

# Enhancing athlete engagement in sport psychology interventions using motivational interviewing: a case study

MACK, Rory, BRECKON, Jeff <a href="http://orcid.org/0000-0003-4911-9814">http://orcid.org/0000-0003-4911-9814</a>, O'HALLORAN, Paul and BUTT, Joanne

Available from Sheffield Hallam University Research Archive (SHURA) at:

http://shura.shu.ac.uk/23371/

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

# **Published version**

MACK, Rory, BRECKON, Jeff, O'HALLORAN, Paul and BUTT, Joanne (2018). Enhancing athlete engagement in sport psychology interventions using motivational interviewing: a case study. The Sport Psychologist.

# Copyright and re-use policy

See http://shura.shu.ac.uk/information.html

1 2 3 4	Enhancing Athlete Engagement in Sport Psychology Interventions using Motivational Interviewing: A Case Study
5 6	Rory J. Mack. Centre for Sport & Exercise Science, Faculty of Health & Wellbeing, Sheffield Hallam University, S10 2PB, UK.
7 8	*Jeff D. Breckon. Advanced Wellbeing Research Centre, Sheffield Hallam University, Sheffield, S10 2BP, UK.
9 10	Paul D. O'Halloran. La Trobe University, School of Psychology and Public Health, Bundoora, VIC, 3068, Australia.
11 12	Joanne Butt. Centre for Sport & Exercise Science, Faculty of Health & Wellbeing, Sheffield Hallam University, S10 2PB, UK.
13	
14	*Correspondence: j.breckon@shu.ac.uk
15	
16	
17	
18	
19	
20	
20	
22	
23	
24	
25	
26	
27	
28	
29	

30	Abstract
31	The clear reporting of the counseling approach (and theoretical underpinning) applied by sport
32	psychologists is often missing, with a tendency to focus on intervention content rather than
33	therapeutic processes and relationship building. Well defined psychotherapies such as Motivational
34	Interviewing (MI) can help fill this void and provide an underpinning counseling approach (in an
35	athlete-centred manner) as a framework for delivering interventions such as psychological skills
36	training (PST). This article describes the role of MI as a framework upon which PST sport psychology
37	interventions can be mapped and delivered. The paper presents an athlete case study to explain the
38	role of MI at each phase of the interaction. Robust, well-defined applications of MI in sport require
39	further research although evidence from other psychological domains suggests that it can be
40	successfully blended into sporting contexts.
41	Keywords: motivational interviewing, athlete engagement, integration, sport psychology,
42	intervention framework
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	

#### Background and Context: Sport psychology interventions and orientations

57

58 Sport psychologists typically operate within one of three frameworks and orientations: 59 psychophysiological; socio-psychological; or cognitive-behavioral (CB). The latter model has 60 traditionally been most widely employed with athletes to inform the delivery of psychological skills 61 training (PST; Lindsay, Breckon, Thomas, & Maynard, 2007; Murphy, 1995). Within this PST approach, 62 self-control strategies such as positive self-talk and mental rehearsal are taught to build athletes' 63 abilities to regulate internal processes, manage environmental conditions, and execute skills and 64 strategies under pressure, through both cognitive and somatic techniques (Behncke, 2004). This application has tended to be in a problem-centred way, rather than an athlete-centred way (Holt & 65 66 Strean, 2001), and perhaps consequently, in recent years there has been increased interest in 67 applying other approaches from counseling and clinical psychologies with athletes. To date, these 68 include cognitive behavioral therapy (CBT; McArdle & Moore, 2012) and derivatives of this approach 69 (e.g., rational emotive behavior therapy, REBT; Turner & Barker, 2014), solution-focused therapy 70 (SFT; Høigaard & Johansen, 2004), and third wave therapies such as acceptance and commitment 71 therapy (ACT; Shortway, Wolanin, Block-Lerner & McDonald, 2018) and mindfulness-acceptance-72 commitment therapies (MAC; Gardner & Moore, 2004a).

73

74 This application of CB approaches is extremely dependent on the practitioner's ability to "engage 75 the client in any sort of dialogue about their problem and therefore the potential for a CB 76 intervention" (Leahy, 2006, p. 137). And yet, published sport psychology interventions appear to 77 place more emphasis on content than on the processes of relationship-building and their delivery 78 (Longstaff & Gervis, 2016), and there is a need to better understand the mechanisms of action or 79 mechanisms of change (Gardner & Moore, 2012; Mack, Breckon, Butt & Maynard, 2017; 80 Poczwardowski, Sherman & Henschen, 1998). It is clear that sport psychologists have the knowledge 81 and ability, but it is often less clear how these are delivered in conversations with athletes. For

example, the specific communication strategies used (and not used), specific models and tools
implemented, conscious processes in cultivating a therapeutic alliance, recognition of athlete
readiness for an intervention, structures which guide practitioner decision-making during sessions,
and processes for integrating two or more complimentary therapeutic methods are rarely described
in detail. This makes it difficult not only to replicate reported interventions, but also difficult to
identify the mechanisms which contribute to a successful intervention.

88

89 Given the growing number of therapeutic approaches and interventions being applied in sport 90 psychology, there is an increasing need to precisely define intervention content and delivery, 91 specifically in regards to the individual and professional philosophies of the practitioner 92 (Poczwardowski, Sherman, & Ravizza, 2004) and the needs of the athlete (Gardner & Moore, 2004b). 93 While this broadening of the discipline is encouraging - given that there is a tendency for neophyte 94 practitioners to adopt the dominant approach in their field (Fishman, 1999) - to avoid uniformly 95 applying PST based on the cognitive behavioral model, there is a need for practitioners to investigate 96 other approaches, in case a situation arises where this is not appropriate (Corlett, 1996; Murphy, 97 1995).

98

99 The CB approach is arguably dominant in mental health, as the premier choice for treatment of a 100 large number of different forms of distress (Cromarty, 2016; Holmes, 2002; Moloney & Kelly, 2004). 101 Nevertheless, it is not without its critics, and these limitations are relevant for sport psychology as 102 the CB approach and its derivatives continue to be applied with athletes. Examples include a focus 103 on fixing athlete 'problems' (e.g., Cunliffe & Hemmings, 2016), perhaps at the expense of identifying 104 and reinforcing athlete strengths; the risk of appearing critical or disrespectful in dissecting and 105 assessing irrational, distorted or faulty thinking patterns (Ryle, 2012); a recognition that cognitive 106 behavioral therapy (CBT) will be ineffective in one third of cases, and a readiness to attribute this to 107 the client's lack of motivation or insight (Moloney & Kelly, 2004). Further, in CBT, if an intervention is

108 evaluated and deemed unsuccessful in terms of the intervention goals, the initial formulation is 109 questioned (McArdle & Moore, 2012, p.307). An alternative may be to evaluate the strategies used 110 to deliver the intervention, including the therapeutic alliance (Baldwin, Wampold, & Imel, 2007). For 111 example, what if the formulation was accurate and the content of the intervention was pertinent, 112 but the intervention was not delivered in an athlete-centred, empathetic, collaborative, autonomy-113 supportive manner? Or, what if the athlete simply didn't 'buy in' to the strategies being proposed by 114 the practitioner, or was not ready for them, and so disengaged from the applied work? Finally, 115 Brown (2011) indicates that athletes can struggle to initiate, practice and maintain CB restructuring 116 or self-regulation strategies, while Massey, Gnacinski and Meyer (2015) identified the largest portion 117 (37%) of sampled NCAA athletes as 'pre-contemplators' regarding engagement in a PST programme. 118 Taken together, these assertions indicate that prematurely focussing on intervention content (at the 119 expense of the therapeutic processes) could be detrimental to that intervention.

