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A case study of extended human capacity perception during energy medicine treatments using mixed methods analysis

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ABSTRACT

Introduction: Some "energy medicine" modalities, such as Reiki, continue to show evidence for efficacy, but the underlying mechanisms of action are still uncertain. To help illuminate possible mechanisms, this exploratory mixed-method study using qualitative and quantitative analyses investigated: 1) How do energy medicine sessions function from the perspective of a *seer*, i.e., an individual trained in techniques to enable perception of purported subtle energies, and 2) Do any of these observations correlate with changes in participants' subjective pain?

Method: One seer reported observations during 30-minute energy medicine sessions delivered by 17 practitioners to participants experiencing chronic hand or wrist pain. Data were coded using an inductive approach, followed by thematic and descriptive analyses. Content analysis was used to assign whether each code was mentioned by the seer for each participant, generating 119 binary variables, one for each code. The relationship between these binary variables and change in participant pain scores after the energy medicine session and three weeks later were explored using linear regression models.

Results: The qualitative thematic analysis identified six major themes from the seer's notes: "Experience of the Practitioner," "Experience of the Participant," "Space and Other Beings" (referring to the qualities of the physical space the energy medicine session occurred in and ostensible non-physical beings present during session), "Participant-Practitioner Relationship," "Healing Process," and "Attributes of Energy." The energy medicine methods used varied for each participant, according to the practitioners' perceptions of each individual's needs. The linear regression models yielded significant associations between changes in pain scores and various codes, including energy color, practitioner touch and the presence of ostensible non-physical beings supporting the session, although their significance did not persist after correction for multiple comparisons.

Discussion: Future studies investigating the mechanisms of energy medicine may benefit from including perceptions by *seers* in their outcome measures.

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Introduction

The extended human capacity of seeing beyond our traditional sense of sight is well-documented as a widespread phenomenon. Using these methods of extended seeing to obtain verifiable information has been repeatedly demonstrated for various purposes. For example, the formerly classified US government-funded "StarGate" program received approximately \$20 million from 1972 to 1995 and was focused on the form of extended seeing referred to as remote viewing. A summary of the results of that program, focused on practical consequences, concluded that: "In a total of 504 separate

missions., remote viewing produced actionable intelligence prompting 89% of the customers to return with additional missions."^{2,3} Meta-analyses of experimental studies of remote viewing have found positive results with effect sizes ranging from 0.17 to 0.39.^{4–7} Archaeology is another area where remote viewing has been demonstrated to provide verifiable and repeatable results.^{8–10} For example, using remote viewing Stephan Schwartz and team discovered the location of a Byzantine structure in the now-buried city of Marea near Alexandria, Egypt.⁹ These examples, while not directly related to healing, support the notion that verifiable information can be obtained through the capacity for perceiving beyond the known, conventional senses.

Despite numerous anecdotal accounts of extended seeing within the context of healing, there have yet to be studies verifying

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information obtained in this way regarding processes within the physical body or how healing might occur. A number of studies have evaluated a seers' ability to make correct diagnoses (see Benor, 2000 for a review of these studies and two qualitative studies of intuitive diagnosis). For example, a recent study found that diagnoses provided by psychics in comparison to medical records were not aligned. Normal Shealy on the other hand evaluated one highly accurate medical intuitive with 93% accuracy in determining a patient's diagnosis when given the patient's name and birth date. He later did a study evaluating the diagnostic accuracy of a palmist, graphologist and three clairvoyants and found that the clairvoyants were most accurate.

However, the goal of this study was not to evaluate the diagnostic accuracy of a seer but to explore if seer perceptions could be used to elucidate how energy medicine may work. Applying this perceptual tool to the study of energy medicine may be particularly useful because little is known from a Western science perspective about the mechanisms underlying this popular form of alternative medicine, despite growing evidence for its efficacy. 15-18 Rationale for such an approach can be found in ancient Vedic and Asian healing traditions, which incorporate a subtle energy body anatomy and which provide explanations for the mechanism of energy medicine within that framework. Perhaps using the insights from someone who claims to directly see energy and body processes, henceforth referred to as a seer, could help inform us on what occurs during energy medicine sessions. To this end, a vetted seer observed energy medicine sessions as part of a pilot study of people experiencing hand or wrist pain in a multi-disciplinary effort to discover clues about the mechanisms underlying energy medicine modalities. The parent study's primary outcome of self-reported current pain scores were decreased postsession and at three weeks (F(2, 565) = 3.82 p < 0.000005; see accompanying paper in this issue). The change in pain score from baseline to post-session and baseline to 3-wk were used in this paper for the quantitative analyses.

This exploratory study integrated qualitative and quantitative analyses in a mixed methods approach.¹⁹ This approach is advantageous because it provides methodological flexibility, reflects the participant's point of view (in this case, the *seer*), and capitalizes on the strengths of both qualitative and quantitative analysis methods.²⁰ The objective of the mixed methods analyses presented in this paper was to describe the phenomenon of energy medicine sessions for hand or wrist pain according to a *seer* who observed the sessions. The research questions explored were: 1) How do energy medicine sessions function from the perspective of the *seer* who observed them? and 2) Do any of these observations correlate with changes in participants' subjective pain?

