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HEALTH AND PHYSICAL EDUCATION PROFESSIONALS´ SALUTOGENIC AND PEDAGOGICAL PRACTICES FOR WORKING WITH DISADVANTAGED OLDER ADULTS

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RESUMO

A proporção da população mundial com 60 anos ou mais está aumentando rapidamente. No entanto, vidas mais longas não significam necessariamente vidas mais saudáveis. Assim, faz-se necessário um maior conhecimento sobre como promover saúde. De que forma a Educação Física (EF) pode contribuir e responder a essa situação? Está bem estabelecido na literatura como o exercício previne doenças crônicas. No entanto, falta conhecimento sobre como a EF pode contribuir para a promoção da saúde. Nesse contexto, o presente estudo foi delineado para abordar o tópico de como os profissionais de EF poderiam ajudar idosos a desenvolver sua saúde e vivenciar positivamente o envelhecimento. O objetivo foi investigar as práticas adotadas por profissionais de EF para oferecer práticas corporais para idosos em situações de desvantagem em programas de promoção da saúde e entender os processos de desenvolvimento de saúde que os idosos experimentaram e perceberam como relacionados à sua participação nas práticas corporais. O estudo se fundamentou na salutogênese, uma teoria para a promoção da saúde proposta pelo sociólogo Aaron Antonovsky. Juntamente com essa perspectiva teórica, a investigação se baseou nas noções de práticas corporais e pedagogia. O estudo foi conduzido por meio da abordagem qualitativa e do método da teoria fundamentada nos dados. A amostragem teórica norteou a inclusão de quatro programas de promoção da saúde, localizados nas regiões sudeste e sul do Brasil. Participaram seis profissionais de EF, três coordenadores de centros de saúde e 34 idosos vinculados aos programas. Os dados foram gerados através do trabalho de campo condensado, com a realização de visitas a cada local em um curto período de três dias. As fontes de dados incluíram entrevistas, observação não participante de 34 sessões de práticas corporais e documentos. A análise dos dados foi realizada pelo método da comparação constante, envolvendo codificação inicial e focada. O software qualitativo de análise de dados NVivo 12 da QSR International foi usado para auxiliar o gerenciamento de dados e o trabalho analítico. Os resultados indicaram que os profissionais de EF se envolveram em uma série de práticas consideradas consistentes com as práticas salutogênicas e pedagógicas: visão ampliada de saúde, ética do cuidado, cuidado holístico e abordagem baseada na comunidade. Essas práticas foram relacionadas a dois principais processos de desenvolvimento de saúde vivenciados pelos idosos: o desenvolvimento de recursos de resistência generalizada em múltiplas dimensões (cognitiva, social, emocional, física) e o fortalecimento dos componentes do sentido de coerência (capacidade de compreensão, capacidade de gerenciamento e capacidade de investimento). Em conclusão, as práticas corporais serviram como um recurso que ajudou os idosos a perceberem suas vidas como compreensíveis, gerenciáveis e significativas. Este estudo sugere que a EF poderia ampliar e maximizar sua contribuição para a promoção da saúde de idosos através da criação de comunidades de movimento, facilitando encontros e conectando pessoas por meio do movimento. Intervenções e iniciativas futuras de promoção da saúde poderiam incorporar práticas pedagógicas informadas pela salutogênese como uma possibilidade de ir além de uma visão patogênica da saúde e permitir que os participantes tenham experiências corporais significativas de cuidado holístico, em direção ao cultivo da vida.

Palavras-chave : Promoção de saúde. Educação Física. Práticas corporais. Práticas pedagógicas. Modelo salutogênico. Idosos. Envelhecimento saudável.

