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ScienceDirect

European Journal of Integrative Medicine 7 (2015) 172–183

European Journal of INTEGRATIVE MEDICINE

www.elsevier.com/eujim

Review article

Perspectives on the effects and mechanisms of craniosacral therapy: A qualitative study of users' views

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Received 23 February 2014; received in revised form 6 October 2014; accepted 7 October 2014

Abstract

Introduction: Craniosacral Therapy (CST) is a 'body based' complementary or alternative medical practice which aims to support natural healing mechanisms. There is limited evidence regarding its effectiveness or mechanisms of action.
Methods: Qualitative study based on constant comparative methods informed by grounded theory. Semi-structured interviews explored 29 participants' experiences with CST. Inductive thematic analysis resulted in themes, concepts and illustrative quotes.
Results: Participants consulted for pain relief, emotional and psychological issues and help with rehabilitation. All but four participants reported improvement in at least two of the three dimensions of holistic wellbeing: body, mind and spirit, others in one. Experiences during CST included altered perceptual states and other specific sensations and emotions. The importance of the therapeutic relationship was emphasized. Theory emerging from this study regarding CST and the ways in which healing can be enabled holistically suggests that the establishment of a trusting therapeutic relationship enables CST to take clients into altered perceptual states; these in turn facilitate a new level of awareness regarding the interrelatedness of body, mind and spirit, together with an enhanced capacity to care for self and manage health problems.
Conclusion: All participants in this study observed positive changes in their health status and most attributed these to CST; these changes were frequently accompanied by new levels of health awareness which enhanced participants' capacity to self-care. Interviewees were self-selected users of CST and the data are therefore subject to certain methodological biases.

Keywords: Craniosacral therapy; Self-care; Holistic wellbeing; Qualitative; Grounded theory

Introduction

Craniosacral therapy (CST) is one of many complementary and alternative approaches to health care (CAMs). The cranial concept was developed from clinical experiences within the field of osteopathy by Dr Andrew Taylor Still (1828–1917), a practising physician, and subsequently one of his students William Garner Sutherland an American osteopath [1]. It is therefore based on careful observation and exploration of the body from the perspective of osteopathic practitioners. Dr John Upledger, also an osteopath, coined the term craniosacral therapy during the 1970s to differentiate the concepts and techniques of CST from pre-existing systems of cranial manipulation [2][2]. In the

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[2] The difference between a CST practitioner and a cranial osteopath in the UK lies within the education. Since 2000, anyone who calls themselves an

http://dx.doi.org/10.1016/j.eujim.2014.10.003
1876-3820/

CST paradigm, the craniosacral system includes the skull, face, mouth and the spine down to the sacrum and coccyx; it is seen to sit at the core of body physiology encasing the brain, spinal cord, the central nervous system, the cranial bones, including the membranes and the connective tissue related to these membranes; these components are all seen to be in relationship to each other and the body as a whole [3]. Upledger proposed that trauma (physical and/and or emotional) influences the craniosacral system and that this may directly affect any or all aspects of central nervous system performance and thus performance of a wide range of bodily systems [3].

Practitioners of CST are trained to feel congestion or restriction in the motion of the cerebral spinal fluids which move through the craniosacral system. Using their hands they aim to amplify the abnormal pattern, allowing the body to better sense this and return to healthier functioning. In Upledger's words: "*In CST, the practitioner is taught to be a therapeutic facilitator, not deciding what must be done, rather following the lead of the body. CST practitioners are taught that the patient's or client's body has within it the wisdom to solve its own problems. Primarily, all that is asked of the CST practitioner is a supportive presence that offers assistance in the form of light touch, energy and intention*" [2]*(p.:6).*

Users are fully clothed and usually lie on a treatment table. The practitioner makes light contact on the body. The head and the sacrum are the two main contact points allowing the practitioner to make direct contact with the craniosacral system and sense the movement of cerebral spinal fluid. Sessions take between 40 min to 1 h. CST is one of a number of body-based CAM therapies in which treatment is hands on and conversation kept to a minimum.

There is a growing expectation that evidence based medicine should be applied to CAMs. According to Sackett et al. [44] "The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research" (p.71). The small number of studies published to date on CST provide limited evidence in support of the therapy. Two systematic reviews summarize this evidence.

The first systematic review rated seven studies, which were reported as providing the lowest grade evidence using the Canadian Task Force on Preventative Health Care ranking system [4]. Study designs in this review included retrospective case control [47], retrospective case series [48,49], before and after studies [50] and case reports [51–53]; outcome measures were not used. The authors of this review suggested that research methods that could conclusively evaluate effectiveness of CST had not yet been applied. A second review, used the Down and Black scoring system to critically evaluate included studies [5]. The seven included studies, none of which were included in the first review, had been carried out since 2000 and comprised randomized controlled trials (RCTs) and observational studies. These studies reported outcomes including reduction in pain, and improvement in quality of life and general wellbeing. The review highlighted an improvement in the quality of evidence in terms of research methodology, suggested that evidence of effectiveness of CST was now of moderate quality, but still recommended further research.

