

Positive Massage for Couples' Wellbeing and Relationships: The Bridge between Positive Psychology and Massage

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How to cite this paper: Naruse, S.M. and Moss, M. (2019) Positive Massage for Couples' Wellbeing and Relationships: The Bridge between Positive Psychology and Massage. *Health*, 11, 1609-1624.
<https://doi.org/10.4236/health.2019.1112122>

Received: November 22, 2019

Accepted: December 24, 2019

Published: December 27, 2019

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Abstract

Although positive psychology interventions are generally aimed at individuals, when considering couples, a dyadic approach may be more effective. In terms of a couples' wellbeing, their relationship is one of the most important factors. As such, interventions targeted for both members' wellbeing via their relationship are likely to be of value. Currently, there exist limited dyadic positive activity interventions available in positive psychology, and notably, tactile intervention is lacking. Massage is the evidence based tactile health modality that has long history as a therapeutic intervention, as well as being one of the most natural human health-oriented behaviours. The current commentary argues for the link between positive psychology and massage, and that "Positive Massage" can be a bridge between the hitherto distinct entities of positive psychology and massage. Furthermore, based on the conceptual theoretical model of the link between Positive Massage and wellbeing, we propose that Positive Massage can be an effective positive intervention impacting on couples' wellbeing and enhancing their relationships.

Keywords

Wellbeing, Relationship, Positive psychology, Positive Massage, Couples

1. Introduction

Since modern positive psychology was introduced by Seligman in 1998, it has contributed to health science by balancing out the conservative view of health-care that is disease-focused and prioritises psychopathology. In contrast, positive psychology offers a two-pronged approach, through the reduction of illness and the increase of wellbeing [1] [2]. Positive psychology therefore aims to achieve a

scientific understanding of wellbeing in order to provide thriving in individuals and societies through effective positive psychology interventions (PPIs)¹ [1] [2]. Although positive psychology has been globally advancing evidential studies in wellbeing [3], the focus has been strongly on an individual approach [4] [5]. Studies of couples' wellbeing in the field are very limited [6]. One possible reason is that PPIs generally target individuals [7]. For couples however, a dyadic approach seems to be more effective in general health science [8]. Furthermore, one of core factors for individual health and wellbeing among couples is relational wellbeing, *i.e.* interaction quality and relationship satisfaction [9]. However, a positive relationship (e.g. relationship satisfaction and closeness) provides both benefits and risks. Being in a close relationship can protect and promote health by buffering stress reactivity, but if one partner develops mental or physical illness, it impacts more negatively on the other [10]. Previous studies have indicated that closer relationships were linked with the stronger transmission of a spouse's depressive symptoms [11], and that greater relationship closeness exacerbated the adverse impact of patient illness severity on the spouses' life satisfaction, positive affect and depressive symptoms over six months [12]. As such, any dyadic positive activity intervention (PAI) for couples that can promote both wellbeing and relational wellbeing would be of value.

The concept of PAIs overlaps with PPIs, and refers to simple, self-administered, intentional, and regular practices that mirror the patterns of naturally happy people's thoughts and behaviours [13] [14]. Currently there are very few recognised dyadic PAIs in existence, including expressing gratitude [15], mindfulness [16] and Couple+² [17]. Notably, tactile intervention in PAIs is particularly lacking, and as far as current authors are aware, no literature seems to be available on this in the field of positive psychology. This is despite the positive effect of touch in bonding and in delivering associated relational benefits [18] [19]. Indeed, among romantic couples, physical affection shown by touch has been demonstrated to be associated with overall relationship satisfaction [20] and higher level of wellbeing [21] [22]. Neglecting this psychosomatic approach is not wise when wellbeing is a core target of national and global health strategy, and with personal relationships being significantly important in the field of positive psychology.

Interestingly, there is depth and breadth in the study of massage—one of the most effective forms of touch [23]—across a number of divisions of health science, with a recent increased focus on wellbeing (e.g. [24] [25]). Although massage has long been established as a therapeutic modality for populations with ill health, it is also possible to recognise massage as a salubrious modality for the

¹PPIs refers to programmed or intentional activities that were empirically developed in line with the theoretical bases of positive psychology with the aim of enhancing positive emotions and wellbeing in a lasting way [5].

