

Touch Unveiled: Navigating the Power, Potential and Prohibitions of Touch Across Therapies

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Abstract: This comprehensive review of 60 research papers spanning from 1940 to 2020 delves into the multifaceted role of touch across developmental stages and in therapeutic contexts. It examines diverse therapies, including massage therapy (Catalonia, Subtle Touch, Fractional Decompression), Psychobiological Approach to Couples Therapy, havening (Amygdala Repotentialization Therapy), Somatic experiencing therapy, canine-assisted therapy, body-oriented therapy, Emotional Freedom Technique, touch in CBT, and touch in mindfulness. The study also investigates touch's effectiveness in addressing disorders such as Dementia, Alzheimer's, PTSD, Depression, and Anxiety. It scrutinises gender and expertise in touch therapy, particularly in the Indian context, while considering appropriateness for regressed patients and survivors of sexual abuse. The research explores the complexities surrounding touch in therapy, focussing upon factors like fear of misconduct, the impact of past experiences, cultural variations, and ethical principles as outlined by the American Psychological Association. Despite ongoing debates, the paper concludes that touch holds potential for improving interpersonal relations and therapeutic success, emphasising the need for further applied exploration.

Keywords: Touch; Touch in Therapy; Therapeutic Touch; Embodied Psychotherapy

Forget about 'Netflix and chill', it's all about 'Hugs and Healing' for real relaxation. Or is it? Touch, often termed the fifth sense, is intricately linked to our skin, our body's largest and oldest sense organ (Montagu, 1971), experienced from prenatal stages, through various forms of tactile stimulation, such as cuddling, breastfeeding, and interpersonal contact, throughout life (Dieter et al., 2003; Lagercrantz et al., 2009). The significance of touch spans various domains. Developmentally, it serves as a vital form of communication from infancy, nurturing a secure attachment between a child and parent. Research by Bowlby in 1952 highlighted that infants deprived of touch faced mortality rates 30-100% higher. Furthermore, touch plays a crucial role in early development, fostering feelings of safety, security and love in children, with its absence linked to significant cognitive and neurodevelopmental delays (Bowlby, 1988; Clulow, 2001; Gillath et al., 2008; MacLean, 2003). Kaler and Freeman's study in 1994, focusing on orphan children, revealed that none of them functioned cognitively at their expected age levels, underscoring the profound impact of touch on psychological development.

Touch in psychotherapy has been cautiously labelled a "slippery slope," with ethical concerns prioritizing avoidance of potential harm over recognizing its therapeutic potential (Fosshage, 2000; Kertay & Reviere, 1998). While literature highlights touch's capacity for healing and fostering deeper connections between therapists and clients, academic attention to its benefits remains relatively scant, despite its role in communication and rapport-building within therapeutic interactions (Ogden, 2006; Rothschild, 2000). Ethical touch is generally viewed as non-erotic and based on clinical judgment, serving to enhance therapeutic engagement rather than constituting therapy itself.

Therapeutic touch, known for its positive impact on bio-behavioural markers, offers significant benefits in reducing postoperative symptoms and stress levels. Research by Coakley and Duffy (2010) showcases its efficacy in lowering cortisol levels, the "stress hormone," thereby promoting better health outcomes. Additionally, neurotransmitters like dopamine, serotonin, and oxytocin, released through nurturing touch, further

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contribute to psychological well-being, exemplified by decreased amygdala reactivity and increased feelings of love and relaxation (Anderson et al., 2014; Ellingsen et al., 2016). Furthermore, empirical evidence from a 2008 study highlights the biological benefits of therapeutic touch in reducing pain and anxiety levels, as demonstrated through lymphocyte subset analysis (McGill Pain Questionnaire; Visual Analogue Scale for Anxiety). In the Humanistic and Gestalt perspective, touch is advocated as a means of fostering genuine therapeutic relationships, facilitating personal development and enhancing communication. Gestalt therapy, pioneered by Fritz Perls, integrates touch to connect individuals with their bodily sensations, emphasizing natural and spontaneous interaction (Imes, 1998; Perls, 1973). Similarly, the Humanistic tradition promotes person-to-person contact as a crucial aspect of therapy, as evidenced by touch-oriented techniques in encounter groups during the 1960s and 1970s (Rogers, 1970; Stenzel & Rupert, 2004). Contrastingly, within the psychodynamic perspective, touch is historically intertwined with debates concerning its therapeutic efficacy and potential risks. Freud initially utilized touch to induce catharsis and access repressed memories but later abandoned its use due to concerns over erotic transference (Breuer & Freud, 1957). While Anna Freud emphasized the developmental importance of touch for infants' sense of security and attachment, contemporary psychoanalysts often avoid touch, influenced by Freud's cautionary stance (Freud, 1965). However, neo-Freudians and object-relation theorists acknowledge touch's role in forming secure attachment styles, suggesting its consideration in therapeutic practices to address attachment-related issues (Ainsworth, 1978; Anisfeld et al., 1990).