A small number of additional quantitative studies have been published. Various research designs were used, including single-blind, randomized, controlled design with cross-over treatments [7] a prospective cohort-study [11], an exploratory controlled clinical trial [9], a descriptive study based on patient records [8] and a four-way randomized controlled trial [10]. Each study used an established outcome measure such as the Measure Yourself Medical Outcome Profile (MYMOP) which measures the outcomes that the patient considers the most important [6] and the General Well-being Scale (GWS) [7], a modified Glasgow Homoeopathic Outcomes Score which allows for patients to choose from a six point rating scale reflecting change since the start of treatment with +4 indicating that the problem is resolved through to −1 showing deterioration [8]. A further four studies used disease/condition specific measures to assess the effectiveness of CST. All of the studies had small sample sizes; two were feasibility studies. They were therefore under-powered to show statistical significance and their findings cannot be applied to the wider population. Most of the participants in these studies found relief in their symptoms from chronic conditions such as headaches, migraine [9], neck, back and shoulder pain, depression/anxiety states, gastrointestinal problems, chronic fatigue, asthma [10] and lower urinary tract symptoms in multiple sclerosis patients [11]. CST impact on agitation in individuals with dementia appeared promising [12] and other participants in this study reported an improvement in general wellbeing. There have been no qualitative investigations of CST outcomes.

Debates regarding the different approaches to CST within the field of cranial osteopathy and CST do exist, but are beyond the scope of this paper [54]. There are limited reports of adverse affects regarding CST. However some literature reporting on cranial osteopathic techniques, which may involve manipulation, refer to the intervention as CST [48], this may confuse and mislead readers. NB would like to clarify that no manipulation has been carried out on the participants of this study, whose experiences are reported in the results section of this paper.

In the broader field of CAM research, there is debate about the outcome measures that should be used in effectiveness studies [13]. A survey of researchers, practitioners and educators identified the need for outcomes that fit a 'holistic model of wellness' recognizing physical, mental, emotional, social and spiritual aspects of health [13,14], but many investigators still opt for disease specific measures on the grounds that these have greater validity in the medical world. We would argue that it is important to use outcome measures that capture the range of changes experienced, including those that are important to users as well as those important to professionals and practitioners. In the absence of a qualitative, open ended exploration of the outcomes experienced by users of CST, it is difficult to be sure

'osteopath' of whatever nature (cranial or otherwise) must, by law be a member of the General Osteopathic Council (GOC). Practitioners eligible to join the GOC must have trained in one of the several accredited osteopathic colleges in this country. NB has not trained at an Osteopathic college but undertook a 2 year training in CST at one of the schools accredited by the CSTA, hence the affiliation to the CSTA.

that established outcome measures are capturing all the potential effects of this therapy.

In order to support future effectiveness research and ensure that CST is evaluated with outcome measures capturing the effects reported by users, we report here the results of a qualitative study pertinent to answering the following questions:

1. What were users' expectations of CST?
2. What effects do users of CST attribute to the therapy?
3. Can users' reflections help to explain the ways in which healing can be enabled holistically?

Methods

Study design

An inductive thematic analysis [16] was used to identify, analyze and report on the themes found in the data using constant comparative [15] methods with regards to research questions one and two. A grounded theory [15] approach was used to explore participants' experiences with CST developing the data in relation to research question three to generate a theory. An iterative process [45] was used, thus the process of gathering information, analyzing it, sorting it and testing it was repeated until the proposed theory became clear.

Recruitment strategy

All participants were recruited via the Craniosacral Therapy Association (CSTA). The CSTA has approximately five hundred practitioner members all of whom have undertaken a two year training from an accredited school. Members adhere to the CSTA code of ethics, undertake regular continuing professional development and hold professional indemnity insurance (www.craniosacral.co.uk). All members were invited to recruit participants into this study, 12 practitioners actively assisted in recruitment bringing the study to the attention of users from their patient base. Recruitment was via posters and patient information packs placed in practitioner clinics. An information sheet was included. This invited users over 16 years old who had received six sessions or more (as we wished to understand how people 'understood' CST after they have received treatment over a period of time) of CST within a 12 month period and were prepared to share their experiences of CST with a practitioner researcher (NB).

Interested volunteers completed a consent form and sent it to NB who contacted them to arrange an interview. Practitioners were not informed about whether users had agreed to take part in the study to ensure confidentiality. Some users may however have shared this information with their practitioner.

Data collection

Semi-structured face to face interviews took place between April and August 2011 and were based on the topic guide shown in Table A.1. For practical and economic reasons interviews were scheduled geographically and collected over two or three days at a time in each area. All interviews were conducted by NB, audio recorded and transcribed in full with participant names codified to ensure anonymity.

Data analysis

The interviews were scheduled in phases, with an initial analysis carried out before the next phase of interviews was started. A topic guide was developed of which two of the questions were pertinent to this article: 'What were users' expectations of CST including the kind of changes they were seeking?' and 'What changes did they report?'

Codes were generated from the data using memos and diagrams to clarify the description and meaning of each code and theme [17]. AL, SSB and JT gave input into the coding scheme. Three primary thematic areas were identified, the first two relating to the topic guide: expectations of CST; and changes reported. One further primary theme arose, mostly from data generated by the non-specific question in which participants were asked to report anything else they felt was important to CST which had not been discussed. This question generated data pertinent to an emerging theme: CST Process and Mechanisms. A fourth overarching theme emerged from two of these thematic areas (Changes Reported, and CST Processes and Mechanisms), that of Developing Self Awareness. Combining insights from these three themes enabled development of a new theory about the processes by which CST may improve health.

The analysis was reviewed by a second researcher (AL) after each stage to enhance analytical rigour and ensure that all data had been fairly represented and reported.

Ethics

This study was granted ethical approval by the University of Warwick's Biomedical Research Ethics Sub-Committee, in June 2010.

