Perceptions of Engaging with a Super-Strengths Approach in Elite Sport

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9 Perceptions of Engaging with a Super-Strengths Approach in Elite Sport

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1   Running Head: PERCEPTIONS OF SUPER-STRENGTHS APPROACH

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1   **Abstract**

2   Strengths-based approaches (underpinned by positive psychology) are scarcely documented

3   in sport. This study explored perceptions of a strengths-based approach (termed super-

4   strengths) on psychological characteristics and performance in elite sport. Semi-structured

5   interviews were conducted with athletes (*N*=12) who had previous experience of working

6   with a sport psychology practitioner on super-strengths. Thematic analysis of the data (Braun

7   & Clarke, 2006) indicated that super-strengths had a positive influence on athletes' mind-set,

8   confidence (e.g., self-belief), clarity of purpose (e.g., goal direction), drive, coping ability,

9   and performance. Findings highlight the potential benefits of adopting strengths-based

10   approaches in sport, and recommendations for future research are provided.

11   *Key words*: positive, performance psychology, confidence, elite sport

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1   Perceptions of Engaging with a Super-Strengths Approach in Elite Sport

2   In recent years, the benefits of focusing on and maximizing a person's strengths and

3 resources have been highlighted in various mental health and performance contexts, including

4 clinical settings (e.g., Fluckiger & Grosse Holtforth, 2008; Scheel, Davis, & Henderson,

5 2012), coaching psychology (e.g., Biswas-Diener, Kashdan, & Minhas, 2011; Linley,

6 Woolston, & Biswas-Diener, 2009), education (e.g., Park & Peterson, 2008), and business

7 (e.g., Clifton & Harter, 2003). Across contexts, findings have consistently suggested that

8 adopting a strengths focus can enhance various desirable characteristics and behaviors, such

9 as positive affect, well-being and engagement. Although the practicalities of strengths-based

10 approaches vary across domains, they typically stem from and are underpinned by principles

11 of positive psychology (see Seligman & Csikszentmihalyi, 2000). Positive psychology

12 promotes the concept that health is the presence of wellness and not solely the absence of

13 disease. Therefore, to enhance mental health, positive psychologists propose that more

14 attention should be given to the positive aspects of peoples' lives and maximizing the good in

15 their situation, rather than concentrating on trying to fix the negative aspects (Diener, 2003).

16 This shift in attention is apparent from research and practice in various disciplines concerning

17 people's mental health, well-being, and performance (i.e., clinical and organizational

18 settings). In sport psychology, it has been suggested that our discipline has exemplified

19 positive psychology for the last 25 years through the study of athletic excellence (Gould,

20 2002). While it is recognized that this focus on excellence is apparent in some sport

21 psychology research, specific strengths-based consultancy approaches and methods, and the

22 potential benefits of adopting these have only recently been alluded to (i.e., Beaumont,

23 Maynard, & Butt, 2015; Gordon & Gucciardi, 2011). Specifically, in elite sport it has been

24 suggested that focusing on an athlete's super-strengths could have a positive impact upon

25 their psychological characteristics and performance (Ludlam et al., 2015).

1   The benefits of helping clients attend to and realize their strengths or positive facets of

2   their lives have been indicated consistently in research across mental health and performance

3   contexts, and many desirable effects have been reported. These include increased positive

4   affect, enhanced well-being (Govindji & Linley 2007; Proctor et al., 2011), and improved

5   self-esteem (Minhas, 2010). Furthermore, in clinical psychology, it has been suggested that a

6   lack of focus on strengths and resources can actually be detrimental to mental health and

7   well-being. For example, Gassmann and Grawe (2006) explored problem activation and

8   resource activation which are two mechanisms for change used in psychotherapy.

9   Specifically, problem activation involves focusing discussion on problems, on the premise

10   that a person must come into contact with negative emotions in order to overcome them.

11   Conversely, resource activation involves focusing on a patient's resources, strengths, and the

12   healthy aspects of their situation in order for them to progress (Fluckiger, Caspar, Grosse

13   Holtforth, & Willutzki, 2009). Gassman and Grawe measured therapeutic progress and

14   session outcomes, in relation to therapists' utilization of the two mechanisms. Results

15   revealed that in unsuccessful sessions therapists activated resources significantly less than in

16   successful sessions. In successful sessions patients' resources were activated more than

17   problems, throughout the entire session, whereas in unsuccessful sessions resources were

18   activated at the end which was seemingly too late to have any positive influence/impact. It

19   was also reported that in unsuccessful sessions where resources were not being activated,

20   patients reported lower self-confidence and rapport with the practitioner, as the session went

21   on. Collectively, these findings highlight the significance of attending to clients' strengths

22   and resources to successfully influence their mental health and well-being.

23   The notion that there is more to gain by developing individuals' strengths, than their

24   weaknesses, is similarly recognized in the coaching psychology literature (Linley, 2008).

25   Strengths coaching, as it is known in this field, is a form of applied positive psychology

1   whereby clients are encouraged to identify, use, and develop their strengths more, in work

2   and life contexts. It has been suggested that by using a person's natural capacities and

3   allowing them to do what they do best, positive emotions can be facilitated (Linley &

4   Harrington, 2006). This suggestion was supported by research assessing college students'

5   needs satisfaction, well-being, goal progress, and goal attainment in relation to their strengths

6   use (Linley, Nielsen, Wood, Gillett, & Biswas-Diener, 2010). Findings showed that

7   strengths-use was associated with enhanced goal progress, which in turn positively influenced

8   psychological needs satisfaction, and well-being. These findings supported previous research

9   proposing that making use of clients' strengths can lead to increased engagement (Harter,

10   Schmidt & Hayes, 2002), motivation and goal attainment (Linley & Harrington, 2006), and

11   performance in the workplace (Collins, 2001; Corporate Leadership Council, 2002).

12   Although the findings should not necessarily be generalized across contexts, there are

13   interesting implications for sport psychology practitioners and coaches working in sport,

14   particularly if highlighting strengths and resources can facilitate enhanced psychological

15   well-being and performance.

16   Despite the prevalence of literature promoting the desirable effects of strengths-based

17   approaches to practice, there has been scant attention paid to this way of working in sport

18   psychology (Ludlam et al., 2015). One study advocating the potential for strengths-based

19   approaches in sport focused on using strengths to aid the development of mental toughness in

20   cricket (Gordon & Gucciardi, 2011). Findings indicated that players in the study suggested

21   they were unfamiliar with having discussions about their strengths, yet they were generally

22   complimentary about the value of these discussions. It was also recommended that future

23   research should explore the potential for strengths-based approaches to be used in a sporting

24   context.