²Couple+ is a multi component four-week self-help intervention that employs a number of empirical positive psychological activities (e.g. savouring and capitalising) to improve relationship functioning and individual wellbeing [17].

healthy general population in order to enhance wellbeing and as a preventative strategy. The aim of the current commentary is to propose a theoretical base for the link between massage and positive psychology, and posit a theoretical model that would underpin how mutual lay massage may increase the level of wellbeing via relationship satisfaction. First, a definition and history of massage will be presented, followed by the current topic of Positive Massage, a potential link between positive psychology and massage. Then, a preliminary theoretical model of the link between Positive Massage and increased wellbeing will be discussed. We hope the current article will become a base for future studies of Positive Massage as one of the PAIs.

2. Massage

2.1. Massage History

The history of massage in the Western world dates back at least to 400 B.C.E [26]. Hippocrates (460-377 B.C.E), the “father of medicine”, promoted massage by stating “The physician must be experienced in many things, but assuredly also in rubbing” [27]. Historical records of massage are seen across many cultures worldwide e.g. 1154 B.C.E in China; 2200 B.C.E in Egypt and 1800 B.C.E in India [28]. Notably, in various Eastern cultures (e.g. China, Thailand, Japan), massage has been not only a part of medical healthcare (including folk medicine), but also prevalently considered as a daily health behaviour that is as common as eating healthy foods and engaging in exercise. Amongst Australian Aborigines, children learn massage from the elders by performing massage on them, since massage is seen as “vital” in their daily lives [28]. Japanese young children learn massage in concert with a well-known nursery rhyme, and give shoulder massage to their mothers. Similarly, Indian mothers teach their sons massage so that they can provide massage to their future wives [28]. Thus, massage has been rooted deeply in daily life, and various styles of massage exist throughout these cultures. However, the similar use of massage in the Western world is very limited.

In the UK, there is no clear information regarding lay massage. Therapeutic massage has been a part of medical healthcare as far back as 1584, where there is a record of Dr Timothy Bright lecturing on the use of exercise and massage at Cambridge University [26]. The British Medical Journal reported the benefits of massage in treating dyspepsia and insomnia in 1887 [29] and also the benefits of “scientific massage” to “arouse the slumbering activities of vital organs by energising the natural motive powers of the individual” in 1895 [30]. In the 19th century, massage was also included in nursing practice, and Florence Nightingale implemented massage as one of the basic indispensable 10 skills for nurse training, aiming particularly for bedside support and comfort [31]. Thus, before World War II, massage was commonly used in healthcare. However, the popularity of the scientific pharmacological solution, in tandem with the shift of massage from a basic nursing comfort measure to a specialised physiotherapy,

led to the use of massage to become very limited and increasingly specified in healthcare [26] [31].

In contrast, in the USA, massage therapy was introduced more recently, with massage being popularised among physicians, nurses, and masseurs in the late 19th century [31]. A neurologist, Professor Silas W. Mitchell (1829-1914) is credited for bringing massage to the medical community's attention [28]. Although massage usage then followed a similar trajectory to the UK, the US has enjoyed a wealth of massage research starting with Dr Kellogg in the 1870s [28] through to countless contemporary clinical studies most notably by Dr Tiffany Field and colleagues at the Touch Research Institute in the University of Miami over three decades.

Interestingly, in recent times massage has become one of the most popular complimentary healthcare modalities not only in the US but also in Europe [32], perhaps because pleasantness is one of the most distinct characteristics of massage. User experiences of modern massage therapy have identified the value of massage through comfort, contact, connection and caring, with valued elements including time for care and personal attention, the holistic approach, empowerment, and strengthening of the inner self [33] [34].

2.2. What Is Massage?

Although a specialists symposium has created a consensus of massage as “a pattern and purposeful soft-tissue manipulation... for the intent of therapeutic change” [35], defining “massage” is still not simple. This is because massage often takes a holistic approach, and is elusive due to its diversity in the application purposes (therapy and wellbeing), the providers (health professionals and lay people), the application locations (public facilities and at home) and in the styles (Western and Eastern).

Therapeutic massage use can be either or both of: physical treatment (*i.e.* cancer, oedema, constipation, muscular stiffness and pain), and mental treatment (*i.e.* anxiety, depression and eating disorders). The positive use of massage for wellbeing aims for one or a combination of relaxation, stress coping, quality of life and prevention. Historically, the majority of research studies have tested massage delivered by professionally qualified specialists such as massage therapists, physiotherapists, or nurses, while only a small number have investigated lay massage delivered by parents (e.g. [36]), carers (e.g. [37]), volunteers (e.g. [38]), and partners (e.g. [39]). The currently prevalent locations for delivering massage in the West are public facilities such as hospitals, clinics, sport gyms or schools, but home application is possible and may be preferable at times (e.g. [33]). Massage style is also diverse and whilst popular Western massage (e.g. Swedish massage and aromatherapy) often requires recipients to undress and expose the skin for oil application using a massage table, Eastern massage (e.g. Thai traditional massage and Shiatsu) permits recipients to keep their clothes on and to simply lie or sit down on the floor to receive massage.