Methods

Parent study summary

Detailed methods and results for the parent study are reported in accompanying articles in this issue. In summary, 17 energy medicine practitioners provided energy medicine sessions to 190 participants with hand and wrist pain. Each participant received one 30-minute session from one provider. The participants were generally middle aged (55 \pm 14 years old), well-educated (16 \pm 2 years), Caucasian (86%) females (84%) who were in a relationship (66%). The energy medicine practitioners were invited to collaborate on the project based on anecdotal testimonials from their respective communities regarding their exceptional healing abilities. The practitioners were selected to represent a wide range of disciplines and traditions. While many of them combined multiple modalities throughout the treatment session, the primary modality used by each was: 1) Shaktis, 2) Rosalyn Bruyere method, 3) Reiki, 4) Barbara Brennan method, 5) clairvoyant healing, 6) Bengston Energy Healing method, 7) Healing

Touch, 8) Peruvian shamanic healing, 9) psychokinetic healing, 10) channeling healing energy of ascended masters, 11) calling in Holy Spirit, 12) quantum healing, 13) Xponential Intelligence, 14) Pranic Healing, 15) Quantum Touch, 16) Krysantha Healing, and 17) psychic manipulation of auras. Ten of the practitioners used light, stationary touch throughout the sessions and the others used exclusively non-physical means. Each practitioner was instructed to have the intention to alleviate pain. They all agreed. They all also said that they would hold the specific intention to alleviate pain within a broader context/space of healing in general.

The primary outcome of the study was the *Numeric Pain Rating Scale (NPRS)*. The NPRS is a segmented numeric version of the visual analog scale where participants select a whole number (0 = "No pain" to 10 = "Worst possible pain") that best reflects the intensity of their pain. This scale was assessed prior to their in-person visit and at their three-week follow-up.²¹ This and other study measures were evaluated before the session (baseline), immediately after the session (post-session), and three weeks later (3-wk).

Vetting the seer

The seer was recruited by word of mouth through the [BLINDED] network, which consists of approximately 80,000 people interested in noetic topics like energy medicine. Six candidates referred through the network were screened through a telephone interview, during which it was confirmed that: 1) their method of extended seeing include visual imagery, so they could report what they observed, 2) they used their skills in a professional setting (no certificates or official credentials were required), and 3) they could work 5 days a week, about 4–6 hours a day, on site for the duration of the project (about 5–6 months). From those completing the telephone interview, three candidates were invited for an in-person interview.

That interview assessed the candidates in terms of their: 1) comprehension of the scientific method, 2) willingness to strictly adhere to protocols determined by the experimental design, 3) lack of prejudice regarding any type of energy medicine, and 4) ability and willingness to observe the energy medicine session without influencing the outcome. This last consideration was included because it is common for seers to also practice energy medicine. Each candidate was also asked to demonstrate their extended "seeing" ability by scanning the body of one of the staff members, without any verbal communication, and record notable perceived energetic aspects. A different staff member observed the scanning procedure, termed "reading," and rated the candidate based on the questions: "Would this person be a good fit for our team?" and "What are your impressions of the candidate in terms of sincerity, respectfulness, quiet demeanor, wise use of time, delivery tone, and requesting verbal permission before scanning?" Finally, the staff member who received the reading rated each candidate on how accurate the reading was.

Based on these procedures, the top-rated candidate was selected. While credentials were not required, the chosen *seer* nevertheless had a Master of Intuition Medicine® Certification from the Academy of Intuition Medicine®, was a senior teacher at the Academy of Intuition Medicine®, and was a Certified Reiki Master at the Sonoma County Center for Reiki. As part of the *seer*'s training, they were introduced to a non-physical guide called an Intuition Medicine Healing Guide which they learned to work with "ethically." They described working "Spirit to Spirit," receiving information from the participant's spirit. The *seer* noted numerous non-physical beings in the sessions they observed in this study. The *seer* expressed that they had witnessed all the same types of non-physical beings in their intuitive readings prior to this study, with the exception of angelic beings.

The *seer* described their process for intuitive readings as consistent throughout the study. The *seer's* preparation for each session went as follows:

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- 1. Going into quiet meditation, breath work, and clearing of the *seer's* energy field by connecting to Mother Earth.
- 2. Locating themselves into the "Meditation Sanctuary" a location in the hypothalamus area of the brain that the *seer* described as "the 'motherboard' of intuition in the body."
- 3. Connecting to themselves as a spirit in the current location and in this space, entering being in the NOW, their portal of light. The *seer* expressed that in this space, their perception of time changes and consciousness expands.
- 4. Opening their clairvoyant (seeing capacity) that provides insight to see through filtering screens of thoughts, images and feelings to a formless context of information.
- 5. In this state, the *seer* is disconnected from all mental chatter and connected to acute sensory perception and creative intuition.
- 6. Connecting their energy as a spirit & their body's energy to the core of the Earth's frequency.

Further, the *seer* commented that they consciously shifted their energy in many ways to be non-obtrusive to the practitioners/participants that were in the space. "While I was in the corner of the room, I would be in my protected space of energy (in a multilayered protective bubble) and shrink my energy to being very small. An example is: shrink to the size of a baseball." The *seer* shared that they held "an objective place of neutrality" with the practitioners and did not observe being more sensitive to one practitioner's energy delivery or technique more than another's.

The data presented here are observations by this seer recorded during 187 energy medicine sessions.