1   Similarly, Beaumont et al.'s (2015) study revealed that practitioners deemed the

2   development of athletes' signature strengths to be an effective method for enhancing robust

3   sport-confidence. While this research offers support for developing athletes' key strengths, it

4   focused on practitioners' views and did not explore athletes' perceptions of experiencing such

5   an approach. Furthermore, the term signature strengths is one that has previously been coined

6   in positive psychology research in clinical settings; The Values Inventory of Strengths (VIA-

7   IS: Peterson & Seligman, 2004), identifies a person's top five "signature strengths," (e.g.,

8   hope, honesty). These signature strengths are computer generated, from a list of 24 potential

9   character strengths. The language used and the signature strengths identified by the VIA-IS

10   are not necessarily context specific or unique to one person. Conversely, super-strengths is an

11   applied approach that has been developed to identify performance edges, using the greatest

12   attributes athletes have that they can use in a competitive environment (Ludlam, Butt,

13   Bawden, Lindsay, & Maynard, 2015). The name super-strengths refers to the notion that the

14   athlete is or could be/become "super" at the strength they have identified to be key to gaining

15   an edge over their competitors. Unlike the trait-like signature strengths (VIA-IS: Peterson &

16   Seligman, 2004), super-strengths by definition are contextual, specific, and state like, with a

17   performance focus (Ludlam et al., 2015). In sport psychology there is little evidence of

18   practitioners adopting strengths-based approaches in their applied work, or consensus as to

19   what these approaches would look like in practice.

20   In line with this gap in research, Ludlam et al. (2015) explored this strengths-based

21   approach, termed super-strengths, that has been applied in elite sport within the UK.

22   Specifically, a qualitative study was conducted with practitioners and coaches that had

23   facilitated a super-strengths approach with athletes. The aim of the study was to threefold:

24   first to understand the meaning of the approach and to define super-strengths, second to

25   ascertain the methods used to identify super-strengths, and finally to capture the phases of

1 development within the approach. Based on the study findings, the researchers proposed that

2 athletes' super-strengths are strategies for performance that utilize a potential world's best

3 resource in order for them to gain a unique competitive edge in their (sport) performance

4 context. It was suggested that the potential world's-best resources underpinning super-

5 strengths might be personal and/or athletic qualities. Thus, athletes' super-strengths could be

6 identified through subjective methods (i.e., discussions and observations) and/or objective

7 methods (i.e., performance statistics/ analysis). Findings of this study also suggested that the

8 super-strengths approach involves a process of contextualising to establish when, where, and

9 how super-strengths will best be most effectively used in performance to gain a competitive

10 edge. This process is facilitated by the sport psychology practitioner, and requires consensus

11 from the coach and athlete on the context for using. Furthermore, the researchers highlighted

12 the need for consideration as to how the coach and athlete will develop and maximise the

13 super-strength(s) in the training environment, both physically and in their psychological

14 approach (mind-set). The findings from Ludlam et al (2015) also provided practical

15 recommendations and a conceptual pathway for practitioners and coaches wishing to adopt a

16 similar approach. In particular, it was highlighted that getting key stakeholders and those who

17 influence an athlete's training environment on-board with the strengths-based approach was a

18 priority. This was deemed necessary to ensure that super-strengths were continually being

19 reinforced and so athletes' development plans were consistent and clear.

20 　　　Although the study provided guidance for conducting a super-strengths approach, the

21 perceived impact of the approach was not alluded to, and athletes were not included in the

22 sample. Therefore, is it not yet known whether athletes perceive the approach to be

23 beneficial, or any concerns they might have with the super-strengths approach. Similarly,

24 from the review of literature conducted, it is evident that there is a gap in knowledge

25 regarding the application and potential impact of strengths-based approaches in sport. Thus

1   the purpose of the present study was to explore athletes' perceptions of a super-strengths

2   approach (cf. Ludlam et al., 2015).

3   **Method**

4   **Design**

5   With a Pragmatic philosophy (e.g., Giacobbi Jr., Poczwardowski & Hager, 2005), the

6   researchers' intentions for the present study were to further develop understanding the

7   practicalities and necessary considerations for adopting a super-strengths approach in applied

8   sport psychology. More specifically, the purpose of the study was to gain understanding of

9   the role and potential benefits/ pitfalls of the approach. In order to do so, it was deemed most

10   appropriate to obtain the perceptions of athletes who had experienced a super-strengths

11   intervention through working with their sport psychologist and coach in their sport. In line

12   with previous research, the perceived effects of engaging with the approach upon athletes'

13   psychological characteristics, well-being, and performance were of particular interest to the

14   researchers.

15   **Participants and Sampling**

16   In order for the most appropriate participants to be identified, critical case sampling

17   was adopted which involves the inclusion of participants who are likely to "yield the most

18   information and have the greatest impact on the development of knowledge" (Patton, 2001, p.

19   236). In order to identify the most appropriate athletes, and to ensure consistency in the

20   definition of super-strengths, sport psychologists from previous super-strengths research (i.e.,

21   Ludlam et al., 2015) were contacted and identified the athletes they had worked with (after

22   gaining the athletes' consent to do so). From this pool of athletes, the two primary criteria for

23   inclusion were that they must be experiencing/have experienced a super-strengths approach

24   within the last 12 months of working with their sport psychology practitioner and coach. In

1   addition, based on previous super-strengths research (Ludlam et al., 2015), athletes were

2   required to hold elite status at the time they experienced super-strengths. In line with previous

3   research, elite status was defined as "world-class, performing at the highest possible

4   international standard in their sport" (e.g., Hays, Maynard, Thomas, & Bawden, 2007). Based

5   on this criterion, 12 athletes (10 male, 2 female) were identified, aged between 21 and 39

6   years (M=28.92, SD= 5.04), with a total of 123 years' experience in elite sport (M=10.25, SD

7   = 2.7). Only one athlete in the sample had retired from elite sport (4 months prior to data

8   collection), all other athletes were still competing at elite level (defined previously). Athletes

9   represented a range of individual and team sports, including Field Hockey, Squash, Cricket,

10   Rugby Union, and Sailing within the UK.

11   **Procedure**

12   Upon gaining institutional ethics approval, an information letter was sent to

13   participants outlining the aims of the research and proposed procedure for data collection.

14   Participants were then contacted via email and/or telephone by the first author to arrange a

15   suitable date and time to be interviewed. Informed consent was sought from all participants

16   prior to them engaging in the interview process and it was reiterated that data would remain

17   confidential and anonymous via the use of pseudonyms. Semi-structured interviews were

18   deemed to be the most appropriate method of data collection. Specifically, they allow for a

19   scaffold of structure to be put in place as the interviewer asks key questions in the same way

20   to all participants, while allowing for unique probing questions so that further information

21   can be gathered at any point (Ritchie, Lewis, Nicholls, & Ormston, 2013). A pilot interview

22   was conducted with a coach who had previously been involved in a similar strengths-based

23   approach while competing as an athlete. The pilot interview enabled the research team to

24   ensure that the interview guide allowed for adequate information to be elicited. Additional

25   probing questions were added into the interview schedule following the pilot interview.

