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This is an accepted manuscript of an article published in The Journal of Alternative and Complementary Medicine, DOI; 10.1089/acm.2021.0104.

Final publication is available from Mary Ann Liebert, Inc. publishers:

<https://doi.org/10.1089/acm.2021.0104>

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**Title page**

A population-practice-based model to understand how yoga impacts on human global functioning: A qualitative study

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Keywords: yoga, qualitative, survey, impact, global functioning, framework

## **Abstract**

### **Introduction**

Research is increasingly demonstrating a range of benefits of practising yoga, such as improved physical and mental health, social connectedness and self-care. Mechanisms of action are less well understood, but may include both psychological and physiological changes. The aim of this study was to understand more about benefits and mechanisms of yoga practice, using qualitative data collected from a large-scale survey of yoga use in the United Kingdom.

### **Methods**

The mixed methods, cross sectional online survey collected data on yoga use and perceived benefits from 2434 UK yoga practitioners. The qualitative survey element used open-ended questions to gain 'real life' data regarding practice and perceived benefits. Data were analysed thematically and deductively. A practice-based model describing yoga practice, mechanisms and benefits, based on the Khalsa logic model of yoga, was developed to explain the data.

### **Findings**

Findings highlighted that a diverse range of yoga practices and non-specific contextual factors related to practising yoga, needed to be considered in order to understand how yoga was benefitting people. These practices encompassed both modern and traditional conceptions of yoga as a deeper lifestyle practice. Key mechanisms for change included improvements in physical strength and flexibility, stress regulation, resilience, equanimity, mind-body awareness and spiritual/personal growth. These mechanisms resulted in diverse

improvements in global health function, particularly physical and mental health and wellbeing.

## **Conclusions**

The Khalsa model provided a useful base upon which to guide the new population-practice-based model, to understand participants' 'real life' experiences of yoga, how yoga is helping people and why. It provides important information for practitioners, teachers and those delivering yoga interventions as to the range of skills and potential benefits of yoga practice. Additionally, findings indicate directions for future research, by highlighting key yoga mechanisms which researchers may choose to focus on in future studies.

## **Introduction**

The worldwide popularity of yoga has increased substantially, with more than a doubling of those practising yoga in the past decade in the US alone,<sup>1</sup> where it is the most commonly reported complementary medicine practice.<sup>2</sup> Research on efficacy studies for improving physical and mental health conditions has similarly grown incrementally as evidenced by bibliographic analyses.<sup>3,4</sup> The roots of yoga as a transformative spiritual practice lie in Indian philosophy, in which the eight limbs of yoga include physical and meditative practices as well as moral precepts, to support a healthy and meaningful life.<sup>5</sup> In the West, yoga practice is primarily associated with physical postures, breathing techniques, relaxation and meditation. Whilst western practitioners may initially be drawn to the physical and stress-relieving qualities of yoga, evidence suggests a shift towards more holistic motivations, including spirituality, with continued practice.<sup>6-8</sup>

Observational and clinical studies have reported a wide range of health outcomes from yoga practice.<sup>9-11</sup> In terms of physical health, yoga has been found to impact on fitness, balance and physical functioning<sup>12,13</sup> as well as a wide range of long-term conditions, such as musculoskeletal,<sup>14,15</sup> metabolic,<sup>16,17</sup> and cardiovascular conditions.<sup>18</sup> Positive impacts on mental health have been noted for both clinical conditions such as depression,<sup>19-22</sup> and broader indices of wellbeing and quality of life.<sup>11,23</sup> Yoga is also associated with increases in other positive health behaviours such as exercise and diet, as practitioners increase their mind-body awareness and place greater emphasis on self-care.<sup>24-26</sup> Broader benefits of practice include increases in social connectedness, connection with environment and improved relationships.<sup>27-29</sup>

Whilst the evidence base for mechanisms of action is still developing, studies suggests that yoga has significant physiological effects on the brain and body, including regulation of the autonomic nervous system,<sup>30</sup> reductions in inflammatory markers,<sup>31</sup> and positive changes in brain structures and function<sup>32</sup>. Psychological mechanisms include enhanced self-regulation, cognitive function and mind body awareness.<sup>33,34</sup> Based on existing research, Khalsa has proposed a logic model describing the main aspects by which yoga practices impact on ‘global health functioning’ through physiological, psychological and experiential mechanisms<sup>35</sup> (see Figure 1). This framework has various iterations, evolving from when it was first published, as new evidence and input emerged, for example, with spirituality added at a later stage.<sup>36,37</sup> The framework describes how the multi-component practice of yoga builds skills and competencies in physical fitness, self-regulation, awareness, and spiritual experience, recognizing that these competencies are interrelated, for example, increased mindfulness leading to improved emotional regulation.<sup>34</sup> These skills then work holistically to improve a range of health, interpersonal and behavioural outcomes.