120

121 Research (e.g., Aviram & Westra, 2011; Driessen & Hollon, 2011; Naar & Safren, 2017; Westra & 122 Arkowtiz, 2011) has suggested that clinical interventions such as CBT can be enhanced by applying 123 an underpinning/adjunct approach such as Motivational Interviewing (MI; Miller & Rollnick, 2013) in 124 order to form an integrative MI-CBT (athlete-centred) therapy. While this integrative approach is 125 becoming well understood and commonly applied in health settings, there is little, if any, awareness 126 of its potential in sport psychology settings and this particular counseling approach has all the tenets 127 to enhance current practice in sport psychology. Therefore the aim of this article is to provide a 128 contemporary perspective of MI and describe its use in sport psychology as a blended framework 129 upon which CB and other interventions might be delivered and their effectiveness enhanced. A case 130 study approach is employed to provide a context and examples of the processes and technical and 131 relational components of MI, to underpin both the therapeutic alliance and PST interventions, 132 before making recommendations for its use in practice and research.

#### 133 Motivational Interviewing

134 Motivational Interviewing is an evidence-based collaborative psychotherapy with roots in Rogerian 135 person-centred counseling (Rogers, 1959). MI seeks to engender an autonomy-supportive 136 relationship, and has been demonstrated to be effective in exploring and managing individual's 137 ambivalence about changing behavior (Miller & Rollnick, 2013). The approach includes: the 138 relational component (spirit of MI); technical or micro-skills (OARS); and four processes (Breckon, 139 2015). The application of MI is now widespread across both behavior cessation (i.e., addictions) and 140 behavior adoption (i.e., physical activity and diet change) contexts, and as an adjunct to other 141 therapeutic interventions. Its popularity is evidenced by the volume of MI controlled trials having 142 been published (over 700 to date) and reviews of studies (e.g., Hettema & Hendricks, 2010; Knight, 143 McGowan, Dickens & Bundy, 2006; Lundahl et al., 2013), with reviews generally finding MI to have 144 significant positive effects, particularly when combined with treatment as usual. For example, 145 Marker and Norton (2018) examined 12 trials using an MI + CBT approach to treat anxiety disorders, 146 and determined that MI as an adjunct to CBT was more effective in in reducing symptoms of anxiety 147 than was CBT alone. Similarly, Soderlund (2017) reviewed nine studies to determine the 148 effectiveness of using MI to self-manage physical activity levels in patients with diabetes mellitus 149 type 2. While it was concluded that using MI did show promise for this when applied by proficient 150 counselors, this review highlighted a key difficulty in reviewing the effectiveness of MI: it is often 151 difficult to make comparisons between studies reporting the use of MI, because the competency of 152 those administering the treatment is often not measured, and the quantity and standard of training 153 they have received in the approach is often not reported. This makes it difficult to say with certainty 154 that the MI approach is being applied competently and faithfully.

155

#### 156 The Spirit of MI

The spirit (or relational component) of MI is its guiding principle and has been described as *a way of being* and thinking that is most common in MI practitioners (Westra, 2012). It is perhaps best
illustrated as four components: Partnership; Acceptance; Compassion; and Evocation (Miller &

160 Rollnick, 2013). These components contain within them many of the humanistic principles of Carl

161 Rogers, including collaboration between practitioner and client; practitioner attempts to

demonstrate accurate empathy; practitioner attempts to be non-judgemental in hearing the client's

story; and practitioner makes effort to be supportive of client autonomy and self-direction.

164

## 165 Technical (micro skills) components of MI: OARS

166 The technical skills, or OARS: <u>Open questions that encourage elaboration and exploration;</u>

167 <u>Affirmations offered from the practitioner that reflect the athlete's autonomy, attitudes and</u>

168 behaviors toward change (as opposed to praise which is laden with practitioner judgements of

169 performance); <u>Reflections that demonstrate that the listener (in this case the sport psychologist) has</u>

accurately heard the athlete's perspective and attempts to clarify deeper understanding of meaning;

171 <u>Summaries that extend the reflections to provide a composite and consolidation of key points</u>

172 presenting them back with varying levels of reflection. These technical skills are extremely helpful in

173 building rapport, gaining a deeper understanding of athlete issues, facilitating discussions, avoiding

discord in the relationship, reframing topics to more useful considerations of change and eliciting

and strengthening athlete commitment toward change behaviors (Wagner & Ingersoll, 2013). For

176 more detail on both the spirit and micro skills (technical components) of MI see Miller & Rollnick

177 (2013), Breckon (2015) and Rosengren (2009).

178

## 179 The four ('+') processes of MI

The four processes of MI are: Engaging; Focussing, Evoking; and Planning (Figure 1). This is not a
linear process (engagement is clearly a fundamental facet of the interaction) but rather the four
processes are a Meta framework which underpin the MI therapeutic approach (Miller & Rollnick,
2013).

184 \*\*\*\*INSERT FIGURE 1 HERE\*\*\*\*

186 **Figure 1 –** The four ('+') processes of MI (Adapted from: Breckon, 2015).

187

#### 188 The language of change

189 MI has traditionally been employed when working with clients who are experiencing ambivalence or 190 resistance towards behavioral change, and are perhaps disengaging from treatment services. By 191 being particularly sensitive to the language clients use regarding change, MI practitioners work to 192 elicit self-expressed arguments in favour of change from the client themselves (referred to as change 193 talk; Miller & Rollnick, 2013). This guiding style and evocative strategy is generally preferred to other 194 more directive, practitioner-led strategies, such as educating, advising or convincing, which can have 195 the opposite of the desired effect, where client resistance is increased and the client finds themself 196 in the position of arguing for the status quo (referred to as sustain talk; Miller & Rollnick, 2013; 197 Rollnick et al., 2005). Research is beginning to better understand how MI practitioners initiate 198 change through their use of language (e.g., Apodaca et al., 2016), and this may be beneficial for 199 sport psychologists to consider when working with athletes, particularly those who appear to be 200 reluctant, resistant, disengaging or unmotivated. 201 Using Motivational Interviewing to build the athlete-psychologist relationship 202 The salience of the athlete-psychologist relationship in sport has been repeatedly emphasised 203 (Andersen & Speed, 2010; Petitpas, Giges, & Danish, 1999; Sharp, Hodge, & Danish, 2015), 204 particularly regarding counseling skills and the 'working alliance', yet trainee sport psychologists are 205 often less clear on how to develop these engagement skills (Katz & Hemmings, 2009). While 206 measuring the influence of the professional relationship on outcomes, 'therapeutic alliance' has 207 emerged as a consistent predictor of outcomes and is an essential component of any talking therapy 208 (Baldwin, Wampold, & Imel, 2007; Flückiger, Del Re, Wampold, Symonds, & Horvath, 2012; Norcross, 209 2002). A collaborative and empathic consultation style is critical for building rapport (Leach, 2005), 210 and managing ruptures in the alliance (Moyers, Miller, & Hendrickson, 2005). MI is one approach

211 which seeks to maximise this working alliance, in order to 'gain access', through its underpinning