Data collection

Qualitative data in the form of seer worksheets and notes were collected as a part of a pilot clinical trial (details for the parent study are reported in an accompanying article in this issue). During each session, the participant was seated in a reclining chair and the practitioner was seated in a regular chair to the participants left in an 8 foot \times 8 foot \times 7.5 foot electromagnetically shielded room. The seer was in the same room with the practitioner and the participant, sitting unobtrusively in the southwest corner of the room. The seer did not engage with the practitioner or participant (e.g. no verbal or physical interaction). Part of the vetting process included the ability and willingness to observe the energy medicine session without influencing the outcome. While we can not confirm if the seer influenced the session, the seer's intention was that they did not.

The seer completed worksheets during and after the energy medicine sessions (see Table 1 for worksheet guestions.) Worksheets were available for 187 out of 190 sessions conducted. The worksheet asked the seer to answer questions with a numerical rating. In addition, some questions allowed for the option to include brief free-response notes. At the end of the worksheet, the seer could also describe any additional perceptions obtained during the session in the form of free response notes and drawings. A project team member transcribed all the worksheet data, including the free response notes into Microsoft Excel 2013 (Microsoft, Inc, Redmond WA) for analysis. (These data are available from the Open Science Framework web site.) Excel was used rather than Microsoft Word so that the data could be more easily manipulated and uploaded into Dedoose (version 8.3.17, Dedoose, Inc, Hermosa Beach, CA), a qualitative analysis software. The free response notes included words, phrases, complete sentences and drawings. The drawings were not included in the present analysis. The average and standard deviation of the number of characters used for each free response question for all participants are reported in Table 1.

Table 1 *Seer* worksheet and answers.

Question	Mean (SD) or Percent of Sessions Scored "Yes"	
Did you observe any energy move- ment of exchange between healing practitioner and participant? (0 Saw Nothing - 10 Strong Observation)	9.3 (1.4, 0-10)	
2. Did you witness radiant energy increase associated with the healing practitioner? (0 Saw Nothing - 10 Consistently Increasing)	9.8 (0.6, 7-10)	
3. Did you witness radiant energy increase associated with the participant? (0 Saw Nothing - 10 Consistently Increasing)	9.4 (1.0, 4-10)	
4. Did you observe any other energetic observations between the healing practitioner and participant? Y or N (Circle one) If Yes (Y), describe briefly. Average number of characters written 70.1 ± 57.3	97.3% Yes (N = 182)	
5. Did you observe any other energetic observations about the energy generally in the space? Y or N (Circle one): If Yes (Y), describe briefly. Average number of characters written 148.6 ± 87.5	100% Yes (N = 187)	
6. Characterize the degree of rapport between the healing practitioner and the participant. (0 No Rapport - 10 Strongest Rapport)	9.4 (1.0, 4,10)	
 Characterize the degree to which you witnessed a miraculous heal- ing. Saw Nothing - 10 Strong Obser- vation) Briefly describe what was most remarkable. Average number of characters written 160.9 ± 107.3 	9.3 (1.0, 3-10)	
8. Did you observe any colors? Y or N (Circle one): If Yes (Y), briefly describe which colors, when and where you observed them. Average number of characters written 62.6 ± 48.4	90.4% Yes (169)	
 Describe any other feelings or perceptions during the session relevant to this pilot study (text only). Average number of characters written 84.8 ± 72.5 	NA	
10a. Please share any other observations that you wish below in the form of drawings. (This question was used for practitioners $1-4$) Average number of characters written 142.8 ± 306.1	NA	
10b. Characterize the degree of receptivity within the participant to receive the healing: (0 No Receptivity - 10 Highest Receptivity) (This question was used for practitioners 5–17)	9.4 (1.2, 1-10)	

Data analysis

The data included for the qualitative analysis were free-responses from questions 3, 4, 5, 7, 8, 9, and 10a. Thematic qualitative analysis was used to characterize the data. Thematic analysis consists of six steps: familiarization, coding, generating themes, reviewing themes, defining and naming themes, and reporting. Different approaches can be used for these steps. Overall, an "emic" approach was used

because of the reliance on the *seer*'s perspective as the main source of data. That is, an emic (insider) approach describes phenomena from the perspective of someone who is themselves engaged with the phenomena, which is in contrast to an "etic" (outsider) approach, which is from the perspective of an outsider looking in.²² As an example of how this influences the results, the vocabulary the *seer* used to describe their observations are maintained. The reader will notice the frequent use of the term "energy." Energy is used by the *seer* not as it would be used in physics to denote the capacity for doing work as potential, kinetic, thermal, electrical, chemical, nuclear, or other forms but as a felt energetic state that had various characteristics they could apparently perceive and describe.

While there have been studies evaluating the energy medicine practitioners perspective of healing, ^{23,24} no prior literature exists about *seer* perspectives, and thus, the data were coded using an inductive approach. ¹³ This involves allowing the data to determine the themes, versus a deductive approach, which involves coming to the data with preconceived themes that are expected to be found based on previous studies. Because the seer completed the worksheet while also giving their free-responses, they may have been biased by the wording and concepts in those questions.

Three project team members trained in qualitative research methods by the project team leader performed the following steps for the familiarization phase of the analysis:

- 1. Read through everything once in the assigned datasets to familiarize yourself with the data. Do not take notes at this stage.
- Read through everything in the dataset again, this time taking notes on general observations and themes (keeping in mind the research questions).
- 3. Read through everything in the dataset again, this time generating a list of broad, potential "parent" codes.
- 4. Read through everything in the dataset a fourth time, this time generating more specific, potential "child" codes.

