



Correction to: Exercise Addiction in Amateur Runners

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As a result of an error in the processing of this article during the publication process, it was necessary to re-publish this article with the following significant changes:

Title

The title of the initial version is Exercise addiction in amateur runners, it was changed to Exercise addiction in competitive amateur runners.

Abstract

It was completely modified in line with the new methodology applied, in addition to minor terminological changes (ex. “gender” by “sex”).

Introduction

Grammatical and translation modifications were made, some terms on the research question were adapted, some of the concepts included in this section was expanded and improved. and two paragraphs on previous empirical research on the research question were added.

Method

Participants

Further data (sociodemographic and athletic) on the sample analysed was provided.

The online version of the original article can be found at <https://doi.org/10.1007/s11469-021-00504-3>

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Table 1 Main characteristics of the sample (frequency, percentage, mean and standard deviation)

		Min		Low		High		Max		Total			
		N	%	N	%	N	%	N	%	N	%	Mean	SD
Sex	Men	149	76.8	134	78.8	84	82.4	40	83.3	407	79.2		
	Women	45	23.2	36	21.2	18	17.6	8	16.7	107	20.8		
Age	≤ 36	86	44.3	55	32.4	30	29.4	14	29.2	185	36.0	38.29	8.75
	36–55	98	50.5	109	64.1	68	66.7	32	66.7	307	59.7		
	≥ 56	10	5.2	6	3.5	4	3.9	2	4.2	22	4.3		
Club-membership	Yes	85	43.8	90	52.9	50	49.0	34	70.8	259	50.4		
	No	109	56.2	80	47.1	52	51.0	14	29.2	255	49.6		
Civil Status	Single	88	45.4	67	39.4	33	32.4	17	35.4	205	39.9		
	Married	84	43.3	83	48.8	51	50.0	23	47.9	241	46.9		
	Divorced	8	4.1	4	2.4	6	5.9	3	6.3	21	4.1		
	Common Law Partner	14	7.2	16	9.4	12	11.8	5	10.4	47	9.1		
Parenthood	Yes	84	43.3	85	50	54	52.9	23	47.9	246	47.9		
	No	110	56.7	85	50	48	47.1	25	52.1	268	52.1		
Employment Situation	Study	25	12.9	17	10	5	4.9	3	6.3	50	9.7		
	Employed	153	78.9	146	85.9	91	89.2	39	81.3	429	83.5		
	Unemployed	12	6.2	5	2.9	4	3.9	5	10.4	26	5.1		
	Retired	4	2.1	2	1.2	2	2.0	1	2.1	9	1.8		
Reasons to start running	Healthy	134	69.1	134	78.8	77	75.7	37	77.1	382	74.3		
	Cheap Sport	37	19.1	23	13.5	12	11.8	6	12.5	78	15.2		
	Social	3	1.5	1	0.6	1	1.0			5	1.0		
	Personal Goals	3	1.5	1	0.6	3	2.9	4	8.3	11	7.4		
Running expertise years	Others	17	8.8	11	6.5	9	8.8	1	2.1	38	2.1		
	< 5 years	92	47.4	59	34.7	45	44.1	13	27.1	209	40.7		
	Between 5 and 10 years	40	20.6	56	32.9	27	26.5	19	39.6	142	27.6		
Duration of training session	More 10 years	62	32.0	55	32.4	30	29.4	16	33.3	163	31.7		
	< 60'	73	37.6	72	42.4	18	17.6	10	20.8	135	26.3		
	60–90'	116	59.8	64	37.6	79	77.5	32	66.7	356	69.3		
	>90'	5	2.6	34	20.0	5	4.9	6	12.5	23	4.5		
Km/week	≤ 55	160	82.5	118	69.4	66	64.7	26	54.2	370	73.0	43.31	22.26
	56–85	31	16.0	48	28.2	29	28.4	15	31.3	123	23.9		
	≥86	3	1.5	4	2.4	7	6.9	7	14.6	21	4.1		
Training frequency/week	≤ 3	117	60.3	67	39.4	27	26.5	8	16.7	219	42.6	3.89	1.28
	4–5	65	33.5	81	47.6	58	56.9	24	50.0	228	44.4		
	6–7	12	6.2	22	12.9	17	16.7	16	33.3	67	13.0		
Date of first race	< 5 years	106	54.7	81	47.7	51	50.0	19	39.6	257	50.0		
	Between 5 and 10 years	40	20.6	43	25.3	27	26.5	18	37.5	128	24.9		
	More 10 years	48	24.7	46	27.1	24	23.5	11	22.9	129	25.1		
Distance of first race	10 km	162	83.5	151	88.9	87	85.3	37	77.1	437	85.0		
	21 km	29	14.9	18	10.6	13	12.7	10	20.8	70	13.6		
	42 km	3	1.5	1	.6	2	2.0	1	2.1	7	1.4		
Usual Distance	10 km	122	62.9	92	54.1	50	49.0	21	43.8	285	55.5		
	21 km	53	27.3	59	34.7	38	37.3	11	22.9	161	31.3		
	42 km	19	9.8	19	11.2	14	13.7	16	33.3	68	13.2		
Best 10 km	No answer	12	6.2	10	5.9	3	2.9	1	2.1	20	3.9		
	< 35'	13	6.7	6	3.5	6	5.9	6	12.5	31	6.0		
	35'- 39'59"	27	13.9	46	27.1	30	29.4	10	20.8	113	22.0		
Best 21 km	> 40'	142	73.2	114	67.1	63	61.8	31	64.6	350	68.1		
	No answer	38	19.6	24	14.1	12	11.8	5	10.4	79	15.4		
	< 1 h20'	8	4.1	7	4.1	9	8.8	8	16.7	32	6.2		
	1 h20'- 1 h29'59"	31	16.0	38	22.4	25	24.5	9	18.8	103	20.0		