ABSTRACT

It is well known that the world population aged 60 or older is rapidly growing. However, longer lives do not mean necessarily healthier lives. Thus, further knowledge about how to promote health has been required. How physical education can contribute and respond to this situation? It is well established in the literature how exercise prevents chronic diseases. Nevertheless, knowledge about the ways physical education might contribute to health promotion is lacking. In this context, the present study was designed to address the topic of how Health-Physical Education (HPE) professionals might help older adults to develop their health and experience ageing positively. The aim was to investigate the practices adopted by HPE professionals to deliver bodily practices for disadvantaged older adults in health-promoting programmes, and to understand what health development processes the older adults experienced and perceived as related to their participation in bodily practices. The study was informed by salutogenesis, a theory for health promotion proposed by the sociologist Aaron Antonovsky. Alongside this theoretical perspective, the investigation drew on the notions of bodily practices and pedagogy. The study was conducted with a qualitative approach and a grounded theory research design. Theoretical sampling guided the inclusion of four health-promoting programmes, located in the southeast and south regions of Brazil. Participants were six HPE professionals, three health centres´ coordinators and 34 older adults enrolled in the programmes. Data was generated through condensed fieldwork by visiting each site in a short period of three days. Multiple data sources included interviews, non-participant observation of 34 bodily practices sessions and documents. Data analysis was conducted through constant comparative method, involving initial and focused coding. The qualitative data analysis software QSR International's NVivo 12 was used to support data management and analytical work. The findings indicated that the HPE professionals engaged in a number of practices that were considered as consistent with salutogenic and pedagogical practices: wide view of health, ethics of care, holistic care, and community-based approach. These practices were connected with two main health development processes experienced by the older adults: the development of generalised resistance resources (GRR) in multiple dimensions (cognitive, social, emotional, physical), and the strengthening of sense of coherence components (comprehensibility, manageability and meaningfulness). In conclusion, bodily practices served as a GRR for older adults, which helped them to see their lives as comprehensible, manageable and meaningful. This study suggests that physical education might widen and maximise its contribution to older people´s health promotion by focusing on the creation of communities of movement, facilitating encounters and connecting people through the medium of movement. Future interventions and initiatives on health promotion might incorporate salutogenic-informed pedagogical practices as a possibility to move beyond a pathogenic view of health, and to enable participants to have meaningful bodily experiences of holistic care, towards life cultivation.

Key words: Health promotion. Physical Education. Bodily practices. Pedagogical practices. Salutogenic model. Older adults. Healthy ageing.

LIST OF ABBREVIATIONS AND ACRONYMS

PE	Physical Education
HPE	Health - Physical Education
WHO	World Health Organization
AHA	American Heart Association
ACSM	American College of Sports Medicine
CDC	Centers for Disease Control and Prevention
SUS	Unified Health System
PNPS	National Health Promotion Policy
NASF-AB	Family Health Extended Team and Primary Care
CAPS	Psychosocial Attention Centres
SOC	Sense of coherence
GRR	Generalised resistance resource
MVPA	Moderate to vigorous physical activity
GT	Grounded theory
SDT	Self-determination theory

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1. INTRODUCTION

1.1 Initial comments and autobiographical reflection

This study was motivated by my concern with the professional practice of physical education[1] (PE) in the health sector.

In 2012/2013, I had the opportunity to work as a Health-Physical Education[2] (HPE) professional in the health-promoting programme *Academia da Saúde* (Health gym) and in a bodily practices programme directed at health workers, within the Unified Health System (SUS[3]).

Working in the health sector was new to me and I experienced a feeling of being unable to find enough tools in my backpack knowledge to contribute to complex situations I encountered. I had a negative feeling of not being helpful to the working dynamics of the health centre, and of not finding coherence and compatibility between the way I was trained by the programme´s coordinators to deliver physical activity and what I was seeing in practice during my daily contact and relationship with the older adults.

Through practice, I learned that the older adults´ needs and interests were mainly related to social aspects, and that health had other dimensions beyond the physical domain. Then, I perceived that I had other conceptual and practical tools in my backpack (e.g. communication and relational skills, knowledge about multiple forms of movement, organisation of recreational events, among others) that could support me to meet the needs and interests of participants.

Similar to my experience, studies have shown a distance between PE practice and the scope of health-promoting programmes (SKOWRONSKI; FRAGA, 2016). There is, moreover, an incompatibility between PE initial professional education and the provision of services in the field of health. This indicates that PE higher education programmes have failed to engage their students in learning processes that are capable of establishing a dialogue with

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[1] I recognise there are alternative possibilities in English language to name the area of research and practice, e.g. Kinesiology (North America), Sport Sciences (United Kingdom) and Human Movement Studies (Australia), but I stick with Physical Education since it is the most common term in Brazil to refer to the field of School Physical Education and others professional areas, like health care, leisure, fitness and sports.

[2] I use the term Health - Physical Education (HPE) professionals to refer to health workers whose speciality is physical education, whether teachers, instructors and others who work specifically with bodily practices and physical activity in public health settings.

[3] I opted to stick with the acronyms in Portuguese when they are widely used in Brazil, in order to facilitate the recognition. This applies to SUS (Unified Health System), PNPS (National Health Promotion Policy), NASF-AB (Family Health Extended Team and Primary Care).

the complexity of health work (COSTA et al., 2012; FALCI; BELISÁRIO, 2013; GUARDA et al., 2014; OLIVEIRA; ANDRADE, 2016; PASQUIM, 2010; RODRIGUES et al., 2013; STHAL, 2016).

