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Filho, Edson, Aubertin, Patrice and Petiot, Bernard

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Filho, Edson, Aubertin, Patrice and Petiot, Bernard (2016) The making of expert performers at Cirque du Soleil and the National Circus School: A performance enhancement outlook. Journal of Sport Psychology in Action . ISSN 2152-0704 (In Press)

It is advisable to refer to the publisher's version if you intend to cite from the work.
<http://dx.doi.org/10.1080/21520704.2016.1138266>

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Paper in Press at the Journal of Sport Psychology in Action

DOI: 10.1080/21520704.2016.1138266

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**The Making of Expert Performers at Cirque du Soleil and the National Circus School:
A Performance Enhancement Outlook**

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Abstract

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In this paper, an applied analysis of the psychological processes and skills necessary for

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performance artists to excel in contemporary circus is presented. This analysis is based on

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applied experience at Cirque du Soleil and the National Circus School, leading contemporary

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circus programs in the world. The importance of learning the rules of the circus domain,

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transferring motor skills to the circus environment, and developing an artistic identity and

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mindful mind-set are discussed. Furthermore, general and discipline-specific performance

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pressures are identified and discussed in light of current performance enhancement

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techniques.

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Keywords: contemporary circus, expert performance, mental skills.

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43 **The making of expert performers at Cirque du Soleil and the National Circus School:**

44 **A performance enhancement outlook**

45 The contemporary circus movement, which emerged in the 1980s, differs from the
46 longstanding traditional circus milieu (for a review see Albrecht, 2006). Most noticeably,
47 contemporary circus shows are animal-free and narrative-driven, wherein every act is
48 interconnected around a central theme or storyline (Leroux, 2014). The emphasis is on human
49 performance in its broader sense, as performing artists across disciplines (e.g., acrobats,
50 actors, clowns, dancers, jugglers, and singers) are invited on stage to “tell a story”. In this
51 context, the purpose herein is to offer an applied analysis of the psychological processes and
52 skills necessary for performance artists to excel in contemporary circus. This analysis was
53 based on a series of visits to one of the leading circus schools in the world (National Circus
54 School, thereafter “NCS”), and the premier contemporary circus company in the world
55 (Cirque du Soleil, thereafter “CDS”). I start by describing the background and
56 methodological approach that substantiate the insights presented herein. Next, I discuss how
57 expert performance in circus requires both acrobatic and artistic skills. I then elaborate on the
58 psychological demands proper to circus acts. I conclude by describing avenues for future
59 applied work in the circus domain. My analysis is followed by independent replies from
60 directors at NCS and CDS.

61 **Background and methodological approach**

62 Although this paper reflects my experiences, the ideas expressed herein were
63 methodologically triangulated in an attempt to increase trustworthiness. The subsequent
64 report was based on the triangulation of focus groups, unstructured interviews, observations
65 of shows and practices, and the maintenance of a reflexive journal. These established
66 qualitative methods were inductively juxtaposed (see Braun & Clarke, 2006) and are

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67 graphically represented to offer an applied view of the role of performance psychology in the
68 development and preparation of performing artists in circus.

69 The focus groups consisted of round table discussions on expertise development in
70 circus and involved head coaches and executive leaders at NCS and CDS. The unstructured
71 interviews involved informal conversations with coaches and performers, occurred during
72 practices or prior to a show, and centred on topics related to coaching and performance
73 psychology. The interviews were not recorded as NCS and CDS leaders asked for a more
74 informal approach to avoid disrupting the daily routine of the coaches and performers. The
75 key points of each interview were written down and subsequently summarized in a reflexive
76 journal. Observations of five different shows, from both an audience and back-stage
77 perspective, were also recorded in a reflexive journal. Observed shows included *L'abri* and
78 *La matrice de Morphée* produced by NCS, and *Amaluna*, *Kurios*, and *KA* by CDS. Two
79 independent replies from executive leaders at NCS and CDS are presented at the conclusion
80 of this commentary, similar to the notion of “external judges” in qualitative inquiry (see
81 Patton, 2002). The overarching idea was to share my applied experience at two leading
82 contemporary circus programs, while striving to produce a trustworthy and transferrable
83 report that may aid practitioners working with performing artists.