*<insert Figure 1 about here>*

The corresponding author recently conducted a mixed-methods survey to assess the practice and perceived impact of yoga amongst a large sample of yoga practitioners in the UK.<sup>6</sup> Quantitative data showed that practitioners attributed a wide range of physical and psychological benefits to their yoga practice, including its value in managing health conditions. Khalsa’s research-based logic model appeared to provide a useful opportunity upon which to guide our explorations of qualitative data and further our understanding of this ‘real life’ survey data. Therefore, the aim of this study was to understand the processes by which yoga may impact on healthy functioning through practitioners’ experiences and

perceptions of their practice, by developing a population practice-based model, based on and informed by the Khalsa framework. The practice-based model is intended, not only as a framework with which to describe the practitioner experience of yoga, but also to inform future yoga studies as a hypothesis generating tool.

## **Methods**

### *Design*

A cross sectional, anonymous online survey collected both quantitative and qualitative data regarding yoga use and perceived impact; qualitative data only is reported here. The Khalsa model of hypothesised mechanisms and outcomes of yoga (see Figure 1) was used as a guiding framework through which to explore and understand the qualitative data, providing a base upon which to inform the development of our population-practice-based model of yoga mechanisms. This approach represents a deductive-dominant analysis:<sup>38,39</sup> initially the researcher takes an inductive approach to their study where they are open to whatever emerges from their data. Then, as initial examinations of the data reveal patterns and dimensions of interest, an appropriate framework or theory may be selected to verify or elucidate what is emerging from the data i.e. a deductive approach.<sup>40</sup> Deductive approaches make use of what is already known on a topic and can improve the validity and reliability<sup>41</sup> of qualitative analysis, supporting ‘conviction’ of the findings.<sup>42</sup>

### *Recruitment*

Survey participants were recruited through UK-based yoga organisations, email invitations to yoga studios, marketing at UK yoga events and social media. The survey was open for completion between June and December 2016. Inclusion criteria included: UK resident,

practised yoga within the past 12 months and over 18 years. The survey measured sociodemographic, health and lifestyle variables, yoga practice characteristics, perceived health impact and yoga-related injuries; full details of the survey are reported elsewhere.<sup>6</sup> Ethical approval was gained from the University of Westminster Ethics committee (REF: 1516-0614) and all participants gave informed consent.

### *Study sample*

2434 people completed the online survey, with the majority being female (87%), White (91%) and well educated (71%  $\geq$  degree), with a wide age range (18-92 years,  $M=48.7 \pm 12.5$ ). Participants reported a high degree of yoga engagement, practising 3.88 ( $\pm 1.96$ ) days per week, with an average of 13.90 ( $\pm 11.60$ ) years of practice. Forty percent ( $n=906$ ) of the sample were yoga teachers. Full quantitative findings are reported elsewhere.<sup>6</sup>

### *Qualitative data collection*

The survey contained four free-text questions which followed relevant sections in the questionnaire, asking participants if they would like to add further qualitative detail:

- Following questions relating to style and duration of practice, “Is there anything else you would like to add about your yoga practice?” ( $n=534$ )
- Following fixed response questions regarding improvements to physical and mental health attributed to yoga, “Please feel free to add further detail” ( $n=353$ )
- Following questions relating to specific health issues, “Feel free to provide further details, including which practices you found most helpful or least helpful” ( $n=696$ )
- At the end of the survey, “any further comments” ( $n=413$ )

### *Analysis*



Qualitative responses to the open-ended questions were analysed using deductive thematic analysis based on Khalsa's logic model, adopting a realist epistemology.<sup>43</sup> Initially, 10% of the data (split equally between the four open-ended questions) were coded according to the Khalsa framework by both authors (AC and TC) independently. Additionally, the researchers highlighted any data which they felt they could not fit into the Khalsa framework – highlighting where this 'real life' data may differ from research study data. The researchers then met to compare coding; where data was coded differently it was discussed and debated until agreement was reached on how best to code the data. For data that did not fit into the existing Khalsa framework an additional category was added or an existing theme was amended/expanded to fit the data. For example, the resilience subtheme (under self-regulation) was amended to resilience/coping. This process was then repeated for another 10% of the data using the amended framework for coding. A final amended framework was then agreed upon and all data were coded (by AC) into NVivo software using this new population-practice-based framework. Any uncertainties that arose regarding coding of the remaining data were discussed with TC.