Table 1 (continued)

		Min		Low		High		Max		Total		Mean	SD
		N	%	N	%	N	%	N	%	N	%		
Best 42 km	> 1 h30'	117	60.3	101	59.4	56	54.9	26	54.2	300	58.4		
	No answer	95	49.0	71	41.8	35	34.3	14	29.2	215	41.8		
	< 2 h45'	2	1.0	4	2.4	4	3.9	5	10.4	15	2.9		
	2 h45'- 3 h14'59''	20	10.3	28	16.5	18	17.6	6	12.5	72	14.0		
Additional Gym Attendance	> 3 h15'	77	39.7	67	39.4	45	44.1	23	47.9	212	41.2		
	Yes	142	73.2	129	75.9	66	64.7	40	83.3	377	73.3		
	No	52	26.8	41	24.1	36	35.3	8	16.7	137	36.7		

Measures

Some variables were recategorized (three categories), in order to obtain study subgroups that are more similar in size. This meant that the data had to be reinterpreted, and Table 1 was totally modified.

Procedure

More details were given in order to allow for eventual replications of the study.

Table 2 Mean rank (Md) and Kruskal-Wallis' H and significant levels of the main characteristics of the sample

		Md	H	p
Age	≤ 36	232.92	9.89	.007**
	36–55	273.52		
	> 56	240.68		
Club-membership	Yes	273.72	6.91	.009**
	No	241.02		
Running expertise years	< 5 years	241.79	7.01	.030*
	Between 5 and 10 years	282.32		
	More 10 years	256.02		
Duration of training session	< 60'	214.85	20.06	.000***
	60–90'	269.34		
	>90'	324.54		
Km/week	≤ 55	238.38	26.05	.000***
	56–85	289.20		
	≥ 86	376.17		
Training frequency/week	≤ 3	206.74	55.28	.000***
	4–5	284.42		
	6–7	331.80		
Usual Distance	10 km	232.94	10.98	.004**
	21 km	253.92		
	42 km	292.91		
Best 10 km	< 35'	257.95	7.74	.021*
	35'- 39'59''	277.29		
	> 40'	236.96		
Best 21 km	< 1 h20'	271.06	8.97	.011*
	1 h20'- 1 h 29'59''	228.82		
	> 1 h30'	208.63		
Best 42 km	< 2 h45'	202.43	6.88	.032*
	2 h45'- 3 h 14'59''	153.38		
	> 3 h15'	145.14		