1 These probes were added to encourage participants to elaborate on their descriptions and

2 perceptions of super-strengths and gain an in-depth understanding of their experiences

3 (Ritchie et al., 2013). For example, when asked "can you tell me about anything that you

4 adapted that came from your experience of super-strengths?", probing questions were added

5 to prompt athletes' reflections on "mind-set", "training", and "performance". Other questions

6 included "can you describe or explain what is/was the best thing about super strengths?" and

7 "can you tell me what we should be mindful of when adopting the approach with athletes?"

8 **Data Analysis**

9 Interviews lasted between 40 and 75 minutes and verbatim transcription generated

10 over 90 pages of raw data. Following transcription by the lead author, a thematic analysis

11 based on the six stage process outlined by Braun and Clarke (2006) was conducted. Initially,

12 the transcripts were read and re-read independently by the researchers, to enhance familiarity

13 with the data. Following this process, interesting and significant extracts of the data were

14 coded and then these codes were collated and put into meaningful categories (i.e., themes). A

15 review of the themes generated was conducted both individually and with the team of three

16 researchers each presenting their themes to the rest of the group for discussion. This process

17 allowed for triangulation of the data to be achieved and the meaning and organization of

18 themes to be debated. This process aimed to enhance the credibility of the analysis procedure

19 and subsequent output, as suggested by Tracy (2010). Tracy also indicated that credibility can

20 be enhanced through member-checking; this was achieved in the present study via emailing

21 participants a copy of their transcript to ensure it was representative of their experience.

22 Through this procedure participants were given an opportunity to amend their transcripts;

23 however no participants wished to make changes. Finally, to further enhance credibility of

24 the data, thick description quotes have been provided in the results section from multiple

25 participants (Tracy, 2010).

1   **Results**

2   Seven higher-order themes comprising 11 lower-order themes were generated from

3 the data and are displayed in Figure 1. The figure outlines the factors that athletes perceived

4 were developed through their experiences of the super-strengths approach. In addition raw

5 data quotes are presented throughout the results, to enhance transparency and authenticity in

6 the meaning generated from the data, as well as enhancing the context for the reader

7 (Roulston, 2010; Tracy, 2010).

8 **Performance**

9   All athletes indicated that engaging with the super-strengths approach had a positive

10 impact on their performance and/or outcomes. Specifically athletes suggested that they had

11 more success in performance after identifying and/or developing their super-strengths, for

12 example one athlete stated:

13   P4: I think [super-strengths] is good. I won my first world cup event this year which

14   was a while after we had started doing this and I can't attribute it to just one thing, it's

15   everything coming together, but it definitely works.

16 Similarly another athlete explained:

17   P10: That was the goal of it all really to give myself a weapon that other players

18   would worry about and would help with the overall goal to make me the best player in

19   the world… and ultimately it did for a time.

20 As highlighted by the following quote, some athletes perceived that this performance impact

21 was as a result of the positive psychological effects they experienced during the approach:

22   My mental game has risen so I am playing better and I am playing at the highest level

23   more often and not dipping, so before I would play at the highest level for one day

24   and then dip for two or three, whereas now I am more consistent so I might not be

25   amazing every day but I am able to play at a stronger level in the gym or training. I

1   am not flagging as much because I have more focus on what I am trying to do. (P2)

2   In this next section of the results the other six higher-order themes that emerged, explaining

3   the psychological characteristics that athletes' perceived were developed, are presented.

4   **Confidence**

5   Athletes suggested that as a result of identifying and developing their super-strengths,

6   their confidence increased. Confidence was generated as a higher-order theme comprising

7   seven lower-order themes: self-belief (e.g., increased belief in own ability), others' belief

8   (e.g., confidence from others' believing in you), positive focus (e.g., working on your super-

9   strength), edge on others (e.g., feeling like you have something better than competitors),

10   competition confidence (e.g., assured you can deliver your super-strength), preparation (e.g.,

11   knowing you have trained your super-strength), and team confidence (e.g., knowing everyone

12   has something special to bring).

13   **Self-Belief.** All athletes proposed that identifying and developing their super-strengths

14   gave them more self-confidence; knowing they had something they were great at and gaining

15   understanding of their competitive edge increased their self-belief.

16   Well I keep going back to this but it gives you that little bit of chest back (physical

17   display of confidence), that I am good, gives you a little bit of self-importance I

18   suppose. And it's nice knowing that actually yeah I think I am better than you at this.

19   (P1)

20   **Others' belief.** Athletes suggested that they gained confidence from their super-

21   strength being highlighted by others. Moreover, that those people (i.e., team-mates, coach)

22   had suggested and believed that the athlete has something special and unique. One athlete

23   stated:

24   I wondered why I hadn't accessed it before like why has this not been thought about

25   before now!...because it does make you feel good knowing that you have this one

1   thing that people see in you I guess. And whether you win a medal or not they still see

2   that in you and it makes you feel a bit special like that. (P11)

3 Another athlete proposed that they gained confidence from their coaches' belief:

4   I think it gives you more confidence and positivity because you have found something

5   that someone believes in…I think it is quite rare in sport for coaches to tell you that

6   you are really good at this as they don't want to put you down but don't want you to

7   start thinking you're the greatest too early... it gives you more belief in yourself, you

8   want to try, like in the past I would go for some hard shots but I didn't really believe it

9   whereas now I can go for it and I have more belief that I can do it. (P2)

10 A further athlete discussed how others' involvement with their super-strengths plan helped:

11   It just worked for me; it gave me confidence, simple as. And I admit I wasn't

12   comfortable talking about what I was good at, at all but it is always nice to hear it

13   from your team mates and then if you hear the same thing from your coach you are

14   suddenly like ok fair enough, then you start to notice it in your own game. (P12)

15   **Positive focus**. Athletes suggested that through engaging with the super-strengths

16 approach and thus focusing on a positive element of performance, their confidence increased.