212 philosophy and inherent four processes, mobilised through overt verbal communication skills which 213 may be missing from early sport psychology training. Motivational Interviewing can be viewed as an 214 effective method for communicating with athletes, a framework for delivering PST and other 215 interventions, and for offering support for non-performance related issues, due to its evocative and 216 collaborative nature. An athlete's ability to use psychological skills is determined by their level of 217 self-awareness, which in turn enables self-regulation (Behncke, 2004). The exploratory, client-218 centred nature of MI aims to increase self-awareness, potentially leading to increased effectiveness 219 of PST and self-regulation. In addition to providing a framework or roadmap for relationship building, 220 MI may also contribute to an underpinning theoretical framework in the intervention process, which 221 is important in providing a cohesive structure against which progress toward change can be 222 measured (Markland et al., 2005) as well as ensuring validity, reliability and evidence-based practice. 223 Athlete concerns about performance should not be viewed narrowly in the context initially 224 presented by the athlete, but rather take a holistic perspective on a broader scale incorporating the athlete's entire life (Gardner & Moore, 2006). This may include "... transitional, developmental, 225 226 interpersonal, intrapersonal and more serious psychological issues..." (Gardner & Moore, 2006, p.11). 227 This is in keeping with the need for a holistic approach for enhancing athletic performance (Simons 228 & Andersen, 1995), an approach inherent in the 'relational ethos' of counseling psychology (Owen, 229 2010). Motivational Interviewing, with its exploratory tools and collaborative empathic nature, is 230 one approach which may be effective for investigating the fundamental causes of underperformance, 231 while also developing the personal and psychological wellbeing of the athlete.

232

#### 233 The role of MI in sport psychology from an integrative perspective: The Trellis analogy

A useful analogy of MI in sport psychology settings is to consider a garden trellis. Here, MI provides a framework or trellis (Figure 2) upon which other interventions and techniques can be grown and can thrive. Each intervention (plant) can be clearly identified as a unique contributor to the overall 'crop' which can be measured in terms of athlete performances, outcomes, and wellbeing. Obviously the

238	types of 'plants' or interventions that can be grown on the trellis (e.g., integrating MI with traditional
239	CB and PST) can vary depending on the athlete, the situation or the context and agreed in
240	collaboration between all stakeholders (ideally the athlete and sport psychologist).
241	
242	****INSERT FIGURE 2 HERE****
243	
244	Figure 2 – Motivational Interviewing as a framework for delivering sport psychology interventions.
245	
246	The role of a sport psychologist is a multifaceted one, for "our athletes have many needs, are of
247	many personalities, and are embedded in organisations and settings of varying complexities"
248	(Gardner & Moore, 2006, p. ix). A sport psychologist may also be required to work with other
249	stakeholders, such as coaches and parents, each with their own values and priorities. There may be
250	an element of discord between parties, and MI could prove a valuable approach for mediation,
251	through reflective listening, values exploration, building discrepancy and triangulation of
252	perspectives. Athletes may harbour ambivalence towards engaging with sport psychology support,
253	which the practitioner would need to recognise and address if any practical work is to be successful.
254	MI is one potential strategy for doing this (although is not limited to those athletes presenting as
255	ambivalent or resistant to change). Often a sport psychologist forms part of a multi-discipline
256	scientific support team, where other practitioners may be utilising the principles of sport psychology
257	or MI to increase adherence to target behaviors, for example, injury rehabilitation (Arvinen-Barrow
258	& Walker, 2013), strength and conditioning (Radcliffe, Comfort, & Fawcett, 2013), nutrition
259	(Campbell et al., 2009), lifestyle behaviors (e.g., balancing training, competition, social and personal
260	demands) (Jones, Hanton, & Connaughton, 2002), and anti-doping (Morse, 2013).
261	

**Case Study** 

263 Case study methodology can provide a valuable platform for practitioners to help bridge the gap 264 between theory and practice (Kuntz & Hessler, 1998; McArdle & Moore, 2012). Case studies have 265 previously been used to demonstrate the effectiveness of using MI with a single patient to increase 266 healthy behaviors during cardiac episode rehabilitation (Pietrabissa et al., 2015); to show increased 267 adherence to medication for a patient with schizophrenia (Ertem & Duman, 2016); and to illustrate 268 how MI can be integrated into career counseling interventions (Rochat & Rossier, 2016). The case 269 study method is also now commonplace in sport psychology research (e.g., Thompson & Andersen, 270 2012; Wood, Barker & Turner, 2017). The following case example (a single session) is therefore 271 employed to provide an example of the use of MI with an ambivalent athlete and will explicitly 272 highlight the application of MI with regards to: the four processes; the spirit and relational 273 components; the technical components (OARS); and, common tools (e.g., scaling rulers). We 274 acknowledge the limitations of presenting a single session, but this example illustrates the potential 275 for using MI to build an alliance with an athlete prior to developing intervention strategies. It will 276 showcase the theoretical underpinning, and applied techniques of MI described earlier, and are 277 based on a real client of the third author. The practitioner was registered in Australia at the time of 278 the case and operated according to the Australian Psychological Society (APS) code of practice. The 279 individual engaged in supervision which ensured that any ethical issues arising in practice were 280 addressed in an appropriate manner, and to maintain the athlete's anonymity details including name 281 and age have been changed.

282

The Client: John (pseudonym), a 25-year old central defender who at the time of the sessions was playing for a football (soccer) club in a state league in Australia. He had played for the national under 21 team and been touted as a future representative in the national senior team. As the team's 28 consultant sport psychologist, John was sent to me by the manager on account of his lack of 28 discipline and excessive (unhelpful) aggression on the pitch. John had developed a reputation for

giving away free kicks and receiving frequent yellow cards. He had been sent off twice in the
previous season and had been suspended six times over the last 3 years.

290

291 Engaging phase:

292 The first thing that struck me about John was the level of discord between us. Speaking with John I 293 got a very clear sense that he was reluctant to work with me (or any other sport psychologist for that 294 matter) - he was there because he had been sent. This 'mandated attendance' presented a 295 substantial barrier to our working relationship and I therefore focussed in the opening exchanges on 296 the core MI process of engagement (Breckon, 2015). It was essential to explore the discord that John 297 was exhibiting through the combination of predominantly simple reflections (using John's own 298 words) and open ended questions to increase engagement and demonstrate empathy and a non-299 judgemental approach (Rosengren, 2009). I explored his ambivalence and it emerged that he had 300 been "sent" to the team's previous sport psychologist about this very issue last season and the 301 psychologist suggested that John needed to calm down in order to approach the game in a more 302 relaxed state. He then proceeded to try and engage John in some anger management training 303 (cognitive-behavioral) and taught John a relaxation technique (PST) and asked him to keep a record 304 of his thoughts associated with this anger (record keeping: CBT; Kennerley, Kirk & Westbrook, 2016). 305 John responded very negatively to this previous strategy as he liked to play 'angry' and consequently 306 did not return to see the psychologist about this or any other matter last season. Through a 307 combination of simple and complex reflections (offering John a deeper level interpretation of his 308 comments) and use of reflective summaries (several reflective statements combined to capture the 309 previous few dialogue exchanges) I conveyed to John that I understood that he feels that he 310 performs best when he plays angry and it is important for him to be in this state (empathy as 311 opposed to sympathy). I then concluded the opening phase with an amplified reflection (an 312 overstatement to gently challenge John's absolute view and status quo) in which I stated "you play 313 best when you're angry and what you're doing now is working for you". John responded that his lack

314 of discipline was typically in retaliation to disparaging personal comments from his opponents – 315 directed to fire him up. He also acknowledged that he had developed a reputation for losing it and 316 that he now realised that players had begun to target him because of this. This moving forward and 317 building upon the practitioner's reflection is typical of an effective complex reflection in MI (Naar-318 King et al., 2013). Here, I used a double-sided reflection (offer two sides of an argument): "on the 319 one hand you feel a need to retaliate to the comments of opponents and on the other hand you 320 don't like the reputation you are developing because of this". John again expanded on both the 321 content and emotion behind his perspective and elaborated on how he wanted to distance himself 322 from this reputation. This was accompanied by a considerable change in his body language, where 323 he appeared less tense. It was clear that this empathic approach had begun to reduce the level of 324 discord between us with John relaxing more, smiling and beginning to ask questions. Now that there 325 were very clear signs of engagement and the absence of discord, it was considered appropriate to 326 begin the process of focusing.