Table 3 Effect Size (d de Cohen) to significance variables

	Eta squared (n ²)	d de Cohen	Effect size
Age	.015	.251	Small effect
Club-membership	.012	.216	Small effect
Running expertise years	.010	.199	No effect
Duration of training session	.035	.383	Small effect
Km/week	.047	.444	Medium effect
Training frequency/week	.104	.682	Medium effect
Usual Distance	.018	.268	Small effect
Best 10 km	.011	.213	Small effect
Best 21 km	.014	.235	Small effect
Best 42 km	.010	.196	No effect

Statistical Analysis

New analysis was carried out considering all the recommendations made, modifying the calculation of cohen's d and replacing the correlations by crosstab analysis.

The structure of the analyses were modified following a logic sequence.

Results

All the section was modified considering all the recommendations and rewriting the results section, changing all tables and creating a new one (Table 5).

Categorisation of addiction levels was performed using a quartile classification similar to the approach used by Ruiz-Juan and Zarauz (2012): minimum (≤ 4.37), low (4.37–4.99), high (5.00–5.62) and maximum (≥ 5.62) risk of addiction.

Discussion

All the section was modified considering all the recommendations and rewriting the discussion according to the new results.

Table 4 Crosstab analysis from combining usual distance and levels of addiction risk (chi squared, X², and significance level)

	10 km		21 km		42 km		Total	
	X ²	p	X ²	p	X ²	p	X ²	p
Sex	2.12	.546	1.89	.594	1.63	.652	1.80	.614
Age	8.27	.218	5.44	.488	3.26	.352	11.33	.078
Club-membership	8.40	.038*	.314	.957	3.39	.335	11.89	.008**
Civil Status	7.73	.562	7.47	.588	1.93	.993	8.30	.503
Parenthood	3.05	.384	3.25	.355	3.88	.274	2.98	.394
Employment Situation	10.40	.319	6.87	.650	5.74	.765	11.54	.240
Running expertise years	9.81	.133	7.50	.277	3.15	.789	14.09	.029**
Duration of training session	19.81	.003*	16.56	.011**	4.28	.638	28.68	.000***
Km/week	29.93	.008**	14.72	.099	9.43	.396	41.77	.000***
Training frequency/week	28.02	.000***	17.61	.007**	13.65	.034*	61.18	.000***
Date of first race	6.25	.181	8.29	.218	4.47	.613	6.69	.350
Distance of first race	7.07	.314	1.60	.657	5.38	.496	11.74	.228
Best 10 km	9.59	.384	7.55	.272	7.45	.589	21.31	.011*
Best 21 km	17.46	.042*	2.46	.982	8.43	.491	19.76	.019*
Best 42 km	11.56	.239	10.52	.309	12.56	.183	22.38	.008**
Additional Gym Attendance	11.23	.011*	2.82	.419	4.52	.210	6.90	.075

Table 5 Crosstab analysis (%) combining usual running distance and levels of addiction risk (sociodemographic and performance variables)