## **Results and Discussion**

The Khalsa model provided a useful guide upon which to base the new population-practice-based model, to understand participants' 'real life' experiences of yoga. The population-practice-based model of yoga is shown in Figure 2; more detail of the themes are presented in Table 1 and elucidated in the text below. Results and discussion are combined and structured around the different elements of the model: the practitioner experience of yoga is described,

differences between this real-life data compared with the Khalsa framework are discussed and examined, and suggestions for future research are proposed.

*<insert Table 1 and Figure 2 about here>*

### **Practising yoga**

Whilst the yoga practices outlined in the Khalsa model (i.e. postures, breathing, relaxation, and meditation) were regularly described by participants, they also reported using additional practices (e.g. chanting, yoga philosophy, devotion, and yoga nidra). Many participants described yoga as a ‘way of life’ practised not just on, but also off, the mat. In the seminal yoga text of the Yoga Sutras, Patanjali describes the ‘eight limbs of yoga’: key aspects of yoga practice which lead towards higher levels of consciousness.<sup>44</sup> These eight limbs include posture and breathing practices (more common in western yoga practices), but also the ethical and moral precepts and ways of living described by some participants as important to their practice. Therefore, the population-practice-based model uses ‘limbs of yoga’ as a descriptor to capture the broad lifestyle practices of yoga in the community.

Additionally, participants described a number of important experiential factors in their yoga practice, such as connection with the teacher and other class members, enjoyment, accessibility, and sense of belonging. The importance of ‘non-specific’ factors in complementary and alternative medicine and psychological therapies is well documented,<sup>e.g.45–48</sup> with the role of teacher/therapist appearing key.<sup>47,49,50</sup> However, research into these non-specific factors in yoga is warranted, particularly on the role of yoga teacher characteristics and their impact on practitioner outcomes and experiences.

## **Yoga Mechanisms**

### ***Physical***

This theme was guided by the Khalsa framework 'Fitness' category, which the population-practice-based model has termed 'Physical' to better reflect the broader content of this category, which has also been used by others.<sup>51,52</sup> Unsurprisingly, development of flexibility and strength were the most dominant subcategories. Although co-ordination/balance and respiratory function were less commonly cited, solid support for these subthemes was present. However, in the current study, descriptions of physical self-efficacy were better captured by the broader self-regulation subtheme of 'self-efficacy', since it constitutes a psychological construct reflecting confidence in exerting control over one's motivation and behaviour.<sup>53</sup> In addition, there was support for two additional subthemes: 1. improved posture, due to musculoskeletal changes and/or improved awareness of poor posture and 2. muscle tension release, which could be general or specifically in relation to release in the back, neck and shoulders. This data is supported by preliminary research which suggest yoga practice improves posture<sup>e.g.54-56</sup> and supports reductions in muscular tension<sup>e.g.57-59</sup> suggesting avenues for future research studies.

### ***Self-regulation***

This Khalsa model category was commonly endorsed by participants. Many described how yoga had improved their emotion regulation, stress regulation, resilience, equanimity and self-efficacy, see Table 1. However, the population-practice-based model expands the resilience category to include coping more broadly, as participants frequently described improved coping<sup>60,61</sup> that encompassed, but extended beyond, resilience "*It has provided me with essential coping mechanism tools for difficult times in my life*". Other research has found that yoga supports emotion-focused and problem-focused coping;<sup>e.g.60,61</sup> and it has been the

focus of other conceptual frameworks of how yoga improves well-being<sup>46</sup> suggesting an important area for further research.

### *Awareness*

Participant data fitted well with the Khalsa awareness mechanism subcategories for mindfulness, concentration and meta-cognition. Analysis showed participants also reported improvements in their ‘focus’ (rather than ‘attention’ used by Khalsa): *“I start every day with my Sadhana, it sets me up for the day and keeps me centred and focused”*. Improved focus as a result of yoga has been described by other studies.<sup>62–64</sup> As the term ‘focus’ is often used interchangeably with the term concentration, a subtheme of ‘concentration/focus’ was included for the population-practice-based model. Data coded to the Khalsa ‘cognition’ subcategory were minimal, including general statements around clearer thinking and improved brain function. However, it is plausible that cognitive changes (e.g. improved memory and problem-solving ability) are better identified under experimental conditions rather than through practitioner reports, which explains the low reporting in this study.

