelic football, is played by all county teams in a knock out cup format. In the
31 National Football League competition, the second most prestigious competition, the teams
32 are divided into four rank ordered divisions with 8 teams in each division.(26) Teams have
33 the possibility of being promoted or relegated from their respective divisions based on their
34 performance in the National League. In the high performance Gaelic football inter-county
35 environment, considerable time is devoted to the development of the physical running
36 demands amongst other technical and tactical performance-related variables.(24)

37 The running demands of elite Gaelic football players have been examined for over
38 twenty five years, with an initial emphasis on video and time-motion analysis. (17, 29) Given
39 the advancement in technology, global positioning systems (GPS) have been the tool of
40 choice to investigate the running demands of the modern Gaelic football player. (6, 24, 26,
41 31) Early research highlighted differences between the 5 positional lines (i.e. full back, half
42 back, mid-field, half forward, full forward) with regard to the respective running demands
43 during match-play. (24) The study found significant differences among the middle 8 players
44 (half-backs, midfielders and half-forwards) covering greater distances (8700 – 9523m) than
45 the inside line players (full-back 6892m and full-forwards 7090m respectively). However, it
46 should be noted that this study only investigated the running demands of one team within one
47 division of the National Football League (NFL). A more recent paper by Mangan and
48 colleagues (27) examined changes in running demands across a playing season using
49 multiple teams.

50 It was found that teams who progressed to the latter part of the All Ireland
51 Championship were found to increase their running demands, with these running demands
52 closely related to the score-line of the match (27).

53 Despite the growth of research investigating the running demands in elite Gaelic
54 football, presently there is a lack of published literature across technical performance
55 variables. More recently Carroll (4) investigated specific technical elements of performance
56 from teams of different standards, concluding that differences in technical performance
57 between teams vary as a result of opposition characteristics. The study also found that attack
58 efficiency and total number of shots were higher for the higher ranked teams when compared
59 to lower ranked teams. Similar findings have been reported within soccer (21, 30) and
60 Australian Rules Football (AF) (11) where total shots, shots on target, passes and number of
61 tackles separate the top and bottom ranked teams.

62 Currently within Gaelic football there is dearth of research comparing the high-speed
63 running demands across standards of play. (26) Although numerous studies have examined
64 the positional demands, (24, 31) none have differentiated teams by success rates or divisional
65 status. Studies in AF, (1, 3) rugby league (10) and soccer (28) have reported that elite players
66 record greater running demands when compared to their counterparts playing at the sub-elite
67 level. However, in contrast to these studies, it has been reported that soccer and rugby league
68 teams competing in higher divisions of competition cover less total distance and less high-
69 speed running distance than teams competing in lower divisions. (8, 13) It has been
70 hypothesized that this is due to their increased technical abilities. Furthermore, Di Salvo et al.
71 (7) found that the bottom 5 teams in the English Premier League covered greater high-speed
72 running distance than the teams in the top 5 positions. However, it is unclear whether similar
73 patterns exist within elite Gaelic football match-play.

74 To date, there is no published literature that has investigated the differences in high-
75 speed running and technical performance variables between different divisional teams in elite
76 Gaelic football. Analysis of such differences would serve to assist coaches in identifying the
77 key characteristics of performance and could help to increase prospects of promotion to
78 higher divisions. Therefore, the purpose of the current study was to investigate the match-
79 play high-speed running demands and technical performance variables of Division 1 and
80 Division 3 players in elite Gaelic football.