	42 km														
	21 km					10 km									
	Min	Low	High	Max	Tot	Min	Low	High	Max	Tot					
Sex	29.3	26.3	15.8	6.0	72.9	28.6	31.1	18.0	5.6	83.2	25.0	26.5	20.6	22.1	94.1
Men	12.4	9.4	3.4	1.9	27.1	4.3	5.6	5.6	1.2	16.8	2.9	1.5	0.0	1.5	5.9
Women	20.3	12.0	5.6	2.6	40.6	12.4	8.1	5.6	2.5	28.6	4.4	10.3	7.4	4.4	26.5
Age	18.4	19.5	11.3	4.9	54.1	19.9	26.7	16.8	3.7	67.1	23.5	17.6	13.2	19.1	73.5
36–55	3.0	1.1	0.8	0.4	5.3	0.6	1.9	1.2	0.6	4.3	2.9	1.5	4.4	4.4	13.3
>56	17.3	17.3	7.1	5.6	47.4	16.8	20.5	13.0	3.7	54.0	14.7	16.2	13.2	19.1	63.2
Club-membership	24.4	15.4	10.5	2.3	52.6	16.1	16.1	10.6	3.1	46.0	13.2	11.8	7.4	4.4	36.8
No	19.9	13.2	5.6	3.0	41.7	11.8	15.5	6.2	2.5	36.0	10.3	5.9	7.4	7.4	30.9
Single	17.3	15.4	9.0	4.1	45.9	18.0	18.6	12.4	3.1	52.2	16.3	16.1	9.9	4.5	48.5
Married	1.5	0.4	1.1	0.0	3.0	0.6	0.6	1.2	0.6	3.1	1.6	0.8	1.2	0.6	10.3
Divorced	3.0	3.8	1.9	0.8	9.4	2.5	1.9	3.7	0.6	8.7	2.7	3.1	2.3	1.0	10.3
Common Law Partner	17.7	15.0	10.2	3.8	46.6	16.1	18.6	13.7	1.9	50.3	14.7	19.1	7.4	14.7	55.9
Yes	24.1	17.7	7.5	4.1	53.4	16.8	18.0	9.9	5.0	49.7	13.2	8.8	13.2	8.8	44.1
No	5.3	4.9	0.8	1.1	12.0	3.7	1.9	0.6	0.0	6.2	1.5	0.0	1.5	0.0	2.9
Employment Situation	33.1	26.3	16.2	5.3	80.8	26.7	33.5	20.5	6.2	87.0	23.5	26.5	19.1	22.1	91.2
Employed	2.6	1.1	0.4	1.1	5.3	1.9	0.6	1.9	0.6	5.0	1.5	1.5	0.0	1.5	4.4
Unemployed	0.8	0.4	0.4	0.4	1.9	0.6	0.6	0.6	0.0	1.9	1.5	0.0	0.0	0.0	1.5
Retired	27.8	24.8	12.4	5.3	70.3	24.8	31.7	18.6	5.0	80.1	14.7	19.1	17.6	22.1	73.5
Healthy	8.6	6.0	2.3	1.1	18.0	6.8	0.6	3.7	1.9	13.0	4.4	7.4	0.0	0.0	11.8
Cheap Sport	0.8	0.4	0.0	0.0	7.1	0.0	0.0	0.6	0.0	0.6	1.5	0.0	0.0	0.0	1.5
Social	1.1	0.0	0.8	1.5	3.4	0.0	0.6	0.0	0.0	1.2					
Personal Goals	3.4	1.5	2.3	0.0	7.1	1.2	3.7	0.0	0.0	5.0	7.4	1.5	2.9	1.5	13.2
Others	22.9	14.7	8.3	3.0	48.9	12.4	8.1	10.6	1.9	32.9	8.8	7.4	5.9	2.9	25.0
< 5 years	6.4	8.6	2.6	3.0	20.7	9.3	14.9	8.1	2.5	34.8	7.4	11.8	8.8	10.3	38.2
Between 5 and 10 years	12.4	9.4	6.8	1.9	30.5	11.2	13.7	5.0	2.5	32.3	11.8	8.8	5.9	10.3	36.8
More 10 years	18.8	9.8	5.3	2.3	36.1	8.1	3.1	1.9	1.9	14.9	2.9	2.9	0.0	1.5	7.4
< 60'	22.9	21.8	12.0	4.5	61.3	22.4	32.9	21.1	3.7	80.1	23.5	20.6	16.2	20.6	80.9
60–90'	0.0	1.1	0.4	1.1	2.6	2.5	0.6	0.6	1.2	5.0	1.5	4.4	4.4	1.5	11.8
>90'	36.8	27.8	13.2	5.3	83.1	26.1	19.9	17.4	5.0	68.3	13.2	11.8	2.9	5.9	33.8
Km/week	4.5	4.5	3.4	1.5	13.9	6.2	15.5	5.6	1.2	28.6	11.8	14.7	13.2	13.2	52.9
Duration of training session	0.0	0.4	1.2	1.1	2.7	0.6	1.2	0.6	0.6	3.1	2.9	1.5	4.4	4.4	13.3
≥86															

