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28           **Development and First Application of the Athlete Adaptation Inventory: An**  
29   **Exploratory Study**

30           Cultural transition represents a new topic in athletic career literature, and reflects the  
31 fact that geographic mobility has become an essential part of career development  
32 (Stambulova, Ryba, & Henriksen, 2020). Liberalization of immigration policies in many  
33 developed countries and freedom of movement in the European Union for their citizens has  
34 facilitated the pace of transnational migration for individuals seeking settlement or temporary  
35 residency for employment, a better lifestyle, and safer working and social conditions.  
36 Likewise, international mobility of athletes has been increasing in a variety of sporting  
37 contexts (for a review, see Ryba, Schinke, Stambulova, & Elbe, 2018). According to the  
38 Swiss-based International Centre for Sports Studies' Football Observatory, the proportion of  
39 foreign football (soccer) players, amongst the 31 top European divisions surveyed, increased  
40 from 34.7% in 2009 to 39.7% in 2017 (Poli, Ravenel, & Besson, 2018). In basketball, the  
41 number of international transfers on a global scale has risen 34% between seasons 2010/11  
42 and 2018/19, with migrant players averaging 44.4% across all major leagues. Spain has  
43 topped the list with 70.1% imported players in the 2018/19 season (CIES Observatory, 2019).

44           The cultural transitioning of athletes encompasses multiple sites and dimensions of the  
45 social fields in which they live, such as sport, education, and family to name only a few. It  
46 has recently been claimed that highly skilled migrants' agile adaptation to changing contexts  
47 within a cultural transition, is crucial for enhancing and maintaining an athletic career (Light,  
48 Evans, & Lavallee, 2019; Ryba, Stambulova, & Ronkainen, 2016; Schinke, Ge, Petersen,  
49 Blodgett, Dupuis-Latour, & Coholic, 2019). In addition to being able to achieve mobility, it is  
50 important for sport migrants to sustain their athletic performance, and this is often predicated  
51 on adaptability; i.e., creating and maintaining social relations and situational knowledge in  
52 the different locations they settle into or leave behind. A growing number of qualitative

53 studies on migrants' experiences indicates that transitioning athletes encounter an array of  
54 psychosocial and cultural challenges both on and off the field, including social isolation,  
55 loneliness and homesickness (Richardson, Littlewood, Nesti, & Benstead, 2012; Ronkainen,  
56 Khomutova, & Ryba, 2019; Samuel, Stambulova, & Ashkenazi, 2019); difficulties  
57 understanding and navigating cultural value systems and norms (Khomutova, 2016;  
58 Middleton, Schinke, Oghene, McGannon, Peterson, & Kao, 2020; Schinke, McGannon,  
59 Battochio, & Wells, 2013); frustration, anger, feelings of cynicism and self-doubt (Samuel et  
60 al., 2019; Schinke, Blodgett, McGannon, Ge, Oghene, & Seanor, 2017); as well as  
61 marginalization, social exclusion and conflict (Blodgett & Schinke, 2015; Ryba, Ronkainen,  
62 & Selänne, 2015). The aforementioned researchers convincingly argued that cultural  
63 transition pathways are socially constructed, and their trajectories are contingent upon both  
64 the transnational migrants' cultural capital and experience on the one hand, and structural  
65 barriers in the social fields of origin and destination countries, on the other (see also Ryba,  
66 2017; Ryba et al., 2018; Schinke, Blodgett, Ryba, Kao, & Middleton, 2019).

67         The role of athletic and non-athletic environments in facilitating or debilitating  
68 acculturation processes of migrant athletes has also been investigated (Duchesne, Bloom, &  
69 Sabiston, 2011; Elbe et al., 2018). These studies revealed that athletes who report higher  
70 levels of satisfaction with both sport and non-sport aspects of everyday life, experience an  
71 enhanced feeling of belonging in new social networks as well as motivation to settle in.  
72 Moreover, a recent study of youth migrants in Greece showed that sport can reduce feelings  
73 of discrimination and serve as a buffer against acculturative stress (Morela, Elbe,  
74 Theodorakis, & Hatzigeorgiadis, 2019). However, no previous studies have examined the  
75 extent to which challenges associated with transitioning into a new culture in general impact  
76 on an athlete's adaptation in the sport context. In other words, there is a poor understanding  
77 of the potential influences of culturally constituted environmental factors – within which the

78 athletic career transition is embedded – on an athlete’s sport performance context. With the  
79 overarching goal to deepen current understandings of the cultural transition, our exploratory  
80 quantitative study aimed to identify challenges that professional and amateur elite athletes  
81 experience on and off the athletic field, when transitioning to new environments at a given  
82 cultural site. The relationship between difficulties in cultural adaptation and demographic  
83 characteristics, namely, gender, sport type (individual vs. team), age and previous migration  
84 experience were also examined.

### 85 **Cultural Transition Theoretical Framework**

86 In this research we focus on transnational athletes who have constructed their careers  
87 across borders and whose individual and sport-based development has been embedded in the  
88 socio-culturally different contexts of at least two countries (c.f. Ryba & Stambulova, 2013).  
89 Culture is conceptualized as constitutive in explaining psychological phenomena, especially  
90 with regards to the self as agent and its relations with others and the social environment  
91 (Kitayama, Duffy, & Uchida, 2007; Markus & Kitayama, 2010). From a cultural psychology  
92 perspective, the cultural and the psychological cannot be separated. However, cultural models  
93 organizing the respective modes of being, consisting of agency, self-other representation, and  
94 cognition (Kitayama et al., 2007), typically can be delineated through comparison when an  
95 individual gets involved in contrasting cultural activities and practices. Although feeling,  
96 thinking, and acting can take culture-specific forms, humans possess a powerful capacity to  
97 continually shape and be shaped by the context (Markus & Kitayama, 2010). Thus, adapting  
98 to an unfamiliar culture is a time-dependent process rooted in the human tendency to strive  
99 for internal equilibrium while establishing a relationship with a new environment (Kim,  
100 2005; Ryba, 2017; Ryba et al., 2012).