81 **METHODS**

82 **Experimental Approach to the Problem**

83 Data were collected across a full Division 1 and Division 3 season (9 months, Jan-
84 Sept) which consisted of 25 competitive games in total (Division 1: $n = 13$; Division 3: $n =$
85 12). Data included League games (Division 1: $n = 7$; Division 3: $n = 8$) and Championship
86 games (Division 1: $n = 6$; Division 3: $n = 4$). Post-season ranking placed both teams in the top
87 3 of their respective divisions. Only full individual match data sets (i.e. players who
88 completed the full match 75-80min) were selected for analysis (Division 1: $n = 107$; Division
89 3: $n = 97$). Notably, an initial analysis revealed no significant difference between the running
90 and technical demands of each team across their respective league and championship
91 competitions, therefore all matches, irrespective of phase of season, were analysed together.
92 Players were sub-categorized via the five positional lines in Gaelic football, full-back
93 (Division 1: $n = 29$; Division 3: $n = 23$), half-back (Division 1: $n = 30$; Division 3: $n = 22$),
94 midfield (Division 1: $n = 13$; Division 3: $n = 19$), half-forward (Division 1: $n = 15$; Division
95 3: $n = 16$) and full-forward (Division 1: $n = 20$; Division 3: $n = 17$).

96

97 **Subjects**

98 Forty seven Gaelic football players from two elite teams volunteered to participate in
99 the study; 23 from a Division 1 team (26.7 ± 2.9 years, 179.2 ± 21.3 cm, 89.9 ± 21.2 kg) and
100 24 from a Division 3 team (25.7 ± 3.5 years, 183.0 ± 4.7 cm, 84.4 ± 6.5 kg). This study
101 received ethical approval from the local institution's Human Research Ethics Committee.
102 Players were provided with a detailed explanation and completed a consent form prior to
103 commencement of data collection.

104 **Procedure**

105 **Running Demands**

106 The running-based movement demands were assessed using VX Sport 4 Hz GPS units
107 (VX Sport; Visuallex Sport, Lower Hutt, New Zealand, Firmware: V1.60 28). The unit was
108 worn on the upper back between the shoulder blades; players wore the same unit across all
109 competitive matches. All devices were activated by the side of the pitch, satellite locked and
110 established for a minimum of 30 minutes before the commencement of each match.(22, 24)
111 Following each match, running performance data was downloaded using the VX software
112 suite (VX Sport View, New Zealand V1.60 28). Each file was trimmed to ensure that only
113 data recorded when the player was in competition (excluding warm-up, half-time and cool-
114 down) was included for analysis.

115 The VX Sport GPS unit has been found to be a valid and reliable tool for the
116 measurement of intermittent activity in field sports.(23) The typical error (TE \pm 95%
117 confidence interval [CI]) was 0.75 ± 0.26 for maximum speed, and 0.55 ± 0.19 for average
118 speed (23). The coefficient of variation (CV% \pm 95% CI) was 4.2 ± 1.5 for maximum speed,
119 and 4.4 ± 1.5 for average speed.(23) The running variables assessed were high speed running
120 distance (HSR) (≥ 17 km \cdot h $^{-1}$), number of speed efforts (HSE) (≥ 17 km \cdot h $^{-1}$), relative high

121 speed distance (RHSD) per min ($\text{m}\cdot\text{min}^{-1}$) and percentage of time spent at high speed (%
122 HS). Acceleration were defined as a change in speed by $2\text{ km}\cdot\text{h}^{-1}$ within 1 second. The
123 change was triggered over a minimum time of 2 seconds. The acceleration stopped when the
124 player decelerated to $<75\%$ of maximum speed reached in the forgoing sprint effort.(24)
125 These variables were analyzed for all 5 out-field positional groups. Selected thresholds and
126 metrics used in the current study have been used previously in the GAA literature.(6, 24, 25)

127 Video Analysis

128 Sports code video analysis (Sports Code Elite V9, Sportstec, Warriewood, New South
129 Wales, Australia) was used to determine the technical performance of Gaelic football match-
130 play on an iMac (version OS X 10.9.4). A specific coding template was developed to best
131 understand the technical variables within match-play. Each technical variable analyzed was
132 assigned an operational definition to determine what was deemed to be a successful or
133 unsuccessful outcome (Table 1). For the purpose of this research, the Gaelic football pitch
134 was divided into 3 distinct sections (Table 1). Two games were chosen at random to perform
135 test-retest reliability on the coding of technical actions. This involved re-coding the 2 games
136 7-10 days after the original coding. Test-retest reliability was conducted for each of the
137 variables using paired sample t-tests. There was a very low percentage error for all variables
138 ($<2\%$).