Results

Participants

The sample included 29 participants; 8 men and 21 women; ages ranged from 35 to 87 years. The geographical spread of the sample included seven counties in England: Cheshire: 2, Staffordshire: 2, Lancashire: 10, Warwickshire: 3, Greater London: 5, Hampshire and Dorset: 7. Throughout this article a unique number is used to identify quotations from each participant.

Expectations of CST

Most participants reported that they were seeking relief from pain or resolution of psychological or emotional problems in the context of chronic health problems. The latter included a variety of physical and mental problems including: musculoskeletal disorders (for example transverse myelitis, back pain and ankle injuries); headaches; anxiety; depression; chronic fatigue;

tinnitus; side effects of chemotherapy and after effects of acquired brain injury. The severity of disabilities participants reported ranged from intermittent symptoms to severe numbness in limbs and loss of use of body parts. A common reason for consulting a CST practitioner was as an alternative to conventional/allopathic medicine, particularly when participants did not feel the latter had met their needs. Two participants had CST in pursuit of greater psychological and spiritual wellbeing.

Changes reported

Participants reported change in three dimensions of health: body, mind and spirit. Four participants reported outcomes linked to only one dimension: three to physical symptoms and one to emotional or psychological symptoms. The remainder of the sample reported outcomes covering at least two of the three dimensions of body, mind and spirit. All participants, except one, reported a beneficial effect on their presenting symptoms. The latter reported a general beneficial effect without specific changes to symptoms. Effects could be categorized as a reduction in symptoms including both sustained and temporary improvement, a recovery or complete resolution of symptoms, and a reassessment of the presenting problem.

Body

The dimension "body" was represented by a wide range of physical symptoms including pain due to inflammation and past injury, restrictions in movement and mobility and limitations in bodily function like breathing, general fatigue and allergies. Most of these participants reporting that these symptoms limited their daily activities. Changes reported are summarized in Table B.2 and illustrative examples provided below.

A participant had chronic asthma, eczema, allergies and fatigue, laboured breathing and inflammatory tendencies. She presented with neck pain, restricted movement in her right shoulder and what she called "diaphragm misalignment" which restricted her breathing. She reported that the most important change for her was that she now feels "stable in her structure" and has full range of movement without 'spasms and pulls', and can breathe more easily. A key indicator was the fact that she got back on her bicycle for the first time in a year suggesting easier breathing and possibly motivation.

> "I'd been so bloody breathless, I couldn't cycle, you know and I really wanted to get out on my bike, and I just hadn't got the lung capacity so that's a real kind of measurable gain that I had been able to get up the hill, up the road, cycle while it's an 8 mile round trip to work, so it was a significant first go" (P020; Pg. 6).

A participant who suffered with osteoporosis, scoliosis, and lumbar spondylosis at L4/L5, with two hip replacements, one knee replacement, a history of cracked pelvis and broken hip and wrist due to a fall, and a car accident with whiplash was seeking pain relief.

> "I have difficulty going upstairs, I have a great problem going up to the surgery. . .. up to the consulting room but coming down and I've had therapy I'm fine. I can near enough run down the stairs. . .. before I actually go I'm quite often tired, very tired. It's quite an effort for me now to get the car out. . . when I've had a session I can go shopping in Sainsbury's. It's an effort to actually get the shopping out of the car and bring it in the house and put the car away, but then I can actually make a meal. I'm fine. The therapy just invigorates. That's one of the invigorating parts of it" (P004:Pg.6-7).

A participant with a slight curvature of the spine, ongoing back problems and sciatica was seeking pain relief. She reported relief from pain.

> "I don't suffer with my back the way I used to..., I mean it will come and go but it's much more manageable. When I used to get sciatica it used to probably take 3 or 4 session before it will clear whereas if I feel it coming on now one session will clear it" (P009: Pg.9).

Another participant seeking pain relief had suffered with headaches all her life, had chronic neck tension and was addicted to over the counter medication. She reported that headaches no longer rule her life and that she does not have to come home from work to lie down. She had started to reduce the pain medication and felt some relief from neck tension.

> "Sometimes I'd have to come home from work with headaches. . . I'd have to come home and go to bed or. . ..whereas now I feel as they're in control really" (P025: Pg.5–6).

Mind

The dimension "mind" was represented by emotional and psychological symptoms. Changes in this dimension included a reduction in these symptoms and also changes in participants attitude to their health problem(s), their environments or life situations, due primarily to a change in awareness. Some participants found that this change enabled them to manage their health problem or its causes or consequences in a more constructive way.

Changes reported in this dimension summarized in Table C.3.

A participant with a mental illness sought CST to support her mental health and general well-being and reported changes in perspective and attitude:

> "my mood has been stronger and the therapy has helped me over the last three years to gain confidence, it's helped with the panic and anxiety that I feel when I'm out shopping" (P001: Pg. 3).

> "I see things in a different light and can understand things that are happening to me and I can actually work it out rather than dwell on things. . ." (P001: Pg. 6-7).

A participant with work related stress reported a new perspective on life;

> ". . .it's kind of opened my eyes really to a new way of looking at things and coping with life, both physically and mentally. . ." (P016: Pg.8).

A participant had had a subdural haematoma; after a terrible headache for about 1 week, he got out of bed and 'blacked out and fitted'. He had made a quick recovery and was back to work within 3–4 weeks. He describes himself as someone who works and plays hard, is successful and aware. After his operation he felt worried and had more 'angst' than normal; he was finding life more of an effort. A family member recommended that he went to see a CST practitioner. He was skeptical about the process but trusted the recommendation. He wanted to explore his "inner world".

> "I now feel in touch with my moods and if angst arises have appointments when I feel the need". (P024: Pg.15).