17 One athlete suggested:

18   For me personally if you are just working on weaknesses it was tough on the old

19   confidence, but if you are keeping the strengths in there, the positivity that comes

20   from working on strengths really made a difference. Working on weaknesses can

21   become quite tiring whereas working on strengths can bring that energy boost and

22   really make you feel good knowing that today I am working on something that I am

23   good at.(P9)

24   **Edge on others.** Athletes also discussed that they gained confidence from knowing

1   they had established a strategy they are better at than others, and a potential competitive edge

2   for performance. One athlete stated:

3   I think it's like a comforting thing - you say well actually yeah I am the best at that,

4   there is nobody better in the world at that, I mean confidence is a strange thing but it

5   is a confidence thing when you know that you have something that it is better than

6   anyone else. (P1)

7   Another athlete described how they believed that highlighting their competitive edge

8   reinforced their belief in their performance capabilities:

9   And it's also really important for your confidence, to actually know I am genuinely

10   good at something, I am not just OK in a lot of different areas, this is what

11   differentiates me from other people and in international sport you look at other

12   players and you go 'he's a good player' and then you always have that internal battle

13   like am I really as good as any of these players. But if you really nail one aspect then

14   you can go I know I am going to be great at this particular strand to what I do.(P5)

15   **Competition confidence.** When discussing the effects of super-strengths, athletes

16   proposed that having worked on their super-strengths, they were more confident in

17   competition-specific situations, as one athlete stated:

18   So yeah when I raced I raced a lot more confidently believing that I could… well I

19   wouldn't say always believing that I could win but I believed that I could be one of

20   the best in the world and that was quite a nice feeling! (P11)

21   **Preparation.** This theme developed from the athletes' belief that knowing they had

22   worked on and trained their super-strength, in preparation for performance, really gave them

23   confidence, as highlighted by the following quote:

24   The best thing about super-strengths is the confidence it gives an individual and the

25   confidence it gives a team, it's not a thing that might happen or could happen, you

1   know that it will happen because you have practiced it and seen it before so it's that

2   knowledge and understanding that you can produce it and it gives you that

3   confidence. (P3)

4   A second participant stated:

5   So it's that confidence that you've put the right program together for the vision, then

6   once you get to that place you just have to execute it… the Olympics came and it was

7   like right, we've done the hard work, full of confidence to go and execute. (P8)

8   **Team confidence.** Athletes who competed in a team sport suggested that engaging

9   with the super-strengths approach enhanced their confidence individually and also as a team.

10   As one athlete described:

11   It gave a lot of players a lot of confidence because it was like oh hang on a minute

12   yes I'm not world class at everything but I am world class at this and this. And that

13   alone really moved the team forward a lot. (P12)

14   Athletes also suggested super-strengths provided them with role clarity and an understanding

15   of how they can contribute towards the team's competitive edge:

16   I love it because it's my thing that I bring to the club so you feel like a cog in the

17   wheel. I know what I'm going to bring and it does give me a confidence and feeling

18   part of a team and part of the environment. Everyone has a super-strength and then

19   everyone has a part to play. (P3)

20   **Mind-set Shift**

21   This higher-order theme was apparent from athletes' suggestions that the process of

22   learning about, identifying, and developing super-strengths made them think differently. One

23   athlete described:

1   This helped put together the final piece of the jigsaw … I remember when he (sport

2   psychology practitioner) first mentioned it to me and it was like someone had opened

3   my eyes, I came out of the session and I felt so inspired with this new idea. (P10)

4 Specifically, some athletes proposed that shifting from working on weaknesses to working on

5 super-strengths was new to them, challenged tradition, and was a positive influence upon

6 their psychology and performance. For example one athlete stated:

7   When you start looking to improve yourself you always start looking at your

8   weaknesses…rather than saying actually no what am I world class at, what am I best

9   in the whole world at, if you are an elite sportsperson what makes me different? (P1)

10 **Clarity of Purpose**

11   This higher-order theme was generated from four lower-order themes that athletes

12 discussed and felt they had developed clarity as a result of engaging with the super-strengths

13 approach. The lower-order themes were: training focus (e.g., a plan/goal in training), strategy

14 for competition (e.g., a clear method for performing), default method (e.g., something they

15 can fall back on under pressure), and goal direction (e.g., a clear focus for what you are trying

16 to achieve).

17   **Training focus.** Athletes highlighted that by identifying their super-strengths and as a

18 result of knowing what their strategy for performance looked like, they had more focus in

19 training.

20   It added more focus to training so sometimes we used to turn up to the pitch and we'd

21   have no idea what we were going to do so and it could be three weeks before there

22   was a drill to allow you to work on your areas because you don't have an individual

23   focus in training… but with your super-strengths it would always give you something

24   in training to focus on even in a generic session. (P12)

1   Another athlete described how their super-strengths were integrated into their training plan:

2   I guess it got put into my training plan where the sports scientists and strength and

3   conditioning coaches could get involved… So we didn't' change anything in group

4   training necessarily, but we just focused on it more so you go out with areas you want

5   to focus on and then debrief them. (P4)

6   **Strategy for competition.** Athletes suggested that the super-strengths process

7   provided them with a method and a clear focus for what they are trying to do in performance.

8   I think it really does give you a good advantage because if I am getting that many

9   points per game then it gives me a huge advantage over anyone else because nobody

10   else is winning that many points and it means all I have to do is win one point off

11   their serve each time and then I have pretty much won the game so it is great

12   tactically. (P6)

13   **Default method.** This theme encompassed raw data which highlighted that athletes

14 perceived their super-strengths were something they could fall back on in competition. They

15 believed their super-strengths were the things they knew they could deliver and succeed in.

16   With this you have something to fall back on so it doesn't matter whether things are

17   going bad or good because you can always have your thing that you are working on.

18   And also if things are going amazing I can still look and say where I think I can use it

19   more so it's like always something to fall back on and to guide you regardless. I think

20   you can rely on yourself as well so you're less reliant on another person coming to tell

21   you, you can rely on yourself telling yourself what you are working towards. (P2)

22   **Goal direction.** Athletes proposed that by identifying their super-strengths and

23 proposed strategies for gaining a competitive edge, they felt they had more focus and clarity

24 around their goals and what they were aiming for.

1   Yeah so from every monthly meeting (with coach and sport psychologist) you would

2   go away with a set of goals and things to work on, very specific and it's very easy to

3   go training knowing you had these specific goals to achieve and it was rewarding it

4   gave you focus, like launching out here in December and it's freezing and you know

5   exactly what you are trying to do out there it gives you a focus and direction and it

6   means you are going out there with a reason. (P8)

7   **Increased drive**

8   This higher-order theme was generated from athletes' suggestions that they felt they

9   had more drive and motivation for what they were doing. As one athlete suggested, 'when we

10 say we are going to play with our super-strengths, this is how we are going to act and do and

11 go about our business, it's a bit more of a get up and go sort of feeling' (P1). Similarly, other

12 athletes talked about how focusing on their super-strengths gave them something to work for

13 and a reason to do what they were doing.