139 *Insert Table 1 About Here*

140 **Statistical Analysis**

141 All data are reported as mean \pm standard deviation unless stated. Preliminary
142 assumption testing was conducted to check for normality (Shapiro Wilk test), while Levene's
143 test was used to test the homogeneity of variances. Independent sample *t*-tests were used to
144 compare the mean performance scores (independent of position) of both teams for all GPS

145 and technical performance variables. The statistical significance was set at $p < 0.05$. Further
146 position-specific independent sample t -tests were used to compare GPS variables between
147 players in the same positional lines on both teams. Eta squared effect size (95% CI) was used
148 to determine the magnitude of any statistical difference (Trivial effect $\eta^2 < 0.01$; Small effect:
149 $0.01 \leq \eta^2 < 0.06$; Medium effect: $0.06 \leq \eta^2 < 0.14$; Large effect: $\eta^2 \geq 0.14$). (5) All data was
150 analyzed using IBM SPSS (Statistical Package for Social Studies), Version 22.

151

152 RESULTS

153 There were significant differences across all the GPS variables HSR ($p = .001$, $\eta^2 =$
154 $.054$, ES = small), HSE ($p = .024$, $\eta^2 = .025$, ES = small), RHSD ($p = .002$, $\eta^2 = .047$, ES =
155 small) and % HS ($p = .002$, $\eta^2 = .049$, ES = small) with the Division 3 team consistently
156 demonstrating significantly higher scores than their Division 1 counterparts (Table 2).

157 *Insert Table 2 About Here*

158 Position-specific analyses (5 positional lines) comparing running demands between
159 Division 1 and Division 3 players is illustrated in Table 2. The Division 3 full-backs had
160 higher HSR ($p = .002$, $\eta^2 = .177$, ES = large), RHSD ($p = .002$, $\eta^2 = .174$, ES = large) and %
161 HS ($p = .001$, $\eta^2 = .208$, ES=large) than their Division 1 counterparts. Division 3 midfielders
162 also performed significantly more HSR ($p = .001$, $\eta^2 = .520$, ES=large), RHSD ($p = .001$, $\eta^2 =$
163 $.508$, ES=large), %HS ($p = .001$, $\eta^2 = .431$, ES = large) and additionally more HSE ($p < 0.01$,
164 $\eta^2 = 0.301$; ES = large) than their Division 1 counterparts (Figure 1). There were no
165 significant differences between half-backs, half-forwards and full-forwards for any of the
166 GPS variables.

167 *Insert Figure 1 About Here*

168 The technical performance data of the Division 1 and Division 3 teams are presented
169 in Table 3. The Division 3 team demonstrated a significantly greater number of total hand
170 passes ($p=.007$, $\eta^2 = .278$, ES = large) and missed shots per game ($p=.007$, $\eta^2 = .279$, ES =
171 large) than the Division 1 team. There were no significant differences between the teams for
172 total kick passes ($p=.102$, $\eta^2 = .112$, ES = medium), shots scored from play ($p=.606$, $\eta^2 =$
173 $.012$, ES = small) and percentage of time in possession ($p=.539$, $\eta^2 = .017$, ES = small). The
174 Division 1 team made a greater number of total tackles than the Division 3 team, with
175 significantly more tackles in the middle third ($p=.044$, $\eta^2 = .072$, ES = medium).

176 *Insert Table 3 About Here*

177

178 **DISCUSSION**

179 The current study is one of the first to investigate the high-speed running demands
180 and technical performance variables in Gaelic football match-play between two elite teams
181 with differing Divisional status. One major finding within this study was that the Division 3
182 Gaelic football team covered greater HSR, RHSD, performed more HSE and had a higher %
183 HS running performance when contrasted to the Division 1 team. These differences were
184 most pronounced in the full-back and midfield positional lines. Second unique finding, there
185 were a greater number of tackles, particularly in the middle third, executed by the Division 1
186 team. Finally, the Division 1 team's attacking efficiency and accuracy in scoring attempts
187 was higher when compared to the Division 3 team, with the latter found to have a greater
188 number of hand passes completed than their Division 1 counterparts.