Yoga is categorised by the medical community as a mind-body medicine,<sup>14</sup> with definitions of yoga including the ‘union’ of mind and body, with practices to train the mind and prepare the body for meditation. It is perhaps therefore unsurprising that there were a significant number of participant reports on improved mind-body awareness: *“Overall understanding of body and mind through yoga gives confidence to deal with physical and mental conditions.”* Other research also has demonstrated that yoga produces improvements in mind-body awareness in practitioners<sup>65–67</sup> and awareness (of mind, body and emotions) has been identified as a key skill learnt during mindfulness training.<sup>68</sup> Therefore a ‘mind-body awareness’ subcategory was included for the population-practice-based model.

### ***Spiritual and personal growth***

Whilst only a small proportion of participants specifically mentioned ‘spirituality’ in relation to their yoga practice, many identified the specific spiritual aspects and states described by Khalsa, suggesting unitive state, transcendence, flow, transformation and life meaning/purpose are all useful operationalisations of spirituality and relatable for practitioners. Changes in life-meaning/purpose was the most commonly cited subcategory, including reports of yoga as helping to find meaning/purpose, yoga AS life meaning purpose, or new life opportunities that have arisen due to yoga. Future studies may wish to explore these different aspects for finding life meaning through yoga.

In addition to spiritual aspects, a body of data appeared to describe ‘personal growth’ as a result of yoga, including improved happiness, positivity, understanding of self/life and approaches to life: “[I do yoga to] balance my ego, ambition and energy. I believe yoga teaches responsibility for self”. This data was included with the ‘transformation’ subcategory and may also benefit from further research.

### **Global Health Functioning (GHF)**

Data from current study fitted well with the Khalsa model GHF subcategories of improved physical and mental health, positive behaviour change, wellbeing, and spirituality. Physical and mental health was by far the most prevalent subcategory which covered a broad range of issues such as maintenance of health, general health, managing specific mental and physical health conditions, supporting pregnancy, pain-management, reductions in medication use, recovery from injury/illness and sleep. Additionally, a number of participants reported yoga as integral to successful aging and improved energy “I have a lot more energy and my fitness

*levels are better for my age than my peer group*". There is also evidence from the research literature that yoga can improve energy levels,<sup>69,70</sup> as well as age-related conditions<sup>11,71</sup> and cellular aging<sup>72</sup>. Thus the population-practice-based model also included these sub-categories. From a practice perspective, yoga may be useful to support Western aging populations, however, populations who are less physically confident may be unsure about attending standard yoga classes. Tailored interventions may therefore be more effective.<sup>73</sup> Whilst the Khalsa model's description of improved physical performance due to yoga was commonly cited, participants also described improvements to mental performance and general functioning at work, "*Yoga postures are incredibly well aligned to the technique and posture required for rowing. Yoga gives me the mental resilience to deal with the pressure of competition too*". Therefore, we have included a broader subcategory of 'performance' for the population-practice-based model, as in earlier iterations of the Khalsa framework.<sup>36</sup>

Participants reported improvements to relationships as a result of yoga, which is echoed in the literature.<sup>27,37</sup> For example, Ross et al,<sup>29</sup> identified four ways in which yoga improved interpersonal relationships through personal transformation, increased social interaction, coping mechanisms to weather relationship loss and spiritual transcendence. Thus, 'relationships' is included in the model here.

Four sub-themes that appear in the GHF theme of the Khalsa model also appear in the yoga mechanisms categories: stress and emotion regulation, awareness/mindfulness, meta cognition, life purpose and meaning, indicating that they are both mechanisms and outcomes of yoga. When examining participant data, their yoga experiences were either more reflective of mechanisms or there was no way to distinguish between reports as GHF or mechanisms. For example, this quote supported mindfulness as a mechanism: "*yoga has made me much*

*more mindful which is why I believe it is so beneficial to so many areas of life*". Theoretical data indicates these aspects may be mechanisms.<sup>e.g.23,33,46,74</sup> However, the reality is complex, indeed mechanisms in the framework may also be outcomes – or even both mechanisms and outcomes. It is important that future studies investigate moderators and mediators of yoga outcomes to refine future models of yoga mechanisms and effects. It would also be useful to explore the amount of practice required for changes to occur; some may emerge more quickly (e.g. changes to physical and mental health, which were commonly endorsed by participants), whilst those less commonly endorsed (e.g. spirituality) may require a more dedicated practice. Additionally, different styles of yoga may be associated with differential physical and psycho-spiritual changes.

#### *Study strengths and limitations*

A strength of this research was the large sample size which enabled the exploration of yoga practices and impact across practitioners with diverse experiences and duration of practice. However, the sample, whilst perhaps reflective of the demographic practising yoga in the UK and other western countries, lacked diversity. The experiences and perspectives of ethnic minority groups, men and those of lower socioeconomic status may not be fully represented by the findings.