Although PE higher education programmes in Brazil demonstrated an intention to prepare students for health work, they did not offer enough health-related modules to provide them with relevant knowledge (FERREIRA; KIRK; DRIGO, 2017). Problems reported by other HPE professionals in the literature confirmed that they did not have access to specific knowledge about public health, health promotion, the health care system, nor to skills development for working within multi-professional teams during their graduation. Other critiques of PE programmes are related to a distance from the reality of health care services, and to a lack of alignment with theoretical foundations of health promotion. There is, in addition, an absence of evaluative methods, and a lack of knowledge about ways of working with health (ANJOS; DUARTE, 2009; BRUGNEROTTO; SIMÕES, 2009; NEVES; ASSUMPÇÃO, 2017; PASQUIM, 2010; SANTIAGO; PEDROSA; FERRAZ, 2016).

Regardless of the shortcomings in initial professional education, it is relevant to highlight that some studies have striven to propose alternatives to improve the quality of PE higher education programmes, indicating possibilities for change. For example, some authors have suggested a focus on sociocultural knowledge, the use of critical and pedagogical approaches, and an integration between learning and service (ANDRADE et al., 2014; BAGRICHEVSKY; ESTEVÃO, 2008; SANTIAGO; PEDROSA; FERRAZ, 2016).

Seeking alternatives to traditional practice has been the direction that this dissertation sought to follow. Although the motivation for carrying out this study included the identification of problems in initial professional education, the inquiry was not concerned with critiquing this context because previous studies already explored the topic (MARTINEZ et al., 2013; PAULO, 2013; PRADO; CARVALHO, 2016; SANTOS et al., 2011; SILVA, 2016; TOASSI, 2017). On the other hand, knowledge about the relationship between PE and health from the perspective of professional practice is still lacking.

There is some practice-based evidence that PE has effectively achieved health goals (ARMOUR; HARRIS, 2013; STONE et al., 1998; TROST, 2006). In the context of this research, Armour and Harris (2013) claimed that there is an urgent need for the development of health pedagogies to support PE practices, due to little knowledge in this area.

To summarise, because health knowledge was lacking in my initial professional education (and in the education of many other HPE professionals as confirmed by the literature), I was motivated to investigate and to gain understanding about how PE might help

older people to develop their health. This discussion is needed in the PE area in order to improve the quality of services offered to older age communities and, secondarily, to advance professional education as well.

1.2 The context of the study

The debate about PE and health have increased recently, although the field of health has strongly influenced PE for a long time, since its systematisation in Brazil. In the nineteenth century, gymnastics was an important component of body education that sought to eliminate immoralities and excesses from the population (SOARES, 2013). Also, it secured a place in society as a normalising and regulating practice, with a disciplinary character, capable of guiding individuals to internalise notions of time, energy expenditure and health as organizing principles of daily life (SOARES, 2013). Brazilian PE borrowed from the European Gymnastic Movement it's functionalist orientation to hygienist and military ideologies that advocated for race regeneration, individuals´ moralisation, virtues development and health promotion, without any change in population´s life conditions (BAGRICHEVSKY et al., 2006; SOARES, 2013).

In line with this historical background, PE incorporated a limited biological conception that exercise is medicine (BAGRICHEVSKY et al., 2006; SALLIS, 2009; TAYLOR, 2014). In addition, epidemiological evidence demonstrated that physical inactivity constitutes a risk factor for major non-communicable diseases (e.g. diabetes, obesity, metabolic syndrome, colon and breast cancer) (LEE et al., 2012; PANG WEN; WU, 2012).

The epidemiological research influenced organizations such as the World Health Organization (WHO), American Heart Association (AHA), American College of Sports Medicine (ACSM) and Centers for Disease Control and Prevention (CDC) to recommend regular physical activity as a strategy for disease prevention and health promotion (HASKELL et al., 2007; PATE et al., 1995; WHO, 2010). In turn, these recommendations influenced the development of public policies of physical activity promotion in many countries, including Brazil (BRAZIL, 2006c; KAHLMEIER et al., 2015; OJA; TITZE, 2011; USA, 2008).

This association between physical activity and disease prevention has been reinforced by PE research and practice without enough reflection and critical thinking (KIRK, 2006). This becomes clear from messages conveyed by editorials and publications in international scientific journals. Some examples are: "*Exercise is medicine and physicians need to prescribe it!"* (SALLIS, 2009 - British Journal of Sports Medicine)*; "Physical inactivity: the*

biggest public health problem of the 21st century" (BLAIR, 2009 - British Journal of Sports Medicine)*; "School Physical Education: The Pill Not Taken*" (MCKENZIE; LOUNSBERY, 2009 - American Journal of Lifestyle Medicine), *"the pandemic of physical inactivity"* (ANDERSEN; MOTA; PIETRO, 2016; KOHL et al., 2012 - Series on physical activity, The Lancet)*; "Exercise Professionals - Could they be the forgotten public health resource in the war against obesity?"* (OPRESCU; MCKEAN; BURKETT, 2012 - Journal of Sports Medicine and Doping Studies).