101 The present study is situated in the Cultural Transition Model (Ryba et al., 2016) that  
102 advanced conceptual understandings of the cultural adaptation mechanisms produced in the

103 transition process. The model was developed based on experiences of professional and semi-  
104 professional transnational athletes and accounts for short- and long-term adaptation, referred  
105 to as acute cultural and sociocultural adaptation, respectively. Acute cultural adaptation  
106 (ACA) typically begins shortly after relocation when athletes learn to fit in to a new sporting  
107 environment and gradually acquire cultural capital that is valued in a broader societal context:  
108 for example, adjusting to the communication norms and practices of the host site. The ACA  
109 is conceptualized as a negotiated process predicated on the satisfaction of basic psychological  
110 needs of relatedness, competency and autonomy (Ryan & Deci, 2000), with team relatedness  
111 mediating the acculturation process of migrant athletes (Ryba et al., 2012). During this phase,  
112 many athletes report experiences that are symptomatic of ‘culture shock’ (e.g., triggered by  
113 weather, diet, training and living conditions) and prioritize their athletic performance  
114 (Meisterjahn & Wrisberg, 2013; Ryba et al., 2012; Samuel et al., 2019; Schinke et al., 2013).  
115 Ryba et al. (2016) moreover suggested that transnational professionals’ focus on performance  
116 issues is also facilitated by receiving clubs’ expectations for athletes to adapt to potentially  
117 different cultural norms of a club, league or national sport system (but rarely beyond that),  
118 whereby the athletes’ normative belonging is established. Consequently, establishing strong  
119 social relations and making friends with teammates at destination may be critical to  
120 successful integration in the new environment (Agergaard & Ryba, 2014; Ely & Ronkainen,  
121 2019; Ronkainen, Harrison, Shuman, & Ryba, 2016; Schinke & McGannon, 2014).

122 Long-term migrants typically more actively engage in interpersonal relations at various  
123 cultural sites outside of their sport and as a result may become more socially integrated in the  
124 destination country, although encompassing multiple sites of inclusion and exclusion. With  
125 long-term settlement and the likelihood of permanent residence, athletes are motivated by the  
126 sociocultural dimension of acculturation associated with behavioral competence, cultural  
127 knowledge, and the ability to interact and function autonomously in the new cultural

128 environment (Ward & Kennedy, 1999). Studies of transnational athlete migrants revealed that  
129 the cultural transition outcome is typically a self-identity transformation, with a subtler  
130 understanding of the local socio-political and cultural systems, and the ability to shift  
131 perspectives within the self–other orientation based on a given cultural context (Light et al.,  
132 2019; McGannon, Schinke, Ge, & Blodgett, 2018; Ronkainen et al., 2016, 2019; Ryba et al.,  
133 2012, 2015; Schinke & McGannon, 2014; Schinke, Blodgett et al., 2019).

134       Because transnational athletes are simultaneously embedded in multiple layers of the  
135 social fields, Ryba et al. (2016, 2020) theorized that the psychological work of cultural  
136 transition involves a cycle of attunement to variations in the cultural modes of being, with  
137 three psychological mechanisms contributing to optimum individual functioning at each  
138 phase of the transition. The underlying psychological mechanisms are: (a) social  
139 repositioning – that is, identification where one stands within new social relations and  
140 networks; (b) negotiation of cultural practices – that is, finding balance between one’s own  
141 and the destination countries’ cultural norms and daily practices; and (c) meaning  
142 (re)construction – that is, the process of realigning personal life story as new experiences  
143 emerge that may challenge the previous self-narrative. Studies that applied the cultural  
144 transition model to a specific athletic population provided support of its non-linear process  
145 (Ely & Ronkainen, 2019; Ronkainen et al., 2019).

146       The important implication of the cultural transition model for the present research is  
147 that we conceptualize challenge as something that acquires meaning in a particular social and  
148 cultural context and consequently activates idiosyncratic modes of thought, feeling, and  
149 action that do not necessarily translate into universal causal relations. This approach also  
150 points to the need to consider subjective time in psychological processing as well as the  
151 possibility of cumulative factors across the social fields that may mediate the relationship  
152 between the psychological and the cultural in transition. Furthermore, as suggested by Ryba

153 (2019), while the current model offers useful insights into the cultural adaptation processes, it  
154 should be developed further with regards to migration motives, gender, and athletic status, in  
155 particular. In this study, we focused on exploring sociocultural markers of difference,  
156 namely, gender, sport type, age, and previous migratory movements.

### 157 **Factors Associated with Cultural Adaptation**

158 It is important to point out that transnational athletes migrate for a variety of reasons  
159 (e.g., training camps, professional contracts, fleeing totalitarian regimes or war zones) which  
160 significantly shape their acculturation pathways (Ryba et al., 2018). In this paper, we focus  
161 on highly skilled migrants who have been considered a privileged group in previous studies  
162 because transnational networks, through which their cross-border mobility is produced, also  
163 facilitate their employment and settlement in the (temporary) destination. While we  
164 acknowledge diversity *within* the skilled sport migrants regarding push and pull resources  
165 underpinning their career and life motives, for the purpose of the present study we  
166 operationalize migration motive as the ambition for professional sport-based development.  
167 This theme has consistently been reported to cut across athletes' explanations for migrating  
168 (Botelho & Agergaard, 2011; Maguire, 2004; Ryba, Stambulova, Ronkainen, Bundgaard, &  
169 Selänne, 2015).

### 170 ***Gender***

171 Sport-based migration has traditionally been investigated as male athletes' career  
172 ambition although recent research indicates that female athletes have become increasingly  
173 mobile (Agergaard & Ryba, 2014; Botelho & Agergaard, 2011; Ekengren, Stambulova,  
174 Johnson, Carlsson, & Ryba, 2019; Ryba et al., 2012; Ryba, Stambulova et al., 2015). Thus  
175 far, however, little empirical research has examined gender-specific challenges of  
176 transnational athletic migration. In one study of the gendered construction of elite athletic  
177 careers from a life story perspective, Ryba, Ronkainen, et al. (2015) detailed the ways in



178 which gender beliefs and norms at a particular cultural site deeply permeated and shaped the  
179 transnational athletes' career trajectories and life choices. The authors discerned a gender-  
180 specific pattern indicating that while the male athlete was largely living a culturally  
181 normative script of 'good life', the female athlete actively resisted and negotiated with the  
182 gendered cultural narratives to realign herself with new meanings, experiences, and  
183 aspirations. Another recent study that examined gendered career trajectories of Swedish  
184 professional athletes (Ekengren et al., 2019), found a migration theme to be integral to  
185 professional development of both men and women. However, there were differences in the  
186 ways in which male and female athletes storied their cultural transition experiences: whereas  
187 men emphasized performance, women stressed difficulties adjusting to social situations and  
188 cultural norms. These findings are consistent with studies in other fields indicating that adult  
189 women tend to experience more difficulties in adaptation to a new cultural environment due  
190 to differing gender-based interactions in the family and receiving community (Dion & Dion,  
191 2001; Wang, 2009). To the best of our knowledge, the association between cultural  
192 adaptation and transnational athletes' gender has not been studied quantitatively.