A participant presenting with depression, tiredness and fatigue was seeking support and reported profound changes in her emotional wellbeing.

> "I think it opens a door to really deep healing and moving on. . ..I'd had acupuncture and I'd had herbs for a number of years. I think they supported me while I was healing. I think the real healing must have come from the CST. I firmly do believe that, because that's when the profound changes really started to happen in the complete recovery really" (P027: Pg.11).

A participant had a history of headaches and tension in her right shoulder; she was recovering from the births of two children. She wanted to explore her inner self and reported finding a new awareness and balance in her emotions;

> "I think its about not being. . .. not kind of having emotions and trying to shut them off, but just being aware of them, being a witness to them, and the more that I have these sessions and I am trusting my body and its own way of journeying and mending, the less I try to control everything and the less I try to understand, engage intellectually, more than try to sift things. I've got more balance between my emotions because I've always been very emotional and very intellectual and I grew up in a family which finds emotions difficult and intellect very praiseworthy and I think there's been a real mismatch there, in that my emotions. . .. haven't been valued particularly" (P002: Pg.16).

Awareness of mind–body links

An additional subtheme emerged from these interviews indicating that one important change experienced by some participants was greater awareness of mind–body links. Some participants went to CST with the perception that the pains they were experiencing on a physical level were linked to a problem 'rooted' in the psycho/emotional aspects of health.

Thus one participant said in relation to her symptoms of shoulder tension;

> "I was tired and irritable for a start, but it's difficult to work out, to distinguish what was due to my shoulder and back and what was because of what was going on in my life at the time. It was a lot of turmoil with my marriage; you know the potential of moving, and my job and boys. . .." (P015: Pg.7-8).

Having identified that there was an emotional component to her complaint, she found a practitioner who worked by combining CST and psychotherapy. This participant reported a deepening of her understanding of mind–body links and an interpretation of her symptoms which encompassed both a physical and emotional image;

> "I just felt lighter. . .I suffer from a lot of tension in my shoulders and that had definitely eased, but I just felt. . .and it sound so clichéd but I felt as if a burden had been lifted. I felt taller and lighter" (P015:Pg. 4).

A participant, whose case was introduced earlier reported

> "I think just the dislodging of living in the brain allows someone like me to kind of just not have my list up there so much, my goals or whatever and just your body feels things in a different way it definitely feels more vulnerable to be like that because you live in the present, because you get all those. . .you really get more in touch with how ephemeral everything is and how mortal one is, I've been really aware of that. I would say that part of living in one's body and being middle aged is that heightens how you live but it also makes things kind of . . .it's all a bit exquisitely painful really. (Laughed) Do you know what I mean, being present as a mum?" (P002: Pg. 19).

Spirit

The dimension "spirit" was represented in part by the capacity to love and have compassion, and in part by feeling connected through relationships with self, others and the wider universe. Other participants reported an enhanced sense of wellbeing. Outcomes associated with the dimension "spirit" are summarized in Table D.4.

The participant (002) that came to explore her inner self reported:

> "being more heart centered generally. . .more trusting in relationships, more compassionate towards others [. . .. . .]is learning to be more instinctive [. . ..].identifying needs for self-care" (Pg.18-21).

She incidentally also reported that her headaches had resolved and her shoulder was improved. It is notable that these complaints were not the primary reason for her consultation in the first place.

Another participant reported in a similar vein, with regards to her relationship with her partner:

"my partner and I were sort of having some time apart and instead of just intellectualizing what we should do I was able to just connect in my heart space about what it was I really wanted, without thinking about what's going on in my head, so I think that was really helpful at the time" (P019: Pg.7).

A number of participants presenting with anxiety and depression consulted primarily for support with their spiritual development (e.g. explore inner self, to find peace, to reconnect with body). They reported changes on a spiritual domain as well as a domain of mind.

"It's given me a faith if you like, it's been very spiritual you know, and it's made me open my eyes to things and question certain issues that happen in my life but also the outside and how it impacts on me as well" (P001: Pg. 7).

One participant reported that she had learnt to relate to herself in a new way, and felt she was less fragmented and more present, and that she is now learning to trust others and allow them to nurture her. For her this was a new behaviour.

"I suppose it's just made me sane really I suppose that's what the cranio has done, it's made me feel all of myself as opposed to these separate bits most of the time and wanting to be somewhere else" (P010: Pg.16).

"the big thing that's happened with the CST is that it's allowed me to let someone else in, which I never did, because the reaction to my family situation was so intense. . . I just was frozen, and I suppose I had huge blind spots that I didn't know were there" (P010: Pg.19).

Both feeling fragmented and the inability to trust and accept support can be signs of spiritual distress [41].

Two participants presenting with physical symptoms relating to cancer and chemotherapy also reported spiritual outcomes:

"I think it's connection to self and then a kind of wider connection, certainly to the therapist I feel a sense of real strong connection, and then it becomes almost like a. . . I'm not particularly religious but a like a sort of universal connection in a way, like a sense of being part of something bigger. I can get that sometimes, which does feel extremely healing, and it's extremely liberating in a way" (P022: Pg.9).

"there's a calming of the spirit. . .a sense of well-being, feeding the inner soul. . ." "it is more than an intellectual experience, you know, it's an acknowledgement that there is more to the world I think than just an emotional and physical and social interaction, there is a sort of another dimension to it" (P008: Pg. 6-7).

Connection to the divine and other dimensions are deemed part of a spiritual process by some [41].