84 **Cross-domain expertise: From acrobats to circus “acro-artists”**

85 Most circus performers engage in some sort of acrobatics, broadly defined as “a
86 spectacular, showy, or startling performance or demonstration involving great agility or
87 complexity” (Merriam-Webster Dictionary, 2015). Although visually attractive, gymnastic
88 moves and exhibitions of agility are not sufficient ingredients for a successful career in
89 contemporary circus. Executive leaders, coaches, and performers at both NCS and CDS
90 affirmed that one needs to become an “acro-artist” to attain high levels of performance in
91 circus. An acro-artist, as the name implies, is someone who successfully integrates acrobatic

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92 and artistic skills (see Ménard & Hallé, 2014). The process of becoming an acro-artist, and
93 ultimately an expert circus performer, involves adapting to the circus context and developing
94 “on stage” performance skills (Figure 1).

95 Contextual adaptation: Learning the “Rules of the domain”

96 Circus is a unique domain that carries its own requirements for expert performance
97 and creativity development. Accordingly, aspiring circus performers who migrate from other
98 disciplines must learn the unwritten rules of the circus arts. Csikszentmihalyi (1996) has
99 contended that expert performance and creativity require mastering the “rules of the domain”,
100 which include the techniques, behaviours and symbols needed to succeed in a given
101 performance context. During the interviews, several coaches commented on the importance
102 that performers, especially those from a sport background, understand that circus is a multi-
103 task enterprise. In fact, circus acts resemble interactive sports, wherein intra-team
104 coordination is central to performance (Filho & Tenenbaum, 2012). As such, “all-star
105 athletes”, particularly those coming from individual sports and accustomed to performing
106 solo acts, need to develop domain-specific shared mental models, namely communal schemas
107 about the tasks and strategies needed to achieve spatiotemporal coordination in interactive
108 group tasks (Mohammed, Ferzandi, & Hamilton, 2010).

109 In addition to developing shared mental models, aspiring circus performers need to
110 become acculturated with what the coaches refer to as the “big top (circus) community”. The
111 circus community is international in nature and performers need to develop multi- and cross-
112 cultural sensitivity as well as overcome language barriers. In this respect, the “big top
113 community” resembles the sports world, wherein international athletes have been found to
114 differ in their perceived performance expectations (Filho, Gershgoren, Basevitch, &
115 Tenenbaum, 2014) and cultural behaviours compared to local players (Schinke, Gauthier,
116 Dubuc, & Crowder, 2007). The performers must also recognize that they are professionals

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117 embarking on a potentially life-long career. A career in the circus, according to one artistic
118 coach, “is not an Olympic cycle. It is a 15 to 20 year long career.” As such, similar to
119 professional athletes, circus artists must balance stress and recovery in order to prevent over-
120 reaching and, ultimately, overtraining and burnout (Kellmann, 2010). After learning these
121 basic rules of the domain, performers develop domain-specific skills to ensure a successful
122 and lengthy career.

123 Skill development: “Learning to be on stage”

124 Circus is ultimately a conversation with the audience. Therefore, individuals from
125 different backgrounds need to learn how to effectively interact and perform on stage. Senior
126 casting and performance coaches at CDS described how this learning process, along with the
127 contextual adaptation process described above, is facilitated by “Organizational Excellence
128 Teams” (Figure 1). These teams consist of coaches with various specializations, health
129 professionals (e.g., nutritionists, doctors and physiotherapists), and performance enhancement
130 specialists. These professionals serve as role models for the aspiring circus artists who, by
131 observing and conversing with more experienced professionals (i.e., vicarious experiences
132 and verbal persuasion; see Bandura, 1997; Feltz, Short, & Sullivan, 2008), develop increased
133 efficacy beliefs in their ability as circus artists. Moreover, the practice of “Organizational
134 Excellence” is congruent with the notion of transactive memory systems in organizational
135 psychology (see Hollingshead & Brandon, 2004), wherein individuals learn how to access the
136 information they need within the institution they work in order to develop domain-specific
137 knowledge and achieve high levels of performance. In contemporary circus, the path to
138 expertise also includes the development of technical and emotional skills.