### 193 *Sport Type, Age and Previous Migration Experience*

194 Cultural adaptation challenges as a function of migrant athletes' sport, age, and  
195 previous mobilities have not been directly investigated. Two qualitative studies that  
196 examined acute cultural adaptation of Finnish swimmers (individual sport; Ryba et al., 2012)  
197 and Israeli handballers (team sport; Samuel et al., 2019) in the context of a training camp  
198 migration yielded similar results. Specifically, the swimmers and the handballers' team  
199 culture mediated individual athlete's engagement with the new sociocultural context. Given  
200 that migrating as a group is hardly likely for transnational athletes seeking professional  
201 opportunities, a team sport athlete may benefit more, than an individual sport athlete, from  
202 established channels of migration in the global sports system (Maguire & Falcous, 2011). The

203 social relations with teammates may further alleviate adaptation difficulties; however, this  
204 potentially is contingent on the team's acceptance and sharing of the acculturation load with  
205 the newcomers to enhance their basic psychological needs satisfaction (Morela et al., 2019;  
206 Ryba et al., 2012, 2015; Schinke et al., 2013; Schinke, Blodgett et al., 2019).

207         With respect to age, athlete movement within countries, such as being drafted to a  
208 national team or recruited to play for a college/university team in another part of the country,  
209 occurs at a relatively young age. In terms of international mobility, it has been suggested that  
210 young people, aged 20-34, are more inclined to migrate than in other age categories (Bale &  
211 Maguire, 2013). This phenomenon is particularly visible in professional football (soccer),  
212 where clubs look to "import" youth players aged 15-16 years to their youth academies for  
213 reasons of working around "home-grown" player quota limitations (Richardson et al., 2012)  
214 or simply maximizing financial gains on future transfer fees. Some qualitative sport studies  
215 provided contextualized insights into identity and cultural practices of migrant athletes  
216 around age. For example, the school-aged Israeli athletes in a long training period abroad had  
217 to arrange time for online tutoring and studying towards matriculation exams (Samuel et al.,  
218 2019). In another study, the acculturation experience of migrant youth footballers to the UK's  
219 Premier League was conceptualized as a "glocalization" process characterized by negotiation  
220 of their migrant, adolescent and elite athlete identities in the unfamiliar and insular academy  
221 setting (Weedon, 2011). Studies also highlighted that difficulties of adjusting to a higher  
222 competition level in addition to multiple broader life challenges (e.g., schooling,  
223 housekeeping, shopping and cooking), are typically reported by younger migrants (Blodgett  
224 & Schinke, 2015; Richardson et al., 2012; Ronkainen et al., 2019; Ryba, Stambulova et al.,  
225 2015; Schinke et al., 2017). Considering the link between biological age and the cultural  
226 meanings informing life choices, Ryba et al. (2016) explicated the ways in which an 18-aged  
227 professional football (soccer) player negotiated situated meanings ascribed to age as 'male



253 challenges experienced in and outside of sport by professional and amateur elite athletes from  
254 different cultures, sport types and migrating to a wide variety of different countries. By  
255 contrast, confirmatory research such as confirmatory factor analysis of psychometric tools  
256 combines theoretical precision and statistical rigor (van de Vijver, 2009), including power  
257 analysis and statistical treatment of data. Consistent with the exploratory nature of the study,  
258 no hypotheses were formulated (Kyriazos, 2018).

259 The study's first aim was to apply the AAI to identify challenging issues associated  
260 with cultural transition. The second aim was to examine whether there were differences in  
261 perceived adaptation challenges based on gender and sport type, and whether there was a  
262 relationship between age and previous migration experience regarding experienced  
263 challenges. To clarify the relationship between the sport and non-sport environments in  
264 which acculturation processes of migrating athletes occur, the third aim of the study was to  
265 examine whether gender, sport type, age, previous migratory movements as well as  
266 challenges experienced transitioning to a new culture in general would predict challenges  
267 perceived in the sport context.

## 268 **Methods**

### 269 *Participants and Procedures*

270 A total of 143 (69 female) athletes (age range 16–44;  $M = 25.76$ ,  $SD = 4.63$ ) were  
271 recruited for this study. One hundred and six athletes were engaged in a team sport and 37 in  
272 an individual sport. All athletes in the study had made at least one cultural transition during  
273 their athletic career, and 104 athletes had experienced more than one. The athletic status of  
274 the athletes included professionals ( $n = 86$ ), semi-professionals ( $n = 24$ ), amateurs ( $n = 26$ ),  
275 and amateurs on athletic scholarship ( $n = 6$ ). One respondent did not indicate athletic status.  
276 Based on the survey, athletes' citizenship was from a total of 22 different countries in  
277 Europe, 2 in North America, 3 in South America, 6 in Asia, 6 in Africa and 2 from the

278 Australasia region. A total number of 9589 months was reported as time spent by participants  
279 in the current location ( $n = 143$ ,  $M = 67.06$ ,  $SD = 103.94$ ), of which 3225 months by men ( $n =$   
280  $74$ ,  $M = 43.58$ ,  $SD = 78.13$ ) and by 6364 by women ( $n = 69$ ,  $M = 92.23$ ,  $SD = 121.5$ ). Of all  
281 participants, 15% spent up to 3 months in the host location, 22% spent between 4 and 12  
282 months, 37% spent between 13 and 48 months, 8% spent between 49 and 120 months and the  
283 remaining 17% spent over 121 months (i.e. over 10 years).

284         Survey participants were recruited by personal emails to colleagues in the authors'  
285 professional network with a request to forward the online survey link to athletes in their  
286 network. Furthermore, a link to the survey was posted in different sport-related Facebook  
287 groups. In addition, athletes in the authors' network were approached directly and asked to  
288 fill in either online or paper and pencil versions of the survey. The link to the online survey  
289 offered participants the opportunity to choose between Danish, English and Russian versions.  
290 Furthermore, athletes were provided with pencil-and-paper versions in Finnish and Polish.  
291 All translations of the survey were completed with the translation – back translation method  
292 (Brislin, 1970). Following the American Psychological Association (APA) ethical guidelines,  
293 all participants provided informed consent and were ensured of the confidentiality and  
294 anonymity of their responses. This study was conducted from Denmark and according to  
295 Danish rules ethical clearance was not required due to the non-invasive nature of the study.  
296 All athletes were free to refrain from the survey as well as completing specific questions. We  
297 asked that athletes be 18 years of age or older to participate in the survey and no athletes  
298 under the age of 16 participated. Since youth 16 and older are deemed Gillick competent we  
299 did not exclude their data.