As such, massage is distinctly multidimensional, however across all the diverse approaches, one commonality of massage character can be identified, that of the “caring touch”. Considering all of the above, we refer now and hereafter to massage as a health modality using a caring touch. In the modern Western world home-based lay massage has been underused and understudied [40], largely due to the heavy dependence on professional massage and its therapeutic application. In contrast, the “Positive Massage” that we propose here as a PAI is a home-based lay massage aimed at promoting couples’ wellbeing via enhancing their relationships. It is designed to be accessible and user-friendly in modern daily life, with no necessity to use oil; no removal of clothes; no massage table, and no appointments with professionals. The requirements are minimal: time; willingness and care of the givers (partners) combined with some simple knowledge and practice. Positive Massage will be described in detail in the following section.

3. Positive Massage

Positive Massage (PM) is a health intervention, aiming to enhance interpersonal and intrapersonal wellbeing in close relationships through mutual lay massage [40] [41]. Instead of lengthy clinical professional massage therapy, PM has been created to be a self-help technique³, with a short (15 min) sequence of massage to be used in a home environment⁴. The sequences are composed of simple Western and Eastern massage techniques that are combined to provide the skills and confidence in giving and receiving massage for people in trusting close relationships. PM has a novelty in approach that is the two-way (reciprocal exchange) application of massage, instead of the more common one-way application. Compared with general massage that was defined in the previous section as a health modality aiming at physical and mental treatment by caring touch that is often delivered by health professionals in scientific research, Positive Massage is a lay massage aimed at positive enhancement of interpersonal and intrapersonal wellbeing.

A short massage course, called the “PM programme”, has been developed to introduce, instruct and facilitate the implementation of PM [40] [41]. The programme provides durable skills⁵ that underpin the kind act of massage, to be used anytime in the home environment. The guidance included in the programme helps couples to foster intimate experiences through sharing quality time and reciprocal gratitude (from the massage receiver to the giver), and attuned nonverbal communication through sensitive and effective tactile practices.

³The intention of PM is not to replace professional massage therapy, but to increase self-care skill as a preventative activity which may also enhance massage therapy effects by professionals. PM would be well suited to complement professional massage therapy for those who seek a health remedy.

⁴Home as the base is conducive to relaxation, rest, and nourishment through self-care, to equip individuals to deal with work and social life effectively.

⁵Once people learn the skill of massage, we expect them to be able to use it when they need/want to in the same way as swimming or cycling. A follow up study of carer’s massage showed 44% carers continued massage the children with disabilities regularly following completion of training [42].

Expressing gratitude between partners enhances the positive perceptions of the relationship, and further leads to more positive relationship behaviour [43] [44].

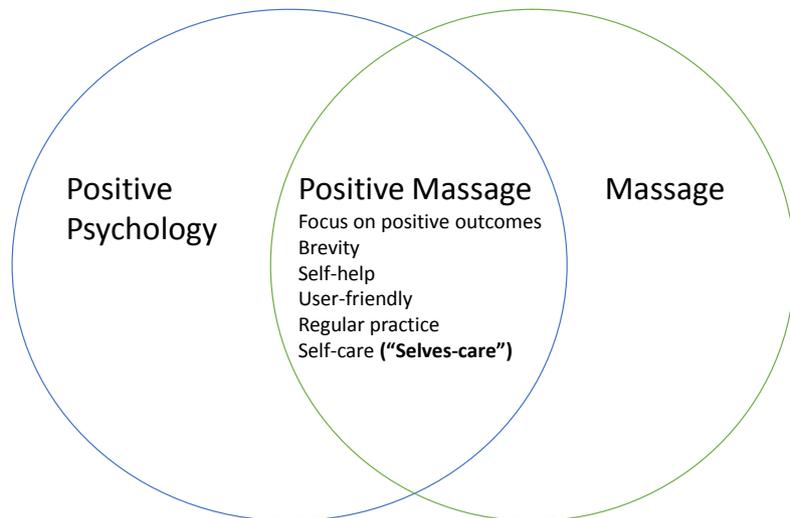
To date, only two studies [40] [41] have explicitly investigated the effect of such reciprocal massage among healthy adults. The first study to explore the effect of PM demonstrated significant improvements in mental clarity coupled with a significant reduction of emotional stress. Importantly, these effects were found for both receivers and givers of massage [41]. Similarly, the PM programme produced significant increases in mental wellbeing and perceived coping, with a strong trend toward increased relationship satisfaction also present [40]. Based on these positive results, a new term, “selves-care” that refers to an activity that simultaneously cares for a loved one and the self, was proposed and advocated as an approach to the enhancement of couples’ wellbeing [41].