Such comprehension is limited as it communicates an idea that individuals are healthy since they are physically active, which is not necessarily true. Due to this socially constructed discourse (KIRK, 2006), it has been widely expected that physical activity has a contribution to make to public health (ARMOUR; HARRIS, 2013; LYON; NEVILLE; ARMOUR, 2017; PÜHSE et al., 2011).

In the literature, major studies about PE and health have been concerned with increasing physical activity levels of the population, both in the school context (CASTELLI; CARSON; KULINNA, 2014; DUDLEY; GOODYEAR; BAXTER, 2016; ERWIN et al., 2013; MCKENZIE; LOUNSBERY, 2009, 2013, 2014; MCKENZIE; SALLIS; ROSENGARD, 2016; METZLER et al., 2013a, 2013b; SALLIS et al., 2012; SALLIS; MCKENZIE, 1991), and other settings (BREHM et al., 2005; HENDERSON et al., 2017; MURPHY et al., 2012; PAVEY et al., 2012; SPENCE; LEE, 2003).

In prioritising the biological and physical dimensions, PE allowed the body's fragmentation and disregarded persons with their affects, focusing on and categorising them based on diseases instead of considering them in their wholeness (CARVALHO, 2006a). In this context, Bracht (2013) reminds us that there is still a challenge to transform PE towards a practice of resistance to healthism through knowledge production and alternative bodily activities.

Other scholars, mainly supported by Humanities and Social Sciences, have also posed critiques of regulative, medicalising and pathogenic discourses (CARVALHO, 1993; FRAGA, 2006; FRAGA et al., 2007; GOMES; PICH; VAZ, 2006; KIRK, 2006; PALMA; VILAÇA; DE ASSIS, 2014; PALMA, 2001). As an alternative, in school context, researchers have advocated for health pedagogies (ARMOUR; HARRIS, 2013; HAERENS et al., 2011; OLIVEIRA; MARTINS; BRACHT, 2015) and salutogenic approaches (MCCUAIG; QUENNERSTEDT, 2016; MCCUAIG; QUENNERSTEDT; MACDONALD, 2013; QUENNERSTEDT, 2008, 2019).

A smaller number of scholars have focused on research in non-school settings with a wide perspective on health, including notions such as quality of life, vitality, happiness, the good life, bodily practices and health resources (ALVES; CARVALHO, 2010; ERICSON et al., 2018; FRAGA; CARVALHO; GOMES, 2013; FRAGA; WACHS, 2007; FREITAS; CARVALHO; MENDES, 2013a, 2013b; GRANT, 2012; JETTE; VERTINSKY, 2011; MANSFIELD; RICH, 2013).

Overall, the literature on PE and health has been mainly focused on younger age-groups in the school context. It is less known about how and what forms of movement contribute to health development among people in older stages of life.

Considering older age-groups becomes even more relevant given the rapid growth in the ageing population worldwide. By 2025, Brazil will be the sixth country in the world with the highest proportion of the population aged 60 and over (WHO, 2002). In face of this phenomenon of increasing life expectancy, it has been questioned 'how can the quality of life in old age be improved' (WHO, 2002, p.5). The World Health Organization (WHO, 2002) have already warned that there is an urgent need, in developing countries in particular, to find ways to help older people to 'becoming healthier'[4] and active in multiple domains (i.e. physically, socially, culturally, economically, spiritually).

How can physical education contribute and respond to this situation? In this context, the present study was designed to address the topic of how HPE professionals might help older adults to develop their health and experience ageing positively. The intention was to seek responses in the field of practice, where HPE professionals have mobilised and produced knowledge in action (SKOWRONSKI; FRAGA, 2016; VERENGUER, 2004), with support of the salutogenesis theory[5] (ANTONOVSKY, 1979, 1987, 1996) alongside the notions of bodily practices and sport pedagogy.

In particular, the study sought to investigate ongoing experiences of public programmes that have operated health promotion principles beyond disease prevention, in order to identify elements that might be taken into consideration for the development of an alternative approach for working with bodily practices throughout life.

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[4] This expression was borrowed from Quennerstedt (2019), who suggested that health is a process of becoming.