300         Data were analyzed using SPSS version 25. Mann-Whitney U tests ( $p < 0.05$ ) were used  
301 to identify group differences in cultural transition challenges between female and male  
302 athletes as well as between team and individual sport athletes. Spearman's correlations (two-

303 sided) were conducted to investigate the relationship between age and number of migratory  
304 experiences and cultural transition challenges. A multivariate regression analysis was  
305 conducted to investigate the study's third aim.

### 306 *Instrument*

307 The first part of the survey included 20 demographic questions relating to athletes'  
308 gender, age, citizenship, current (temporal) settlement, number of countries in which they  
309 have resided for a minimum of two months, languages spoken, sport participation, and their  
310 parents' cultural background. The majority of questions were open-ended.

311 The second part of the survey included the newly developed Athlete Adaptation  
312 Inventory (AAI). The AAI was developed by adapting the Sociocultural Adaptation Scale  
313 (SCAS), developed by Ward and Kennedy (1999) for studying international students'  
314 adaptation, and was informed by the cultural transition literature (Ryba et al., 2012, 2016).  
315 Based on the adopted theoretical framework, moreover, supported by empirical findings that  
316 transnational migrant athletes experience non-linear acculturation cycle on and off the  
317 athletic field (e.g., Ronkainen et al., 2019; Ryba et al., 2012; Samuel et al., 2019; Schinke et  
318 al., 2013), we aimed to construct a more encompassing questionnaire. For this, from the  
319 original SCAS, 23 unaltered items were taken over referring to challenges when transitioning  
320 to a new sociocultural environment of the receiving society (i.e., non-sport items), two items  
321 were deemed redundant, and 16 items were modified. The modification of original items was  
322 minor and consisted of inserting context words (e.g., on the team, in everyday situations) or  
323 changing wording while maintaining the concept intact (e.g., SCAS item living away from  
324 family members overseas/independently from your parents was modified to living away from  
325 family and friends). This resulted in additional 23 and seven items respectively. Sixteen new  
326 items were generated to probe into issues that might be perceived as challenging for athletes  
327 transitioning to a new sociocultural environment, with 13 of them being sport-related items.

328           The SCAS modification as well as the new items were formulated based on (a) the  
329 authors' extensive research and applied experience with transitioning athletes; (b) review of  
330 relevant literature; and (c) multiple discussions with an expert panel consisting of sport and  
331 performance psychology consultants (SPPC), a sports physician, team and individual sports'  
332 coaches and transnational athletes (summarized in Table 1). To give an example, new items  
333 like getting used to the training routine (# 5) and understanding coaching instructions (# 17)  
334 were added based on first author research (1<sup>st</sup> author et al. XXXX); preparing for games in  
335 your usual way (# 7) was created based on Schinke and colleagues research with Aboriginal  
336 athletes (e.g., Schinke et al., 2007); while health-related items (# 33, 34 and 35) were  
337 included per the sports physician recommendation. The expert discussion participants had  
338 significant experience within the area of athlete adaptation, in some cases over 30 years'  
339 experience, and the majority had first-hand experience with transnational mobility. The  
340 purpose of including diverse experts in the discussion group was to broaden our perspective  
341 on the complex dynamics of cultural adaptation, performance and wellbeing (see also 1<sup>st</sup>  
342 author XXXX, based on selected interview material). The AAI was developed in English and  
343 simultaneously translated into Danish and Finnish which prompted additional reflection on  
344 wording of the items.

345           At the next stage, eight expert discussion participants and six transnational athletes (see  
346 Table 1) were asked to provide feedback on the instrument's wording, comprehensiveness  
347 and relevance. Based on feedback received, which included minor suggestions for wording,  
348 the scale was further modified to a version that included a total of 69 items. The 5-point  
349 response scale of the SCAS which ranges from 1 (*no difficulty*) to 5 (*extreme difficulty*) as  
350 well as a choice of "does not apply" was also used for the AAI. Tables 2 and 3 list sport and  
351 non-sport items, respectively. The AAI was not designed to be sport-type specific and can be

352 used for all migrant athlete populations. The AAI currently exists in eight languages, namely  
353 Albanian, Danish, English, Finnish, German, Polish, Russian and Turkish.

### 354 **Results**

355 The means, standard deviations, and range of the 69 items (Table 2, Table 3) indicated  
356 that, on average, athletes rated the challenges as slightly difficult. The mean for all 69 items  
357 was 1.84 ( $SD = 0.54$ ) with an average range of 2.67 (min 1.0 – max 3.67). The 36 items  
358 relating to the sport context had a mean of 1.84 ( $SD = 0.57$ ) and the 33 items relating to the  
359 everyday life context also had a mean of 1.84 ( $SD = 0.52$ ). Thirteen items had a mean of 2.0  
360 (*slight difficulty*) or higher. Eight of these items referred to the sport context, like being  
361 understood on the team, understanding jokes and humor in the team, understanding the local  
362 accent/language, dealing with someone on the team who is unpleasant/aggressive or  
363 expressing one's own ideas about the team's playing style. The other five items pertained to  
364 general life issues such as making friends outside of sport, living away from family members  
365 and friends or dealing with bureaucracy.