4. Theoretical Link between Positive Psychology and Massage

In order to establish a conceptual base of current proposal, a proposed theoretical link between positive psychology and PM is presented in **Figure 1**.

While professional therapeutic massage does not serve as a PAI, positive psychology and PM share the focus on positivity, brevity, accessibility, user-friendliness, and the self-help approach, coupled with the importance of regular use. Among these common factors, the most important is the “positive use” of the intervention. This “positive use” makes PM distinctive from therapeutic massage because the focus is on positive outcomes rather than curing, although some healing may also occur as a result of PM practice. This aligns with a balanced view of positive psychology, which deals with both negatives and positives [45]. The expected positive outcomes of PM include increasing positive emotions, positive cognitions, positive behaviours and positive relationships [41]. Among these, the particular strength in PM is the dyadic approach in close relationships via shared positive health experiences. Dyadic approaches in health interventions have been shown to be more effective for wellbeing than individual approaches [8]. In addition, the use of caring touch between partners in trusting relationships has been demonstrated to be effective in enhancing positive emotions and wellbeing [21] [46]. In contrast, tactile touch between people without trust and consent may cause negative effects such as aversion [47] demonstrating that PM is not appropriate for the rehabilitation of “broken” relationships, and it is not proposed to be used in such circumstances. A further benefit of PM is the self-regulatory approach⁶ that includes learning together and adaptation for the home environment, which may help people increase personal resources. This will be discussed in following section. When taken together, the benefits of PM outlined above clearly overlap with the positive psychology approach and as such, the proposed model suggests that PM can be seen as a bridge between positive psychology and massage.

⁶The intention of the PM programme is that once a dyad has learnt and familiarised themselves with PM, they can use the massage skills at home regularly and/or wherever when they need support in coping under stressful situations.



This figure is not reproduced but has been produced by the current authors. Massage: Health modality aiming at physical and mental treatment by caring touch. Majority of massage in scientific research has been delivered mainly by health professionals. Positive Massage: Lay massage aiming at positive enhancement of interpersonal and intrapersonal wellbeing.

Figure 1. Proposed theoretical link between Positive Massage and Positive Psychology.

5. Theoretical Model of the Link between PM and Wellbeing

The benefits for couples of being together include being able to mutually build up one's own resources as well as the partner's through positive interactions [17]. Positive interactions, particularly fulfilling the mutual needs (e.g. effective support), can predict both party's wellbeing and relationship functioning [48].

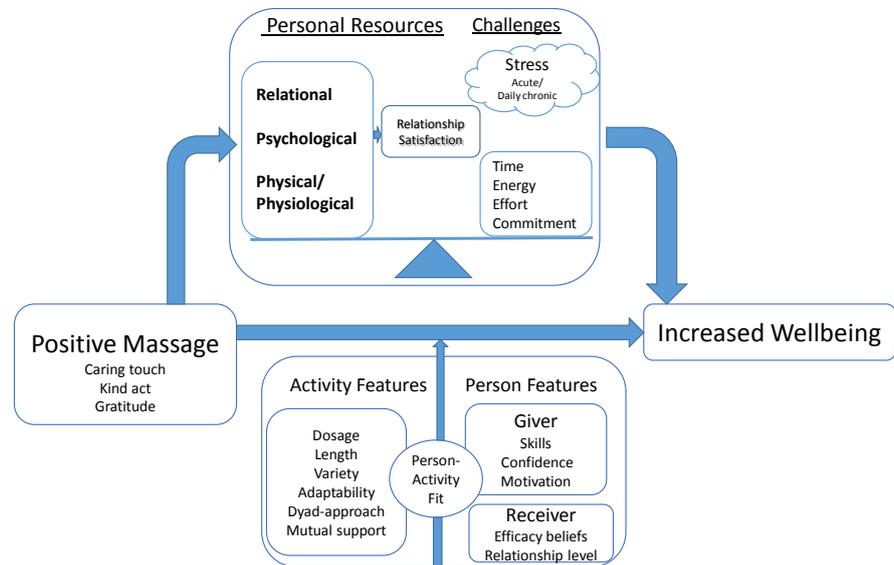
With the intention of underpinning the current proposal, a preliminary theoretical model of the link between PM and wellbeing (PM-WB model) is delineated in **Figure 2**. The model depicts the proposal that PM can be an effective PAI, and how PM can impact positively on wellbeing. The model was adapted from the theoretical Positive-Activity Model [13] that explains how PAIs increase wellbeing. The Positive-Activity Model is useful in this context because the moderators (lower half in the diagram) and the mediators (upper half) are clarified. However, the Positive-Activity Model has not reflected the challenges in performing the positive activities. To fill the gap, the wellbeing model by Dodge *et al.* [49]⁷ has been adapted and integrated into the PM-WB model, which helps us view the mediations in a more balanced way.