Possible adverse effects

Even though CST is often recommended to people due to its gentle and non-invasive approach, two participants did report what would be described in CST as a reaction to treatment: one recalled a physically painful experience and one recalled an emotionally painful experience. Both were put in touch with past traumatic experiences during the CST session and yet both experienced a sense of healing.

"I can remember in some sessions that were partly about me becoming more trusting in the relationship [with practitioner], so I was able to let go more, and when something became quite painful, because I can remember those sessions at first when I thought, gosh craniosacral can be really painful, when something's happening, it's almost like in my body there's a kind of gathering of tension". (P002: Pg. 6)

"There was an awful lot of activity if you like round the pelvic area. Whether that came from you know, I mean I'd had two children; I had a hysterectomy, so there was lots of, you know emotional attachment through the pelvis. . .like I can remember my legs felt like legs but the positions that they seemed to get into, it would have been impossible. It would have been impossible as an adult to get in that position, but the sensation was they were in that position, but very childlike. . .there was just this sense of shifting, sort of swaying if you like from side to side. Yes, you know and I can remember that quite vividly and it being uncomfortable". (P005. Pg.7)

CST processes and mechanisms

During the course of the interviews, and specifically when asked at the end to report about anything else they thought was important, participants talked spontaneously about the components of CST sessions that they thought were significant for the outcomes they experienced. Two aspects were evident in these data. The nature of the therapeutic relationship was recognized to be fundamental by almost all participants who described specific components; and a number of participants described altered sensory perception, becoming conscious of aspects of their body, senses or environment that were not normally evident to them.

The therapeutic relationship

Some participants emphasized the importance of feeling cared for and developing a sense of partnership with the practitioner creating a balance of power, as important facets to the therapeutic relationship

"It's very collaborative I'd say, she's [practitioner] not doing it to me, or fixing me, she's having a conversation with what my body is asking her to do, and I guess making that space for that realignment to occur" (P020: Pg.10).

The attention given to the ambiance and environment in which the sessions are held were also mentioned as essential to the experience because this created a safe space.

"I suppose it comes back to safety, that you know you're safe and it's quiet and relaxed atmosphere, you know there's not a lot of distractions" *(P005: Pg.15).*

The capacity to listen actively and non-judgementally was reported as allowing participants to unburden and get things off

their chest. This increased rapport and deepened the connection with the practitioner.

> "to have the attention of somebody for one hour and as you build up your rapport, be able to tell them things that are going on in your life, is hugely advantageous because how many other people with issues or whatever, I do believe that although one might not be able to talk one's self better in every single circumstance, just unburdening one's self, or having the facility to is a step to getting better." (P026: Pg.5). . . "the evidence of that I did an introduction to a counselling course, and I can just see how that does work" (P026:Pg. 6).

> "So there's something about that sense of connection,[with the practitioner] a more. . .yes a sort of sense of connection I get that I don't often experience in everyday life, and that feels very healing" (P022: Pg.9).

Finally participants talked about the importance of their practitioners' model of health and their lack of expectation in terms of outcomes of treatment. The latter is very much in line with the basic tenet of CST, that the body has its own wisdom and that the practitioner's role is to enable it to find its own route back to health. This is perceived by the client as very respectful.

> ". . .it fits for me the model of the mind-body medicine, that we are a whole system and we're not fragmented, compartmentalised and so how. . ..she's [practitioner] not going in with any expectations or plan. . .very respectful. It's like a real tuning in and listening" (P020:Pg.10)**.**

Altered perceptions

A second component of the CST process reported related to the experience of different states of perception during the CST session. These involved changes in perceptual awareness, of seeing colours and images and new sensations in the body.

Participants who had presented with a range of complaints for example; stress and musculoskeletal pain reported:

> "I experience a lot of colours that I can see while I'm in the therapy, especially golden and purple colours, . . . I always get them every time I have the therapy, but I mean I can only describe it as a sort of being asleep but still awake, it's so relaxing" (P007: Pg. 4).

> "I have raised relaxedness, if you can explain it like that. . .I can feel sort of really bright and alert, and think oh yes, nothing. . .and then suddenly I'm sort of like, oh yes; I think I've just come back again" (P016: Pg.6).

> "a bubble arrives at the bottom of my spine and it bubbles all the way up. . .it's like a fountain, a firework fountain it starts as a bubble and goes right up my spine and then actually goes into a fantastic release at the back of my neck" (P004: Pg. 5).

Developing self awareness

Reports contributing to two of these themes 'Changes Reported' and 'Processes and Mechanisms' pointed to the medium of awareness as fundamental to the perceived impact of CST on health. Participants believed that receiving CST resulted in their developing a new perspective on their health status, particularly a greater awareness of the holistic nature of health and the interrelatedness of body, mind and spirit.

After receiving CST, one participant reported that he is now:

> "aware that inner conflict[. . .] causes pain on a physical level[. . .]has learnt coping strategies along the way and is listening to the body (P026: Pg.5)

This participant and several others describe a new relationship with their bodies in which they were better able to sense what they needed.

A further participant underwent a process of learning;

> ". . .learning to listen to the guidance from my body" (P002: Pg. 8).

Another

> I'm becoming really conscious of the way my body works, and how off-balance it is, and I'm getting a sense of what it's like to be in myself. . .I physically can feel processes happening in, of opening out in my body, and it's always been around the jaw and neck and then that's. . . and the heart" (P010: Pg.14)

A fourth experienced a:

> "reconnection to own intuition" (P019: Pg.5).

This new found awareness enabled participants to care for themselves in a way which better supported their health.