Codes were generated from this process. To maintain reliability across the coding process, the codes and coding processes were frequently discussed among the researchers. The codes were then refined and re-organized into parent and child codes, creating a structured codebook.

For this phase of the analysis, all study data were distributed between six project team members (including the original three) who coded the data in Dedoose using the structured codebook. Coding was iterative, and weekly meetings were held to discuss the coding process and edit the codebook if needed. An inter-rater reliability test performed prior to formal coding revealed excellent interrater agreement (pooled kappa score 0.91 \pm 0.09). 25 After coding the entire dataset, the project team leader and principal investigator reviewed, redistributed, and merged redundant codes.

In the generating themes phase, codes are reviewed and patterns are identified among them. Themes are usually broader than codes, and oftentimes multiple codes are combined into a single theme. This phase was conducted by the project team leader, who also reviewed, defined and named the themes.

Finally, the data were analyzed by the project team leader using qualitative descriptive analysis.²⁶ This process aims to construct a framework for the mechanism of energy medicine according to the specific "insider" perspective of a *seer* observing the sessions. Theme summaries are provided with representative quotes for the descriptive analysis. Quotes from the *seer*'s original notes, which were written in shorthand, were edited with articles, punctuation, and extra clarification where needed to support the flow of reading and reader comprehension.

Content analysis was performed by assigning each code a 0 or 1 for each participant, representing whether the code was endorsed on that participant's worksheet. This approach was used to prevent

biasing of codes, because the *seer* often mentioned the same code multiple times in a given session (i.e., the *seer* was not directed to filter the number of times observations were noted based on actual frequency of observation). The number of occurrences is presented in parentheses after each code (Coded data are available in Open Science Framework).

The relationship between content analysis binary data and (1) baseline to post-session subjective pain score change and (2) baseline to three-week subjective pain score change was explored using two simple linear regression models with base functions of the R statistical program (R Core Team, 2020). There were 119 binary variables representing the 119 total codes and subcodes. Each binary variable had a 1 if the code was noted for that session, and a 0 if the code was not noted. All binary variables were converted to factor variables. Variables with a single level, that is they had 1 for all sessions or 0 for all sessions, were removed from the data resulting in 111 binary code variables. Variance Inflation Factors (VIFs) were calculated using the R package car,²⁷ and variables with VIFs greater than five were removed.²⁸ The VIF calculation measures how correlated independent variables in the model are which can affect regression results. Studentized residuals were extracted using the R package MASS²⁵ and visually examined for normality using histograms and QQ-plots. The studentized residuals were also assessed for normality using the Shapiro-Wilk, Kolmogorov-Smirnov, and Anderson-Darling tests.³⁰ Homoscedasticity was examined using residuals vs. fitted plots and the non-constant variance test. Residual autocorrelation was assessed using the Durbin-Watson test as well as ACF and PACF plots of studentized residuals. All analyses were performed using the statistical programming language R.

Results

The worksheet questions are listed in Table 1. Average scores and standard deviations are listed for questions that were scored on a sliding scale from 0 to 10. The total percent of participant sessions scored "Yes" are listed for Yes or No questions. The average number of characters and standard deviation of the *seer* free responses for those questions are listed as well.

Thematic analysis

The major themes present in the data were:

- 1. Experience of the Practitioner
- 2. Experience of the Participant
- 3. Space and Other Beings
- 4. Participant-Practitioner Relationship
- 5. Healing Process
- 6. Attributes of Energy

Qualitative descriptive analyses for each theme are included in the following sections, along with some representative quotes from the *seer's* notes in italics. Content analysis sums are reported as numbers in parentheses that is the number of participant sessions for which the code was noted out of 187 sessions. Also, each quote is followed by a practitioner/participant number. The first two digits represent the practitioner number (1 through 17) and the last two digits represent the participant number. For example, (3–15) listed after a quote denotes the fifteenth participant treated by practitioner number three.

Theme 1: the experience of the practitioner

The *seer* described their perceptions of the practitioners' experience of the sessions. They noted the method or type of healing used by the practitioner and their relationship to "energy" and the

participant. The practitioners described using energy as a tool to heal the participants by affecting and manipulating the energy present in the space and associated with the participants' bodies (40). The *seer* noted that the practitioners affected their own energy, as opposed to energy from elsewhere (24). The practitioners also appeared to be affected by the energy in the surrounding space, and by the energy of "non-physical" beings present in the space (14).

Four primary methods used by the practitioners to perform the healing were noted. One was by affecting or manipulating the energy within the participant and the surrounding area, which included transferring, moving, or changing that energy (42).

"The practitioner is connected to a powerful force of energy and floods this energy into the participant's head, (then) it moves to the participant's heart. The participant begins to release the energy of her feet. From her head to her souls (sp) of her feet (there is a) release of negative energy. The participant cries gently." (1-3)

A second method noted by the *seer* was physical touch, laying on of hands, or channeling the energy through the hands (28). It is important to note that practitioners may have used touch in the remaining 159 energy medicine sessions without the *seer* noting it because the *seer* was not asked to report on whether touch was used.

"The participant begins to release dark emotional possessed energy. The practitioner put (their) hands on the participant. Healing golden light streams into the participant, making held energy easier to be expanded/released out the body." (1–18)

The third method was using the voice, either through prayer, the breath, or speaking (26).