139 **Development of technical skills.** Individuals entering a career in circus need to adapt
140 their skills to the new environment. In motor learning theory this process is referred to as
141 transfer of skills, and consists of (a) using previously mastered skills as the basis to learn new

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142 skills or, (b) applying a skill learned in one context (e.g., gymnastics) to another context
143 (Wang & Chen, 2014). At NCS and CDS, transfer of skills is maximized through training
144 regimes based on the notion of “open improvisation”. Specifically, training sessions designed
145 for a given circus act or show storyline (e.g., time, action, and space) are conducted, where
146 the acro-artist apprentices learn to transfer their skills from other domains to the circus
147 environment. For example, a gymnast will not be completing a vault routine as in traditional
148 gymnastics, but rather will be using those skills to jump over and interact with myriad objects
149 during a circus act.

150 **Development of emotional skills.** Different emotional skills have been linked to peak
151 performance in the circus arts (Ménard & Hallé, 2014; Nordin-Bates, 2012). During my
152 experience at NCS and CDS, two emotional skills were identified as paramount by the artistic
153 and acrobatic coaches. Performers need to develop a self-concept as an artist, or their artistic
154 identity. This process involves learning how to act by expressing emotions through verbal and
155 non-verbal communication. At NCS and CDS, the circus apprentices engage in a series of
156 acting exercises where they play different roles and explore various scenarios in order to
157 determine the emotions and behaviours that work best for them on stage. This is akin to how
158 athletes practice in order to identify the cognitive-affective-behavioural states that will enable
159 them to enter their zone of optimal performance (see Hanin, 2007; Tenenbaum, Basevitch,
160 Gershgoren, & Filho, 2013). According to self-complexity theory, novel self-concepts can be
161 developed as people explore new personal and professional areas (Rafaeli-Mor & Steinberg,
162 2002). Once an individual has “opened up to be an artist”, as one coached pointed out, it is
163 important that s/he develops a mindful mind-set in order to connect with the audience.

164 Mindfulness is a multi-layered meta-cognitive process that has affective-cognitive-
165 behavioural implications, including a state of non-judgment and attentional focus directed to
166 the present (Greeson, 2009). The facet of mindfulness most emphasized by coaches and

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167 performers was the need to be present “in the here and now”. According to one performer:
168 “You need to be generous with the public. As long as you give all the energy you have, you
169 will be fine”. Circus is a continuous dialogue with the audience and the viewers need to feel
170 that the performer is “in the moment”. Indeed, the ability to remain focused while allocating
171 the proper energy level to the task at hand has long been associated with optimal performance
172 experiences in movement sciences and sport psychology (Hanin, 2007). Similar to
173 professional athletes, circus performers need to cope with general and discipline-specific
174 pressures to increase their likelihood of performing at peak level.

175 **General and discipline-specific performance pressures**

176 Experts are those who consistently perform at a high level and are able to overcome
177 bio-psycho-social pressures (Ericsson, 2007; Filho & Tenenbaum, 2015). During my time at
178 NCS and CDS, I identified general and discipline-specific performance issues that can be
179 addressed by applied professionals interested in working with circus performers.

180 **General performance pressures**

181 The actual or perceived pressure from the public influences the performance of all
182 acro-artists. In this regard, research in sport psychology suggests that the presence of an
183 audience may facilitate or debilitate performance depending on numerous factors (Strauss,
184 2002). Generally speaking, the presence of an audience facilitates the performance of an
185 overlearned motor task. In fact, athletes engage in extensive practice to increase their self-
186 efficacy to perform in front of an audience (Feltz et al., 2008). It is also perhaps for this
187 reason that performers at NCS and CDS only perform well-mastered skills during shows. For
188 instance, a juggler who is able to simultaneously juggle with nine balls/objects will likely
189 juggle with only seven balls/objects during a show, taking into account the added pressure or
190 stress associated with a live performance. Furthermore, an acrobat able to perform a triple
191 twist (i.e., 1080 degree rotation in the air) will likely perform a double twist during a show.

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192 Noteworthy, all performers practice at an extremely high level and constantly push the limits
193 of their physical and mental boundaries, in agreement with the notion of deliberate practice
194 (see Ericsson, 2007). However, they will only showcase their overlearned skills in order to
195 diminish the likelihood of choking in front of an audience.