[5] Salutogenesis is a theory for health promotion that proposes a shift from focusing on what causes diseases to the origins of health (see chapter 3). The salutogenic model has been considered a promising approach to put forward the ways HPE professionals might contribute to health in young groups (KIRK, 2020; MCCUAIG; QUENNERSTEDT, 2016; MCCUAIG; QUENNERSTEDT; MACDONALD, 2013b; QUENNERSTEDT, 2008b). However, there is little evidence of salutogenesis being used to support older adults in maintaining their health.

Grounded in practice-based evidence, this study points to a possible response that physical education might give to the health sector: pedagogical practices informed by salutogenesis, focusing on care, humanization, affects, holism, and on the 'production of encounters' through communities of movement. Thus, this doctoral dissertation supports the creation of communities of movement as means of health promotion across the lifespan, that is, a salutogenic and pedagogical way for working with bodily practices for life cultivation.

1.3 Research questions

Two questions guided this inquiry, as follows:

(1) How do HPE professionals deliver bodily practices for disadvantaged older adults as means of health promotion?

(2) How does participation in bodily practices contribute to disadvantaged older adults´ health development?

1.4 Purpose of study

According to the research questions, the purpose of the study was twofold:

(1) to investigate the practices used by HPE professionals to deliver bodily practices for disadvantaged older adults in health-promoting programmes;

(2) to understand what health development processes the older adults experienced and perceived as related to their participation in the health-promoting programmes.

2 THE RELATIONSHIP BETWEEN PHYSICAL EDUCATION AND THE HEALTH SECTOR

The health sector became a multidisciplinary area, where different professions (e.g. Medicine, Nursing, Physiotherapy, Occupational Therapy, Psychology) apply their knowledge and approaches to intervention. PE was officially included as a health profession with other 13 areas (BRASIL, 1997, 1998). Since then, HPE professionals have had credentials to provide health services for individuals and communities, at the levels of health promotion, protection and recovery.

Despite being regulated as a health profession, PE area kept a discrete discussion about health for a decade. It seems that the field of health became noticeable mainly after the formal inclusion of HPE professionals within the Unified Health System (SUS) in 2008 (BRAZIL, 2008), which will be presented in the next section.

2.1 Insertion of Health-Physical Education (HPE) professionals in the Unified Health System, Brazil

The SUS was created in 1990 based on the assumption that health is a right for all, and the state must provide the population with conditions for their health development (BRAZIL, 1990). Then, the SUS offers health services for the whole population, without charging the citizens. Indeed, 70% of Brazilians depend on the public health system to get access to health care (CNDL, 2018).

The system is organised into three levels: primary health care (basic services of low complexity), secondary (special services of intermediate complexity) and third (hospital´s services of high complexity).

As this study focuses on health promotion, it refers to the first level of primary health care, which is carried out in settings like psychosocial centres, social services centres, basic health care units, family health programmes, health gym units, among others.

The main strategy for systematising and qualifying primary care service within the SUS is Family Health (BRAZIL, 2006; 2012; 2017). This strategy is organised through professional teams, which are comprised of a physician, nurse, nursing technician, community health agents (workers who live in the local community) and in some cases, dentist and dental technician. Each family health team provides services for 4,000 people, maximum (MINISTRY OF HEALTH, [s.d.]).

Based on the argument that sedentariness represents a high economic cost due to associated number of deaths, hospitalizations at the SUS and early retirement provoked by noncommunicable diseases, the Ministry of Health launched the Physical Activity Promotion Programme (BRAZIL, 2001).

Accordingly, the Pact for Health (BRAZIL, 2006b) established as an objective to emphasize population´s behaviour change in order to people internalize individual responsibility for an active lifestyle. Then, as planned by the Pact for Health, the National Health Promotion Policy (PNPS) was elaborated and launched in 2006.

The PNPS proposed a wide view of health and, it formally included physical activity and bodily practices as a priority action in the scope of public health (BRAZIL, 2006c).

A revised version of the PNPS was released in 2014, emphasizing the importance of health sector´s integration with other sectors to work towards equity and better life conditions for all[6]. The policy´s main goal is to construct a health care model that prioritises actions for improving people´s quality of life (BRAZIL, 2006c; BRAZIL, 2014). The PNPS suggests that local health needs, problems and social determinants are the core of health care in terms of how to organise, plan, deliver and monitor services (BRAZIL, 2006c; BRAZIL, 2014). Thus, there is a clear intention in the document to make an impact on people´s life conditions and to facilitate popular access to a wide range of healthy choices.