"The practitioner speaks soothingly to the participant who suffers (from) PTSD. In this compassionate environment, the participant receives healing energy and supportive information." (2-18)

The fourth method was the practitioners' use of intention, which was set at the beginning of the session, by visualizing, or by using guided imagery as a means of healing (20). It should be noted that all practitioners agreed to have the intention to alleviate pain for all the sessions. Any other intentions noted by the seer were based on the seer's perception.

"The practitioner sets the intention for the participant to be pain free." (5-7)

Theme 2: the experience of the participant

The attributes noted most frequently were how participants were affected by the energy present (61), the participants' own energy being affected (40), and their receptiveness or openness to the energy (67).

The *seer* described the participants as being affected by the practitioner and by ostensible non-physical beings in the room. The energy observed by the *seer* often entered the participants' bodies, provoked healing, or shifted within the participants.

"Light streams into her (the participants') body to release emotional darkness. The spine releases the energy of (other people)." (8–6)

"Pillars of light (were) present on the (right) side of the practitioner. The participants' mothers' energy was on the left side of the participant." (12-7)

The seer noted changes in the participant, specifically with their "life force energy," soul retrievals, karmic and subtle energies,

"changes in their DNA," and a wide range of emotional, spiritual, and physical energetic effects. The participants' energy might be blocked or unblocked during the session, and it was perceived as being present in the body in numerous ways. For example, the *seer* noted that some participants held old memories or other peoples' energy in their bodies, or were not living life fully, which affected their energy and well-being.

"The participant released an emotional blockage (pattern) that was still being carried in her: mind, body, (and) spirit." (3–5)

"(The participant's) spine was cleared of blocked energy - the left and right wrist released energy. (There was) integration of healing energy flowing throughout the body of the participant." (7–15)

The *seer* also noted their perception of the participants' feelings about the session, especially their receptiveness or openness versus doubt and hesitation regarding the practitioner and session. The *seer* expressed that the participants' willingness for healing played a large role in whether the session was effective.

"(There was an) open willingness of the participant to learn and receive a healing. The participant's perceptions open(ed) to see the bigger picture, that healing involves the whole body." (2–11)

"From the moment we (began), the openness the participant showed was very receptive to wanting (and) needing healing. There was a moment of tears as (the participant) felt she could let go of all she was holding and embrace her own truth." (6-10)

Likewise, hesitancy and resistance were noticed among some participants.

"In the beginning, the participant held hesitancy - just wondering what might happen and how this energy healing works. When (they) released this anticipation, the participant was able to receive energy from the healer." (12-2)

Theme 3: the space and other beings

The *seer* described how energy was present in the surrounding space, beyond the energy of the participants and practitioners themselves (93). This energy was observed as having various qualities such as heat and intensity, and various forms such as sound, frequency, vibration, and shapes (37), as being positive (9), as and having multiple dimensions (7).

The *seer* identified multiple types of ostensible non-physical beings in the room, such as guides or helpers for both the practitioners and participants (101), overtly spiritual beings (e.g., God, Supreme Being, Buddha, Angelic, Spiritual) (82), other spirits and beings (e.g., "small beings", "elder beings", "light beings") (20), spirits of other humans (e.g., deceased relatives, friends, ancestors) (23), and occasionally people from the participant's past life (2).

"As soon as the door closed and the session began, an angelic being made its warm pink energy know(n), it took its place just behind the participant's back. (There were also) other spiritual beings, the practitioner's guides entered the space at different times of healing." (4-6)

"The practitioner's angels' and guides' energy (were) present in different hues, ranging from bright white, golden white, (and) gold." (4-8)

The *seer* perceived that all of these purported beings played an active role in the session by entering or being present in the space (34), by helping, assisting, or teaching the practitioner or participants (19), by healing or affecting the participant (14), or by learning or observing the healing session (11).

6

"(A) spirit guide of the practitioner (was) present. A portal (was) perceived (in the space of the room). portal opens to shed more healing energy for the practitioner's use." (8–5)

"The practitioner's guides are present and observing, sending rays of light at appropriate times throughout (the healing session), and changing the frequency of the healing energy..." (4-9)

"The practitioner's guide has a presence in the space during the healing. The participant's own spirit guide was present and engaged in healing. The guide knelt in front of the participant and reached out to her left hand." (2-1)

Theme 4: the participant-practitioner relationship

The *seer* described positive energetic and interpersonal connections between the participant and practitioner using terms such as "coherence," "entrainment," "heart-to-heart" connections (135), and conversation or rapport (32).

"Coherence was happening throughout the session - with trust on her (the participant's) part - coherence increased." (17–2)

"They (the participant and the practitioner) entrained, with circulatory energy moving/transmitted between them, heart to heart." (2-1)

The participant's trust in the practitioner and their general calmness throughout the process were often noted. There was an implication that this level of connection and ease between the two was relevant for an effective session, as the participant needed to be guided by the practitioner through the healing process. On rare occasions when there was a negative energetic (3) or interpersonal connection (1), the participants' hesitancy was often stated as the reason.

"Hesitation and unknowing of what to expect from the participant made coherence questionable." (17-8)

Theme 5: the healing process

The energy medicine healing appeared to take many forms and each participant was reported to have unique pathways for healing. The *seer* also identified multiple levels of healing in addition to a physical reduction of pain and discomfort, including energetic, emotional, and spiritual levels. Although the *seer* was not asked to report if effective healing had occurred, they explicitly noted that healing occurred (not necessarily related to hand or wrist pain) for 44 participants, and often alluded to healing by describing the healing process in detail (e.g., methods of healing under Theme 1).