189 Consistent with previous Gaelic football studies, (24, 25) the middle 8 positions (half-
190 backs, midfielders and half-forwards) covered more high-speed running when compared to
191 the other two positional lines (full-back and full-forwards).

192 These differences in running demands might be explained by the typical inter-
193 changeable and roving tactical role the middle 8 players have within Gaelic football (winning
194 possession and transitioning from defense to attack). Additionally, with the previous
195 literature (24,25), the Division 3 midfielders recorded the greatest high speed running values
196 in comparison to the other four positional lines. However in contrast, the findings within the
197 current study, found the Division 1 team's half-forward line covered the greatest high speed
198 running distances. This difference may be due to a tactical ploy among the Division 1 team.

199 A novel finding within the present study was that the Division 3 full-back and
200 midfield lines had the increased running demands (i.e. HSD, RHSD, HSE and %HS) when
201 compared to their Division 1 counterparts. There are several possible explanations for this
202 finding. Firstly, the lack of tackles by Division 3 teams in the middle third may result in an
203 increase in match-play involvements for the full-back line, therefore these lines will have
204 increased running demands placed upon them,. This is in direct contrast to the increased
205 tackle count noted within Division 1 teams who had lower running demands but a higher
206 tackle count in the middle third. Notably, the Division 3 team completed a significantly
207 greater number of hand passes; this finding is not surprising as anecdotal evidence suggests
208 that Division 3 teams will engage in a style of play that is hand pass oriented with the aim of
209 keeping possession and working the ball up the pitch (4), which in turn would increase these
210 teams' running demands. In contrast to Division 3 teams, the Division 1 team had a greater
211 number of kick passes than their Division 3 counterparts; this may directly explain the lower
212 high-speed running observed for these players as the ball is consistently traveling a greater
213 distance thus lowering the running demands on these players.

214 The present findings are in agreement with other research (7, 8, 13, 26, 30) that
215 increased high-speed running does not necessarily ensure success. These studies indicate that
216 there are technical and tactical variables at play that more accurately determine success than

217 high-speed running. Similar to Hulin et al. (13) within rugby league, the present study found
218 no significant difference between the two teams with regard to the percentage of time in
219 possession of the ball. Previous research has found that the team with less time in possession
220 completes greater amounts of high-speed running defending and chasing (10, 11) this was not
221 the case in the present study with both teams having possession of the ball for approximately
222 50% of the time.

223 Another unique finding within the present study was the Division 1 team's execution
224 of a greater number of total tackles. Similar findings were found in rugby league (13) with
225 successful teams making greater number of collisions than unsuccessful teams. A potential
226 explanation for the greater amount of tackles associated with the Division 1 team is the
227 tactical approach selected. Currently, within Gaelic football, there is an increase in teams
228 adopting a high press of kick outs and direct opposition within the half forward and full
229 forward lines with the aim of dispossessing opponent lines (half back and full back) in the
230 middle third. This may have impacted a number of findings within the current study, such as
231 the Division 1 team completing a greater number of tackles in the middle third, resulting in
232 the team winning possession higher up the pitch, which in turn reduced the need for the
233 midfield line to complete high-speed running in their defensive third. Finally if possession is
234 re-gained through this high-press tactic, it will result in the exclusion of the defensive lines
235 from completing high-speed running during the ensuing phases of play.

236 The Division 1 team demonstrated a higher score rate than the Division 3 team. The
237 'shots missed' category was greater in the Division 3 team, which may suggest the presence
238 of better decision-making and technical proficiency in front of goal in higher level teams.
239 This finding is consistent with Carroll (4) who found this to be a major difference between
240 higher and lower ranked Gaelic football teams.