366 Subsequently, gender, sport type, age and previous migration experience were  
367 investigated for all 69 items. Significant gender differences were found in a total of seven  
368 items. In the majority of cases (4 items), females felt it was more difficult to adapt to  
369 challenges compared to males. Most of these challenges were sport-related. Getting used to  
370 the training routine ( $U = 2003.00, p = .022, r = .19$ ) was more challenging for females ( $M =$   
371  $1.90, SD = 0.93$ ) than for males ( $M = 1.58, SD = 0.82$ ). Understanding coaching instructions  
372 ( $U = 1924.00, p = .020, r = .20$ ) was also more challenging for females ( $M = 2.04, SD = 0.94$ )  
373 than for males ( $M = 1.74, SD = 1.01$ ). In addition, getting medical help ( $U = 1639.00, p$   
374  $= .029, r = .19$ ) was more challenging for female ( $M = 2.10, SD = 1.10$ ) than for male ( $M =$   
375  $1.74, SD = 0.96$ ) participants. Only one non-sport aspect was identified (applicable to student  
376 athletes), namely dealing with foreign staff at the university ( $U = 431.00, p = .015, r = .29$ ),



377 which was also perceived as more challenging by females ( $M = 1.82, SD = 1.00$ ) than by  
378 males ( $SD = 1.33; SD = 0.59$ ). Males experienced more adaptation difficulties than females  
379 solely outside of sport. Talking about themselves with others ( $U = 1654.00, p < .001, r = .30$ )  
380 was more difficult for males ( $M = 2.30, SD = 1.16$ ) than for females ( $M = 1.62, SD = 0.71$ ).  
381 Also, adapting to local etiquette ( $U = 1996.00, p = .035, r = .18$ ) was more difficult for males  
382 than for females. And finally, seeing things from a local's point of view ( $U = 1930.00,$   
383  $p = .022, r = .19$ ) was also more challenging for males ( $M = 1.97, SD = 0.92$ ) than for females  
384 ( $M = 1.68, SD = 0.96$ ).

385 Sport type was differentiated according to team versus individual sports. A total of  
386 three items showed adaptation differences. In all three cases, team sport athletes perceived  
387 more difficulties, and in all cases in the non-sport domain. Living away from family and  
388 friends ( $U = 1272.00, p = .002, r = .26$ ) was more difficult for team sport ( $M = 1.71, SD =$   
389  $0.96$ ) than for individual sport athletes ( $M = 1.69, SD = 0.98$ ). Adapting to local etiquette was  
390 also more challenging ( $U = 1496.00, p = .030, r = .18$ ) for team sport ( $M = 1.66, SD = 0.76$ )  
391 than for individual sport athletes ( $M = 1.41, SD = 0.76$ ). And lastly, using the local transport  
392 system ( $U = 1396.00, p = 0.032, r = .18$ ) was more challenging for team sport athletes ( $M =$   
393  $2.05, SD = 1.14$ ) than individual athletes ( $M = 1.61, SD = 0.99$ ).

394 Age was significantly correlated with only two sport-related items. Older athletes  
395 reported fewer difficulties in expressing their ideas about training ( $r = -.23, p = .006$ ) and  
396 understanding what is required from them ( $r = -.19, p = .024$ ) than younger athletes. Age was  
397 not related to adaptation to sociocultural challenges outside of sport.

398 Lastly, results suggest that previous migration experience (operationalized as the  
399 number of host countries participants had lived in longer than 2 months) is inversely related  
400 to adaptation difficulties for one non-sport and two sport-related items. That is, the more  
401 cultural transitions experienced by athletes, the fewer adaptation challenges they identified in

402 the AAI. This pertains to finding one's way around the team ( $r = -.17, p = .045$ ) as well as  
403 understanding cultural differences ( $r = -.20, p = .018$ ) and following local rules and  
404 regulations ( $r = -.20, p = .020$ ).

405 Finally, we analyzed whether gender, sport type, age, previous migratory movements as  
406 well as challenges experienced with the transition to a new culture in general could predict  
407 perceived challenges in the sport setting. For each participant, the total number of cultural  
408 adaptation challenges was calculated separately for sport and non-sport domains. Briefly, the  
409 number of items rated from at least slightly challenging were summated to a total score of  
410 perceived challenges for each domain. Male and team sport athletes were coded as "1", and  
411 females and individual sport athletes were coded as "2". Bivariate correlations showed no  
412 significant differences in terms of gender or sport type (Table 4). A multiple linear regression  
413 was conducted to evaluate how well gender, sport type, age, previous migratory experience  
414 and non-sport setting predicted adaptation challenges in the sport setting. Regression results  
415 indicated that the five predictors explained 56.2 % of the variance ( $R^2 = 0.562$ , adjusted  $R^2 =$   
416  $0.56$ ),  $F(5;137) = 37.42, p < 0.01$ ). It was found that increased difficulties in adapting to sport  
417 challenges are associated with difficulties in adapting to everyday life challenges ( $\beta = .76, p$   
418  $< .01$ ) and to a much lesser degree, with gender (female) ( $\beta = .12, p < .01$ ). The remaining  
419 independent variables (i.e. involvement in a team sport, age and previous migratory  
420 experience) did not contribute significantly to the prediction (Table 5). Based on tests carried  
421 out for independence of observation, multicollinearity and outliers, the model was found to  
422 fulfil assumptions for multivariate regression analysis.

## 423 Discussion

424 The first aim of this exploratory study was to identify the challenging issues associated  
425 with cultural transition in a sample of transnational migrant athletes. On average, athletes  
426 rated their adaptation challenges as slightly difficult, which equals a 2 on the scale ranging

427 from 1 to 5. Since only 15% of the sample had relocated less than 3 months prior to data  
428 collection, this finding is hardly surprising. However, it was found that certain aspects were  
429 perceived as very challenging by some athletes. The results support previous qualitative  
430 findings that athlete migrants may experience rupture or discontinuity in cultural transition,  
431 both on and off the athletic field (Blodgett & Schinke, 2015; Light et al., 2019; Meisterjahn  
432 & Wrisberg, 2013; Richardson et al., 2012; Ronkainen et al., 2019; Ryba et al., 2012; Ryba,  
433 Stambulova et al., 2015; Samuel et al., 2019; Schinke et al., 2013, 2017). Consistent with  
434 these works, relational and communal layers of acculturation have also emerged in this study  
435 as evidenced by the fact that participants had most difficulty making friends outside of sport,  
436 understanding the local accent/language and living away from family and friends. Our  
437 findings indicate that receiving teams need to better understand migrant athletes' perspectives  
438 as newcomers, who experience difficulty comprehending team culture, team jokes and  
439 humor, who struggle with making themselves understood, talking about themselves with  
440 others or with coping when team member behaviors are unpleasant/aggressive. Moreover,  
441 results reveal that athletes value opportunities to express their ideas about training and about  
442 team playing style, both of which are culturally embedded, locally organized and often taken  
443 for granted by coaches and athletes alike. By cultivating awareness of cultural diversity  
444 issues and taking on a greater share of the acculturation load, members of receiving athletic  
445 environments would be more effective in fostering transitioning athletes' motivation to train  
446 and perform (Duchesne et al., 2011; Ryba, 2014; Schinke et al., 2013; Schinke, Ge et al.,  
447 2019). Sport psychology practitioners can assist athletic teams and groups to bridge gaps in  
448 understanding hidden cultural assumptions that, in turn, would augment trust and team  
449 chemistry associated with better performance outcomes.