Specific issues or causes ascribed to the participants' symptoms were numerous. Physical issues such as pain, discomfort, carpal tunnel syndrome, or other physical causes or diseases were mentioned for a majority of participants (129). Additionally, energetic issues such as "blocked energy," "held energy" in the body, "negative energy", or issues with the meridians within the body or the participant's "life force energy" were common (111).

"The participant's life force energy (was) activated - this energy cleared stagnant energy in the wrist(s), especially the right one." (17-8)

Spiritual issues related to chakras, karma, or past lives were also noted (90).

"participant (was) holding negative energy around the seventh chakra, with the spirit not fully in the body." (2-18)

Emotional and psychological issues, including "old patterns" that the participant was holding onto, negative emotions, traumatic

experiences, energy from other people that was stored in the participants' bodies, or a lack of self-awareness or self-acknowledgment were also described (63).

"Through the experience of "healing golden light" flowing into and around the participant who was bathed in light. (the participant was) able to release deeply held emotional energy." (1–18)

"practitioner guided the participant back in time (to the time) of his accident to retrieve the energy he left there. participant was deeply moved to be guided so gently and retrieve his soul energy in order to move forward in his life." (8–13)

Healing old trauma or wounds was a common observation.

"participant was receptive to certain/specific periods in her lifetime that created trauma, pain, (and) heartbreak, and released that energy." (3-14)

"(There was a) release of pain in the shoulder, down the right arm to the wrist, (with the) participant opening up to healing old wounds in the body." (2–5)

"The heart energy (was) balanced, (and the) heart meridians and pathway(s) to the wrist opened. The final step in healing created (an) image of a breaking wave - a metaphor for (an) old pattern (being) released." (11-6)

Of the five methods of healing noted, the most common was energy leaving the body, shown as release, removal or clearing of energy, and reduction of pain from the body (147). Balance of energy, observed through or described as alignment, grounding, integration, and restoration of energy, was the second most common (94). Energy moving through or changing in the body, including "covering" the body, transforming, shifting, or channeling, was the third most common (63). "Healing" as an explicit action was mentioned 33 times. Finally, the last two of the five methods of healing noted were energy entering the body, including flooding the body, and energy being retrieved from outside sources (19), and energy increasing in the body, including energy being activated, restored or raised (13). Of these methods mentioned, the methods used for each participant varied. That is, the practitioners did not always use the same method for all the participants they gave sessions to. The methods used were specific to the participant rather than to the practitioner.

"The participant's heart rate increased. Healing has begun - calming her nervous system. The practitioner calls awareness for the participant to enter the 5th dimension, (a) safe vibration of love and light. The participant follows direction to allow herself to the frequency." (1-3)

"The participant's right wrist (was) holding energy (which was) was dissipated at the end of the session." (1-9)

"Healing involved releasing negative energy causing a left side face swelling under her skin. The practitioner removed it (from) body, space, (and the) universe. . . " (1-12)

"The grounding in space increases as the practitioner uses earth energy... with golden energy for healing. When combined, this energy can charge through the participant and open blockages of energy." (7-17)

The seer noted that some healing was physically localized to certain body parts by including the following terms in their notes in descending order of occurrence: shoulders, arms, elbows, wrists, hands and fingers (174), head, brain, face, and neck (110), body systems (e.g., nervous system), muscles, and organs, including the heart (94), skeleton, bones, and the spine (36), trunk and elvis (35), body in general (31), and legs and the feet (31). Additionally, the right side of

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the body was noted as being affected (159) more than the left side (115).

Theme 6: the attributes of energy

The seer noted many attributes of energy, such as color, movement, and quality (heat, temperature, vibration, or frequency) (76). They also noted the attributes of light, as holy or spiritual (75), and depicted energy in various shapes and patterns, such as pillars or streams (35), and less often in terms of positive qualities such as calming or soothing (24), or negative qualities such as aberrant or annoying (8).

The energy of the space where the session occurred was also noted to be important and observed to have different functions and behaviors. The *seer* noted energy in the space moving in numerous ways, such as shifting, pulsing, and circulating, and moving between people in the room, within the participant's body, and among the ostensible non-physical beings present. The energy in the space was reported as manipulatable, in that it could be affected by anyone in the room, although primarily by the practitioner and with healing intention.

"The participant('s) heart (was) filling with healing, compassionate light energy."

"An energy of love fills the space." (3-10)

"As soon as (the) practitioner taps into his own healing energy & releases out his hand a wave of energy is sensed/felt in space, like that of a heavy/warm vibration." (5–14)

"The practitioner placed (their) hands above the participant('s) head, emitting healing energy." (5–14)

The energy's color and color quality were often noted, with descriptors including light, warm, brilliant or bright (105), healing (27), intense or potent (8), or shaped like orbs or rays (7). The color itself also had various functions, such as being present and moving in and around the bodies of people and ostensible non-physical beings present (48), being observed in the space (46), moving or changing (17), and healing the participant (10). The *seer* often ascribed meaning to specific colors, such as white as grace and spirit healing, gold and rose gold as healing, green as a "vehicle for healing by spirits," red as vitality and energy from the participant or others, blue as healing the memory, soothing and reducing inflammation, and pink as love. Colors mentioned in descending order were: Gold (126), White (83), Blue (77), Rose Gold (33), Green (30), Purple (25), Red (15), Pink (11), Yellow (9), Other (9), Orange (7), Rainbow (6), Silver (2), and Black (1).