196 The audience at circus shows tends to be supportive of the performers. In professional
197 sports, the audience is often hostile towards away teams and poorly performing players
198 (Jamieson, 2010). In contrast, the audience at a circus show wants the performers to feel
199 comfortable in order to perform well and deliver an entertaining show. According to the
200 performers, positive vibes from the audience facilitate performance, consistent with research
201 on social facilitation (for a review see Strauss, 2002). Although a supportive audience is
202 usually perceived as advantageous to performance, several performers noted that they strive
203 to maintain a task-relevant focus, rather than diverting attention to the audience, in order to
204 prevent mistakes in their routines.

205 **Discipline-specific performance pressures**

206 Different circus disciplines have unique idiosyncratic performance stressors that were
207 identified by the performers. Next, I detail some of these pressures while highlighting how
208 mental skills training can be used to cope with such stressors. These discipline-specific
209 performance issues, along with suggested mental training approaches and techniques, are
210 summarized in Figure 2.

211 **Aerial actors: Solo trapeze and tight rope.** All of the performers that I spoke with
212 indicated “Fear of Injury” as the major performance stressor in aerial acts. Although fear
213 (generally conceived) can be harmful to performance, there is evidence that this primal
214 emotion serves an important self-protective function (Lang, 2010). In particular, during
215 dangerous situations, such as in the case of aerial acts, fear may direct attentional focus and
216 decision-making to task-relevant cues. Noteworthy, all performers at NCS and CDS were

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217 aware of action control strategies to deal with the potentially paralyzing effects of fear. They
218 hinted, albeit in non-technical terms, that the solution to overcoming fear is attentional
219 control training and pre-performance routines. Circus acts are inherently dangerous and
220 performers only practice and perform when confident in their ability to stay focused and
221 block out distractors (e.g., audience noise; internal thoughts). Furthermore, all of the aerial
222 actors I spoke with engaged in pre-performance routines to ensure that environmental factors
223 (e.g., lighting, temperature) would not interfere with their ability to focus during dangerous
224 acts.

225 **Clowns.** Several clowns mentioned “Pressure from the Audience” as a major stressor.
226 In fact, externally regulated high-performance expectations have been linked to social anxiety
227 and self-presentation concerns (Leary & Jongman-Sereno, 2010). As one clown pointed out:
228 “You are alone on stage and you must be funny all the time.” Similarly, another clown
229 highlighted that: “Everything revolves around you... You have to change clothes quickly
230 (between acts) and be back out there for the audience.” A cognitive-behavioural approach
231 centred on attentional control strategies, such as directing the attention to controllable “core
232 components of action” associated with functional performance states (see Bortoli, Bertollo,
233 Hanin, & Robazza, 2012), could be a useful performance optimization strategy for clowns.

234 **Contortionists.** I conversed with two contortionists who both described the physical
235 pain inherent to their discipline. “Pain Control”, in their view, is the most challenging
236 element of their performance. To deal with the pain, one contortionist mentioned the need “to
237 train to acquire muscle endurance”. Performance simulation training, which allows for the
238 feeling of skill mastery that is the basis of self-efficacy (Bandura, 1997), may help
239 contortionists’ prepare their mind and body for performance, especially for long acts.
240 Furthermore, relaxation and biofeedback training are important techniques to ensure a healthy
241 stress-recovery balance, particularly with respect to general well-being and reduction of

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242 somatic complaints (Kellmann, 2002). In this regard, there is evidence that relaxation and
243 biofeedback training are among the most effective techniques to cope with pain (Schwartz &
244 Schwartz, 2003; Willmarth, Davis, & Fitzgerald, 2014).

245 **Dual Acts: Dual-trapeze and hand-to-hand.** For trapezists and hand-to-hand
246 performers (i.e., “catchers” and “flyers”; see Albrecht, 2006) “Group Dynamics” is a critical
247 issue standing between poor and optimal performance. In a focus group with dual act acro-
248 artists, a general consensus evolved that the process of acquiring mutual trust is long and
249 dynamic. The artists discussed how intensive training and open communication can improve
250 performance in high-risk dyadic acts. Both theoretical and empirical evidence indicates that it
251 takes time to develop high-performing teams and that task-specific training along with team
252 building and communication exercises are paramount in developing team processes, such as
253 cohesion and team coordination (Filho, Tenenbaum, & Yang, 2015).