The Khalsa model was chosen as a framework for analysis, after data had been collected and initially examined. The model was chosen because as an established framework it allowed us to make use of existing knowledge on the topic and provided a robust foundation upon which to guide our explorations and further our understanding of this ‘real life’ data. However, this approach also comes with some implications for this study. The data collection questions were broad, asking participants to provide additional details to quantitative ratings of health

and well-being, as well as anything they wanted to add about their practice. Whilst this has the advantage that topics unanticipated by researchers are allowed to emerge, which is important in initial stages of framework formation, it may also mean that specific experiences of yoga, not prioritised by participants, may have not been uncovered by this study. It may also be that changes in physical and mental health are over-emphasised as a result of the approach. Specific questions representing each subcategory in the Khalsa model may have provided additional data, for example, if participants had been specifically asked if their values had changed as a result of yoga, further data may have been obtained on this topic. Future research should now adopt this approach in order to test the population-practice-based model further.

## **Conclusions**

This study provides further insight into the practices, mechanisms and perceived impact of yoga from the perspective of practitioners and teachers. A population-practice-based model of yoga was developed, based upon and guided by the Khalsa logic model of yoga. Findings highlighted that a diverse range of yoga practices and non-specific contextual factors related to practising yoga, needed to be considered in order to understand how yoga was benefitting people. These practices encompassed both modern and traditional conceptions of yoga as a deeper lifestyle practice. Key mechanisms for change included improvements in physical strength and flexibility, stress regulation, resilience, equanimity, mind-body awareness and spiritual/personal growth. These mechanisms resulted in diverse improvements in global health function, particularly physical and mental health and wellbeing. This systematic enquiry into subjective experiences of yoga sheds light on how yoga is helping people and why. It provides important information for practitioners, teachers and those delivering yoga interventions as to the range of skills and potential benefits of yoga practice. Additionally,



findings indicate directions for future research, by highlighting key yoga mechanisms and outcomes which researchers may choose to focus on in large scale quantitative studies or in-depth qualitative enquiry.

### **Acknowledgements**

The authors would like to express their gratitude to all yoga studios, teachers and the British Wheel of Yoga for promoting the survey and to participants for taking their time to complete the questionnaire. With additional thanks to Karen Pilkington and Heather Mason for their involvement in the survey design and to the reviewers for their valuable suggestions which substantially improved the manuscript.

### **Authorship Confirmation Statement**

TC collected the survey data. AC and TC co-developed the idea for the paper and how to present the qualitative data. AC led on the data analysis, with input from TC. TC and AC jointly wrote the manuscript. All coauthors have reviewed and approved the manuscript prior to submission.

### **Author Disclosure Statement**

The authors declare that they have no competing interests.