"Beautiful blue rays of light filled the space as the practitioner continued her soothing healing with the participant." (2-8)

"(There is a) flash of violet in the participant's right wrist, pearlescent gold flowing in the participant's chakras, and a green flow into the heart..." (7-11)

"Rose pink energy stood behind the participant throughout the session..." (4-6)

"When the participant allowed and released energy, the space inside of her body and subtle energy field filled in with golden energy..." (3-16)

Color as an attribute of energy was noted in relation to the chakras, auras, and specific body parts of the participant and practitioner. The energy's color acted relationally between the participant and practitioner. For example, colors were observed in and could shift within the practitioners' and participants' bodies. They could also move between the two, for example through the practitioners' bodies and into the participants'. The energy's colors were often seen in the participants' bodies at places where there was pain or healing and could transform throughout the session.

Quantitative analysis

The codes of, Energy In Around People Beings, Emotional Interpersonal, Participant's Degree of Openness, Energy In Space, Final Outcome Effect, Specific Way of Healing Other, and Practitioner Relationship to Energy, were removed due to the VIF being > 5 in both models. In addition, Coherent Energy, Quality of Color Other, and Healer Affects energy were removed for the three-week change model. There was no evidence of violation of model assumptions for both models. The associations reported were present with the remaining covariates held fixed.

The regression model for baseline to post-session change in pain scores was not significant overall (F(70,111) = 1.16, p = 0.25). Two codes were associated with an increase in pain immediately after the session: energy color yellow and the seer recording specific times of import during the session. Four codes were associated with a decrease in pain immediately after the session: Moving and changing of energy, the energy color orange, practitioner technique of lightly touching participants, and ostensible non-physical guides or helpers present during session (Table 2). The regression model for baseline to three-week change in pain scores was also not significant overall (F (65,108) = 1.28, p = 0.14). Two codes were associated with a decrease in pain three weeks later: practitioner technique of lightly touching participants and having other ostensible non-physical beings reported by the seer as overtly spiritual (e.g. God, Supreme Being, Buddha, Angelic, Spiritual). Four codes were associated with an increase in pain three weeks later: energy in shapes, energy color red

Table 2Notable associations in the regression models.

	Change in Pain Baseline to Post-Session	Baseline to 3-Wk Follow-Up	Direction of Change
Moving and changing of energy	t = -2.4, $p = 0.018$		Decrease
Energy color Red	•	t = 2.4, $p = 0.02$	Increase
Energy color Orange	t = -2.5, $p = 0.015$	•	Decrease
Energy color Yellow	t = 2.2, p = 0.033	t = 2.3, p = 0.026	Increase
Energy in Shapes	-	t = 2.0, p = 0.05	Increase
Lightly touching participant	t = -2.5, $p = 0.015$	t = -2.0, $p = 0.05$	Decrease
Non-Physical Beings: Guides or helpers	t = -2.8, $p = 0.006$	-	Decrease
Non-Physical Beings: Overtly Spiritual (e.g., God, Supreme Being, Buddha, Angelic, Spiritual)	-	t = -2.3, $p = 0.024$	Decrease
Non-Physical Beings: Helping, assisting, teaching		t = 2.1, p = 0.04	Increase
Seer reporting specific times	t = 2.4, p = 0.018	-	Increase
Participant energy affected	-	t = 2.8, p = 0.006	Increase

Note: The *p*-values listed are unadjusted. While the *p*-value for these associations were below a 0.05 threshold for significance in the model, when adjusting for multiple comparisons using the False Discovery Rate none remained significant.

and yellow, the participant's energy being affected, and ostensible other non-physical beings helping, assisting or teaching in the session. The associations for both models did not remain significant after correcting for multiple comparisons with False Discovery Rate²² (see supplemental data for detailed regression model tables).

Discussion

The answer to the first research question was revealed through analyses of the seer's notes taken while observing energy medicine sessions. Their perceptions about how energy medicine works can be summarized in the following main points: 1) Physical symptoms in the participant can be caused by multiple etiological origins, including physical, emotional (especially traumatic), spiritual, and energetic, 2) The relationship between the participant and practitioner is important to the healing process, 3) The healing process is unique to the individual rather than being a fixed method performed by the practitioner, 4) Energy exists in the space within and between the participant and practitioner, and is manipulatable, 5) The practitioner affects this energy, either alone or with assistance from ostensible non-physical beings, and through various techniques, with the intention of healing the participant, 6) Energy has the characteristics of action, movement, color, intensity, shape, meaning, and purpose or intention, and 7) energy's characteristics change as the energy medicine session ensues and perceived healing occurs. This description of healing and energy aligns with other schools of thought on energy healing and studies evaluating energy medicine practitioner's experience of healing,²⁴ and is likely informed by the *seer's* training and experience.^{31–33} It may also have been biased by the worksheet questions that were being completed at the same time as the freeresponse descriptions. For example, the key tenets of energy medicine practitioners' worldview were summarized in a comprehensive review that closely mirror our seer results: "the existence of a universal life force or vital energy flowing through and available to all beings; the existence of a subtle energy system or biofield that interpenetrates the physical anatomy of the human body and extends outward beyond it; the idea that in ill health, the human energetic field is out of balance or congested, free flow is blocked, which diminishes the normal self-healing capacity; the belief that the practitioner can detect abnormalities in the energy system, sometimes before physical manifestations, and restore the capacity for self-healing; the contention that the practitioner's conscious healing intent and compassion are essential to the effectiveness of therapy; and the assertion that the healing outcome is not dependent on the client's beliefs."²³

The second research question - do any of these observations explain changes in the participants' subjective pain? - was less clear. The associations revealed in the regression models did not remain significant after correction for multiple comparisons. With this caveat in mind, several associations between the *seer's* reports and the participants' pain relief stand out and may prove useful in designing future studies.