450         The second aim of this study was to investigate how athletes perceive adaptation  
451 challenges encountered during cultural transition, according to gender, sport type, age and

452 prior migration experience. In this sample, female athletes perceived adapting to a new  
453 training routine, understanding coaching instructions and getting medical help as more  
454 challenging than male athletes. Notably, women found it particularly challenging to interact  
455 with individuals in power, such as coaches, doctors or foreign university staff, whereas men  
456 experienced greater discomfort talking about themselves or adapting to local etiquette. Given  
457 that these interactions occurred in various social fields of the culturally unfamiliar  
458 environment for the athletes, the results indicate that this might also have significant  
459 implications for athletes' wellbeing and career development opportunities (c.f., Ryba, 2014;  
460 Ryba, Ronkainen et al., 2015). A study about the doctor–patient relationship by Ferguson and  
461 Candib (2002) found consistent evidence that race, ethnicity and language had a substantial  
462 influence on the quality of doctor–patient communication; and that minority (in terms of  
463 power) patients, especially those unable to speak the host culture's language, were less likely  
464 to elicit an empathic response from physicians, receive sufficient information, and be  
465 encouraged to participate in decision making. These, together with sport psychology research  
466 findings that female athletes experience greater difficulties than male athletes in their  
467 communication with male coaches (Kristiansen, Tomten, Hanstad, & Roberts, 2012;  
468 Ronkainen, Watkins, & Ryba, 2016), indicate that particular attention should be given to  
469 transitioning female athletes to assist them with sport-related adaptation processes. Men, on  
470 the other hand, showed more challenges than women in adapting to the non-sport context.  
471 Understanding ways in which gender shapes acculturation pathways would serve the  
472 receivers well in their efforts to manage diversity more efficiently.

473 In terms of sport type, results suggest that team sport athletes perceive adaptation as  
474 slightly more challenging than individual athletes. Differences, however, only surfaced in a  
475 total of three items pertaining to non-sport challenges, including living away from family  
476 members and friends, using local transportation and adapting to the local etiquette. We found

477 it surprising that individual sport athletes, who do not reap the social benefits of a team  
478 setting, did not perceive these transitions as more challenging compared to team sport  
479 athletes. Similarly, it was expected that the social support that team members offer would  
480 mitigate team athletes' difficulty of living away from family and friends to a greater extent  
481 than individual athletes. The results, however, indicate that challenges associated with  
482 adapting to a new team culture with respect to values, norms, practices as well as power  
483 offset the potential benefits of team-based social support.

484         Concerning age, our findings indicate that older athletes find it less challenging to  
485 navigate new sport environments. Specifically, older athletes appear to be more confident  
486 understanding what is required of them and expressing their ideas about training. The age  
487 phenomenon has been reported in the sports literature with reference to dressing room  
488 hierarchy, in team sports like football/soccer (Roderick, 2006). Older players tend to have  
489 greater role clarity (Cotterill, 2013), which could partially explain our findings regarding  
490 their grasp of what is required or expected of them, including assuming a formal/informal  
491 leadership role. Individual sport athletes are also more likely, with age and experience, to  
492 form stronger views on their training and to become more assertive in expressing these views.

493         Interestingly, previous migratory experience was found to impact primarily on the  
494 perception of non-sport-related adaptation difficulties. Athletes with a greater number of  
495 prior cultural transitions reported fewer difficulties understanding cultural differences, being  
496 able to see two sides of an intercultural issue or communicating with people from a different  
497 ethnic background. It could thus be assumed that migratory movements alone, more  
498 specifically the number thereof, affect adaptation to sport challenges only in so far as athletes  
499 feel they are better equipped to find their way around the team. However, other aspects of  
500 adapting to a new team/sports environment such as making yourself heard and understanding  
501 what is required of you, come with length of professional experience. To this effect, Schinke

502 and Park (2016) state that previous transition experience “might” (p. 151) help to promote  
503 acculturation processes.

504 The third aim of the study was to examine whether gender, sport type, age, previous  
505 migratory experiences and general daily life challenges in cultural transition predict  
506 challenges in the sport context. We found that sport challenges are strongly related to non-  
507 sport (general life) challenges, and, to a lesser degree, to the female gender. Our quantitative  
508 results corroborate previous qualitative studies which suggested this relationship (e.g., Dion  
509 & Dion, 2001; Ryba et al., 2012). The current findings also provide support for conceptually  
510 (Markus & Kitayama, 2010; Ryba, 2017) and empirically (Elbe et al., 2018; Ronkainen et al.,  
511 2019; Ryba et al., 2016) established assertions about the embeddedness of migrant athletes’  
512 psychological experience in relational cultural contexts, wherein the mismatch between an  
513 individual’s cultural mode of being and sociocultural patterns of meaning at the destination  
514 may create difficulties in an athlete’s attempts to develop a working relationship with the new  
515 sporting context. Taking into consideration that on average the participants of the present  
516 study spent more than five years in their destination country, our findings suggest that the  
517 psychological work of cultural transition may even be more taxing than what is directly  
518 assessable for transnational migrants on a conscious level.

### 519 **Limitations and Conclusions**

520 We acknowledge the limitation of our starting point assumption that highly skilled  
521 sport migrants, such as professional and amateur elite athletes, would engage in migration  
522 voluntarily. Another limitation is the self-report format of this study. The study is also based  
523 on retrospectively collected, cross-sectional data and, therefore, no causal inferences can be  
524 made. Moreover, there was no representative sampling for this study. It is therefore possible  
525 that athletes, who had experienced a traumatic cultural transition, were not inclined to  
526 respond or that athletes retrospectively downplayed how challenging the adaptation process

527 was. Hence, cultural transitions might be perceived as even more challenging than our data  
528 suggest. Future research can extend this work by recruiting a larger, experientially more  
529 diverse and representative group of athletes. Moreover, challenging adaptation items should  
530 be related to other factors, such as coping skills, cultural awareness, and cultural  
531 competencies, to examine interpersonal dynamics between newcomers and receivers that  
532 might explain why certain aspects of the adaptation process appear to be challenging as a  
533 function of gender and type of sport. Longitudinal research would allow the investigation of  
534 adaptation processes in real time and the identification of issues perceived as most  
535 challenging during particular phases of the cultural transition process. Applying mixed  
536 methods might additionally further our understanding of the cultural transition process.