Rationale

The rationale behind this paper is to tackle the enduring debate surrounding the incorporation of touch within therapeutic environments. Given the lack of definitive guidelines and agreement on whether touch should be endorsed or restricted in professional therapeutic settings, there is a pressing need for a thorough examination. The paper seeks to offer clarity and direction for therapists and policymakers alike, aiming to improve the overall well-being of individuals undergoing therapy.

Objectives

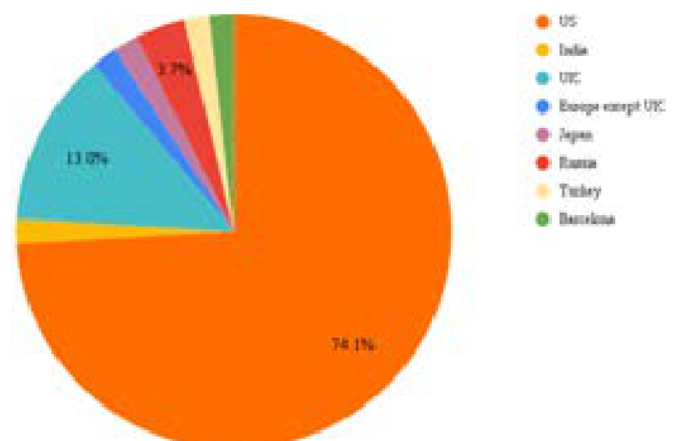
This paper aims to examine the efficacy of a range of touch-based therapies in enhancing mental and emotional wellness. Additionally, it seeks to explore the varied applications of touch in therapy, encompassing body-oriented interventions, to assess its therapeutic effectiveness in promoting mental well-being across different disorders, fostering a comprehensive understanding of the role of touch in counselling and therapeutic practices. Furthermore, it investigates the diverse factors influencing restrictions on physical contact in therapy with the goal of enhancing understanding for ethical and culturally competent psychotherapeutic practices

Method

60 research papers were reviewed from the period 1940 to 2021 with most research papers published in the two decades- 2000-2020. Databases referred to were PubMed, JSTOR, ScienceDirect, PsycINFO, APA PsycNet, National Institute of Mental Health, among others. Indices and search terms used were touch in therapy, touch therapy in India, role of gender in touch, role of culture in therapy, massage therapy, perspectives of touch in therapy, effectiveness of touch in therapy, touch and disorders, ethics for using touch in therapy, significance of touch, touch deprivation, types of touch therapy, touch and COVID, touch and AI, among others.

Figure 1

Country-wise distribution of reviewed papers



Results

Based on the papers reviewed, the authors were able to understand touch and its utility in clinical settings under the following headings presented:

Modalities of Touch in Therapeutic Approaches

Massage Therapy

Hippocrates, around 400 BC, introduced the concept of "medicine as the art of rubbing," now recognized as massage therapy. Unlike relaxation techniques, massage therapies do not require cognitive engagement. Since effective massage therapy only necessitates moderate pressure (Diego et al., 2004; Field et al., 2004), they tend to be suitable for individuals with attention deficits, including children (Field et al., 2007).

Catalonia, a structured touch therapy, induces the orienting reflex (OR), positively impacting affective and cognitive states. Developed by Petho Sandór during World War II, Catalonia involves a sequence of 10 light touches on distinct tactile points, regulating sympathetic and parasympathetic responses (Farah, 2017; Sandór, 2019). Another technique, Fractional Decompression, gradually releases pressure through touch, benefiting patients unresponsive to verbal psychotherapy (Delmanto, 2008).

