

**Supplementary 2.** Expertise of athletes based on a modified version of the model for classifying the validity of expert samples in sport psychology research.

Study	Within sport assessment			Between sport assessment		Results		
	Level of performance	Success at level	Experience at level	Competition in country	Competition in world	Score (0-16)	Competitive-elite (>8)	Semi-elite (<8)
Caia et al. 2017	4	NP	NP	3	3	12	1	0
Caia et al. 2017	4	NP	NP	3	3	12	1	0
Caia et al. 2017^	4	NP	NP	3	3	12	1	0
Caia et al. 2017^	2	NP	NP	3	3	6	0	1
Chennaoui et al. 2016	4	3	NP	2	3	10	1	0
Dennis et al. 2016	4	NP	NP	4	1	10	1	0
Dobrosielski et al. 2016	1	NP	NP	4	1	3	0	1
Dunican et al. 2017	2	NP	NP	1	3	4	0	1
Dunican et al. 2018	4	NP	NP	2	3	10	1	0
Eagles & Lovell 2016	4	NP	2	2	3	10	1	0
Fietze et al. 2009	4	NP	NP	1	1	4	0	1
Fowler et al. 2014	4	NP	NP	3	4	14	1	0
Fowler et al. 2015	4	NP	NP	3	4	14	1	0
Fowler et al. 2017	2	NP	NP	4	4	8	0	1
Fullagar et al. 2016	4	NP	3	4	4	16	1	0
Fuller et al. 2017*	4	NP	NP	4	1	10	1	0
George et al. 2003	4	NP	NP	4	1	10	1	0
Hoshikawa et al. 2013	1	NP	NP	2	4	3	0	1
Juliff et al. 2018	2	NP	NP	4	3	7	0	1
Juliff et al. 2018	2	NP	NP	4	3	7	0	1
Knufinke et al. 2017*	3	NP	4	3	3	9	1	0
Kolling et al. 2016	2	NP	NP	2	4	6	0	1
Kolling et al. 2017	2	NP	NP	2	4	6	0	1
Lalor et al. 2018	4	NP	2	4	1	10	1	0
Lastella et al. 2014	2	NP	NP	3	4	7	0	1
Lastella et al. 2015	3	NP	NP	2	4	9	1	0
Lastella et al. 2015	3	NP	NP	2	4	9	1	0
Lastella et al. 2015*	3	NP	NP	3	3	9	1	0
Lastella et al. 2017	2	NP	NP	3	3	7	0	1
Leeder et al. 2012*	4	NP	NP	2	3	10	1	0
Miller et al. 2017*	4	NP	NP	4	3	14	1	0
Nedelec et al. 2017	4	NP	3	4	4	16	1	0
Netzer et al. 2001	2	NP	NP	1	4	5	0	1
O'Donnell & Driller 2017	3	NP	NP	4	3	11	1	0
O'Donnell et al 2018	4	NP	NP	4	3	14	1	0
O'Donnell et al 2018	4	3	NP	4	3	14	1	0
Pitchford et al. 2017	4	NP	NP	4	1	10	1	0
Richmond et al. 2004	4	NP	NP	4	1	10	1	0
Richmond et al. 2007	4	NP	NP	4	1	10	1	0
Robey et al. 2014	2	NP	NP	3	4	7	0	1
Romyn et al. 2016	2	NP	NP	4	3	7	0	1
Sargent et al. 2013	2	NP	NP	3	4	7	0	1
Sargent et al 2014*	4	NP	NP	2	3	10	1	0
Sargent et al. 2014	3	NP	NP	2	3	8	0	1
Sargent & Roach 2016	4	NP	NP	4	1	10	1	0
Schaal et al. 2015	4	NP	2	2	3	10	1	0
Shearer et al. 2015	4	NP	NP	2	3	10	1	0
Staunton et al. 2017	4	NP	NP	2	3	10	1	0
Thornton et al. 2017	4	NP	NP	3	3	12	1	0
Thornton et al. 2017	4	NP	NP	3	3	12	1	0
Tuomilehto et al. 2016	4	NP	NP	4	3	14	1	0
Van Ryswyk et al. 2017	4	NP	2	4	1	10	1	0
Taylor et al. 1997	3	NP	NP	1	3	6	0	1
Roach et al. 2013	2	NP	NP	4	4	8	0	1
Whitworth-Turner et al. 2017	2	NP	NP	4	4	8	0	1
Total							35	20

\* Indicates studies recruited athletes from several sports, thus scores reflect an average across all sports examined. ^ Indicates study examined distinct samples of competitive-elite and semi-elite athletes, therefore the study has been entered twice in the table. Due to limited reporting of the 'success' and 'experience' of athletes, the modified version of the model uses only the 'level of performance', 'competition in country', and 'competition in world' when determining the expertise of athletes.

- *Level of performance:* 4 = athletes competed in a top tier professional league / tour, or at an international level, 3 = athletes competed in a second tier professional league / tour, or at a national level, 2 = athletes competed in a third tier professional league / tour, or were involved in talent development (e.g. age group national representatives), and 1 = athletes competed in a fourth tier league / tour, or at intercollege level. Note: athletes identified as 'recreational', 'trained', or competing in leagues lower than 4th tier were not awarded a score and excluded from the study.
- *Competition in country:* 4 = a sport considered to be the most popular in the nation, 3 = a sport considered to be in the top five most popular sports in the nation, 2 = a sport considered to be in the top ten most popular sports in the nation, and 1 = a sport considered to be outside the top ten most popular sports in the nation.
- *Competition in world:* 4 = high-profile Olympic sport, or a sport with a widespread global audience, 3 = regular Olympic sport, or a sport with a semi-global audience, 2 = occasional Olympic sport, or a sport with a limited global audience, 1 = non-Olympic sport, or a sport with a local / national audience only.

Equation used to calculate total score: level of performance × [(competition in country + competition in world) ÷ 2], whereby scores >8 were deemed 'competitive-elite', and scores <8 = were deemed 'semi-elite'.