14   Focusing on something you are good at is very helpful and has a big impact on

15   confidence and makes you excited to go train the things you are good at. It does make

16   you feel good having that to fall back on so even if it hasn't gone so well that day you

17   know the next day you are going to be focusing on your strengths so when it comes to

18   it there is that excitement there that you want to work on it. (P9)

19 **Coping with pressure**

20   Athletes perceived that having their super-strength(s) to focus on in performance,

21 something that they knew they were great at, enhanced their ability to cope under pressure

22 and they felt freer and less worried about their ability to succeed in competition.

23   When the pressure was mounting, when we were in a difficult situation, I knew that I

24   could deliver my super-strengths at any time, that was my game and completely

1   innate and there was an expectation from every member of the team that I would

2   deliver day in, day out. (P12)

3   **Reliance**

4   In this theme, athletes indicated that the approach could potentially have a negative

5   impact on performance by them becoming reliant or obsessed about super-strengths. Athletes

6   alluded to the notion that super-strengths need to be used in context and if an athlete has seen

7   their super-strength have a positive impact in performance, they might become a "one trick

8   pony". As one athlete discussed:

9   It's about learning and working out when this works for you… it's not necessarily to

10   be used all the time, because I think you can become a bit obsessed on it which can

11   become a negative so it could be like ah well we did that graph that showed your

12   strength overdone is bad and if you start to think you need to use it all the time it

13   almost becomes a weakness. So for me the big thing was learning when to use it. (P2)

14   It was evident when analyzing the data that there were commonly reported barriers

15   and challenges that athletes suggested needed to be considered in the super-strengths

16   approach, in order to achieve the positive impact they perceived to be possible. The main

17   barrier proposed was the potential hesitance/resistance from athletes to engage with super-

18   strengths, stemming from a lack of comfort or familiarity when asked to talk about what they

19   think they are great at. Athletes proposed that in the UK, culturally we do not pay as much

20   attention to our strengths and thus practitioners may struggle to elicit what an athlete thinks

21   they could potentially be best in the world at. To overcome this, athletes suggested the

22   importance of the approach being continually reinforced by coaches and practitioners, and in

23   turn, believed that this would enable athletes to reap the benefits associated with super-

24   strengths. One athlete explained the importance of reinforcement in the following way:

1   It was uncomfortable because we don't talk about things we are good at, we don't

2   have that culture at all, so once you got over the barrier that people were comfortable

3   enough to say well actually I am bloody good at whatever it is, then it was more

4   comfortable… but we knew each other incredibly well at that point whereas if we had

5   to do it now, God it would be like getting blood out of a stone trying to coax that out

6   of some of them! (P12)

7 Similarly another athlete discussed:

8   I think this only really works if you are very persistent with it, because the natural

9   human nature kicks in more often than we think, even though people might be

10   generally excited about it, it's very easy to go back to default. There is a reason

11   coaching has evolved how it has because people want to cover their weaknesses it

12   seems the logical thing to do, it's natural. And so I think that's the biggest danger, that

13   the practice bit is really important, you have to be hands on and remain committed to

14   it otherwise I don't think it will work. (P5)

15   **Discussion**

16 The purpose of the present study was to explore elite athletes' perceptions of a super-

17 strengths approach, and more specifically if athletes perceived this approach to have

18 influenced (positively or negatively) their psychological characteristics, well-being, and

19 sporting performance. Generally, athletes spoke positively about their experiences of super-

20 strengths and highlighted numerous benefits of the approach. Specifically, it was encouraging

21 to find that all athletes perceived that identifying and developing their super-strengths had a

22 positive impact upon performance. Moreover, it was apparent that there were associations

23 between this performance impact and the perceived impact upon psychological

24 characteristics. That is, engaging with super-strengths positively influenced psychological

characteristics such as confidence and drive, which in turn generated performance

improvements. It is expected that if an athletes' psychology improves, their performance will

benefit from this improvement (Wang & Zhang, 2015). Indeed in the present study, athletes

perceived that super-strengths had a positive influence upon several psychological

characteristics.

One of the most prevalent findings was that athletes perceived that identifying and

developing their super-strengths enhanced their confidence in several ways. Specifically,

athletes discussed that their self-belief was enhanced throughout the super-strengths

intervention, and also that they gained confidence through others (i.e., coaches, teammates)

believing in them. They suggested this was facilitated by the process of super-strengths

whereby the athletes' greatest attributes are highlighted and the subsequent development plan

includes working on something others (i.e., their coach) believes the athlete could become

best in the world at. Similar findings are apparent within clinical psychology literature where

it has been suggested that discussing strengths and resources with clients during sessions

(known as resource activation) is paramount for success, rapport building, and clients'

confidence (Gassman & Grawe, 2006). Similarly in sport psychology, it has recently been

indicated that developing an athlete's signature strengths (i.e., what they are superior at) is a

method recognized by practitioners as good for enhancing athletes' sport confidence

(Beaumont et al., 2015). While the effects of signature strengths have not yet been

empirically tested, collectively, findings indicate the potential benefit of practitioners eliciting

and developing clients' strengths and resources during consultancy sessions. Thus, future

research assessing the impact of strengths-based approaches upon athletes' sport confidence

is encouraged.

Another suggestion from athletes as to how they perceived their confidence to be

enhanced through the super-strengths approach was because it allowed them to identify their

1   unique edge on others. This notion has been alluded to in previous literature related to

2   sources of sport confidence. Hays et al. (2007) reported that a key source of confidence for

3   elite male athletes was feeling they have superiority over their competitors. Correspondingly,

4   the main purpose of super-strengths is to help the athlete identify something they have/do that

5   provides them with a competitive edge over their opponents in the context of their sport

6   (Ludlam et al., 2015). Furthermore, within the intervention, coaches and sport psychology

7   practitioners will highlight and reinforce where the athlete is superior or has a potential edge

8   over their competitors. Thus, considering previous research, it is not surprising that

9   confidence was reported to be positively influenced as a result. Highlighting an athlete's

10   performance edge is something that could be considered by sport psychology practitioners

11   aiming to develop athletes' sport confidence.

12   Athletes in the present study suggested that in competition, they felt more able to cope

13   under pressure, as they had identified their specific super-strengths strategy for performance.

14   This is novel to the sport psychology literature; it has not previously been reported that

15   identifying and developing a strategy for performance based on athletes' strengths or

16   competitive edge can enhance coping under pressure. However, an association that has been

17   established previously is that athletes who have more self-belief and are confident in their

18   ability to perform will cope better with the demands of the performance environment (Hays,

19   Thomas, Maynard, & Bawden, 2009). This association is apparent in the present study, as

20   athletes felt they gained competition confidence from super-strengths and were better able to

21   cope with the pressure of performance. Nonetheless, future studies could investigate whether

22   identifying and developing super-strengths can enhance measures of coping skills.