The PNPS follows the WHO agenda, so it relies on the health promotion framework and on the notion of social determinants of health. With this perspective, health is understood as a result of multiple factors that shape people´s lives, such as food, housing, education, sanitation, income, leisure, culture, transport, environment and work conditions. In 2013, physical activity was also included as a determinant of health in Brazilian legislation (BRAZIL, 2013).

The policy criticises the biomedical paradigm as it is disease-centred and focused only on the biological aspects of individuals, not being capable of modifying social conditions and considering life as a whole. The PNPS gives more attention to ways of living in a given historical, social and cultural context (BRAZIL, 2014). It is important to highlight that the document adopts the expression ‘ways of living’ instead of ‘lifestyle’. The PNPS makes clear

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[6] The PNPS stimulates an articulation across public policies to develop practices that contribute to integral health care (CARVALHO, 2006b). The PNPS´s key strategy is working across sectors, which would enable changes on poor conditions that constrain people´s lives to disadvantaged situations. So, it claims that all other public policies should work cooperatively to address inequalities (BRAZIL, 2014).

that how people organise their lives and choose their ways of living does not depend on individual willingness, but they are conditioned by economic, political, social and cultural factors (BRAZIL, 2014).

Furthermore, the PNPS acknowledges subjectivity, solidarity, happiness, ethics, diversity, humanisation, co-responsibility, social justice and social inclusion as valuable resources for helping people to recognise their own potential, to find opportunities to overcome barriers and change their conditions towards new ways of living (BRAZIL, 2014).

The public policy proposes the delivery of health services in accordance with a set of principles[7], namely: equity and social participation, autonomy and empowerment, action across sectors, sustainability, integrality and territoriality.

Eight priorities were established by the PNPS to fulfil its goals, as follows: (1) continuous education, (2) nutrition and healthy diet, (3) bodily practices and physical activities, (4) reduction in tobacco use, (5) reduction in alcohol and drugs harmful use, (6) safe mobility, (7) culture of peace and human rights, and, (8) sustainability.

The third priority involves actions related to the delivery of bodily practices and physical activity, such as walking, exercise, recreation, sports and leisure activities for the whole community and vulnerable groups. Moreover, it includes other actions like partnerships across sectors to create active environments, counselling about healthy lifestyles, communication of healthy ways of living, and monitoring of activities´ effectiveness for disease control and prevention (BRAZIL, 2006c).

Summarising, the PNPS indicated four actions related to bodily practices and physical activity: delivery, counselling, working across sectors, and monitoring.

It is important to highlight that from the PNPS official document published in 2006 to the 2014´s version, there was a change in how terms were written: from ‘bodily practices/physical activity’ to ‘bodily practices **and** physical activity’. The slash seems to be used in 2006 as a way to include both approaches. However, the difference between the terms are not very clear in the document, creating the risk of readers understanding them as similar (see section 2.2). In the revised version, the slash became an ‘and’, which seems to be an

[7] The principles can be defined as: (a) equity and social participation - offering equal opportunities for all and considering the voice of different individuals and groups; (b) autonomy and empowerment - stimulating self-perception and capacities´ development towards awareness, decision-making and control over oneself life; (c) action across sectors - articulating collaborative networks; (d) sustainability - considering the importance of promoting actions continuously; (e) integrality - acknowledging the complexity and wholeness of individuals; and, (f) territoriality - referring to local specificities regards social determinants of health (BRAZIL, 2014).

attempt to emphasise they are different ways of thinking about movement and health (BRAZIL, 2014).

In alignment with the PNPS, the HPE professionals were formally included within the SUS in 2008, through the creation of the *Núcleo Ampliado de Saúde da Família e Atenção Básica,* NASF-AB (Family Health Extended Team and Primary Care) (BRAZIL, 2008; 2017). The strategy´s purpose was to widen the scope and coverage of primary health care services.

The NASF-AB refers to a multi-professional team that has a function to provide support for other programmes and strategies within SUS, such as family health teams, basic health care and *Academia da saúde* (Health gym). Following the health policy, the NASF-AB established that bodily practices and physical activity were priority actions, delineating a new setting for HPE professionals´ service within the multi-professional team (BRAZIL, 2008). Then, among 13 health workers listed as possible personnel, the HPE professionals were involved[8].

According to NASF-AB guidelines (BRAZIL, 2010), the HPE professionals should:

- develop bodily practices and physical activity with communities;
- provide information related to disease prevention and risk factor reduction;
- favour social inclusion through regular activities;
- provide continuous education about bodily practices and physical activity for other health workers;
- intensify the use of public places for social integration;
- articulate partnerships with other sectors and public institutions; and
- organise events that promote bodily practices and physical activity.