### **Funding Statement**

The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

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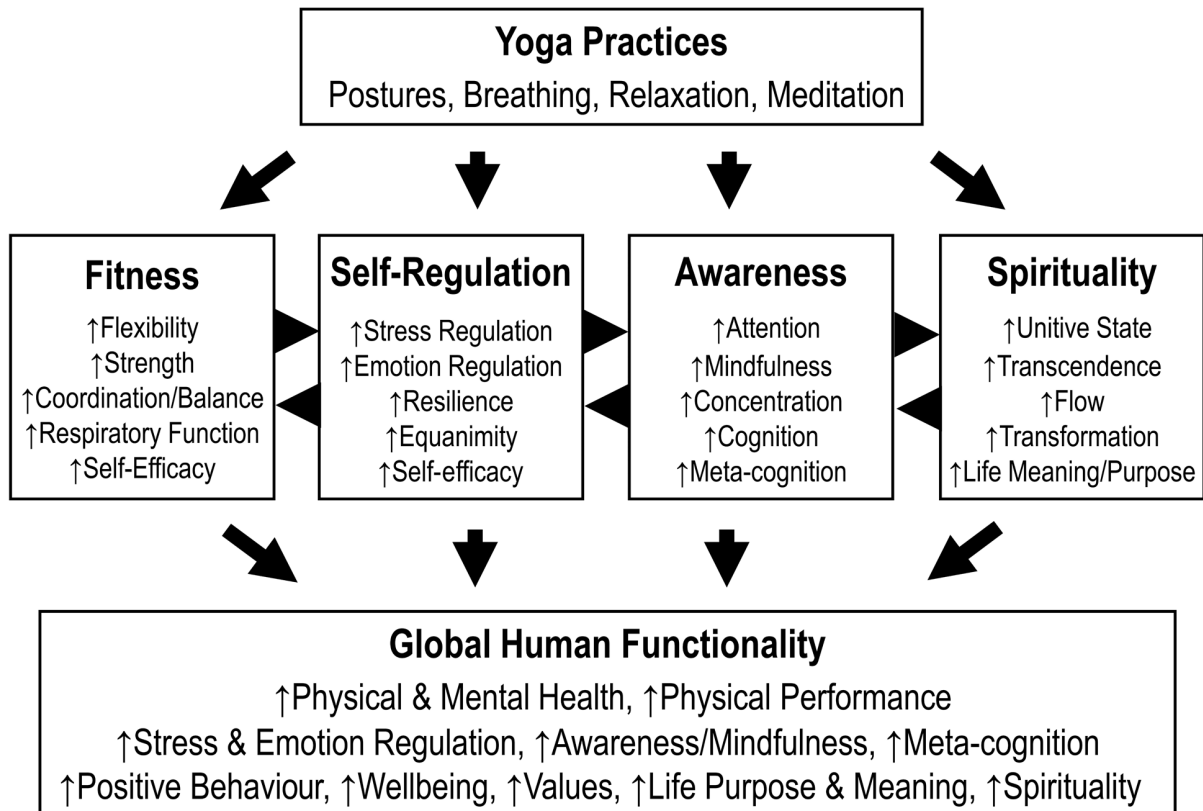
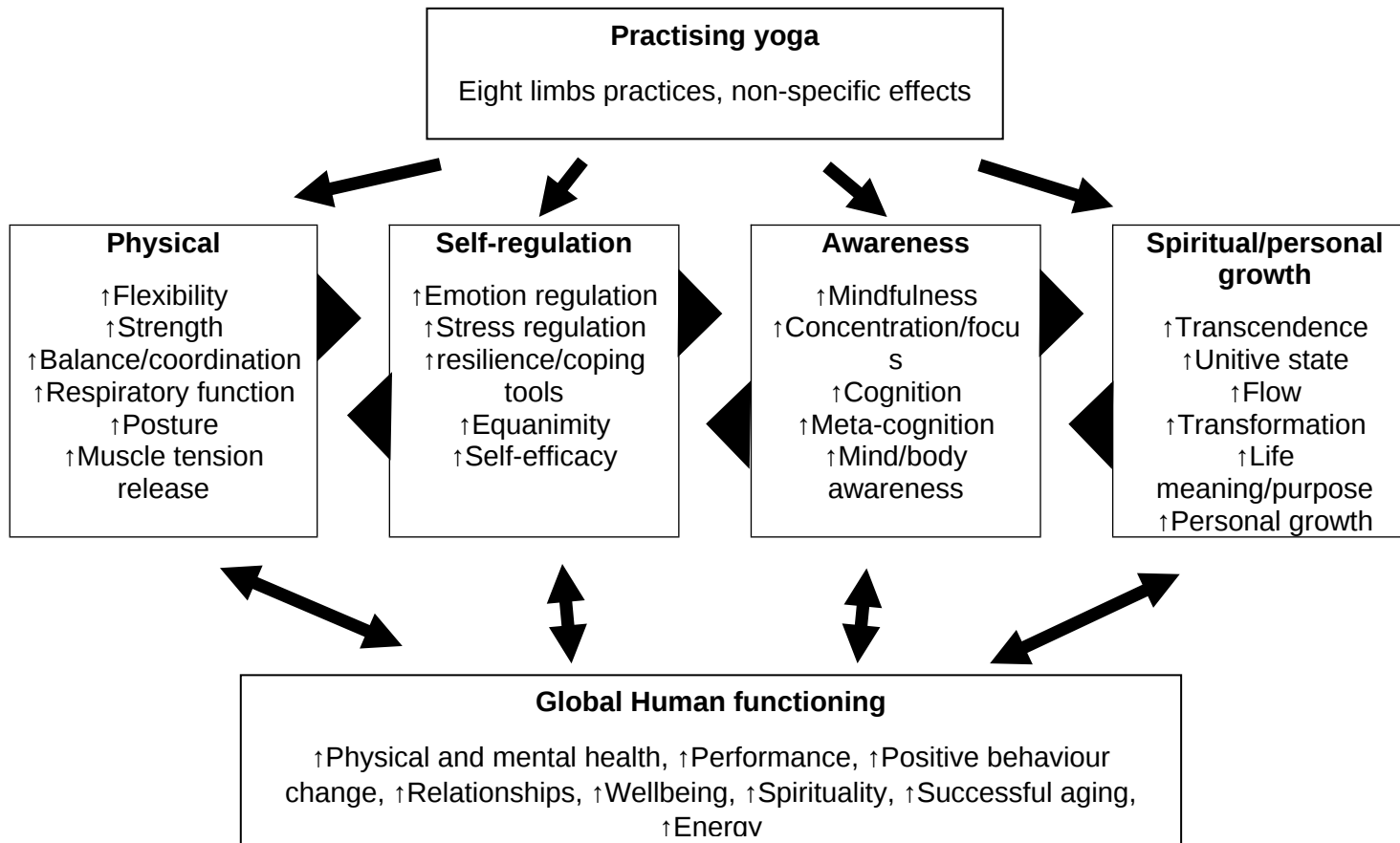