Of particular note, the *seer* reporting the color yellow was associated with an increase in pain symptoms in both the post-session and three-week follow-up. This association may represent a corroboration of the tenet found in subtle energy texts (e.g., The Subtle Body: An Encyclopedia of your Energetic Anatomy by Cyndi Dale) asserting that yellow relates to the intellect and can represent overemphasizing "certain mental ideas or beliefs to create falsehoods or judgments." Also notable was the frequent perception of ostensible non-physical beings supporting the energy medicine sessions. Having guides/helpers or overtly spiritual beings (e.g., God, Buddha, Supreme Being, etc.) noted in the session was associated with pain relief immediately after the session and three weeks later. This observation is consistent with a previous report regarding ostensible non-physical beings supporting therapeutic relationships and may serve as a guidepost for future studies. For example, one mixed

methods study on mediumistic and psychic experiences found that participants received information from multiple sources including guides/angels, non-specific discarnates, and Source/universal.²⁶ Energy medicine practitioners have also commented that they must connect with "God, divine love, spirit, the universal life force, or the earth's energy" or noted that their healing "comes directly from an intervention of God, a mediation of spirits, or the assistance of other external agents."

Another interesting association was found between the apparent efficacy of physical touch by the practitioner, which was associated with pain relief immediately after the session and three weeks later in the regression models. Touch is known to be therapeutic in general. For example, numerous studies have demonstrated the beneficial effect of massage for a variety of conditions such as pain in people with cancer, ³⁴ pain, anxiety, and depression in people with fibromyalgia, ³⁵ and carpal tunnel syndrome. ³⁶ Healing Touch is energy medicine modality that uses touch with some positive clinical outcomes especially with health related quality of life. ³⁷ Therapeutic Touch is another energy medicine modality that has shown positive benefit for pain also. ³⁸ Future controlled studies will determine whether touch plays a pivotal role in the mechanisms underlying energy medicine (e.g., directly mediating or enhancing the effects) or whether touch simply enhances the placebo effect through human contact.

Only one seer was asked to participate to reduce heterogeneity of responses and to help ensure continuity of methods for the primary objectives of the parent pilot study. Despite this, the primary limitation of this study is that the data was derived from one person's subjective experience in one setting. The seer's observations were likely biased by their energy medicine education. For example, the seer in this study mentioned that some participants had possessed energy. Other seer's who do not have this concept in their training may have observed something different. All the perceptions noted by the seer are based on their filter that is based on their training, beliefs, and experience. Without additional seer's or in some other way verifying what the seer in this study was observing, we have no way of knowing the veracity of their perceptions. Many of the seer's notes were also presented without context. For example, the seer notes that one participant's mother's energy was on the left side of the participant without including any context for why they perceived this. Future studies focusing on research questions regarding extended seeing and energy medicine should include multiple seers observing the same energy medicine sessions and correlating their observations.

The seer also seemed to have a positive skew toward reporting. All the averages were above nine on a scale of 0-10 with 10 being the highest rating, as indicated by the low variability and very high averages on the quantitative rated worksheet questions. Standard deviations on these questions were between 1 and 1.4 and all the questions were rated 9 or above on a scale of 0-10 with 10 being the highest rating. Perhaps our selection of energy medicine practitioners with excellent anecdotal reports resulted in high performing practitioners that the seer rated high on our pre-selected scales.

Also, the analysis presented here did not include the practitioners' or participants' subjective experiences. The seer's perceptions would be strengthened had there been corroboration with the subjective experiences of the practitioners and/or participants. Rarely do studies evaluate the experiences of all involved in a healing encounter. The similarities and differences in their experiences could support improved outcomes, at the very least from aligned patient-healer interactions.³⁹ Future qualitative research could incorporate subjective reports from all parties involved in the healing session to evaluate the relationships between them.

Finally, as an exploratory pilot study, there was no sham-treated control group. Thus, there was no possibility of blinding the participant or the seer as to whether the participant was receiving an actual treatment. Control conditions are especially important in complementary and integrative medicine studies where placebo effects can play a

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pivotal role.⁴⁰ The parent study did evaluate participants' subjective credibility and expectancy of the intervention and found no credibility or expectancy effect on pain improvements (See accompanying paper in this issue). Future studies would include an active control condition where placebo effects could be further tested.

Conclusion

Energy medicine and extended human capacity "seeing" are emerging research areas and, considering the paucity of information on how energy medicine works, mixed-method approaches in multiple disciplines are warranted. The results of this study, at the intersection of energy medicine, extended human capacities, and hand and wrist pain may be useful in discussing and planning future research in this area of health and healing.

Repository

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Author contributions

Helané Wahbeh - Conceptualization, funding acquisition, methodology, formal analysis, writing — original draft preparation, review & editing

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.explore.2020.10.006.

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