Research shows massage therapy's effectiveness in reducing prematurity in pregnancy, improving visual attention task performance and intelligence test scores, alleviating anxiety and stress hormones in children, mitigating chemotherapy-related fatigue and anxiety and reducing uncontrolled movements in Parkinson's disease (Field et al., 1999; Cigales et al., 1997; Hart et al., 1998; Diego et al., 2002; Karagozoglu & Kahve, 2013; Hernandez-Reif et al., 2002). In various medical contexts, massage therapy emerges as a valuable element for patient well-being and stress relief.

Psychobiological Approach (PACT)

To treat couples in couple therapy, Solomon and Tatkin (2011) created the psychobiological approach (PACT). Inter-partner contact is used in this method during a couples counselling session. Eye contact, holding hands, moving towards and away from each other and

direct embracing are all PACT therapeutic techniques. These exercises are meant to encourage contact and connection between the couple while also helping them feel at ease being close to one another.

Havening / Amygdala Repotentialisation Therapy

Nurturing touch, as exemplified in Dr. Ronald Ruden's Havening technique, positively influences subjective well-being by promoting the healthy processing of traumatic events and distressing memories (Ruden, 2010). Havening, also known as Amygdala Repotentialisation Therapy, addresses the role of biological structures in emotional and behavioural responses rooted in encoded traumatic memories.

During Havening, gentle touch on the face, palms, and arms, coupled with bringing the distressing event to awareness, induces biological changes leading to adaptive processing by the amygdala (Gordon et al., 2013). This touch-induced response involves the release of dopamine and oxytocin and promotes a shift in attention and perception through change in alpha activity (Ellingsen et al., 2016; Portnova et al., 2020).

Ruden suggests that touch induces delta activity, activating basic homeostatic and primal motivational processes, inhibiting amygdala activity when confronting traumatic events (Knyazev, 2012). However, recent research by Sumich and colleagues (2022) yielded mixed findings, with site-specific decreases in gamma waves post-Havening but inconclusive support for increased delta activity. Increased beta activity was noted, potentially linked to implicit cognitive processing of traumatic events. These nuances highlight the complexity of understanding the impact of Havening on brain activity and psychological states.

Touch in Cognitive Behavioural Therapy

The brain can still learn, develop, and adapt to new experiences and information of touch since the human brain keeps its plasticity for a lot longer than was originally thought. Cognitive behavioural therapy shows us that altering habits and attitudes through repetitive cognitive restructuring is achievable. Basic cognitive behavioural principles support the idea that, like any behaviour, the more we touch, the more we will

grow accustomed to touch. The client might be instructed, for instance, to touch others more frequently in daily life. Cognitively, the client's fears of touch can be reality-tested to see if they are really based on real risk or merely the residue of childhood attachment wounds. Talk therapy targets the cognitive functions of the brain, but for long-lasting improvement, the brain must undergo several changes (Lucas, 2012).

Somatic Experiencing Therapy

For those with anxiety or depression, self-touch serves as a comforting coping technique rooted in Somatic Experiencing therapy. In a somatic exercise, clients close their eyes, assume a comfortable position, and embrace themselves. They identify a soothing position, often reminiscent of a caregiver's touch and are encouraged to recreate it during moments of distress. This somatic position exercise aids in coping with stress and provides a psychobiological relaxation strategy for use beyond therapy sessions.

Touch, skilfully applied by a trained counsellor, emerges as a significant intervention for trauma treatment within the framework of Somatic Experiencing therapy (Berendsen, 2014). The counsellor's sensitive use of touch helps traumatised clients regain self-regulation by adhering to safety guidelines and understanding nervous system regulation and the threat response cycle.

Touch in Mindfulness

In focusing therapy, a mindfulness-based approach, patients enter a meditative state to identify the physiological manifestations of their problems (Berendsen, 2014). They close their eyes, relax, and place their hand on a troubling body part (such as the throat for anxious clients who fear confrontation). In this case by asking the client to describe the sensation, the therapist guides clients to process the source of anguish related to self-worth and facilitates a portion of their own wound healing by exploring the needs of that distressed part through a psycho-biological mindfulness-based touch approach.