The actions must be directed at the whole community, not restricted to ill or vulnerable groups. However, in the field of practice, a study carried out by Santos et al. (2015) with 296 HPE professionals, who were affiliated to NASF-AB programmes, showed that the activities were directed mainly at older women, hypertensive and diabetic patients, and the youth. The authors indicated that there is a need for HPE professionals to engage in

[8] The decision of which professional categories constitute the team is made according to city councils´ decision, informed by epidemiological data and local needs (BRAZIL, 2018). Among 5,067 teams distributed over 3,329 cities, the most preferred professions to constitute the multi-professional group are Physiotherapy, Social Service, Psychology, Dietetics and PE (BRAZIL, 2015). Carvalho et al. (2018) found that the HPE professionals had the highest growth rate of 145% from 2008 to 2013 among other areas in SUS. This significant increase demonstrates that there is an expectation that HPE workforce might make an effective contribution to health promotion.

continuous professional development and explore other activities in order to improve the quality of services and to reach a wider range of populational groups.

Besides the NASF-AB programme, another area for the production and mobilisation of PE knowledge within SUS (SKOWRONSKI; FRAGA, 2016) arose with the community-based strategy *Academia da Saúde* (Health Gym) (BRAZIL, 2011).

Initially, the programme aimed at the promotion of physical activity, leisure and bodily practices among the population, by providing activities free of charge, in public places, with professional supervision (not only HPE professionals[9]). Later, it was reconceptualised with a wide perspective, broadening its scope to health promotion, production of care and healthy ways of living (BRAZIL, 2013). The new version paid more attention to health promotion principles.

The actions of *Academia da saúde* are directed at individuals and communities through eight themes: bodily practices and physical activity, healthy eating promotion, production of care and healthy ways of living, integrative and complimentary practices, artistic and cultural practices, health education, management and, community mobilisation (BRAZIL, 2013).

The *Academia da saúde* programme assumes that environment and accessibility are important factors to favour community engagement. A relevant aspect is that the strategy addresses inequalities by implementing practices and offering opportunities in socially vulnerable areas (SOUZA ANDRADE et al., 2018). The programme functions as a facility that favour community access to and engagement with bodily practices and physical activity (ibid., 2018). To date, there are 2,459 units operating in Brazil (BRAZIL, 2018).

Therefore, NASF-AB and *Academia da Saúde* are the main programmes that involve formally HPE professionals in Brazilian health sector. There are other settings that include PE service, however in a minor scale, like CAPS (Psychosocial Attention Centres), independent health-promoting programmes sponsored by city halls, hospitals, and more recently, in the context of supplementary health with the initiative of health insurance companies that began to invest on health promotion actions.

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[9] Besides the HPE professionals, the programme involved other workers, for instance: social worker, occupational therapist, physiotherapist, speech therapist, dietitian, psychologist, sanitarian, social educator, music therapist, arts therapist, artists and dancers (BRAZIL, 2016).

2.2 Languaging bodily practices and physical activity

Bodily practices and physical activity were adopted by Brazilian health policy as health care actions through the medium of movement. Both terms were used together in the official documents, however they were separated by a slash symbol (/) in the first version (BRAZIL, 2006), and by an 'and' in the revised one (BRAZIL, 2014).

About the way the terms were associated to each other in the documents, Galvanese, Barros and Oliveira (2017) indicate that it hides the diverging perspectives the terms have. To Damico and Knuth (2014), bodily practices *versus* physical activity can be considered as an epistemological dispute in the area of PE and health.

This study corroborates this idea that bodily practices and physical activity are diverging notions and recognises that they are distinct not only in theoretical basis, but also in political and practical dimensions.

In the political dimension, the term bodily practices is not meant to be a new name for what already exists (CARVALHO, 2006b). What it intends is to present a new way of thinking and working with health promotion that involves dialogue with other forms of knowledge, such as those from Humanities and Social Sciences. Bodily practices entail a discourse in favour of the diversity of bodies in movement (ALVES; CARVALHO, 2010), in contrast to the imperative and prescriptive discourses of physical activity as a product for consumption in the market of active life (FRAGA, 2006).

Furthermore, the notion of bodily practices questions the assumption that the main contribution of PE to the health sector would be the delivery of physical activity as a regulated practice that seeks to serve as a means to achieve external goals, such as weight loss and disease control. In considering bodily practices, human movement is more than an activity that serves to specific purposes of regulating bodies.

In the practical dimension, the adoption of bodily practices has implications in terms of what to do and what not to do (MENDES; CARVALHO, 2015). Engaging with bodily practices implies to not reduce a person into the illness or health condition he/she may have, nor to fragment actions, nor to isolate from the complexity of health services (MENDES; CARVALHO, 2015).