327

## 328 Focusing phase:

329 Having begun to develop a shared understanding in the opening (engagement) phase, focusing 330 began with an exploration of what (if anything) he would like to change. Through the appropriate 331 use of reflection, affirmations (reflective statements which acknowledge strengths, values or self-332 efficacy) and open ended questions I was able to ascertain that John would like to play angry but in a 333 way that advantaged the team; a way that was within the rules. A form of ambivalence was clearly 334 evident in regard to how he would like to play, but unsure of how he might do this without 335 impacting negatively on the team. Ambivalence is normative in the early phases (Engle & Arkowitz, 336 2006). John wanted to change his reputation of being a player that would *lose it* quickly and that 337 other teams would target. Instead he wanted to: run hard, pressure and harass opponents, tackle 338 hard but within the rules and not react to the negative comments of opponents. In response to this I 339 used a combination of complex reflections and affirmations. For example, I noted that "You are very

340 much a team player that likes to play tough but in a way that benefits the rest of the team and you 341 are the kind of person who wants to set a good example for your younger teammates." John reacted 342 in a positive way in terms of both his body language (he sat up straighter and began to smile more) 343 and produced some more discussion around what he wanted to achieve specifically for both himself 344 and the team. It was clear that engagement was still underpinning our relationship and that change 345 talk (CT; Amrhein et al., 2003) was beginning to emerge. Given that we now had an agreed focus for 346 what John would like to modify, our next goal was to actively promote dialogue from John that was 347 consistent with this change plan. Change talk is important because it positively correlates with 348 change outcomes (Amrhein et al., 2003; Magill et al., 2014) and this phase enabled me to move 349 toward evoking from John his own thoughts and beliefs about why this change would useful, how 350 confident he is about achieving this and how he might go about it.

351

### 352 Evoking phase:

353 Given that the production of CT is a primary goal of MI, I decided to focus on a combination of 354 simple and complex reflections and open ended questions that are specifically designed to promote 355 this self-generated language in clients (Rosengren, 2009). These open ended questions can be 356 represented by the DARN-CAT acronym - that is, questions that evoke CT related to people's desire, 357 abilities, reasons, need, commitment, activation and taking steps toward change (Amrhein et al., 358 2003). Using a directional open question to evoke further CT, based on his desire to change, I asked 359 John how things would be different if he was implementing the change strategies (i.e., PST). John 360 responded that he would enjoy his football more, would gain greater respect amongst his 361 teammates, and would improve his chances of selection in the national team. I followed up with an 362 'ability' question to elicit some further change talk; specifically I asked "How might you achieve 363 this?". John stated that he would like to play the game like some of the players he admired most in 364 the league – hard yet legal and relatively unaffected by what others say. I asked him if he could 365 visualise (integrating PST techniques) what this might look like and he responded positively, noting

366 that he had a particular player in mind. After asking how John might use this image to his advantage 367 (using the client as the resource), he came up with the idea of using imagery before games to 368 visualise how he would like to play. Whilst he seemed quite engaged with this idea I got a sense from 369 his body language he may not have been particularly confident about following through with this. I 370 therefore decided to follow up with a further ability-based question in which I asked John about how 371 confident he was about being able to engage in this visualisation before games. A very useful 372 strategy for evoking change talk related to areas such as confidence and importance is the use of 373 rulers (i.e., 0-10 rating scales). Specifically, I asked John to rate his level of confidence using a scale 374 where 0 = not at all confident to 10 = extreme confidence. John's initial response was 5 out of 10. I 375 asked what made it a 5 and with the evocation of more preparatory CT (Amrhein et al., 2003) and 376 use of reflection when John told me about the fact that he is the type of person who will tend to 377 follow through with things once he sets his mind to it, he was able to shift quite quickly to an 8/10 in 378 terms of confidence. John was now displaying most of the core signs that he was ready to commit to 379 change (Miller & Rollnick, 2013). He was producing substantially increased CT, there was little (if any) 380 resistance to change (or sustain talk; Miller & Rollnick, 2013), and he was starting to talk about how 381 much more he would enjoy his football once these things had changed. I therefore decided that it 382 was appropriate to move to planning.

383

## 384 Action planning phase:

Given John was clearly committed we began planning by discussing when he would begin, and how he would do it. John was quite clear that he was committed to spending at least 15 minutes every night before a game visualising opponents trying to agitate him and then seeing himself respond in the way he would like to play. I then spent some time checking with John about how he might use visualisation (collaboration) and how it has worked for him in the past, and we then discussed strategies that can be followed to facilitate the effectiveness of this technique. This was a clear example of the integration of PST within an MI framework. Consistent with MI, I thought it

392 important to incorporate some troubleshooting in order to prepare for times when things become 393 challenging for John, therefore facilitating maintenance. Here John discussed occasions when he 394 might struggle with this, such as when extremely tired, and certain opponents that agitated him the 395 most. We really focused on imagining these scenarios and how he would respond to these situations 396 with his new philosophy of how he would like to play the game. John also came up with the idea of 397 visualising momentary lapses in which he lost control and then regained it. This evocation from the 398 athlete maintained a sense of engagement and trust between both parties and valued their 399 resourcefulness and autonomy toward change (Resnicow & McMaster, 2012) in an efficient and 400 non-judgemental manner.

401

#### 402 Outcomes

*Immediate*: John reported very positive results in terms of his ability to play how he would like for
the next two games. In order to try and build in some maintenance, we scheduled in a further two
fortnightly sessions and then a monthly booster session in which we reviewed his successes and any
challenges he faced.

407 Longer term: John gave away substantially fewer free kicks, the number of yellow cards he received 408 was reduced by 85% and he went 4 seasons without being suspended. His form substantially 409 improved and he enjoyed his football more. While the application of MI alone cannot be claimed to 410 achieve these outcomes, it was clear to me that the increased engagement and collaborative 411 working that MI provided created the opportunity for the interventions to be delivered and 412 accepted by the athlete - something that had not been achieved with previous approaches.

- 413
- 414

#### Discussion

It has previously been stated that the athlete-psychologist relationship is akin to the client-counselor
relationship (Petitpas, Giges, & Danish, 1999). While factors which should be present during the

417 design, implementation and evaluation of psychological services with athletes have been identified

418 (Poczwardowski, Sherman, & Henschen, 1998), there are still limited descriptions of the therapeutic 419 content, structure and style of consultations and interventions in sport psychology. One 420 consequence of this has been a dearth of research into the minutia of sport psychology 421 interventions beyond describing headline content such as the type of PST delivered (e.g., mental 422 rehearsal and goal setting). Moreover, a lack of understanding of the mechanisms which influence 423 the therapeutic alliance and relationship between the athlete and psychologist, including aspects 424 such as building empathy and utilising athletes as an autonomous resource, often means we do not 425 fully understand the influential mediators of success in these sessions. Sport psychology support is 426 concomitant with the therapeutic relationship within which it was delivered. It is through this 427 relationship that the practitioner facilitates change in the athlete, and the success of an intervention 428 should not be assessed independently of the relationship that fostered it (Poczwardowski, Sherman 429 & Henschen, 1998). As the case study clearly illustrated, there is real potential for future 430 collaboration once engagement has been achieved and resistance or ambivalence from the athlete 431 has been managed. The case example also demonstrated the value of applying technical (and 432 therefore measurable) skills such as the use of appropriate reflections and an emphasis on evoking 433 change talk from clients, in order to have the athlete take greater responsibility for change in an 434 empathetic relationship.