241 The efficiency, rather than the quantity of shots, has also been shown to differentiate
242 top and bottom teams in previous soccer studies. (18-21, 32)

243 The findings from the current study must be viewed in context with the limitations
244 within the investigation. The use of a 4-Hz GPS system to accurately track high-speed
245 movements must be considered. In addition, the absence of a tri-axial accelerometer and
246 gyroscope, which provides information on physical contact such as a tackle, could have
247 provided additional information related to match-play demands. Future research should aim
248 to apply recent technological advances in this field to evaluate other physiological demands
249 such as contact force (i.e. tackles), change of direction and associated heart rate variability.
250 Furthermore, this study did not examine positional differences in technical performance.
251 Future research should aim to examine the technical performance by position, by team and
252 how these potentially fluctuate across the season. While this study examines differences in
253 movement demands and technical performance variables across divisions, it does not
254 examine differences within teams competing in the same division. Similar to Carrol's (4)
255 findings, a team's style of play and prevalence of technical skill may vary depending on the
256 opponent. Future research in Gaelic football should examine differences in the
257 aforementioned variables from multiple teams within the same division to gather a more
258 overview and representation of performance measures. Finally, future studies in Gaelic
259 football must look at the match to match variation in running performance with a team across
260 multiple divisions taking into account the quality of opposition, styles of play, styles of
261 coaching and the margins that are associated with winning and losing, so we can better
262 understand the contextual factors that impact running and technical demands across divisions.

263

264 PRACTICAL APPLICATION

265 Findings from the current research suggest that greater amounts of high-speed running
266 are not necessarily related to team ranking in elite Gaelic football. Scoring accuracy, in
267 addition to a higher frequency of tackles, particularly in the middle third, were characteristics
268 more associated with the higher ranked team. It is beneficial for coaches to be aware of the
269 relevant running and technical performance measures associated with higher divisional status.
270 Greater knowledge in this regard would facilitate coaches to structure their training to
271 optimize performance. Currently within Gaelic football, there is an increased emphasis on the
272 physical development of athletes. However these findings highlight the importance of
273 technical competence in differentiating between higher and lower-ranked teams. It is
274 recommended that coaches at all levels place these elements as a central tenet of their
275 coaching philosophy to maximize the development of the key performance skills required
276 during match-play. Finally, this study highlights the importance of technical skill proficiency,
277 rather than running performance capability, in distinguishing between higher and lower
278 ranked teams within elite Gaelic football.

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LEGEND OF TABLE AND FIGURES

Table 1. The technical variables quantified and there specific definitions.

Table 2. Position specific mean (\pm SD) high-speed running demands within elite Gaelic football competition with respect to Division 1 and Division 3 players.

Table 3. Mean (\pm SD) technical demands within elite Gaelic football competition with respect to Division 1 and Division 3 teams.

Figure 1. Position specific mean (\pm SD) in high-speed running (m) demands of Division 1 and Division 3 players.

ACCEPTED

TABLE 1

Variable	Definition
Total kick passes	The number of attempts made to transfer the ball by foot to a teammate. Successful and unsuccessful.
Total hand passes	The number of attempts made to transfer the ball by hand to a teammate. Successful and unsuccessful.
Tackle	The number of situations where the defending player made physical contact with an opponent player while contesting the ball.
Shots from play	The number of attempts to score, over or above the cross bar from play. Successful and unsuccessful.
Percentage of possession	The overall percentage of time a team had in possession of the ball whilst it was in play.
Gaelic football 3 distinct section	<p>The defensive section was from the defending team's end-line to their 45m line.</p> <p>The area between the two 45m lines was categorized as the middle section (50-60m).</p> <p>The area from the opposition's 45m line to the opposition's end-line was categorized as the attacking section.</p>