5.1. Mediators

The top left list depicts personal resources that have been drawn from theoretical perspectives and empirical evidence from touch and lay massage literature⁸.

⁷Dodge *et al.* [49] explains interventions that increase the personal resources over the challenges would increase wellbeing.

⁸The evidence from professional massage effects was not included (unless mentioned). It was challenging to do so, since lay massage literature is limited, but we presume that for the current commentary of the lay dyad massage, it is more convincing to refer to the evidence of the effects of lay massage. Literature of parents' massage for children/infants was included, but the massage effects listed here were limited to results of adults' population.



The PM-WE model has been adapted from the Positive-Activity Model by Lyubomirsky & Layous (2013) with the integration of the Definition of Wellbeing model by Dodge *et al.* (2012).

Figure 2. Theoretical model of the link between Positive Massage and wellbeing.

Personal resources mediate the effect of PM on the positive change in wellbeing and comprise three dimensions: relational; psychological; and physical/physiological.

Relational resources include positive relationships, closeness, and connectedness. “Touch science” has revealed the function of touch in influencing emotions via non-verbal communications [50], and on positive interpersonal relationships and connectedness [22] [23] [37]. A few massage studies have also shown positive changes in relationships following massage, e.g. increased sense of closeness via postoperative massage performed by a significant other [51]; benefits for marital adjustment following one way massage between couples [52], and improved relationships for both givers and receivers [39]. Relationship satisfaction can also be protected by increased positive emotions and behaviours [53] [54] as detailed below.

Psychological resources comprise of positive emotions and positive cognitions. Diverse massage studies have demonstrated the effect on positive emotions such as improved mood [55], and decreased anxiety [55] [56], anger and depression [39]. Positive cognition includes positive thoughts such as increased engagement and comfort [57] [58], appreciation [58], self-efficacy [37] [42] [59], confidence [57], perceived coping against stress [41] and psychological wellbeing [42] [59] [60]. Notably, significant benefits of massage on decreased anxiety, anger and depressed mood were also demonstrated among not only the receivers but also the givers [39] [52].

Physical/physiological resources include physical comfort and positive physiological change. Evidence has shown lay massage effects on physical wellbeing such as increased physical function [51], decreased discomfort [51], fatigue [56], pain sensitivity [60], pain relief [39] [51] [56], and lower heart rate and cortisol levels [61]. Interestingly, the latter study compared the effect of different interac-

tions between couples and found that only massage (ten minutes) delivered significant benefits during stressful conditions. Various stress reduction effects of lay massage have also been demonstrated in terms of lowered blood pressure, decreased cortisol [39] [62], and increased serotonin and dopamine levels in massage receivers [62]; and increased salivary oxytocin in massage givers [63]. Oxytocin is the peptide hormone and neuropeptide that has been linked strongly with connection (social bonding), emotion process and prosocial behaviour [64] [65]. In addition, oxytocin produced by warm touch has been linked with lower stress hormone levels and decreased heart rate [66].

These activity-fostered personal resources would likely increase relationship satisfaction, and may mediate the resulting increases in wellbeing. Contrarily, challenges such as time, energy, effort, and commitment can negatively influence these outcomes. The most commonly cited reason for the discontinuation of delivering lay massage was time constriction [42] [67] and burden [56]. Furthermore, challenges can be amplified when acute stress is perceived or chronic daily stresses are accumulated outside of the intervention [68]. The PM-WB model proposes that when the resources surpass the challenges, couples would receive the benefit of PM in enhancing wellbeing. However, both the effects of massage and wellbeing factors are distinctly diverse. Therefore, the list of current personal resources is not exhaustive and should be developed within future studies.