A participant reported that:

> "it's changed my lifestyle in terms of health and stuff because I don't suffer with my back the way I used to, I don't suffer with sciatica as frequently, I mean it will come and go but it's much more manageable" (P009: Pg.3).

Other participants also reported that CST had enabled them to change their lives, empowering them to live in a better way. For example, one said that she was regaining control of her life, feeling less depressed, had a more positive outlook and less fatigue, and was engaging more in physical activity and life in general.

> "from a place of negativeness and depression I'm now feeling a lot more on top of life, and certainly getting out more and doing things. . .at the moment I would say the chronic fatigue is kind of in abeyance" (P023: Pg.5).

This enhanced capacity to care for self extended beyond health behaviours such as physical activity into the realms of emotional and psychological wellbeing. The participant (010) who reported developing trust in others went further to describe an improvement in the relationship with herself, as she felt she had learnt to relate to herself and others in a new way, learning to trust and allow others to care for her.

> "...It's given me a set of tools, to have a relationship with myself; so that I now know that I can befriend myself" (P010: Pg.20).

A theory of action

These data have contributed to new theory development about the way in which CST may bring about health improvement that could be tested in further studies. From the accounts of CST users we can theorize that this process occurs in four stages in an iterative manner during a series of sessions as the relationship between practitioner and client deepens. (1) Establishing a trusting respectful relationship enables users to feel safe and relax sufficiently for the (2) hands on work of CST to take them into (3) heightened perceptual states, or altered states of consciousness. These heightened perceptual states enable users to develop a new level of awareness or understanding of their health, perhaps though amplifying their capacity to explore, rediscover, reconnect and reclaim aspects of themselves that have been fragmented or denied as a result of experiences, events or conditionings on a physical, psycho/emotional or spiritual level. (4) The fourth stage sees these aspects of self reintegrated during the process of CST resulting in a movement towards health. This final stage brings about new levels of awareness and understanding which in turn enables a new level of capacity for self care. The end product of the process is experienced as recovery, reduction of symptoms or reassessment of the presenting problems as the individual accesses inner and outer resources and engages with life in a new way. We suggest that for full effectiveness, all stages (1–4) may be necessary and take place sequentially within each session. In addition, suggest that further development and testing of this theory using suitable outcome measures be done.

Discussion

In this paper we have reported users' experiences of the changes they attribute to CST, identifying outcomes of interest to them. We have also reported their perceptions of what enables CST to result in the positive changes they report. These perceptions have enabled us to develop a new theory about the ways in which healing can be enabled holistically when using CST. The challenge here, is that there is no clear boundary between 'experiences' and 'outcomes', as the mind-body-spirit elements are enmeshed within individual experience. In our sample of CST users, most people observed positive changes in at least two of the three dimensions of holistic wellbeing: body, mind and spirit. Bodily symptoms in which participants reported change included pain, limitations in functioning and mobility; symptoms related to the mind included aspects of self-concept, coping strategies, self-care and interpersonal relationships; spiritual changes included a sense of connectedness with self, others and the wider universe consistent with Bellingham's definition of spirituality [18] and a general sense of enhanced wellbeing. One of the key findings was that the CST process helped participants see the interrelationship between these dimensions of wellbeing and relate to a more holistic health paradigm. The changes in health which were reported including recovery, reassessment of problems and reduction of symptoms, both sustained and temporary were achieved at least in part because the CST process enabled clients to develop new levels of health understanding and awareness which empowered them to care for themselves in a way which better supported their health.

The proposed theory is not just about how CST might bring about improvement but also how this is experienced i.e. what is needed for users of CST to feel a positive change. Users may feel a 'movement towards health' which may be physical, psychological, spiritual and/or a combination of these areas. We are aiming to theorize about how people experience CST, not about what happens physically in the body. We therefore see the 4-step process as a description of an 'ideal' healing process of a CST session from the users' perspective.

Holistic effects of CAM similar to those we have reported for CST have been reported in other studies of CAM therapies. Cartwright and Torr [19] reported participants perceptions of the effect of a range of CAM as: symptom relief; energy and relaxation; coping; control; reconceptualisation; balance; health maintenance; relationship to self and others; self identity and perceptions of others. A US study that explored the benefits of one or more CAM therapies on back pain identified a range of positive outcomes including increased options and hope, increased ability to relax, positive changes in emotional states, increased body awareness, improved ability to cope with back pain, improvement in physical conditions unrelated to the back pain, increased energy and dramatic improvements in health or wellbeing [20]. It is perhaps not surprising that CAM therapies whose primary goal is to kick start the healing process report similar outcomes.

The heightened health awareness that seemed to follow from CST could be viewed as a process of becoming more 'mindful' in the sense that users became both more observant and more accepting of health processes and interactions. Mindfulness is defined as "*paying attention in a particular way: on purpose, in the present moment and non-judgmentally*" (Kabat-Zinn, cited in Cardaciotto et al. [21]). Baarts and Kryger-Pedersen [22] describe awareness as "*the process through which clients give discursive attention to the body in specific circumstances*". Users in our study regarded awareness as a means of enacting changes in their personal lives. It made them aware that change is possible and that the disease or state that they may perceive as static or deteriorating is actually transient. According to Baarts and Kryger-Pedersen "*When bodies function unproblematically, we tend to take them for granted and they cease to be part of our conscious experience*" [22]. As we found in this study, their findings suggested that participation in CAM practices increases bodily awareness, making the body 'present' to users even when they no longer suffer from pain or other dysfunctions. Paterson and Britten's study to investigate how the experience of a course of acupuncture evolved over time reported similar effects [23]. They defined three components of this complex intervention: the acupuncturists' diagnostic and needling skills; the therapeutic relationship; and a new understanding of the body and self as a whole being. An increase in self awareness, an increased sense of wholeness, self confidence, taking responsibility for self, being in balance and centred are all effects that have been grouped as 'changes in personal and social identity' by Paterson and Britten [24] and labelled as 'self concept' by Paterson [25].