TABLE 2

Variable by Position	Division 1 (<i>n</i> = 107)	Division 3 (<i>n</i> = 97)	Effect Size	Difference 95% CI
All Positions				
HSR (m)	1145 ± 436	1358 ± 462 ‡	Small	-336.973 to -89.030
HSE (no.)	64 ± 21	71 ± 24*	Small	-13.539 to -.982
RHSD (m/min)	14.9 ± 5.7	17.6 ± 6.1 ‡	Small	-4.1923 to -.9750
HS (%)	11.2 ± 2.8	12.5 ± 3.1 ‡	Small	-2.1340 to -.5103
Full Back				
HSR (m)	796 ± 255	1072 ± 340*	Large	-451.987 to -106.909
HSE (no.)	47 ± 16	55 ± 14	Small	-14.434 to 2.167
RHSD (m/min)	10.4 ± 3.3	13.9 ± 4.5*	Large	-5.6780 to -1.3408
HS (%)	9.2 ± 1.8	11.9 ± 3.2 ‡	Large	-4.2117 to -1.1823
Half Back				
HSR (m)	1339 ± 433	1339 ± 289	Trivial	-201.209 to 201.639
HSE (no.)	75 ± 23	73 ± 17	Trivial	-8.898 to 13.976
RHSD (m/min)	17.5 ± 5.6	17.3 ± 3.7	Trivial	-2.5434 to 2.9731
HS (%)	12.1 ± 3.0	12.7 ± 2.0	Trivial	-2.0389 to .9601
Midfielders				
HSR (m)	1221 ± 216	1767 ± 295 ‡	Large	-742.122 to -350.599
HSE (no.)	75 ± 10	93 ± 15 ‡	Large	-27.542 to -7.575
RHSD (m/min)	15.9 ± 2.7	22.9 ± 3.9 ‡	Large	-9.5415 to -4.4172
HS (%)	10.7 ± 1.7	13.9 ± 1.9 ‡	Large	-4.5626 to -1.8245
Half Forwards				
HSR (m)	1500 ± 548	1659 ± 254	Small	-482.951 to 165.476
HSE (no.)	75 ± 21	86 ± 10	Medium	-24.073 to 1.473
RHSD (m/min)	19.6 ± 7.2	21.4 ± 3.3	Small	-5.9757 to 2.5440
HS (%)	13.1 ± 3.4	14.0 ± 1.5	Small	-2.8838 to 1.0804
Full Forwards				
HSR (m)	1051 ± 250	1030 ± 578	Trivial	-293.825 to 333.748
HSE (no.)	57 ± 12	56 ± 32	Trivial	-16.649 to 17.560
RHSD (m/min)	13.8 ± 3.1	13.4 ± 7.5	Trivial	-3.6813 to 4.4742
HS (%)	11.4 ± 2.3	10.0 ± 4.2	Small	-.9682 to 3.7529