537         The present study contributes novel findings to the existing literature by revealing  
538 significant differences in cross-cultural adaptation based on gender, type of sport, age and  
539 previous migratory experience. Furthermore, the study found that female athletes, who are  
540 struggling with the transition to a new cultural environment, are most likely to experience  
541 challenges in the sport context, whereas males and team sport athletes seem to struggle more  
542 in the non-sport context. Although navigating through an acculturation process can lead to  
543 negative emotions such as frustration and stress it does not necessarily have to lead to a crisis  
544 or a performance decrement (see also Ryba et al., 2020; Stambulova, 2016). On the contrary,  
545 discontinuity experienced in cultural transition can enhance personal growth as suggested by  
546 the results regarding age and number of mobilities. However, some athletes do not manage  
547 the transition successfully, and this can lead to a decrease in performance, psychological  
548 stress and health risks (Demes & Geeraert, 2015; Ryba, 2014; Schinke, Blodgett et al., 2019).  
549 The questionnaire could be a valuable tool for sport psychology practitioners, coaches and  
550 medical staff working with transitioning athletes by enabling them to identify most  
551 challenging areas in athletes' cultural adaptation. Questionnaire results would provide a more

552 accurate assessment of athletes' needs that in turn could inform the design of targeted  
553 interventions; ones which could effectively address the transitioning challenges identified.  
554 Accordingly, potential performance decrements caused by unidentified inter-cultural  
555 challenges can be prevented (see also Schinke, Ge et al., 2019). Further, our findings raise  
556 awareness for the need to make a concerted effort in socializing newcomers and orienting  
557 them to available resources which would reduce the burden of the acculturation load in  
558 transnational athletes, especially in areas where psychosocial support is particularly needed.  
559



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- 739
- 740



741 Table 1

742 *Participant Characteristics*

743

744 **Participants of Expert Discussion**

745

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746	Professional Role (Gender)	Sport	Another Roles' Experience	Region
747				
748	1. SPPC, national team (M)	I/T	Researcher, migration	Asia
749	2. SPPC, national team (M)	I/T	Researcher, migration	Australasia
750	3. SPPC, national team (F)	I/T	Researcher, migration	Africa
751	4. SPPC, national team (F)	I/T	Researcher, migration	Asia
752	5*. SPPC, NCAA athletes (M)	I/T	Researcher	North America
753	6*. SPPC, NCAA athletes (M)	I/T	Researcher, coach	North America
754	7*. SPPC, club athletes (F)	I/T	Researcher, migration	Europe
755	8*. SPPC, club athletes (M)	T	Coach, researcher, migration	Europe
756	9*. Coach, national team (M)	T	Migration	Russia, Europe
757	10*. Coach, club athletes (F)	I	Migration	Europe
758	11*. Coach, club athletes (M)	T	Migration	Europe
759	12*. Sports physician, national team			
760	and club athletes (M)	I/T	Researcher	Europe

761

762 **Transnational Athletes**

763

764

765 1. Professional athlete (M) T Student-athlete North America, Russia

766	2. Professional athlete (F)	T	Student-athlete	North America, Europe
767	3. Professional athlete (M)	T		Europe, North America
768	4. Semi-professional athlete (F)	T	Coach, student-athlete	Europe, North America
769	5. Semi-professional athlete (F)	T	SPPC, student-athlete	Europe
770	6. Amateur elite athlete (F)	I	Researcher	Europe, Asia

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772 *Note.* \*participants of expert discussion who also provided feedback on the AAI earlier  
773 versions.

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775 Table 2

776 *Items, means, ranges as well as gender and sport type differences and correlations with age*777 *and number of host countries for the Athlete Adaptation Inventory (AAI) – sport challenges*

Item Nr.	Item text	<i>M</i>	<i>SD</i>	Range	N	M/F	T/I	Age	Nr. of countries
1	Making friends on the team	1.70	1.00	1–5	142				
2	Finding your way around on the team	1.71	0.83	1–4	141				(–)
<b>3</b>	<b>Being understood on the team</b>	<b>2.01</b>	<b>0.98</b>	<b>1–5</b>	<b>141</b>				
4	Getting used to the training place/venue	1.74	0.85	1–4	143				
5	Getting used to the training routine	1.73	0.88	1–4	142	F			
6	Going to team social events/gatherings/functions	1.80	1.06	1–5	143				
7	Preparing for games in your usual way	1.66	0.89	1–5	140				
<b>8</b>	<b>Talking about yourself with your teammates</b>	<b>2.02</b>	<b>1.03</b>	<b>1–5</b>	<b>139</b>				
<b>9</b>	<b>Understanding team culture</b>	<b>2.01</b>	<b>0.96</b>	<b>1–5</b>	<b>141</b>				
<b>10</b>	<b>Understanding jokes and humor on the team</b>	<b>2.13</b>	<b>1.07</b>	<b>1–5</b>	<b>142</b>				
<b>11</b>	<b>Dealing with someone on the team who is unpleasant/aggressive</b>	<b>2.39</b>	<b>1.09</b>	<b>1–5</b>	<b>137</b>				
12	Getting used to the food offered during training camps	1.95	1.12	1–5	141				
13	Following team rules and regulations	1.47	0.79	1–5	143				
14	Dealing with people in positions of authority on the team/in the sport club	1.62	0.84	1–5	141				
15	Adapting to the team's coach–athlete interaction	1.75	0.93	1–5	140				
16	Getting along with the coach	1.62	0.87	1–5	140				
17	Understanding coaching	1.89	0.98	1–5	140	F			

	instructions					
18	Making yourself understood with the coach	1.91	0.94	1-5	140	
19	Communicating with teammates of a different ethnic background	1.84	0.96	1-5	137	
20	Relating to fans	1.60	0.91	1-5	124	
21	Dealing with the crowd/ spectators	1.47	0.80	1-5	129	
22	Dealing with playing conditions	1.81	0.89	1-5	140	
<b>23</b>	<b>Understanding the local accent/language</b>	<b>2.59</b>	<b>1.31</b>	<b>1-5</b>	<b>143</b>	
24	Relating to older/younger teammates	1.59	0.81	1-5	140	
25	Dealing with athletes of a higher status	1.61	0.83	1-5	133	
26	Understanding what is required of you	1.61	0.87	1-5	142	(-)
<b>27</b>	<b>Expressing your ideas about your own training</b>	<b>2.14</b>	<b>1.00</b>	<b>1-5</b>	<b>141</b>	(-)
<b>28</b>	<b>Expressing your ideas about the team's playing style</b>	<b>2.30</b>	<b>1.05</b>	<b>1-5</b>	<b>139</b>	
29	Accepting/understanding club/ team policies	1.64	0.91	1-5	139	
30	Understanding the coach's philosophy	1.89	0.98	1-5	140	
31	Understanding the team's value system	1.73	0.97	1-5	137	
32	Adopting the team's perspective on culture	1.70	0.86	1-5	137	
33	Expressing your health issues and concerns with the coaching staff	1.92	1.10	1-5	132	
34	Getting medical help	1.91	1.06	1-5	129	F
35	Communicating your health problems with the doctor	1.88	1.05	1-5	129	