23   Something that all athletes alluded to in the present study was a shift in their mind-set

24   about where they should invest energy in order to make the biggest improvements in their

25   sport. Specifically athletes discussed a shift from looking to address weaknesses and what is

1   not quite right to help them improve, to considering their competitive edge and a way to win,

2   focused on the attributes that makes them uniquely great. This shift in the investment of

3   energy, focus and resource from deficits to strengths and positive elements of a person's

4   situation is the premise of positive psychology (Seligman & Csikszentmihalyi, 2000). There

5   is a plethora of research from various mental health and performance contexts referring to the

6   positive impact that working in this way has had upon desirable characteristics (e.g., Govindji

7   & Linley 2007; Proctor et al., 2011). Similarly, athletes in the present study believed that this

8   mind-set change had a positive influence on their general psychology and performance.

9   Despite being encouraged in previous research (Gordon & Gucciardi, 2011), the benefits of

10   adopting a strengths focus and working with athletes to stimulate this positive mind-set shift

11   are yet to be tested in sport psychology. Thus the present study offers new insight for the

12   discipline, however it is hoped that the findings from this preliminary investigation will spark

13   interest and encourage others to address the knowledge gap in this area.

14   Findings of this study also showed that athletes perceived identifying their super-

15   strengths, and subsequent strategies for developing these, allowed them to gain goal direction

16   and increased drive. It is important that athletes are involved throughout the super-strengths

17   approach (Ludlam et al., 2015), as being involved in the mechanics of the process would

18   enhance autonomy and ownership over the subsequent super-strengths development plan. In

19   sport psychology research, it has been highlighted that when autonomy and self-concordance

20   are achieved in relation to athletes' goals, this can result in more sustained goal-directed

21   effort and goal attainment, as well as psychological well-being (cf. Ntoumanis, Healy,

22   Sedikides, Smith, & Duda, 2014). Smith, Ntoumanis and Duda (2007) proposed that if a goal

23   is congruent with an athlete's values and beliefs (self-concordance) and is striven for with a

24   sense of ownership (autonomy), then athletes will have a greater direction of effort toward

25   the attainment of their goal. Furthermore, they suggested that this can be achieved even when

the goal is assigned or agreed by a coach or external source, predominantly through perceived

autonomy support and needs satisfaction. It is suggested that the process of identification and

coming up with a plan for utilising and developing super-strengths would enhance levels of

perceived autonomy support. As Black and Deci (2000) highlighted, this would be achieved

by the coach recognising the athlete's perspective, acknowledge their feelings and giving

opportunities for choice whilst minimising pressures and demands (i.e., through providing

context and giving them license for utilising their super-strengths: Ludlam et al., 2015).

The perceived increase in goal direction and drive reported by the athletes in the

present study could be explained by enhanced psychological needs satisfaction. The three

basic human psychological needs that if satisfied yield enhanced self-motivation, according

to self-determination theory (e.g., Ryan & Deci, 2000), are: autonomy (task is self-governed

or endorsed by the person themselves), relatedness (person feels close or connected to

significant others), and competence (person believes/experiences that they can achieve task

effects or outcomes) (Reis, Sheldon, Gable, Roscoe & Ryan, 2000). The super-strengths

approach offers autonomy to athletes because they are actively involved and they at all

stages; the process is not dictated but guided by the athlete themselves, and the super-

strengths and development plan agreed between the coach/psychologist and. Competence

satisfaction is encouraged throughout the super-strengths process through the athlete

identifying along with their coach and/or sport psychology practitioner where they think they

are most competent and have the potential to be world's-best. Finally, relatedness and a sense

of belonging to the social environment would be enabled, as the athlete's coach and others

would be taking the time to co-create a plan that is specific and unique to the athlete. As

alluded to, psychological needs satisfaction is associated with enhanced psychological well-

being and self-determination (Ryan & Deci, 2000), thus it is plausible that athletes in the

present study felt they had more direction in training and competition, and were more driven

1   to achieve their training and competition goals. This is an important finding for sport

2   psychology practitioners as it suggests the potential to introduce strengths-based approaches

3   as a vehicle for influencing motivation and goal direction/ attainment.

4   **Applied Implications**

5   The findings indicate that there are several potential benefits of sport psychology

6   practitioners adopting strengths-based methods, in particular the super-strengths approach, in

7   their applied practice with athletes. Notably, it is suggested that the process of identifying and

8   developing an athlete's super-strengths, focusing on how their capabilities make them

9   uniquely great, could enhance their sport confidence in several ways. Thus, it is proposed that

10   sport psychology practitioners could reflect upon and consider how a focus that elicits and

11   develops what makes that athlete special/unique might benefit the outcomes of their applied

12   practice. Such considerations could be integrated into practice through routine processes, for

13   example, performance profiling. Sport Psychology practitioners could use this process to

14   identify where the athlete is strongest and how they could maximize this area or combine it

15   with other greatest strengths to create their unique edge over others.

16   It was also suggested that the process of super-strengths enhanced athletes' drive and

17   goal direction, potentially through psychological needs satisfaction. Identifying athletes'

18   unique strengths could enhance competence, and developing these super-strengths through a

19   plan co-created with the athlete could facilitate autonomy and relatedness and thus enhance

20   drive and goal direction. The satisfaction of basic psychological needs of clients through

21   strengths-based approaches is something that could be considered by applied practitioners. In

22   particular, this could be achieved through methods such as goal setting and individual athlete

23   planning. It is proposed that ensuring plans for development are not only co-created to

24   provide autonomy, but also to consider how to satisfy the athlete's need for competence

25   would be beneficial. From the findings of the present study, suggestions for achieving this

1   would be to include plans for the athlete to grow their areas of strength, and allowing time for

2   them to focus on and indeed maximize the thing(s) that they are greatest at, that if grown

3   could impact their performance.

4   In addition, a novel finding from the study was that athletes perceived that having a

5   strategy for performing, underpinned by their super-strengths, helped them better cope with

6   the pressure of competition. This highlights the potential benefit of sport psychology

7   practitioners and coaches adopting strengths-based methods when preparing performers for

8   competition.

9   The findings also highlighted potential pitfalls that sport psychology practitioners

10   adopting similar approaches should be mindful of. In particular, it is suggested that

11   practitioners should consider how they will work alongside those influencing athletes'

12   training environments, to ensure that the development plan and focus of development (i.e.,

13   super-strengths) is being reinforced and not compromised. Also, sport psychology

14   practitioners should establish with athletes the boundaries and context for using their super-

15   strengths, to ensure that athletes do not become over-reliant or obsessed with the approach.