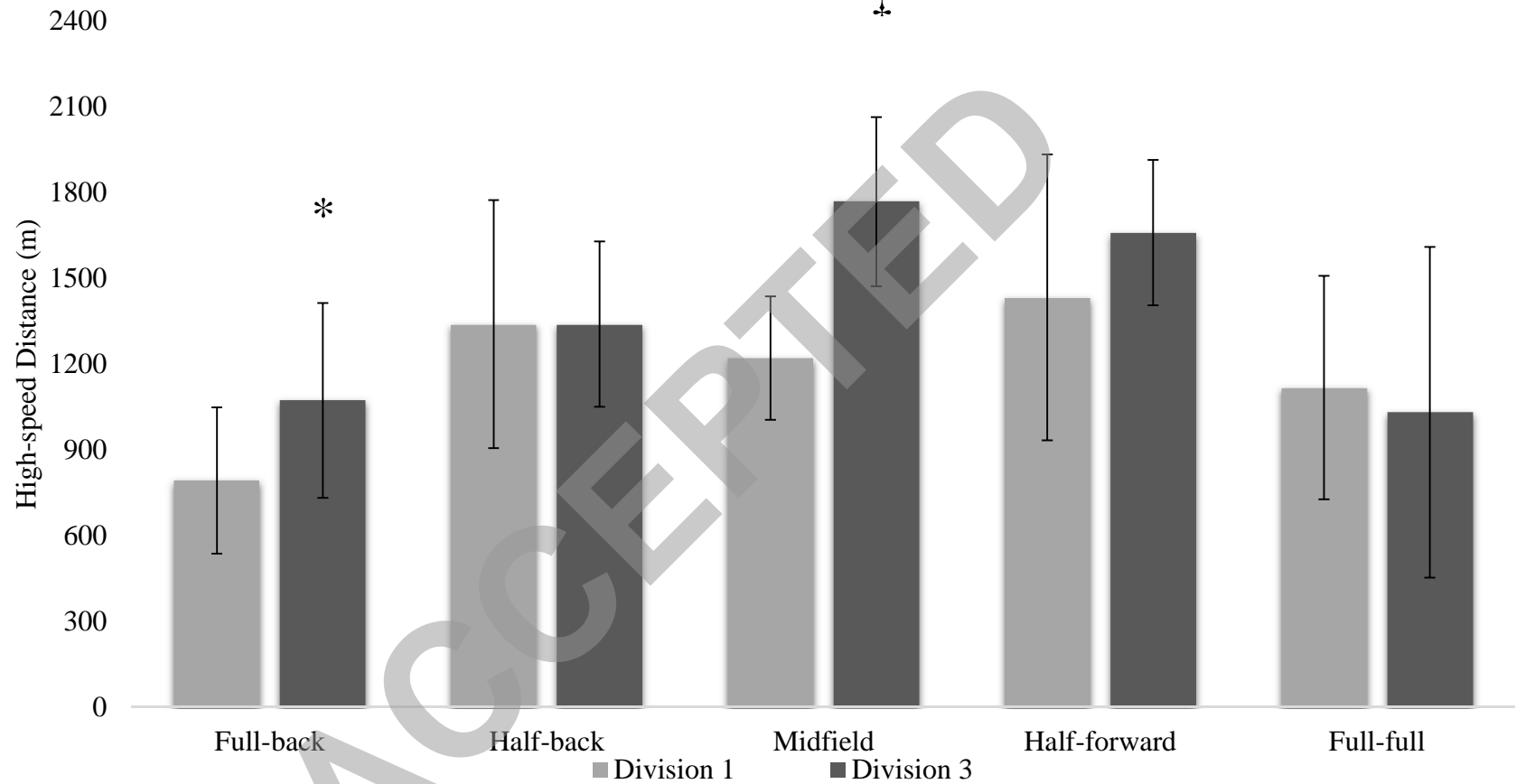
Difference mean value in high speed running (HSR), number of high speed efforts (HSE), relative high speed distance (RHSD) and percentage of time at high speed (HS %); Trivial effect $\eta^2 < 0.01$; Small effect: $0.01 < \eta^2 < 0.06$; Moderate effect $0.06 < \eta^2 < 0.14$; Large effect: $\eta^2 > 0.14$. CI, confidence interval. ‡ Significant difference ($p < 0.01$) from division 1 team. *Significant difference ($p < 0.05$) from division 1 team.

TABLE 3

Variable	Division 1	Division 3	Effect Size	Difference 95% CI
	Total (<i>n</i> = 13 games)	Total (<i>n</i> = 12 games)		
Total Hand passes	131 ± 23	167 ± 36*	Large	-60.44 to -10.87
Total Kick passes	71 ± 11	62 ± 17	Medium	-2.07 to 21.53
Shots Missed from Play	9 ± 3	13 ± 3*	Large	-6.28 to -1.50
Shots Scored from Play	10 ± 4.1	11 ± 3	Small	-3.84 to 2.29
Percentage of Possession	49 ± 3	50 ± 4	Small	-4.09 to 2.19
Tackles in Defensive Third	56 ± 34	34 ± 10	Large	0.41 to 42.64
Tackles in Middle Third	54 ± 44	36 ± 11*	Medium	-9.51 to 44.09
Tackles in Attacking Third	12 ± 8	10 ± 4	Small	-3.30 to 7.32
Total Tackles	121 ± 71	80 ± 17	Large	-2.65 to 84.29

Difference mean value; Small effect: $0.01 < \eta^2 < 0.06$; Moderate effect $0.06 < \eta^2 < 0.14$; Large effect: $\eta^2 > 0.14$.
CI, confidence interval. *Significant difference ($p < 0.05$) from Division 1 team

FIGURE 1



Difference means values significant difference set at 0.05. ‡ Significantly different ($p < 0.01$) from Division 1 team

*Significant difference ($p < 0.05$) from Division 1 team.