435

436 With MI the inclination to confront, convince or persuade athletes is replaced by evoking their own 437 reasons for change and adapting behaviors, which minimises athlete resistance (Lundahl et al., 2013). 438 MI even explores the subtleties of language about change (Amrhein et al., 2003) providing clear 439 frameworks for appropriate responses (Miller & Rollnick, 2013). Since MI is a clearly-defined 440 approach with clear and measureable technical and relational components, it appears well placed to 441 provide a basis for sport psychology interventions and a framework (or trellis) upon which 442 intervention components can be mapped and delivered in a holistic way that respects the athlete's 443 own motives and needs. This is illustrated by the sport psychologist in the case study who, following

444 a process of engagement, worked in partnership with the athlete to develop an intervention445 (visualisation) that he could use to play football the way he wanted to.

446

447 A further benefit of applying MI is the clear structure (engagement, focusing, evoking, planning) and 448 direction that the approach offers - which can be readily tailored to the athlete's needs - with 449 adaptable and bespoke responses avoiding 'off the shelf' inflexible interventions (Rosengren, 2009) 450 or a 'cookbook' (Poczwardowski, Sherman & Henschen, 1998) approach which often fails to 451 acknowledge the wide variety of factors which can influence an athlete's performance. These 452 flexible, non-linear four processes can guide the practitioner in supporting athletes on a session-by-453 session basis (as in this case study), or globally for the duration of a professional relationship, by 454 providing a conscious awareness of where the athlete is in the change process, and facilitating the 455 practitioner in moving fluidly with the athlete throughout.

456

457 After investigating the use of MI by expert practitioners in applied sport contexts, it may be possible
458 to make recommendations for the use of MI in sport, and to develop coherent and evidence-based
459 training curricula for neophyte practitioners.

460

#### 461 Implications for applied practice

The case study has shown MI to be a valuable approach for practitioners to consider adopting when working with an athlete who has been forced to attend, and/or presents initially as sceptical or resistant to engaging, in order to begin building a professional relationship and get the athlete to the point of being ready for some sport psychology work. Further, it is a valuable approach to slip into as and when ambivalence or resistance arises over the course of the professional relationship, perhaps during the intervention phase of the relationship which athletes may find particularly challenging.

468

469 It has been shown here that MI can be successfully integrated with at least one dominant 470 intervention in sport psychology (PST), which raises considerations regarding which other 471 interventions MI might integrate with and enhance, and how practitioners are integrating different 472 approaches in their work (Norcross, Karpiak & Lister, 2005), which could potentially lead to a more 473 holistic and athlete-centred delivery of service. It has been identified that some elements of MI are 474 being used already by sport psychologists in their applied work, both explicitly and implicitly, but it 475 appears that elements of MI are being 'cherry picked' rather than embraced holistically (Mack et al., 476 2017), which is in keeping with previous research (e.g., scaling rulers; Hays, Thomas, Butt & Maynard, 477 2010). As illustrated in this case study, there are benefits to a more comprehensive application of an 478 MI framework as part of athlete conversations.

479

480 MI has the potential to greatly enhance the ongoing reflective processes and professional 481 development of sport psychology practitioners through the use of a range of validated competency 482 and fidelity coding instruments. The clear identification of components of MI enables practitioners 483 to be assessed in their use of the approach in conversations with athletes. These tools include the 484 Motivational Interviewing Skills Checklist (MISC; Miller et al., 2008) which assesses both the 485 technical and relational components of MI, including both practitioner behavior counts and client 486 responses. Such assessment should enable practitioners to be considerate of how they are 487 responding to ambivalence and resistance, how they use technical skills to form effective working 488 alliances, and whether or not they are able to initiate change in their clients, among other things. 489 Importantly, practitioners can also begin to understand athlete perceptions of practitioner behaviors 490 during consultations, how their MI work is being received and their professional relationships in 491 general using the Client Evaluation of Motivational Interviewing scale (CEMI; Madson et al., 2013). 492

493 MI looks easy, but is difficult to do well – it is important that the integrity of MI delivery is assessed
494 in order to determine that it is actually MI that is being implemented with athletes. Fidelity checks

(Bellg et al., 2004; Breckon, Johnston & Hutchison, 2008) of MI in sport settings could be applied to
ensure reliability and integrity. This also avoids reliance on athlete performance and competition
outcomes as the sole measure of successful sport psychology interventions. Clearly reporting the
content, frequency and delivery of MI and integrative therapy components, including an evaluation
of the therapeutic alliance (Fluckiger et al., 2012) is becoming widespread in many randomised
controlled trials and clinical intervention settings, and applied sport psychology could potentially
learn and benefit from such practices.

502

#### 503 Implications for future research and training

504 In considering these implications for applied practice, there are also implications for future research. 505 These centre on the need to further explore how practitioners with extensive training and 506 knowledge in the MI approach are applying it in their daily work in sport settings, to determine best 507 practice guidelines for practitioners wishing to add this approach to their repertoire. Given that 508 several approaches from within the broader discipline of psychology (e.g., REBT, CBT, MAC, solution-509 focused) are becoming popular for working with athletes, future research should seek to identify 510 and delineate the processes and efficacy of integrating MI with these different interventions. This 511 may be achieved through production of case studies which provide in-depth explanations of an 512 integrated model. For example, a case study outlining the use of CBT underpinned by MI (and vice 513 versa - MI applying CB intervention components) to support an athlete who is experiencing a drop in 514 performance due to irrational or intrusive thoughts. Such a case study could outline the processes of 515 integrating CBT with MI, the impact of this on the therapeutic alliance, and impact on the athlete's 516 wellbeing and sport performance. While it is believed that MI can underpin delivery of many 517 interventions because of the technical and relational aspects, it may be more compatible with some 518 interventions than others. For example, greater emphasis may be placed on challenging illogical and 519 irrational thinking than on collaborating and building an alliance with an athlete when using a 520 traditional REBT approach, when compared with more traditional CBT (Brown, 2011).