Figure 1 – Khalsa’s framework describing the main aspects by which yoga practices impact on ‘global health functioning’ through physiological, psychological and experiential mechanisms<sup>34</sup>

**Figure 2 - A population-practice-based model of yoga practice**



**Table 1 – A population-practice-based model of yoga practice: Qualitative data analysis categories and example quotes**

<b>Category</b>	<b>No. of references</b>	<b>Example quotes</b>
<p><b>Practising yoga</b> Limbs of yoga (postures, breathing relaxation, meditation, chanting, yoga philosophy, devotion, yoga nidra, way of life)</p> <p>Non-specific elements of practice (connection with teacher and other class members, enjoyment, accessibility, sense of belonging)</p>	362	<p><i>My practice varies greatly in terms of the breakdown of Asana, Pranayama, Meditation etc. according to my needs and external factors.</i></p> <p><i>Yoga is my way of life not just something I practice on my mat.</i></p> <p><i>A spiritual practice full of diversity and with many different limbs.</i></p> <p><i>I think the connection with others helps as well as the actual practice and the supportive, accepting approach of Iyengar yoga teachers. I feel a sense of belonging when I'm in a class on my mat!</i></p> <p><i>I enjoy it in every possible way.</i></p> <p><i>The social interaction from likeminded people enhances my life tenfold</i></p>
<b>Physical</b>		
Flexibility	96	<p><i>Asanas and sun salutation very helpful at keeping me flexible.</i></p> <p><i>I am much more flexible than most people of my age.</i></p>
Strength	109	<p><i>I feel stronger now than when I started even though I'm older.</i></p> <p><i>Yoga is helping me to rebuild my strength and confidence.</i></p>
Coordination/balance	7	<p><i>My balance is much better as a direct result of practising yoga.</i></p> <p><i>I lost my balance with labyrinthitis. Yoga has helped me get it back and also to get back my physical confidence.</i></p>
Respiratory function	24	<p><i>Breathing techniques helped me come off my asthma medication.</i></p> <p><i>Pranayama is a great practice for managing chronic bronchitis and other respiratory issues.</i></p>
Posture	44	<p><i>My posture and alignment have really improved because of yoga.</i></p> <p><i>I have always had problems with posture, yoga has helped me change this which has impacted how the rest of my body works.</i></p>
Muscle tension release	20	<p><i>Postures release muscular tension.</i></p>

		<i>I practise Iyengar yoga and basic asanas enable me to relieve any tensions, strain in my muscles and joints.</i>
<b>Self-regulation</b>		
Emotion regulation	42	<i>Practices have brought emotional stability, and for the first time in my life I have found I am content and positive. I have practised yoga for 25 years or more, so yoga is part of my life, it anchors me emotionally.</i>
Stress regulation	116	<i>Breathing exercises/patterns learnt at yoga e.g. Slowing it down, inhaling and exhaling deeply has helped in stressful situations. I was in a very stressful job teaching in a secondary school I found by practicing Yoga before work my stress was definitely minimised I found myself and my students confirm that.</i>
Resilience and coping tools	170	<i>Husband diagnosed with prostate cancer but yoga has helped me cope. Yoga gives us the philosophy and tools to deal with difficult people and situations, not to get involved and to be aware of the bigger picture.</i>
Equanimity	98	<i>I love my yoga. It keeps me balanced, pain free and chilled. The practice of yoga leads you to a constant internal peace.</i>
Self-efficacy	24	<i>Yoga has helped me to relax and take control of my own expectations of situations, confidence, belief in my abilities. I have always had problems with posture, yoga has helped me change this which has impacted how the rest of my body works. It's given me confidence to take on other sports such as running.</i>
<b>Awareness</b>		
Mindfulness	26	<i>Yoga physical practice to help keep the mind in the here and now. All of the yoga practices have helped but in particular classes where the teacher has encouraged us to be loving and kind to ourselves, to accept what arises with no judgement.</i>
Concentration and focus	29	<i>I am no-longer overly stressed and I am depression free for the first time since my teens! I think it has to do with improvements in focus and concentration as well as fostering a positive outlook - things which are definitely improved by yoga.</i>