36	Seeing things from the sports club's point of view	1.82	0.95	1-5	141
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780 Table 3

781 *Items, means, ranges as well as gender and sport type differences and correlations with age*782 *and number of host countries for the Athlete Adaptation Inventory (AAI) – non-sport*783 *challenges*

Item Nr.	Item text	<i>M</i>	<i>SD</i>	Range	N	M/F	T/I	Age	Nr. of countries
37	Understanding cultural differences	1.67	0.81	1–5	140				(–)
38	Being able to see two sides of an intercultural issue	1.69	0.76	1–5	138				
<b>39</b>	<b>Making friends outside sport</b>	<b>2.64</b>	<b>1.47</b>	<b>1–5</b>	<b>142</b>				
40	Using the transport system	1.93	1.12	1–5	136		T		
41	Making yourself understood in everyday situations	2.00	0.89	1–4	141				
42	Getting used to the pace of life	1.80	0.87	1–5	143				
43	Going shopping	1.49	0.80	1–5	142				
44	Enjoying social events/gatherings	1.68	0.90	1–5	142				
45	Worshipping as you usually do	1.87	1.09	1–5	112				
46	Talking about yourself with others	1.97	1.03	1–5	141	M			
47	Engaging in activities you usually enjoy	1.85	1.00	1–5	142				
<b>48</b>	<b>Dealing with someone who is unpleasant/aggressive</b>	<b>2.13</b>	<b>0.97</b>	<b>1–5</b>	<b>139</b>				
49	Getting used to local food/finding food you enjoy	1.68	0.92	1–5	143				
50	Following local rules and regulations	1.55	0.85	1–5	143				(–)
51	Communicating with people of a different ethnic group	1.78	0.98	1–5	141				
<b>52</b>	<b>Dealing with bureaucracy</b>	<b>2.12</b>	<b>1.13</b>	<b>1–5</b>	<b>139</b>				
53	Making yourself understood with authorities	1.94	1.09	1–5	134				
54	Adapting to local	1.64	0.84	1–5	140				

	accommodation						
55	<b>Living away from family and friends</b>	<b>2.57</b>	<b>1.23</b>	<b>1-5</b>	<b>142</b>		T
56	Interacting with members of the opposite sex	1.71	0.96	1-5	140		
57	<b>Dealing with unsatisfactory service</b>	<b>2.14</b>	<b>0.91</b>	<b>1-5</b>	<b>137</b>		
58	Finding your way around in the city	1.76	0.83	1-4	143		
59	Dealing with the climate	1.86	0.95	1-5	142		
60	Dealing with people staring at you on the streets	1.65	0.89	1-5	131		
61	Adapting to local etiquette	1.59	0.77	1-4	140	M	T
62	Getting used to the population density	1.49	0.73	1-4	140		
63	Accepting/understanding the local political system	1.92	0.94	1-5	141		
64	Understanding the locals' world view	1.86	0.93	1-5	140		
65	Seeing things from the locals' point of view	1.84	0.95	1-5	140	M	
66	Understanding what is required of you at university	1.59	0.94	1-5	71		
67	Coping with academic work	1.84	0.94	1-4	73		
68	Dealing with foreign staff at the university	1.57	0.84	1-5	70	F	
69	Expressing your ideas in class	1.81	0.96	1-5	72		

784

785 *Note.* Items with a mean  $\geq 2$  set in boldface; M/F = scored significantly higher than the other  
 786 gender; I = Individual sport athletes scored significantly higher. T = Team sport athletes  
 787 scored significantly higher; (+) – the difficulty increased with increased age/number of host  
 788 countries; (-) – the difficulty decreased with increased age/number of host countries.

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790

791 Table 4

792 *Male and female athletes' adaptation when moving to a new country*

	M (n = 74)		F (n = 69)		t	p	95% CI		d
	M	SD	M	SD			LL	UL	
AAI: Sport challenges	1.81	0.55	1.88	0.59	-0.72	0.470	-0.26	0.12	0.12
AAI: Non-sport challenges	1.88	0.53	1.81	0.51	0.77	0.444	-0.10	0.24	0.13

793 *n* – number of athletes; *M* – mean; *SD* – standard deviation; *t* – Student's test statistic; *p* – significance; 95% *CI* – confidence interval for794 difference between means; *LL* i *UL* – upper and lower level of confidence interval; *d* – Cohen's coefficient

795

796 *Athletes' adaptation when moving to a new country, depending on sport type*

	team (n = 106)		single (n = 37)		t	p	95% CI		d
	M	SD	M	SD			LL	UL	
AAI: Sport challenges	1.85	0.54	1.81	0.65	0.37	0.710	-0.17	0.26	0.07
AAI: Non-sport challenges	1.86	0.52	1.80	0.51	0.56	0.580	-0.14	0.25	0.11

797 *n* – number of athletes; *M* – mean; *SD* – standard deviation; *t* – Student's test statistic; *p* – significance; 95% *CI* – confidence interval for798 difference between means; *LL* i *UL* – upper and lower level of confidence interval; *d* – Cohen's coefficient

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800



801 Table 5

802 *Regression coefficients in analysis predicting difficulties in adapting to sport challenges*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
(Constant)	0.14	0.26		0.54	0.587
Age (years)	0.00	0.01	-0.03	-0.42	0.672
Number of host countries	0.02	0.03	0.04	0.67	0.507
Gender (female)	0.13	0.06	0.12	2.04	0.043
Individual sport	0.01	0.07	0.01	0.14	0.889
AAI: life challenges	0.84	0.06	0.76	13.54	<0.001

803 *B* – regression coefficient; *SE* – standard error;  $\beta$  – standardised regression coefficient; *t* – test statistic; *p* – significance

804

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