16   These boundaries could be established by working through examples of different situations,

17   opponents, and/or conditions (depending on the type/context of the sport) for where using

18   super-strengths would work best, and agreeing behavioral descriptions of what the coach

19   would see if super-strengths was being used well, under used, or over used. It is

20   recommended that those facilitating the training and competition strategies are present when

21   doing so to ensure that these strategies are reinforced throughout the athletes' support system.

22   Overall, these processes could facilitate greater shared understanding and be useful for

23   monitoring and reinforcing (i.e., in the athletes' performance debriefs). Failure to agree

24   contextual boundaries may lead to the use of super-strengths when it is not appropriate for the

25   context the athlete finds themselves within.

Limitations and Future Research

The present study offers insight to athletes' perceptions about a novel strengths-based approach being used in elite sport. However, there are limitations that should be noted and where possible addressed in future research. Firstly, although the athletes included in the study had experienced super-strengths, they were not necessarily engaging in the approach at the time of data collection. Therefore athletes were asked to recall experiences and thus were often speaking retrospectively about how their thoughts, emotions, and behaviors were impacted. Future studies could address this limitation by conducting a strengths-based intervention in sport and assessing perceived and actual impact on psychology and performance, potentially using repeated measures single-subject design.

Some of the findings from the present study support previous research from psychology and performance contexts whereby similar strengths-based approaches have been explored. However, due to the qualitative nature of the study, the small sample, and the unique population targeted (elite athletes), the findings cannot necessarily be generalized across contexts (e.g., development or lower-ability level athletes). It would be encouraged that practitioners wishing to adopt super-strengths with lower-level athletes ensure that the rationale and process is contextually relevant, and that these are adapted accordingly. Future research adopting similar strengths-based approaches with lower-level or developing athletes would offer new knowledge to the sport psychology literature.

Concluding remarks

This study has highlighted several potential benefits associated with athletes engaging in a super-strengths approach with their coach and/or sport psychology practitioner. However, as strengths-based approaches in applied practice are not documented in the sport psychology literature, it is suggested that future research should further explore the role of strengths-based interventions with athletes. It has previously been called for that researchers

1   should consider how to unearth clients' strengths and resources, and how athletes could use

2   these effectively in sporting contexts (Pitt, Thomas, Lindsay, Hanton, & Bawden, 2015), as

3   methods for doing so are not apparent in the literature. The present study echoes this request,

4   particularly as there are seemingly numerous ways that engaging with a super-strengths

5   approach can impact upon athletes' psychology and performance in sport. There is a need to

6   address the gap in knowledge concerning applied strengths-based approaches, and it is hoped

7   that the present study encourages sport psychology researchers and practitioners alike, to

8   investigate further.

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4

1   **Figure Caption**

Figure 1. Higher-order, lower-order and raw data themes representing athletes' perceptions of

the effects of the super-strengths approach.

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5

PERCEPTIONS OF SUPER-STRENGTHS APPROACH

Raw Data Themes	Lower Order Themes	Higher Order themes

Raw Data Themes

I believed that I could be one of the best in the world
It's really important for your confidence, to know I am genuinely good at something
It gives you that bit of chest back feeling, that I am good
It gives you a bit of self-importance
It's nice knowing that actually yeah I think I am better than you at this.
There is always that inner belief in yourself
It has had a big impact on my confidence
It gave me confidence to believe I could compete at an Olympic games
The best thing about super strengths is the confidence it gives you

Self-belief

They see something in you and it makes you feel a bit special.
I think it gives you more confidence because someone believes in you
Knowing that you have this one thing that people see in you makes you feel good

Others' belief

It gives you more confidence because you're concentrating on what you are good at
It makes you feel really good focusing on the positives.
The positivity that comes from working on strengths makes a difference.
It really makes you feel good knowing you are working on something you're good at

Positive focus

Super strengths is linked to confidence as it reminds you of your edge
You know that you have something that it is better than anyone else.
If they can't read what I'm going to do, I'll always have the upper hand on my serve.
It gave me a weapon that other players worried about
It gave me an aura, because people knew that I could lead the race and still win, and people had thought you couldn't do that.
It adds relentless pressure to opponents when they know you have a super strength
Other players fear you - when you believe someone fears you, you don't fear them
It gives me a huge advantage over anyone else because nobody is winning that many points

Edge on others

It gives me more confidence going into matches
I had more confidence in leading my races
When I raced, I raced a lot more confidently
I felt more confident in my method going out there
It's very simple playing to your super strengths; it's a very big confidence thing.
It gives you more belief in yourself to go for the shots, more belief you can do it
I feel confident that I will make the right decisions around the super strengths
Knowing what works for you and that gives you the confidence to go out and race
I knew that I would always be able to deliver those super strengths
Believing I could deliver a game that could get me to the Olympics and win us a medal made a big impact on my performance

Competition confidence

Your confidence is sky high because you know you have done everything you could do to prepare for the comp.
It's that confidence that you've put the right programme together for the vision
We knew we had done the hard work, full of confidence to go and execute
I had a lot more belief after putting it into practice
It gives you confidence once you have done it, and you have seen
If I am working on my strengths in training, I am going to be building confidence
It's the knowledge and understanding that you have shown you can produce it that gives you confidence.
Knowing that you just need to do what you have been doing gives you an untouchable confidence

Preparation

It gave a lot of players a lot of confidence in our team
I could see that everyone had the confidence that they would just do their job.
We believe that our team has that extra edge
I didn't doubt at any point that we would win as we all knew what each of us was going to deliver
Even when losing we still have this confidence that if we bring our super strengths out we will win.
As a team it gives you inner confidence, there is no doubt about it.
Standing up and telling each other what it was we brought to the team created a real confident environment and a real energy.

Team confidence

Higher Order theme: Confidence

PERCEPTIONS OF SUPER-STRENGTHS APPROACH

Raw Data Themes   Lower Order Themes   Higher Order themes

I think there was a shift in emphasis from weaknesses to strengths It changes where you look for improvement It is different to the traditional way of always looking at weaknesses to get better Traditionally we always worked on weaknesses, this was different I think it is quite rare in sport for coaches to tell you that you are really good at this Working on my super strength was a big change from what I was used to It was a first for me, working on weaknesses not being the focus It changed what I think about what we look at when trying to improve It wasn't like what I had done before It's very good as it gives you a new way of thinking	Mind-set shift