		<i>Thinking is clearer.</i>
Cognition	7	<i>Personally I continue to use the skills of Yoga to cope with cognitive problems. It makes my brain work better e.g. clearer thinking</i>
Meta-cognition	37	<i>I do notice now when stressing – negative programming and can sometimes divert myself. Think about how I feel and what makes me feel good/bad and will change my behaviour - rather than b4 I just accepted it. Acceptance, acknowledgement of stress as creation of the mind, impermanence of suffering.</i>
Mind/body awareness	110	<i>I am not interested in asanas for their own sake but in how they help me understand my body and help to calm my mind. Yoga was key in my recovery from bulimia as I was disconnected from my body and it encouraged acceptance of myself as I was and reconnection to my body. Yoga has really helped me to become more aware of my mind, body and spirit. I notice now when I'm tense &amp; where I'm holding my tension and can relax these parts by doing some yoga or having a nice bath.</i>
<b>Spiritual &amp; personal growth</b>		
Transcendence	28	<i>Guided meditation practices take you to a deeper level of being where you forget the external environment and find bliss./peace at a deeper level. I've found the meditation increasingly useful as it teaches detachment which I've found invaluable.</i>
Unitive state	17	<i>I feel very connected in the world and with other people &amp; this feeling has grown with doing yoga and meditation. Yoga is really about bringing harmony to the outer body, the internal organs (physiology) and the mind.</i>
Flow	2	<i>Yoga is part of my life -- when I need to stretch I stretch when I need to sit I sit when I need to bring focus and awareness I do it's about living with flow and peace within and joy. I believe more formal yoga comes in &amp; out of people's lives as we allow ourselves to go with the flow of life &amp; our destiny.</i>
Transformation and personal growth	119	<i>Yoga has totally transformed me and continues to do so , I wish I'd learnt it younger The benefits of Dru yoga have been so transformative that I undertook teacher training so that I can share it.</i>

		<i>It has added more to my life than I imagined possible, I have grown and developed so much, feel more energetic, happy and motivated in life.</i>
Life meaning/purpose	135	<i>My mental health has improved because I've found my place in the world, which has happened as a result of my commitment to and involvement with yoga. It changed my life and I teach because I want to help others change their lives for the better too.</i>
<b>Global Human functioning</b>		
Physical & mental health	389	<i>My life has been completely changed by my yoga practice. My physical health has improved beyond recognition and I can manage my mental health issues, particularly stress and anxiety so much better. It's not to say I never have these problems, but now I can manage and cope with them, and their occurrence is vastly reduced when I practice yoga. As a past sufferer of ME/CFS (I class myself as only being 'very mild' now) yoga has had a significantly positive effect on my overall health.</i>
Performance	42	<i>In general I feel more attuned to myself, more productive. I love doing yoga at work - it makes a fantastic break during the day and I always approach work better afterwards.</i>
Positive behaviour change	60	<i>I have changed my eating and lifestyle habits, giving up smoking and drinking for instance. Practising yoga was the start of a process of learning to listen to myself and care for myself.</i>
Relationships	40	<i>Am currently undergoing treatment for conjunctival melanoma, my yoga friends and teachers have played an important part in my positive attitude to the diagnosis and my practice has helped me to deal with the aftermath of the operation and the contemplation of forthcoming treatment I can't imagine where I would be without yoga, but certainly divorced!</i>
Wellbeing	115	<i>Yoga has been so beneficial. My improved well-being has supported me through a major career change. It develops a well-being that spreads to those you interact with.</i>
Spirituality	23	<i>I have found that Yoga has had such a beneficial effect on my life physically, mentally, emotionally and spiritually.</i>



		<i>Over the years my practice has moved from predominantly physical to predominantly energetic (pranayama, meditation, koshas, vayus etc), and I have become much more developed spiritually.</i>
Successful aging	38	<i>I'm now using a modified practice (still strong by normal standards) as I gently progress in years towards old age! It's marvellous, keeps me young in body &amp; mind. I am 70 next year which is a blow, yoga makes me think I am still 21.</i>
Energy	28	<i>I have more, strength, flexibility and energy. Life isn't a massive effort now. It really had a massive impact on my energy levels and motivation. Every time I attended a yoga class I felt like I had a boost of energy and positivity that I never experienced before.</i>