254 **Jugglers.** The jugglers disclosed during our conversations their “Fear of Failure”.
255 Performance errors are highly identifiable in juggling acts. One of the jugglers pointed out
256 that “I am scared to drop it [balls or clubs]...Because if you drop it, everybody can see you
257 made a mistake”. A mindful performance enhancement approach (see Kaufman, Glass, &
258 Arnkoff, 2009) emphasizes staying in the present and refraining from judgmental thinking.
259 This approach could help jugglers to (a) stay focused in the present (rather than in the past or
260 future), thus diminishing the likelihood of error; and (b) reduce the likelihood of panicking
261 following a mistake. Mindfulness acceptance techniques allow athletes to “embrace” failure
262 without being overly critical or judgmental, as such thinking may lead to choking (see the
263 reinvestment hypothesis; Masters & Maxwell, 2008).

264 Jugglers also discussed the extremely challenging nature of practices and noted that
265 quitting the circus has crossed their minds at times. This notion of “High-Risk of
266 Overtraining” is explained by the extensive deliberate practice requirement of the discipline.

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267 According to one of the jugglers “It [juggling] is very lonely. You have to learn it and train
268 hard by yourself.” Practitioners working with jugglers should ensure appropriate stress-
269 recovery balance by educating jugglers about the importance of passive (e.g., sleep and
270 resting), active (e.g., hiking and physical activity), and pro-active (e.g., travelling) recovery
271 activities (see Kellmann, 2002).

272 Summary and future outlook

273 My purpose in writing this paper was to share my experience at NCS and CDS from a
274 performance enhancement perspective. The development of expert acro-artists requires
275 learning the rules of the circus domain, transferring motor skills to the circus environment,
276 and developing an artistic identity and a mindful mind-set. Furthermore, circus performers
277 have their own discipline-specific performance demands. Aerial acro-artists, clowns,
278 contortionists, hand-to-hand acts, and jugglers can all benefit from mental skills training
279 addressing their unique needs. In this context, practitioners should be aware that mental
280 training should not only be domain and discipline specific but also person-centred and
281 idiosyncratic in nature.

282 My experience at NCS and CDS illustrated that various sport psychology techniques
283 are applicable to the circus domain. To this extent, current conceptual frameworks of mental
284 toughness might be useful to orient intervention programs in the circus arts. On one hand,
285 mental toughness training programs should be delivered from a global stance, in the sense
286 that the programs should cover the mental skills considered to be key to the development of
287 expert performance across domains of human activity. On the other hand, mental toughness
288 programs should be discipline-specific, as they should consider the unique requirements of a
289 given sport or, as in the present case, the idiosyncrasies of each circus discipline (see
290 Gucciardi & Gordon, 2007; Jones, 2002).

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316 to create a strong communication, or communion, with the audience. The paper points,
317 however, at coping mechanisms that aim at promoting task-relevant focus, hence diverting
318 attention from the audience to prevent mistakes during performance. It would be interesting
319 to see if this strategy is counterproductive in creating a connection with the audience. Of
320 equal interest, could we use performance psychology constructs that would alleviate this
321 disconnection while maintaining a mistake-free performance?

322 **Reply from Bernard Petiot: Vice President of Casting and Performance at Cirque du**
323 **Soleil**

324 This article is very interesting and instructive in many ways. The author has been able
325 to capture the core pillars of “stage performance” demands within the domain of circus.
326 Learning about the rules of the domain, stage presence, balancing the needed attention of the
327 skill execution while being emotionally engaged and connected with the audience, as well as
328 coping with the pressure of delivering an excellent performance, are all fundamentals to
329 understand the psychology of stage performance. The authors’ references to various
330 performance psychology concepts available in the literature are very useful to better
331 understand the nature of the demand beyond the skills itself. This understanding is important
332 to set up pertinent and useful intervention programs to support the artists. The discipline-
333 specific performance pressure should be further developed to better understand the
334 underlying psychological demand and the variability from artist to artist. While performance
335 psychology is well recognized as a key contributor to success in high level sports, in the
336 circus world performance psychology has not yet reached a pervasive level. The focus is still
337 on skill acquisition while leaving the underlying psychological skills and ability to
338 “intuition”. That being said, more is to know about the psychological strategies and
339 techniques that unique circus artists have to develop in order to become expert performers.