522	Research of this nature will require not only in-depth interviews or focus groups, but also analysis
523	using previously mentioned coding instruments and client evaluations of their work, to understand
524	the mechanisms of action by which they are being effective, and even identify strategies proving
525	ineffective. This knowledge would be invaluable for the training of current and neophyte
526	practitioners, given that "There is now a greater emphasis on counseling and clinical training in sport
527	psychology" (Weinberg & Gould, 2012, p.18). These findings would also add to the wealth of
528	material already used to train practitioners in the MI approach, and could be considered for
529	inclusion in university degree curricula, to give students a foundation in relational and technical skills
530	prior to introducing intervention skills and strategies.
531	
532	From a curricula and training perspective the training of MI is a mature approach with over 1300
533	trainers worldwide (www.motivationalinterviewing.net) and the content of existing training would
534	offer a valuable foundation for trainee sport psychologists in an aspect of their work that currently
535	receives scant attention. While MI training is being delivered extensively to groups such as
536	physiotherapists, physicians, physical activity professionals and dieticians, there is a lack of training
537	for neophyte and practising sport psychologists. It is important that research also begins exploring
538	sport-specific uses or adaptations to the MI model and develops sport-specific training materials, to
539	fill this previously-identified gap (Mack et al., 2017).
540	
541	Regardless of these specific suggestions and recommendations, moving forward it is essential that
542	applied practice, research and practitioner training in this area continue to inform each other in
543	order to narrow the gap between the science and the service.
544	Conclusion
545	While it has been suggested that sport psychologists must be competent in both PST and
546	therapeutic counseling (Herzog & Hays, 2012) this suggests they are exclusive of one another,

547 whereas the delivery of PST within a counseling framework appears to be a more efficient and 548 effective approach. MI has been shown to increase treatment engagement and improve treatment 549 outcomes (Britton, Patrick, Wenzel, & Williams, 2011), particularly when combined with other 550 treatments such as CBT (Flynn, 2011; Geller & Dunn, 2011; Leahy, 2006; Westra & Arkowitz, 2011). 551 As the case study illustrated, it is delivering PST within an evidence-based framework which has the 552 potential to enhance the efficacy of treatments, through working in partnership with athletes, 553 respecting their autonomy and evoking ideas about techniques from the athlete. MI is not being 554 proposed as a panacea here but rather we are proposing this evidence-based approach, used 555 extensively in other psychological domains, can complement and enhance current sport psychology 556 interventions through enhanced therapeutic engagement.

# References

Amrhein, P.C., Miller, W.R., Yahne, C.E., Palmer, M., & Fulcher, L. (2003). Client commitment

language during motivational interviewing predicts drug use outcomes. *Journal of Consulting and Clinical Psychology*, 71, 862-878. DOI:10.1037/0022-006X.71.5.862.

Andersen, M. B., & Speed, H. D. (2010). Therapeutic relationships in applied sport psychology. In S. J.
Hanrahan & M. B. Andersen (Eds.), *Routledge Handbook of Applied Sport Psychology* (pp. 3–11).
London: Routledge. http://doi.org/10.4324/9780203851043.ch1

Apodaca, T. R., Jackson, K. M., Borsari, B., Magill, M., Longabaugh, R., Mastroleo, N. R., & Barnett, N.
P. (2016). Which Individual Therapist Behaviors Elicit Client Change Talk and Sustain Talk in
Motivational Interviewing? *Journal of Substance Abuse Treatment*, *61*, 60–65.

568 http://doi.org/10.1016/j.jsat.2015.09.001

Arvinen-Barrow, M., & Walker, N. (2013). *The psychology of sport injury and rehabilitation*. New York,
NY: Routledge.

Aviram, A. & Westra, H.A. (2011). The impact of motivational interviewing on resistance in cognitive
behavioral therapy for generalized anxiety disorder. *Psychotherapy Research*, 21(6), 698-708.
DOI:10.1080/10503307.2011.610832.

574 Baldwin, S.A., Wampold, B.E., & Imel, Z.E. (2007). Untangling the alliance-outcome correlation:

- exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75(6), 842–852. DOI:10.1037/0022-006X.75.6.842.
- 577 Behncke, L. (2004). Mental Skills Training For Sports : A Brief Review. *The Online Journal of Sport* 578 *Psychology*, 6(1), 1–19. ISSN 1536-0431.
- 579 Bellg, A.J., Borrelli, B., Resnick, B., et al. (2004). Enhancing treatment fidelity in health behavior

change studies: best practices and recommendations from the NIH behavior change consortium. *Health Psychology*, 23, 443–451. DOI:10.1037/0278-6133.23.5.443.

- Breckon, J.D. (2015). Motivational Interviewing to promote physical activity and nutrition behavior
  change. In, *Doing Exercise Psychology* (M. Anderson & S. Hanrahan, Eds.). Human Kinetics,
  Champaign, Ill. ISBN: 9781450431842.#
- 585

558

Breckon, J.D., Johnston, L.H. & Hutchison, A. (2008). Physical activity counseling content and
competency: a systematic review. *Journal of Physical Activity and Health*, 5(3), 398-417. PMID:
18579918.

Britton, P.C., Patrick, H., Wenzel, A., & Williams, G.C. (2011). Integrating Motivational Interviewing
and Self-Determination Theory With Cognitive Behavioral Therapy to Prevent Suicide. *Cognitive and Behavioral Practice*, 18, 16–27.

592

Brown, J.L. (2011). Cognitive-behavioral strategies. In J. K. Luiselli & D. D. Reed (Eds.), *Behavioral sport psychology: Evidence-based approaches to performance enhancement* (pp. 113–126). New
York, NY: Springer.

- 597 Campbell, M.K., Carr, C., Devellis, B., Switzer, B., Biddle, A., Amamoo, M.A., ... Sandler, R. (2009). A
- randomized trial of tailoring and motivational interviewing to promote fruit and vegetable
- consumption for cancer prevention and control. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 38(2), 71–85. DOI: 10.1007/s12160-009-9140-5.
- 601 Corlett, J. (1996). Professional Practice Sophistry, Socrates, and Sport Psychology. *The Sport*602 *Psychologist*, *10*, 84–94.
- 603 Cunliffe, M., & Hemmings, B. (2016). Case Study 4: A case study of cognitive behavior therapy in
- tennis. Sport and Exercise Psychology Review, 12(2), 51–63.
- 605 Cromarty, P. (2016). Improving access to psychological therapies (IAPT) in Australia: Evidence-based
- cognitive-behavior therapy interventions for anxiety, depression and gambling addiction. In R. G.
   Menzies, M. Kyrios, & N. Kazantzis (Eds.), *Innovations and Future Directions in the Behavioral and Cognitive Therapies* (pp. 272–276). Samford Valley, QLD: Australian Academic Press.
- Driessen, E. & Hollon, S.D. (2011). Motivational Interviewing from a cognitive behavioral perspective. *Cognitive and Behavioral Practice*, 18, 70-73. DOI: 10.1016/j.cbpra.2010.02.007.
- Engle, E.D. & Arkowitz, H. (2006). *Ambivalence in Psychotherapy: Facilitating Readiness to Change.*New York: Guilford Press.
- 613
- 614 Ertem, M., & Duman, Z. Ç. (2016). Motivational Interviewing in a Patient With Schizophrenia to
- Achieve Treatment Collaboration: A Case Study. *Archives of Psychiatric Nursing*, *30*(2), 150–154.
  http://doi.org/10.1016/j.apnu.2015.08.003
- 617 Flückiger, C., Del Re, A.C., Wampold, B.E., Symonds, D., & Horvath, A.O. (2012). How central is the
- 618 alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal of Counseling Psychology*,
- 619 59(1), 10. DOI:10.1037/a0025749.
- 620 Fishman, D. B. (1999). *The case for pragmatic psychology*. London: New York University Press.
- Flynn, H.A. (2011). Setting the Stage for the Integration of Motivational Interviewing With Cognitive
  Behavioral Therapy in the Treatment of Depression. *Cognitive and Behavioral Practice*, 18, 46–54.
  DOI: org/10.1016/j.cbpra.2009.09.006.
- 624
- Gardner, F.L. & Moore, Z.E. (2012). Mindfulness and acceptance models in sport psychology: A
  decade of basic and applied scientific advancements. *Canadian Psychology/Psychologie Canadienne*,
  Vol 53(4), 309-318. DOI: org/10.1037/a0030220.
- 628
  629 Gardner, F.L., & Moore, Z.E. (2006). *Clinical Sport Psychology*. Champaign, IL: Human Kinetics.
  630
- Gardner, F.L., & Moore, Z.E. (2004a). A mindfulness-acceptance-commitment-based approach to
  athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35(4), 707–723.
  DOI: 10.1123/jcsp.3.4.320.
- 634
- Gardner, F. L., & Moore, Z. E. (2004b). The Multi-Level Classification System for Sport Psychology
  (MCS-SP). *The Sport Psychologist*, 18, 89–109. DOI:org/10.1123/tsp.18.1.89.
- 637
- 638 Geller, J., & Dunn, E. C. (2011). Integrating Motivational Interviewing and Cognitive Behavioral
- 639 Therapy in the Treatment of Eating Disorders: Tailoring Interventions to Patient Readiness for
- 640 Change. *Cognitive and Behavioral Practice*, 18, 5–15. DOI: 10.1016/j.cbpra.2009.05.005.