I am much more focused when playing games in training It gives you more of a focus and purpose in training You go out to training with areas you want to focus on around your super strengths It gives you structure to your practice There was a clear focus in training to implement my strengths in the session It gives you a plan to work on in training	Training focus	
It provides a simple strong message which is what a team needs It can give you a clear method for performing It helps you really establish your method for performance It is about clear messages, clear goals and focusing It provides a much clearer methodology about how you score your runs It gave me a real focused game plan of what I set out to do in a match It helps you just focus on one or a couple of things when performing It gives you a way of focusing your game on something It is your thing you bring to the team so you feel part of the cog in the wheel. Everyone has a super strength and so everyone has a part to play.	Strategy for competition	Clarity of purpose
It's like a blueprint and as a team you always go back to it It was something I could always refer to It was something I could fall back on when the pressure was mounting It's very easy to keep referring back to your super-strengths in performance Whether it's going good or bad you can always go back to your super strengths. It's something to fall back on even if your game isn't going so well If you are having a tough time or a poor bit of form you can always go back there	Default method	
You know where you are going once you have a super strength to work on Immediately it gives you focus and direction I think it gives me a focus It gives you a target, as in something you can always work towards no matter what It gives you much more clarity than trying to improve on lots of things It made me practice more, deliberately thinking of my way to succeed There was a real mentality shift trying to be a bit more proactive on the court I think it just gives you a clear focus, knowing what you are going to work on. It gives you focus and direction for improving	Goal direction	

Raw Data Themes   Lower Order Themes   Higher Order themes

| I think it changes your mind-set to keep pushing throughout
I felt so inspired with this new idea.
It gives you a bit more of a 'get up and go' sort of feeling
It makes you think it's worth giving it a go
It makes you excited to go train the things you are good at.
I would be more inclined to make myself pretty tired in training
It gives you a good reason to go out when it's freezing!
A strength is usually something you enjoy, so it's more fun to work on.
Reassurance from coach about your super strength before the day means you can get excited to perform | Drive |

| It gives you something good to focus on when you're having a bad day
When the pressure is on this gives you that focus and with that your performance improves.
It actually takes a bit of pressure off knowing they don't want you to be perfect at everything
I think you just feel freer because you are not worried about making mistakes
I don't worry so much on the day
It positively changes your expectations in the times you aren't doing well | Coping with pressure |

| The only danger is that because something has worked you say like OK well let's just do that all the time!
I came a bit of a one trick pony because I tried to do it every time
It's about working out when this works for you, otherwise you can become a bit obsessed on it
It has to complement the other stuff you're doing, it's not the only thing you do
The danger in a team is that sometimes you might rely on an individual to bring their super strength
If you struggle to get my super strength out, you might race a bit more negatively | Reliance (Negative) |

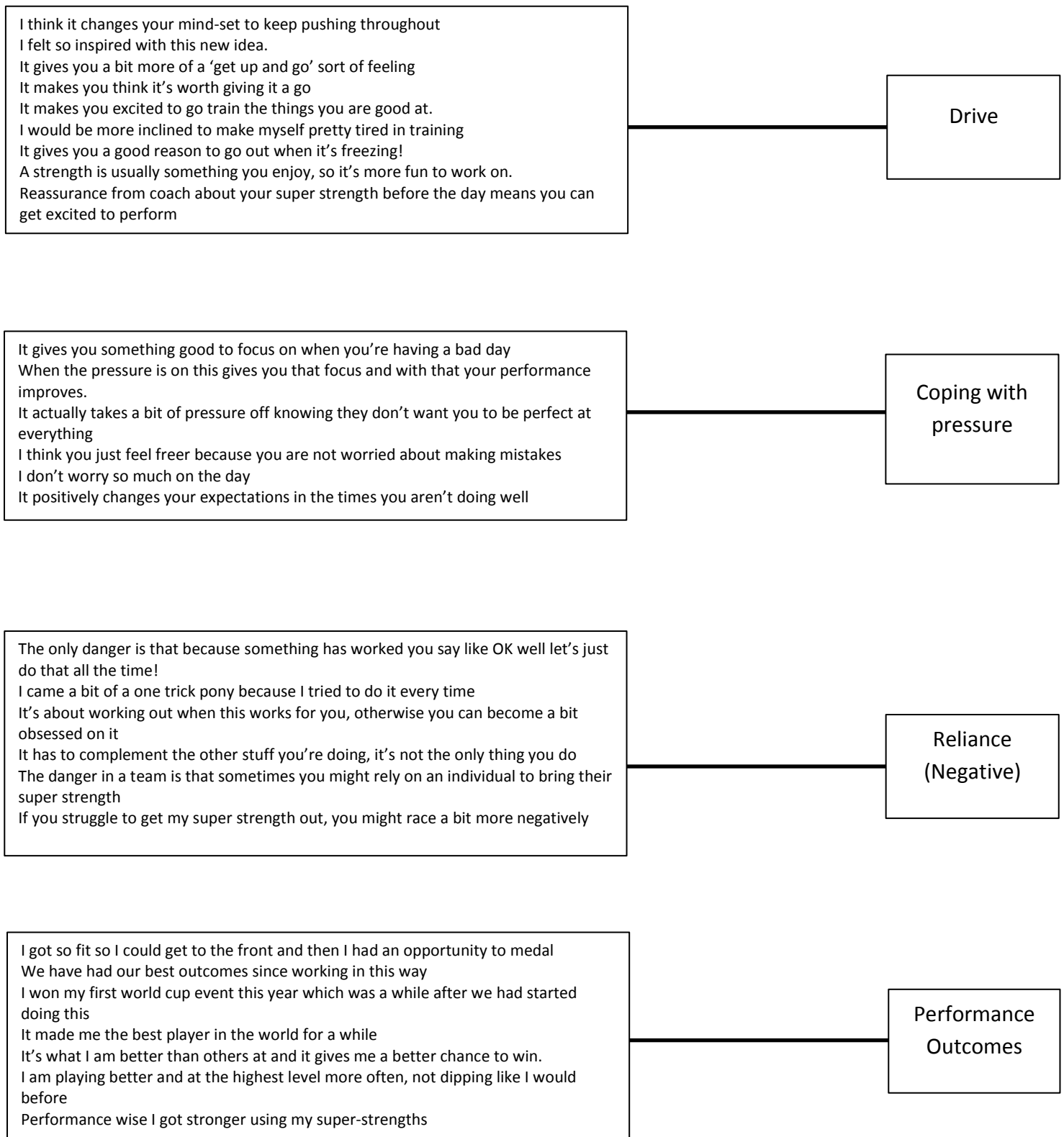| I got so fit so I could get to the front and then I had an opportunity to medal
We have had our best outcomes since working in this way
I won my first world cup event this year which was a while after we had started doing this
It made me the best player in the world for a while
It's what I am better than others at and it gives me a better chance to win.
I am playing better and at the highest level more often, not dipping like I would before
Performance wise I got stronger using my super-strengths | Performance Outcomes |

Figure 1. Higher-order, lower-order and raw data themes representing athletes' perceptions of the effects of the super-strengths approach.