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340 References

- 341 Albrecht, E. (2006). *The contemporary circus: Art of the spectacular*. Lanham, MD:
342 Scarecrow Press.
- 343 Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- 344 Bortoli, L., Bertollo, M., Hanin, Y., & Robazza, C. (2012). Striving for excellence: A multi-
345 action plan intervention model for shooters. *Psychology of Sport and Exercise*, 13,
346 693-701. doi:10.1016/j.psychsport.2012.04.006
- 347 Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research*
348 *in Psychology*, 3, 77-101. doi:10.1191/1478088706qp063oa
- 349 Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and*
350 *invention*. New York, NY: Harper Perennial.
- 351 Ericsson, K. A. (2007). Deliberate practice and the modifiability of body and mind: Toward a
352 science of the structure and acquisition of expert and elite performance. *International*
353 *Journal of Sport Psychology*, 38, 4-34.
- 354 Feltz, D., Short, S., & Sullivan, P. (2008). *Self-efficacy in sport*. Champaign, IL: Human
355 Kinetics.
- 356 Filho, E., Gershgoren, L., Basevitch, I., & Tenenbaum, G. (2014). Profile of high-performing
357 college soccer teams: An exploratory multi-level analysis. *Psychology of Sport and*
358 *Exercise*, 15, 559-568. doi:10.1016/j.psychsport.2014.05.008
- 359 Filho, E., & Tenenbaum, G. (2012). Team mental models in sports: An overview. In R.
360 Schinke (Ed.), *Athletic insight's writings in sport psychology*. Hauppauge, NY: Nova
361 Science Publishers, Inc.
- 362 Filho, E., & Tenenbaum, G. (2015). *Sports psychology*. Oxford bibliographies. Oxford,
363 United Kingdom: Oxford University Press. doi:10.1093/OBO/9780199828340-0175

EXPERTISE AND PERFORMANCE PSYCHOLOGY IN CIRCUS

- 364 Filho, E., Tenenbaum, G., & Yang, Y. (2015). Cohesion, team mental models, and collective
365 efficacy: towards an integrated framework of team dynamics in sport. *Journal of*
366 *Sports Sciences*, 33, 641-653. doi:10.1080/02640414.2014.957714
- 367 Greeson, J. M. (2009). Mindfulness research update: 2008. *Complementary Health Practice*
368 *Review*, 14, 10-18. doi:10.1177/1533210108329862
- 369 Gucciardi, D. F. & Gordon, S. (2007) (Eds.). *Mental toughness in sport: Developments in*
370 *theory and research*. Abingdon, Oxon: Routledge.
- 371 Hanin, Y. L. (2007). Emotions in sport: Current issues and perspectives. In G. T. Tenenbaum
372 & R. C. Eklund (Eds.) *Handbook of sport psychology* (3rd ed., pp. 31-58). New York,
373 NY: Wiley.
- 374 Hollingshead, A. B., & Brandon, D. P. (2004). Transactive memory systems in organizations:
375 Matching tasks, expertise and people. *Organization Science*, 15, 633-644.
- 376 Jamieson, J. P. (2010). The home field advantage in athletics: A meta-analysis. *Journal of*
377 *Applied Social Psychology*, 40, 1819-1848. doi:10.1111/j.1559-1816.2010.00641.x
- 378 Jones, G. (2002). What is this thing called mental toughness? An investigation of elite sport
379 performers. *Journal of Applied Sport Psychology*, 14, 205-218.
- 380 Kaufman, K. A., Glass, C. R., & Arnkoff, D. B. (2009). Evaluation of mindful sport
381 performance enhancement (MSPE): A new approach to promote flow in athletes.
382 *Journal of Clinical Sport Psychology*, 3, 334-356.
- 383 Kellmann, M. (2002). Underrecovery and overtraining: Different concepts – similar impact?
384 In M. Kellmann (Ed.), *Enhancing recovery: Preventing underperformance in athletes*
385 (pp. 3-24). Champaign, IL: Human Kinetics
- 386 Kellmann, M. (2010). Preventing overtraining in athletes in high intensity sports and
387 stress/recovery monitoring. *Scandinavian Journal of Medicine & Science in Sports*,
388 20, 95–102. doi:10.1111/j.1600-0838.2010.01192.x