One of the key elements of the process of CST as perceived by participants was the 'therapeutic' practitioner–client relationship. Such relationships are not exclusive to CST and are a key component of what are called 'non-specific effects' [46] of CAM and healthcare generally. Factors such as warmth, empathy, duration of interaction and the communication of positive expectation have been identified elsewhere [42] as important factors significantly affecting clinical outcomes. What is being suggested in this paper is that the quality of the therapeutic relationship is inseparable from the treatment itself because it is a precondition for the body work to achieve its desired outcome. If this is the case the therapeutic relationship is a necessary component of CST not a 'non-specific effect'. The core themes and sub-themes arising from Cartwright and Torr's phenomenological study [19] into the meaning of CAM in general from the patients' perceptive included: therapeutic relationship; having time to be heard; trust; and a relationship of equals as important parts of the process: As in the latter study, our participants reported that the therapeutic relationship component of CST made an important contribution to the treatment overall, but also contributed to their health improvement in its own right with references made to the counselling and psychotherapeutic qualities offered by practitioners.

According to Sointu [26], alternative and complementary health consultations, which instill the client with the power of defining and even deciding what their unease consists of, are often characterized by recognition, "*the self being recognized as an active being by the other is also a potential source for experiences of agency*". Benjamin, cited in Sointu, suggests that being, recognized as an active being enables the person to develop into an active being. In developing the capacity of recognition – where the self comes to be known through intersubjective recognition granted, also to the other as a being with its own subjective centre – is also the source of understanding and empathy [26].

A second element of the CST process perceived by participants in our study but not so far reported in the literature is the experience of altered states of perception or consciousness during the CST session. These states may emerge as a key part of the mechanism in which CST and perhaps other CAM enable a change in the level of health awareness and thus enhance self care.

The theory which emerged from this study, suggesting that the establishment of a therapeutic relationship and trust in the practitioner enables users to feel sufficiently safe and relaxed for the hands on element of CST to take them into new perceptual states, which in turn facilitate a new level of health awareness, is reminiscent of Upledger's idea of the 'therapeutic facilitator' [3]. The CST practitioner working together with the client to cultivate this change or shift in awareness. Recognizing this beneficial effect of CST, one which exceeded initial motivation for attending, may be one of the reasons that participants continued to engage in sessions, even though they did not claim to understand how CST works. Whilst our study data relates to CST, it may be possible to apply the emerging theory presented in this study to other body based CAMs. The development of greater awareness of holistic paradigms and the capacity for greater mindfulness about health may apply more widely in self-care and the long term management of chronic illness.

Parallels to some our findings can be seen in studies looking at other forms of CAM [27–30], which report the importance of treating the whole person and developing mind body links. These studies also report people's reasons for having CAMs as wanting an emphasis on wellness as opposed to illness and the importance of practitioners' understanding client experiences and perceptions. A study of Chinese medicine users in the United States [31] for example, revealed that participants believed that Chinese medicine care relieves symptoms and improves function, improves physiological coping or adaptive ability, improves psychosocial coping or adaptive ability, involves a close patient practitioner relationship and treats the whole, body, mind, spirit and social person.

These findings contribute important insight into current conversations about how to measure the outcomes and effects of CAM treatments, in this case CST. In addition they provide a backdrop against which the appropriateness for CST of existing outcome measures can be assessed. A recent review has summarized and classified these measures [32]. Of those commonly used to assess outcomes in studies of CAM, the Measure Yourself Medical Outcome Profile (MYMOP) [33] and Short Form Health Survey (SF-36) [34] have the potential to assess the physical and emotional changes reported by participants in this study but do not assess changes in aspects of wellbeing which were not perceived as a problem before the consultation, for example levels of awareness about health and self. Other measures have been developed which address spiritual insights resulting from treatment [35], but not the combination of spiritual, mental and physical changes reported by the participants in this study. Yet others have the potential to assess the changes in positive mental health and wellbeing [36] but lack the capacity to assess the domain of body.

Since developing a new level of health awareness seems to be a vital mechanism in CST, it is important that outcome measures used in quantitative studies cover this aspect of change. One newly developed patient-centred outcome measure for CAM therapies called the Self-Assessment of Change questionnaire (SAC) [37,38] can assess patient's perception of personal changes associated with a CAM intervention. This makes the SAC a possible contender for use when assessing CST outcomes but further investigation will need to be done to confirm that it does pick up the development of greater health awareness.

This research provides health professionals working outside the field of CAM with an understanding of the potential effects of CST that could enhance decision making about referral. Many participants reported benefit from CST after conventional medicine had failed to help them. Increased awareness of the holistic nature of illness and the emotional and spiritual factors underpinning health is not part of allopathic health care at the present time. Such awareness seems to enhance users' capacity to self-care and better manage their health and may be an underlying theme that transcends the apparent success of many CAM therapies.

Limitations of this study

This was a self selected group of participants who were extremely happy to talk about their experiences of CST, introducing the possibility of bias. People who have had poor experiences are also often very happy to be given the opportunity to describe them, but that did not appear to be the case here. Most of the participants were female, introducing another possible source of bias. It is possible that the experience of men may be different from those of women, although this was not evident with the small sample of men who contributed to our study. The ratio however closely mirrors that amongst consumers of CAM treatments in the UK [39]. The data shows an overwhelming sense of positivity from participants even in the case of the one participant whose presenting symptoms did not change but nevertheless reported developing a real sense of wellbeing.