5.2. Moderators

The positive influence of PM on wellbeing may be moderated by both the activity feature and the person feature. For example, dosage of massage affects the outcome. Twice-weekly massage showed greater positive immune system changes more than once-weekly massage [69]. Similarly, PM features such as the duration and variety may moderate the effects. This means that although the previous PM study cited above used a three-times-a-week massage practice, future studies should test different application regimes such as once a week, or daily. In addition, the duration of the training course should be further considered, especially with respect to couples who suffer from challenges such as chronic pain or anxiety.

A distinctive feature of PM is the adaptability that the original Positive-Activity Model [13] does not possess. Although it is similar in some ways to “variety”, adaptability in PM is distinctive in that couples can choose the body part to focus on, and other factors such as different massage techniques, duration and pressure (*i.e.* soft, moderate or deep) according to the receiver’s needs or preference each time⁹. Person features such as massage giver’s skills, confidence in practicing massage, motivation and attitude towards giving massage, and the receivers’ beliefs of massage effects and the level of trust or the relationship level (e.g. connectedness) may also moderate the benefits couples gain. For the optimal effect

⁹For example, one may choose to follow the protocol of the PM sequence generally, however, it is possible to change the massage sequence at times to 10 minutes shoulder massage with moderate pressure and 5 minutes head massage with deep pressure.

of PM, both effortful engagement and motivation (e.g. to become more connected and healthier); and the belief that their effort will be rewarded are important [13]. Besides, Lyubomirsky & Layous [13] stated that the effect of PAIs seems to be greater when people feel support from close others. Indeed, PM has a distinctive characteristic in that the intervention itself involves both parties (without each other, it is impossible to give and receive massage), so there is a natural mutual support system innate in the intervention. Moreover, PM itself owns the features of caring touch, kind act, and gratitude (feeling and expressing appreciation), and all of these are previously established elements of PAIs [13]. Having the unique feature that the activity itself supports both oneself and the partner [41], suggests that PM can be an effective PAI for couples' wellbeing and positive relationships.

Individuals who cannot enjoy comforting touch or massage e.g. people who suffer interpersonal related posttraumatic stress disorder [47] may not receive the potential benefits outlined here because person-activity fit is an important factor for PAIs [13]. Considering this factor, the ideal target population for PM may be those couples who are seeking both an increase of wellbeing and relationship satisfaction using tactile modality. A possible challenge for further research maybe difficulties in recruiting such dyads [70] who can attend the PM programme together [40]. Not only does mutual time availability but the willingness to learn new skills and practice, and the possession of a solid trust base will also influence the viability of the programme.

We further argue that there is some overlap between positive psychology and health psychology. Indeed, a small but important argument has started to closely link the two divisions [71]. Similarly, a small but significant paper proposed the linking of massage therapy research with health psychology for reciprocal benefit [72]. Therefore, we suggest PM to be included in the health psychology domain as well as in positive psychology. Moreover, although this article has focused on couples' wellbeing, PM can also be used in the wider realm of close relationships such as family and friends in the home environment. Further exploration of effect of PM in such populations may be interesting and potentially provide benefits for both positive psychology and health psychology generally.

6. Conclusions

This article explored the possibility of the positive use of massage (PM) as a psychosomatic dyadic PAI for couples' wellbeing. Based on the conceptual link between PM and positive psychology, and the theoretical model of the link between PM and wellbeing, the article suggests PM can be an effective positive intervention for couples' wellbeing and positive relationships. This is based on PM's unique feature that the activity itself supports both parties by increasing relational, psychological, and physical/physiological resources reciprocally [41]. However, because lay massage between couples is an innovative approach in Western culture, we recommend the following future studies:

- Qualitative research to assess how couples perceive PM;
- A randomised control trial to confirm the previously reported beneficial effects of PM and the PM programme;
- Identification of population characteristics that would predict the greatest benefits to be gained from PM;
- Exploration of the impact of different application regimes for PM; and
- An assessment of the effects of PM amongst close relationships such as family and friends.

Acknowledgements

We are thankful Dr Deborah McGann for her passion and dedication expressed during her positive psychology module at Northumbria University.

Conflicts of Interest

The authors declare that the paper was formulated in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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