Touch in association with Canine-Assisted Therapy

When clients interacted with and touched puppies in canine-assisted therapy, it was found that their moods

improved. The ability to interact with animals can be a valuable tool for stress management. Clients who have previously had pleasant interactions with animals will find this resource to be especially valuable. Giving clients access to animal-assisted activities and counselling could be a low-cost resource to support them and encourage a stronger sense of well-being (Davis et al., 2017).

Body-Oriented Therapy

Childhood trauma affects a significant proportion of individuals, with therapy playing a crucial role in mitigating its impact. The Substance Abuse and Mental Health Services Administration (SAMHSA) reports that by age 16, over two-thirds of children experience at least one traumatic event. Therapy, addressing issues early on, can reduce the risk of chronic illnesses and mental health problems. Cynthia Price's case study on "Body-oriented therapy as an adjunct to psychotherapy in childhood abuse recovery" emphasises the value of body-focused therapy in aiding survivors of childhood abuse, particularly in conjunction with psychological care (Price, 2005).

Emotional Freedom Therapy (EFT)

Emotional Freedom Technique (EFT) combines exposure and cognitive therapies with acupressure to treat psychological distress. Developed by Craig and Fowlie (1995), the protocol involves acknowledging a distressing event and pairing it with self-affirming statements while tapping on acupressure points. This down regulates limbic system activity, relevant to memory and stress response. EFT is effective for anxiety-related disorders and post-traumatic stress disorder (PTSD), as demonstrated in a study by Church and colleagues (2012) on psychologically or physically abused adolescents. A single session significantly improved post-test scores, reducing intrusive and avoidant symptoms.

Touch in Therapy: Correlates of Gender and Expertise

Therapeutic touch practices among psychologists vary considerably. Stenzel and Rupert (2004) surveyed 470 psychologists practicing adult individual psychotherapy, revealing a predominant reluctance

toward physical contact with clients. Approximately 90% of respondents reported seldom or never engaging in touch during sessions, except for the customary handshake. The frequency of touch correlated with therapist and client gender, theoretical orientation, and prior touch experience.

In the Indian context, Joshi et al. (2010) surveyed 61 counsellors and therapists regarding attitudes toward and frequency of touch use in therapy. Gender played a significant role, with female counsellors exhibiting a more positive attitude toward touch and employing it more frequently than their male counterparts, despite experience levels. These gender differences stem from socialization and cultural norms, with men often perceiving touch as less helpful compared to women. Research indicates that same-sex touch avoidance is more prevalent among men due to historical homophobic norms, while women tend to engage in more frequent physical contact.

Female therapists tend to utilize touch more frequently than males, a trend supported by previous studies (Cowen et al., 1983; Holroyd & Brodsky, 1977; Pope et al., 1986). Touch is often associated with femininity, empathy and care, aligning with societal gender roles. Conversely, men may suppress emotions, particularly in the presence of other men, to uphold masculine ideals, leading to discomfort with male-to-male touch.

Older male counsellors may exhibit more favorable views toward touch, as touch from older males may be perceived as less threatening. Regardless of gender, clients may feel vulnerable in the face of touch, particularly in male-to-male interactions, where power dynamics are more pronounced.

Effectiveness of Touch-Based Interventions in Treating Disorders

Counselling aims to foster relationship healing, particularly addressing attachment wounds stemming from touch deprivation or inconsistency in childhood experiences. Drawing from psychoanalytic and developmental psychology, counsellors educate clients on techniques to address attachment wounds and cultivate a secure attachment stance with oneself and significant others. These interventions range from

learned techniques, such as those in cognitive-behavioural therapy, to experiential methods reintroducing touch and attachment as safe experiences.

Pinson (2002) conducted an exploratory study interviewing four psychoanalytically oriented therapists who incorporated touch in therapy sessions. The study revealed that therapists primarily based their decision to touch on the specific needs of their patients and their individual circumstances, rather than on their therapeutic orientation or general attitude towards touch. Touch was observed to provide patients with a sense of safety, presence, and encouraged growth and integration, thereby reducing their suffering.