We have recruited through CST practitioners. This will have influenced the sample by favouring people who were still engaged in CST and disenfranchised those who had discontinued it because it was not working for them. Some practitioners invited users to participate from historical records, for example past rather than current users and may have chosen those with particularly positive experiences. Involving CST practitioners in the recruitment process meant that the sample we could recruit had a range of age/gender characteristics and many different health problems. We will have missed talking to clients who had fewer than six sessions of CST. Due to time constraints purposive sampling looking for negatives and theoretic sampling to further develop the emerging theory were not carried out. It is important that future studies purposively seek users with negative experiences and users whose experience may challenge the theory we have developed.

NB is a practitioner researcher and the ethical tensions this created, with regards to the multiple roles she was playing throughout this practice were considered at the design phase of this study and reflexively throughout. As the primary researcher NB, interviewed all of the participants her position as a CST practitioner can also introduce bias. However, any bias towards establishing the effectiveness of CST is offset by her professional responsibilities towards people having CST. In addition, her roles within the CSTA as someone researching on the behalf of its members and being a masters by research candidate when this study was undertaken. AL, JT and SSB were her academic supervisors and GL was her examiner. This research was therefore intensely scrutinized by individuals that have nothing to do with the discipline of CST. According to Costley and Gibbs [43] there "*lies a connection between self and the communities of practice within which the researcher works and lives"* and "*this is where the ethic of care is at its most potent.*" (pg.92).

Finally, we have captured clients' lived experiences and their perceptions of CST. Participants were very clear that the changes they reported were something to do with CST, but it maybe that these changes could have occurred without CST and we do not know the exact magnitude of the CST contribution. It is also difficult to state with certainty how CST effects healing as it is a dynamic process, and the user's experience is also an important part of the healing process; treatment and outcome cannot be seen as separate and outcome cannot be quantitatively measured using existing measures. As stated earlier, 'healing' or 'treatment' does not imply symptoms resolving or even relieving, as for some participants, it is the change in awareness, outlook on life or the way they cope with their condition that is important to them. A full report on all the findings of this study has been published as an MPhil Thesis at Warwick University [40].

Conclusion

People consult CST practitioners for a variety of chronic conditions, many having tried conventional medicine unsuccessfully. Their accounts suggest that CST could make a valuable contribution to health care, enabling health awareness and a more sophisticated level of self-care among people with chronic mental and physical health problems.

The quality of the therapeutic relationship with the CST practitioner appears as a necessary component of successful CST, not merely a non-specific effect. It is this that enables users to experience different perceptual states in the CST session and enhances the effect of active listening and body work.

This paper makes a useful contribution to the CST field having highlighted the key outcomes that are important to users. As there is limited literature on CST the scope for supporting research is great.

The study was undertaken in part to support the identification of suitable outcome measures for CST effectiveness research. Given our findings with regards to the importance of altered perceptions, improvements in capacity to self care and spiritual development, we believe it is necessary to develop a new outcome measure that encompasses all three dimensions of mind, body and spirit.

It is also important to undertake further studies to test and further develop the theory which emerged from this study relating to the ways in which healing can be enabled holistically using CST and to explore the possible relevance of these mechanisms to other body-based CAMs.

Financial support

Cranio-Sacral Therapy Association UK (CSTA) funded N Brough's university fees and research expenses.

Conflicts of interest

Nicola Brough may indirectly benefit from this article as she is a registered Craniosacral Therapist and could benefit from an increase in clients.

Acknowledgements

We would like to thank the CSTA for funding the University fees and research expenses and the CST practitioners who supported the project and the participants' whose honesty and depth of sharing made this a rich experience.

Appendix A.

Tables A.1 and B.2.

Table A.1
Topic guide.

First stage – rapport building
• Ask about demographics/current life circumstances – work, family life.
• How many sessions have they had?
• What other interventions were being had at the time?
Second stage – main interview questions
• What was their expectation of CST?
• What was their experience of CST?
• How did they feel after a session?
• For how long did those feelings last?
Third stage – reflection/taking stock
• Participants were asked to summarize the important outcomes or changes they had noticed whilst having CST and asked to mention anything else that they feel is important in relation to CST that has not already been discussed.

Table B.2
Outcomes associated with the theme of body.

• Pain relief from sciatica and back (Participant 009)
• Relief from tension in the body (Participant 003)
• Improvements in mobility (Participant 008)
• Improved lung capacity, stable easy breathing (Participant 020)
• Settles stomach after chemotherapy (Participant 012)
• Reduces sleep medication for a couple of nights (Participant 004)

Tables C.3 and D.4.

Table C.3
Outcomes associated with the theme of mind.

• Reduction of anxiety and panic (Participant 002)
• Recovery from depression (Participant 027)
• Less fatigue (Participant 023)
• New emotional awareness (Participant 002)
• Awareness of mind body links (Participant 015 and 002)
• Gained self confidence (Participant 029)
• Learnt new coping strategies (Participant 021)
• Changes in mental attitude (Participant 023)

Table D.4
Outcomes associated with the theme of spirit.

• Sense of well-being (Participant 005)
• Felt a lightness of spirit (Participant 027)
• More present, more open hearted (Participant 010)
• Feeling connected in relationships (Participant 002)
• Feeling connected to the wider universe (Participant 022)

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