- 641
- Hays, K., Thomas, O., Butt, J., & Maynard, I.W. (2010). The development of confidence profiling for
- 643 sport. The Sport Psychologist, 18, 373–392.
- 644

- Herzog, T., & Hays, K. F. (2012). Therapist or Mental Skills Coach ? How to Decide. *The Sport Psychologist*, 26, 486–499. DOI: org/10.1123/tsp.26.4.486.
- 648 Hettema, J.E. & Hendricks, P.S. (2010). Motivational Interviewing for Smoking Cessation: A Meta-
- 649 Analytic Review. Journal of Consulting and Clinical Psychology. 78(6), 868–884. DOI:
- 650 10.1037/a0021498.
- Høigaard, R., & Johansen, B.T. (2004). The Solution-Focused Approach in Sport Psychology. *The Sport Psychologist*, 18, 218–228. DOI: org/10.1123/tsp.18.2.218.
- Holmes, J. (2002). All you need is cognitive behavior therapy? *British Medical Journal*, *324*(7332),
  288–294.
- Holt, N.L., & Strean, W.B. (2001). Reflecting on initiating sport psychology consultation: A selfnarrative of neophyte practice. *The Sport Psychologist*, 15, 188-204. DOI: org/10.1123/tsp.15.2.188.
- Jones, G., Hanton, S., & Connaughton, D. (2002). What Is This Thing Called Mental Toughness? An
  Investigation of Elite Sport Performers. *Journal of Applied Sport Psychology*, 14, 205–218. DOI:
  org/10.1080/10413200290103509.
- 660
- Katz, J., & Hemmings, B. (2009). *Counseling Skills Handbook for the Sport Psychologist*. The British
  Psychological Society.
- Kennerley, H., Kirk, J. & Westbrook, D. (2016). An introduction to cognitive behavior therapy: Skills
   and applications (3<sup>rd</sup> Edition). Sage: Los Angeles.
- Knight, K.M., McGowan, L., Dickens, C. & Bundy, C. (2006). A systematic review of motivational
  interviewing in physical health care settings. *British Journal of Health Psychology*, 11, 319–332.
  DOI:10.1348/135910705X52516.
- Kuntz & Hessler, (1998). Bridging the Gap between Theory and Practice: Fostering Active Learningthrough the Case Method. ERIC.
- Leach, M.J. (2005). Rapport: a key to treatment success. *Complementary Therapies in Clinical Practice*, 11(4), 262–5. DOI:10.1016/j.ctcp.2005.05.005.
- Leahy, R.L. (2006). *Roadblocks in Cognitive-Behavioral Therapy: Transforming Challenges Into Opportunities for Change.* Guilford: London.
- 674

Lindsay, P., Breckon, J.D., Thomas, O., & Maynard, I.W. (2007). In Pursuit of Congruence : A Personal
Reflection on Methods and Philosophy in Applied Practice. *The Sport Psychologist*, 21, 335–352. DOI:
org/10.1123/tsp.21.3.335.

- Longstaff, F. & Gervis, M. (2016). The use of counseling principles and skills to develop practitionerathlete relationships by practitioners who provide sport psychology support. *The Sport Psychologist*.
  30, 276-289. DOI: 10.1123/tsp.2015-0029.
- 681 30, 682

Lundahl, B., Moleni, T., Burke, B.L., Butters, R., Tollefson, D., Butler, C., & Rollnick, S. (2013).

684 Motivational interviewing in medical care settings: a systematic review and meta-analysis of 685 randomized controlled trials. *Patient Education and Counseling*, 93(2), 157–168. DOI:

- 686 10.1016/j.pec.2013.07.012.
- Mack, R., Breckon, J., Butt, J., & Maynard, I. (2017). Exploring the Understanding and Application of
  Motivational Interviewing in Applied Sport Psychology. *The Sport Psychologist*, (31), 396–409.
  http://doi.org/10.1123/tsp.2016-0125

Madson, M.B., Mohn, R.S., Zuckoff, A., Schumacher, J.A., Kogan, J., Hutchison, S., ... Stein, B. (2013).
Measuring client perceptions of motivational interviewing : factor analysis of the Client Evaluation of
Motivational Interviewing scale. *Journal of Substance Abuse Treatment*, 44, 330–335. DOI:
10.1016/j.jsat.2012.08.015.

694

Magill, M., Gaume, J., Apodaca, T.R., Walthers, J., Mastroleo, N.R., Borsari, B. & Longabaugh, R.

(2014). The technical hypothesis of motivational interviewing: A meta-analysis of MI's key causal
 model. *Journal of Consulting and Clinical Psychology*, 82(6), 973-983. DOI: 10.1037/a0036833.

Marker, I., & Norton, P. J. (2018). The efficacy of incorporating motivational interviewing to cognitive
behavior therapy for anxiety disorders: A review and meta-analysis. *Clinical Psychology Review*, *62*,
1–10. DOI: 10.1016/j.cpr.2018.04.004

Markland, D., Ryan, R.M., Tobin, V.J. & Rollnick, S.R. (2005). Motivational Interviewing and self determination theory. *Journal of Social and Clinical Psychology*, 24(6), 811-831. DOI:

703 org/10.1521/jscp.2005.24.6.811

Massey, W. V., Gnacinski, S. L., & Meyer, B. B. (2015). Psychological Skills Training in NCAA Division I
Athletics: Are Athletes Ready for Change? *Journal of Clinical Sport Psychology*, 9(4), 317–334.
http://doi.org/10.1123/jcsp.2014-0042

- McArdle, S., & Moore, P. (2012). Applying Evidence-Based Principles From CBT to Sport Psychology.
   *The Sport Psychologist*, 26, 299–310. DOI: org/10.1123/tsp.26.2.299.
- Miller, W.R., Moyers, T.B., Ernst, D. & Amrhein, P. (2008) Manual for the Motivational Skill Code
   (MISC). Version 2.1. Available from http://casaa.unm.edu/download/misc.pdf
- 711
- 712 Miller, W.R., & Rollnick, S. (2013). *Motivational Interviewing: Preparing people for change (3<sup>rd</sup>*
- 713 *edition*). London, England: Guilford Press.
- 714
- Moloney, P., & Kelly, P. (2004). Beck never lived in Birmingham: Why CBT may be a less useful
   treatment for psychological distress than is often supposed. *Clinical Psychology*, *34*, 4–9.
- Morse, E.D. (2013). Substance Use in Athletes. In D. A. Baron, C. L. Reardon, & S. H. Baron (Eds.),
   *Clinical Sports Psychiatry: An International Perspective* (pp. 3–12). Wiley-Blackwell.
- 719
- 720 Moyers, T.B., Manuel, J.K., & Ernst, D. (2014). *Motivational Interviewing Treatment Integrity Coding*
- 721 *Manual 4.1*. Unpublished manual.