Table 5 (continued)

	10 km					21 km					42 km				
	Min	Low	High	Max	Tot	Min	Low	High	Max	Tot	Min	Low	High	Max	Tot
	Training frequency/week	27.4	18.4	5.3	1.9	53.0	17.4	8.7	6.2	1.2	33.5	8.8	4.4	1.5	1.5
4–5	12.0	12.0	9.8	4.1	38.0	13.0	21.1	16.1	4.3	54.7	16.2	17.6	8.8	8.8	51.5
6–7	2.3	2.3	2.6	1.9	9.0	2.5	6.8	1.2	1.2	11.8	2.9	5.9	10.3	13.2	32.4
Date of race date	24.8	19.2	9.8	3.8	57.5	13.0	11.2	11.2	1.9	37.3	11.8	11.8	5.9	8.8	38.2
< 5 years	6.8	6.4	2.3	3.0	18.4	11.2	13.0	8.1	2.5	34.8	5.9	5.9	11.8	8.8	32.4
Between 5–10 years	10.2	7.1	5.6	1.1	24.1	8.7	12.4	4.3	2.5	28.0	10.3	10.3	2.9	5.9	29.4
More 10 years	38.0	32.0	16.9	7.1	94.0	23.0	28.6	18.6	5.6	75.8	19.1	22.1	13.2	13.2	67.6
Distance of first race	2.6	0.8	0.8	0.8	4.9	9.9	8.1	5.0	1.2	24.2	8.8	4.4	4.4	8.8	26.5
10 km	1.1	0.0	0.0	0.0	1.1						0.0	1.5	2.9	1.5	5.9
21 km	2.6	1.5	1.1	1.1	6.4	3.1	0.6	1.2	0.6	5.6	1.5	1.5	1.5	2.9	7.4
Best 10 km	6.0	7.5	5.3	1.1	19.9	5.0	10.6	6.8	0.6	23.0	4.4	11.8	7.4	8.8	32.4
< 35'	32.7	23.7	11.3	5.6	73.3	24.8	25.5	15.5	5.6	71.4	22.1	13.2	11.8	10.3	57.4
> 40'	9.4	7.1	3.4	1.5	21.4	2.5	1.9	1.2	0.6	6.2	1.5	2.9	2.9	4.4	11.8
Best 21 km	1.1	0.8	1.9	1.5	5.3	8.1	8.1	5.6	1.2	23.0	4.4	10.3	10.3	8.8	33.8
< 1 h20'	25.6	18.0	9.0	4.5	57.1	22.4	26.1	16.8	5.0	70.2	19.1	13.2	7.4	8.8	48.5
> 1 h30'	0.4	0.8	0.8	0.4	2.3	0.6	1.2	0.0	0.6	2.5	0.0	0.0	2.9	4.4	7.4
Best 42 km	2.6	3.0	2.6	0.4	8.6	6.2	7.5	3.1	0.0	16.8	4.4	10.3	8.8	7.4	30.9
< 2 h45'	13.5	7.5	6.8	3.0	30.8	16.8	21.7	13.7	5.6	57.8	20.6	16.2	7.4	8.8	52.9
> 3 h15'	31.2	25.9	9.8	6.8	73.7	23.6	24.8	18.0	6.2	72.7	20.6	25.0	11.8	17.6	75.0
Additional Gym Attendance	10.5	6.8	7.9	1.1	26.3	9.3	11.8	5.6	0.6	27.3	7.4	2.9	8.8	5.9	25.0
No															

A paragraph of limitations was included.

A paragraph of practical implication was included at the end of the paper.

Conclusions

The conclusions section was completely modified to reflect the new results.

Section updated by deleting unused references and adding new ones included in the document.

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