EXPERTISE AND PERFORMANCE PSYCHOLOGY IN CIRCUS

- 389 Lang, P. J. (2010). Emotion and motivation: Toward consensus definitions and a common
390 research purpose. *Emotion Review*, 2, 229-233. doi:10.1177/1754073910361984
- 391 Leary, M. R., & Jongman-Sereno, K. P. (2010). Social anxiety as an early warning system: A
392 refinement and extension of the self-presentation theory of social anxiety. In S. G.
393 Hofmann & P. M. DiBartolo (Eds.), *Social anxiety: Clinical, development, and social*
394 *perspectives*. Waltham, MA: Academic Press.
- 395 Leroux, L. P. (2014). Contemporary circus research in Quebec: Building and negotiating and
396 emerging interdisciplinary field. *Theatre Research in Canada/Recherches théâtrales*
397 *au Canada*, 35(2).
- 398 Masters, R., & Maxwell, J. (2008). The theory of reinvestment. *International Review of Sport*
399 *and Exercise Psychology*, 1, 160–183. doi:10.1080/17509840802287218
- 400 Ménard, J. F., & Hallé, M. (2014). Circus also needs performance psychology: Facts and
401 realities of consulting at Cirque du Soleil. In J. G. Cremades & L. S. Tashman (Eds.),
402 *Becoming a sport, exercise, and performance psychology professional: A global*
403 *perspective*. New York, NY: Psychology Press.
- 404 Mohammed, S., Ferzandi, L., & Hamilton, K. (2010). Metaphor no more: A 15-year review
405 of the team mental model construct. *Journal of Management*, 36, 876-910.
406 doi:10.1177/0149206309356804
- 407 Nordin-Bates, S. (2012). Performance psychology in the performing arts. In S. Murphy (Ed.),
408 *The Oxford handbook of sport and performance psychology* (pp. 81-114). New York,
409 NY: Oxford University Press.
- 410 Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks,
411 CA: Sage Publications.

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- 412 Rafaeli-Mor, E., & Steinberg, J. (2002). Self-complexity and well-being: A review and
413 research synthesis. *Personality and Social Psychology Review*, 6, 31-58.
414 doi:10.1207/S15327957PSPR0601_2
- 415 Schinke, R. J., Gauthier, A. P., Dubuc, N. G., & Crowder, T. (2007). Understanding athlete
416 adaptation in the national hockey league through an archival data source.
417 *The Sport Psychologist*, 21, 277-287.
- 418 Schwartz, N. M., & Schwartz, M. S. (2003). Definitions of biofeedback and applied
419 psychophysiology. In M. Schwartz & F. Andrasik (Eds.), *Biofeedback: A
420 practitioner's guide* (3rd ed., pp. 27–39). New York, NY: Guilford Press.
- 421 Strauss, B. (2002). Social facilitation in motor tasks: A review of research and theory.
422 *Psychology of Sport and Exercise*, 3, 237-256. doi:10.1016/S1469-0292(01)00019-X
- 423 Tenenbaum, G., Basevitch, I., Gershoren, L., & Filho, E. (2013). Emotions-decision-making
424 in sport: Theoretical conceptualization and experimental evidence. *International
425 Journal of Sport and Exercise Psychology*, 11, 151-168.
426 doi:10.1080/161219X.2013.773687
- 427 Wang, J., & Chen, S. (2014). Transfer of learning: The key principle of motor skill training
428 implementation. *Applied Motor Learning in Physical Education and Sports*.
429 Morgantown, WV: FiT Publishing.
- 430 Willmarth, E., Davis, F., & Fitzgerald, K. (2014). Biofeedback and integrative medicine in
431 the pain clinic setting. *Biofeedback*, 42, 111-114. doi:10.5298/1081-5937-42.03.10