- 722
- 723 Moyers, T.B., Miller, W.R., & Hendrickson, S.M.L. (2005). How does motivational interviewing work?
- 724 Therapist interpersonal skill predicts client involvement within motivational interviewing sessions.
- 725 *Journal of Consulting and Clinical Psychology*, 73(4), 590–598. DOI: 10.1037/0022-006X.73.4.590.
- 726 Murphy, S. M. (Ed.). (1995). Sport Psychology Interventions. Champaign, IL: Human Kinetics.

- 729 Naar-King, S., Earnshaw, P. & Breckon, J. (2013). Towards a Universal Maintenance Intervention:
- 730 Integrating Motivational Interviewing with Cognitive-Behavioral Strategies for Maintenance of
- Behavior Change. *Cognitive and Behavioral Practice*, 27(2), pp.126-137. DOI: org/10.1891/08898391.27.2.126.
- Norcross, J.C. (2002). *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients*. Oxford University Press.
- 735 Norcross, J. C., Karpiak, C. P., & Lister, K. M. (2005). What's an integrationist? A study of self-
- identified integrative and (occasionally) eclectic psychologists. *Journal of Clinical Psychology*, *61*(12),
  1587–1594. http://doi.org/10.1002/jclp.20203
- Owen, J. (2010). Working with sport and exercise psychologists A winning combination. In M.
  Milton (Ed.), *Therapy and Beyond: Counseling Psychology Contributions to Therapeutic and Social Issues* (pp. 213–228). West Sussex: Wiley & Sons.
- 741
- 742 Petitpas, A.J., Giges, B., & Danish, S.J. (1999). The sport psychologist-athlete relationship -
- implications for training. *The Sport Psychologist*, 13, 344–357. DOI: org/10.1123/tsp.13.3.344.
- Pietrabissa, G., Ceccarini, M., Borrello, M., Manzoni, G. M., Titon, A., Nibbio, F., ... Castelnuovo, G.
- (2015). Enhancing behavioral change with motivational interviewing: A case study in a Cardiac
  rehabilitation unit. *Frontiers in Psychology*, 6(298), 1–9. http://doi.org/10.3389/fpsyg.2015.00298
- 747 Poczwardowski, A., Sherman, C.P., & Henschen, K.P. (1998). A Sport Psychology Service Delivery
- Heuristic: Building on Theory and Practice. *The Sport Psychologist*, 12, 191–207. DOI:
  org/10.1123/tsp.12.2.191.
- 750
- 751 Poczwardowski, A., Sherman, C.P., & Ravizza, K. (2004). Professional philosophy in the sport
- psychology service delivery: Building on theory and practice. *The Sport Psychologist*, 18, 445-463.
  DOI: org/10.1123/tsp.18.4.445.
- Radcliffe, J.N., Comfort, P., & Fawcett, T. (2013). The Perception of Psychology and the Frequency of
- Radchile, J.N., Comfort, P., & Fawcett, T. (2013). The Perception of Psychology and the Frequency of
   Psychological Strategies used by Strength and Conditioning Practitioners. *Journal of Strength and Conditioning Research*, 27(4), 1136–1146. DOI: 10.1519/JSC.0b013e3182606ddc.
- 757
- Resnicow, K. & McMaster, F. (2012). Motivational Interviewing: moving from why to how with
  autonomy support. *International Journal of Behavioral Nutrition and Physical Activity*, 9(19), 2-9. DOI:
  10.1186/1479-5868-9-19.
- 761 Rochat, S., & Rossier, J. (2016). Integrating motivational interviewing in career counseling: A case
- 762 study. Journal of Vocational Behavior, 93, 150–162. http://doi.org/10.1016/j.jvb.2016.02.003

Naar, S. & Safren, S. (2017). *Motivational Interviewing and CBT: Combining Strategies for Maximum Effectiveness*. New York, Guilford Press.

- Rogers, C. (1959). *Psychology: A Study of a Science*. Study 1, Volume 3: *Formulations of the Person and the Social Context*, edited by Sigmund Koch. (McGraw-Hill, 1959, pages 184-256).
- 765
- Rollnick, S., Butler, C. C., McCambridge, J., Kinnersley, P., Elwyn, G., & Resnicow, K. (2005).
- Consultations about changing behavior. *British Medical Journal*, *331*(7522), 961–963.
- 768 http://doi.org/10.1136/bmj.331.7522.961
- Rosengren, D. (2009). *Building motivational interviewing skills: A practitioner workbook*. London:Guilford Press.
- 771
- Ryle, A. (2012). Critique of CBT and CAT. In E. McCormack (Ed.), *Change for the Better* (Vol. 4, pp. 1–
  8). New York, NY: Sage.
- Sharp, L.A., Hodge, K., & Danish, S. (2015). Ultimately It Comes Down to the Relationship:
- Experienced Consultants? Views of Effective Sport Psychology Consulting. *The Sport Psychologist*,
   29(4), 358–370. http://doi.org/10.1123/tsp.2014-0130
- 777 Shortway, K. M., Wolanin, A., Block-Lerner, J., & Marks, D. (2018). Acceptance and Commitment
- 778 Therapy for Injured Athletes: Development and Preliminary Feasibility of the Return to ACTion
- Protocol. Journal of Clinical Sport Psychology, 12, 4–26. http://doi.org/10.1123/jcsp.2017-0033
- 780 Simons, J.P. & Andersen, M.B. (1995). The Development of Consulting Practice in Applied Sport
- Psychology: Some Personal Perspectives. *The Sport Psychologist*, 9(4), 449-468. DOI:
  10.1123/tsp.9.4.449
- Soderlund, P. D. (2018). Effectiveness of motivational interviewing for improving physical activity
  self-management for adults with type 2 diabetes: A review. *Chronic Illness*, *14*(1), 54–68.
  http://doi.org/10.1177/1742395317699449
- Thompson, C., & Andersen, M. B. (2012). Moving Toward Buddhist Psychotherapy in Sport: A Case
  Study. *The Sport Psychologist*, *26*(4), 624–643. http://doi.org/10.1123/tsp.26.4.624
- Turner, M.J., & Barker, J.B. (2014). Using Rational Emotive Behavior Therapy With Athletes. *The Sport Psychologist*, *28*(1), 75–90. DOI: org/10.1123/tsp.2013-0012.
- 790 Wagner, C.C & Ingersoll, K.S. (2012). *Motivational Interviewing in groups*. London: Guilford Press. 791
- Weinberg, R.S. & Gould, D. (2012). Foundations of Sport and Exercise Psychology, 6<sup>th</sup> Edition.
   Champaign, ILL.: Human Kinetics.
- 794
- Westra, H. (2012). Motivational interviewing in the treatment of anxiety. London: Guilford Press.
- Westra, H.A., & Arkowitz, H. (2011). SPECIAL SERIES: Integrating Motivational Interviewing With
   Cognitive Behavioral Therapy for a Range of Mental Health Problems. Introduction. *Cognitive and Behavioral Practice*, 18, 1–4. DOI: 10.1037/ccp0000098.
- 800 Wood, A. G., Barker, J. B., & Turner, M. J. (2017). Developing Performance Using Rational Emotive
- 801 Behavior Therapy (REBT): A Case Study with an Elite Archer. *The Sport Psychologist*, *31*(1), 78–87.
- 802 http://doi.org/10.1123/tsp.2015-0083