Touch deprivation has been linked to neurological dysfunction and developmental disorders such as autism and ADHD. Research indicates that early touch deprivation, particularly in institutional care settings with minimal physical contact between children and caregivers, leads to deficits in sensory stimulation and sensitive caregiving. Casler (1965) demonstrated that infants receiving additional tactile stimulation exhibited higher developmental scores.

Goldfarb (1943) compared foster children who experienced institutionalisation in their early years to those who did not, finding a higher prevalence of aggressive behaviour disorders among the former, attributed to a lack of parental touch during infancy.

Lowrey (1940) observed negative behavioural effects, including excessive crying, stubbornness, difficulty eating, aggression and shyness, in children raised in hospital settings, where touch was lacking, suggesting adverse consequences of touch deprivation.

Dementia & Alzheimer's Disease

Detrimental cortisol levels are prevalent among individuals with Alzheimer's disease (AD). Woods and Dimond (2002) explored non-invasive techniques for regulating cortisol levels in AD patients, highlighting the positive impact of therapeutic touch. Woods et al. (2009) investigated the effects of therapeutic touch on patients with dementia exhibiting behavioural symptoms and elevated cortisol levels. Their study involved delivering therapeutic touch to the

experimental group on the neck and shoulders twice daily for three days, while the control group received a placebo treatment. Findings indicated that therapeutic touch effectively mitigated behavioural symptoms and reduced cortisol levels in dementia patients.

PTSD

Experiences of trauma often result in a dissociation of the mind-body connection. Krystal (1988) highlighted the impact of severe trauma, such as that experienced by concentration camp survivors, which can lead to blunted affect (a diminished ability to comprehend and interpret emotional cues from bodily sensations). Neurobiological studies indicate deactivation of the Broca's area, the brain's expressive speech centre, in individuals with PTSD. Considering this, body-oriented techniques offer a promising avenue for integrating somatic and psychological experiences, enhancing bodily sensations among trauma survivors.

Finneran (2009) conducted a mixed survey study involving 45 individuals with PTSD or traumatic experiences, exploring the efficacy of self-selected body-centred techniques involving therapeutic touch. The findings revealed that these touch-based interventions effectively reduced distress and promoted integration of mind-body relations, particularly among those who experienced trauma within interpersonal relationships.

Depression

Field et al. (1996) found that children exhibiting symptoms of PTSD and depression post-Hurricane Andrew showed reduced anxiety, depression, and symptom frequency after receiving massage therapy twice a week for a month, compared to a control group exposed to a relaxation video only. This intervention bolstered the children's self-image, as reflected through their self-drawings. For instance, a girl on the first day drew a small drawing with no facial features, and the same girl on the last day drew a birthday party with friends. This study underscores the therapeutic benefits of touch beyond interpersonal trauma, extending to traumatic experiences like natural disasters.

Prohibitions and Contraindications to the Use of Touch in Therapy

The major reasons for imposing restrictions on physical contact in therapy include fear, concerns about risk management such as potential misinterpretations and legal consequences, ignorance, adherence to traditional psychoanalysis' emphasis on therapist neutrality and rigid boundaries, the influence of gender roles, where some feminists argue that male therapists may disempower female clients due to inherent power dynamics in patriarchy and biases held by therapists or clients against touch (Phelan, 2009). The apprehension centres on the fear that touch could lead to inappropriate sexual contact or allegations. Lazarus and Zur (2002) argued that the sexualisation of touch is ingrained in Western culture and reflects faulty beliefs in psychotherapy. Carere-Comes (2007) suggested that touch would be widely accepted if not for the taboo surrounding the management of erotic transference and countertransference. The fear of sexual misconduct is justified, as demonstrated in a survey where 44% of psychologists reported clients disclosing sexual contact with previous therapists (Stake & Oliver, 1991). Ethical complaints also frequently cite sexual contact with clients as a top reason (Report to the Ethics Committee, 2006).

The impact of patients' past experiences significantly influences their responses to touch. For instance, a woman who has suffered sexual abuse from her father might harbour apprehensions about appropriate touch from a male therapist or anyone perceived as having authority, regardless of gender. Touch is also emotionally disorienting for individuals with PTSD driven by interpersonal trauma, as was demonstrated by Strauss and colleagues in 2019. Two separate studies examined how different forms of interpersonal and impersonal touch were perceived and processed in PTSD patients versus healthy controls. Patients suffering from PTSD demonstrated a strong dislike for touch as well as interpersonal stroking (skin-to-skin) whereas touch was appreciated by the control group.

Another factor influencing the appropriateness of touch, as identified in literature, is the client's expectations and the contextual setting. In an exploratory study by Suiter and Goodyear (1985)

involving 120 counselors and 120 clients in a military mental health clinic, negative perceptions arose when semi-embraces were employed. The authors suggested that this negativity could be attributed to touch introducing more intimacy than desired by the recipients, compounded by the stigma associated with touch in military environments. Contraindications to touch also stemmed from clients' attitude toward touch and their cultural and religious beliefs. In certain cultures, the utilization of touch in psychotherapy is more freely embraced. In Europe, for instance, the incorporation of body therapies with a focus on touch is more positively acknowledged (Rowan, 2000). Asian and Mediterranean cultures diverge significantly on their perspectives and manifestations of touch. Asian cultures generally lean towards a non-touch-oriented society, avoiding overt displays of affection, touching, or prolonged body contact. However, certain Asians, particularly Koreans and Filipinos of the same sex, may be seen walking hand-in-hand, a gesture symbolizing friendship. In contrast, Mediterranean and Middle Eastern cultures engage in close talking and regular physical contact. European countries exhibit a mix of cultural views on touch; Germany tends to be non-touching, while Italy embraces touch as commonplace and even expected. Regardless of broader cultural perceptions of touch, its application in psychotherapy varies. For instance, although Asian cultures typically avoid public displays of touch, exceptions exist, as seen in certain Japanese groups open to therapies incorporating rhythmic touching, especially in dance, facilitating healthier and more supportive interactions for patients (Sakiyama & Koch, 2003). Psychotherapists must be cognizant of cultural and cross-cultural understandings of traditions, particularly regarding touch. This entails recognizing not only what is acceptable in a culture overall but also what aligns with an individual's preferences within that culture, considering the variations therein. Merely identifying with a particular culture doesn't imply adherence to all assumed customs associated with that culture.

Ethical Considerations

Fuller (2006) has examined the concept of touch in alignment with the fundamental principles outlined in the American Psychological Association (APA) 2003 Code of Ethics. The APA code underscores

beneficence and non-maleficence as primary ethical considerations in professional conduct. Other pertinent principles in the APA code are informed consent, justice, integrity, fidelity, responsibility and respect for the rights and dignity of the client, including their autonomy to refuse any intervention. Fuller contends that for any use of touch to be deemed ethical, it must adhere to these principles. Benjamin and Sohnen-Moe (2003) propose that employing touch responsibly necessitates a comprehensive understanding of core psychological concepts, including the meaning of the therapeutic relationship, transference, countertransference, power differentials, projection, repression, and denial.

Limitations and Future Implications

While the paper holds strengths, it is not a meta-analysis and lacks primary data collection. Originality and a fully balanced perspective may be limited. Ethical concerns in cultural contexts are acknowledged and the overall scarcity of research in the field, especially in experimental quantitative studies, poses challenges. The role of extraneous and mediating variables remains understudied, suggesting opportunities for future research refinement.

Looking ahead, this paper prompts considerations for future research and practice. Exploring touch in therapy within diverse cultural contexts is crucial, acknowledging the potential variations in its interpretation. There is a need for the development of a more comprehensive code of conduct by prominent professional organisations, such as the American Psychological Association, the American Counselling Association and others, to ensure ethical and culturally sensitive practices. Moreover, the organisational sector could benefit from further exploration of touch's potential role in building motivation and enhancing efficiency, opening avenues for practical applications in diverse settings.

Conclusion

The COVID-19 lockdown revealed the profound impact of touch deprivation on mental health, particularly emphasising the significance of intimate touch (Mohr et al., 2021). Goodman and Teicher's (1988) nuanced perspective on touch in therapy

highlights its effectiveness. The emergence of Huggable, a therapeutic robotic companion (Stiehl, 2005), exemplifies innovative solutions using touch in comparative psychology. Despite its importance, touch in therapy remains insufficiently explored. This conclusion calls for future research to leverage technology and psychology advancements, aiming to deepen our understanding of the varied benefits and limitations of touch in diverse therapeutic contexts.

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