Instead, working with bodily practices involves the creation of ways of integrating care, participants´ needs and interests, and knowledge from other areas. Furthermore, the notion invites HPE professionals to offer meaningful bodily experiences, to be responsive to participants´ needs, and to provide them with affective and relational practices (MENDES;

CARVALHO, 2015). Hence, bodily practices do not aim to guide people to a particular lifestyle, but to create with them new possibilities of ways of living (SILVA; DAMIANI, 2005).

On the other side, physical activity is mainly concerned with fighting against sedentariness, overweight and obesity through the promotion of physically active lifestyles. It has become a medicalised concept (FRAGA et al., 2007), beyond the classic definition that it follows: 'any bodily movement produced by skeletal muscles that results in energy expenditure' (CASPERSEN; POWELL; CHRISTENSON, 1985, p. 126).

The physical activity approach has its foundations on quantitative and biological knowledge, from disciplines like Anatomy, Physiology and Epidemiology. It is widely accepted that physical activity plays an important role in reducing and controlling risk factors for noncommunicable diseases (DAMICO; KNUTH, 2014). That is the reason why research on physical activity is mostly related to measurements of physical activity levels of the population (DAMICO; KNUTH, 2014).

In contrast to physical activity, the notion of bodily practices emerged in Brazilian literature in the late 1990´s related to school PE (LAZZAROTTI FILHO et al., 2010). Its use has increased, and it has been adopted by other areas like Education, Psychology, Anthropology, Arts and Social Sciences. The bodily practices approach has its foundations on Humanities and Social Sciences (LAZZAROTTI FILHO et al., 2010).

Bodily practices are conceptualised as the individual or collective expressions of physical culture that convey the meanings people attribute to them (BRAZIL, 2013). They derived from people´s knowledge and experience of play, dance, sports, recreation, martial arts and gymnastics, constructed systematically or not (BRAZIL, 2013, p.28). Bodily practices involve both Eastern and Western traditions to movement, including multiple forms of human expression through the body (CARVALHO, 2006b).

The conceptualisation of bodily practices entails a refusal of medicalising and fragmented practices (BAGRICHEVSKY et al., 2013), and an affirmation of the sociocultural aspects of human movement (DAMICO; KNUTH, 2014; LAZZAROTTI FILHO et al., 2010).

Bodily practices convey a critique to physical activity, since the latter refers to an approach based on biomedical traditions that tend to focus on illness, symptoms and risk factors as a means to promote health. What can be seen as a limitation is that physical activity, as a biomedical approach, takes account only of the ill-body and not of the whole person with his/her story of life, needs and interests (CARVALHO, 2006b).

Moreover, a biomedical approach is likely to reduce the body into an object under control and undermine the caring dimension of health work (MERHY, 2014). In this way, physical activity can serve to specific purposes for governing bodies and inculcating a sense of responsibility and blame into the population (SILVA; DAMIANI, 2005). In this regard, Fraga (2006) revealed how the phenomenon of body governmentality operates mostly at the level of discourse and provision of information for the population.

In response to these critiques, bodily practices evolved as an alternative approach that focuses on the person (whether ill or not) and on the 'production of encounters' (CARVALHO, 2006b). In these encounters, movement is the language that allows a special dialogue among individuals, communities and health services.

Bodily practices are aligned with health promotion principles and they have a potential to contribute to holistic health care (FRAGA; CARVALHO; GOMES, 2013). Furthermore, they are likely to provide participants with meaningful experiences, leading to increased self-care, self-esteem, self-perception, socialisation and fun. Also, they create opportunities for HPE professionals to listen to, observe and stimulate people in the construction of affective, enduring and supportive relationships (CARVALHO, 2006b; SILVA; DAMIANI, 2005).

Therefore, this study adopted the notion of bodily practices because it is a potent theoretical tool for operating a comprehensive orientation to health, which considers the wholeness and complexity of human being, and the social determinants of health. The concept of bodily practices has a power to develop other dimensions of health and wellbeing that have been little explored by HPE professionals in service.

The notion of bodily practices extrapolates the boundaries of a theoretical concept and reaches the practice. It carries a humanistic basis that is helpful for HPE professionals to position and mobilise their discourses and practices within the health sector. For instance, bodily practices imply the freedom of participants to connect with their culture, needs and interests, and the sensitivity of HPE professionals to identify and boost these connections. Then, bodily practices affect how HPE professionals deliver sessions and care for participants. In working with bodily practices, there is a concern to enable participants to find meaning from movement, in opposition to the imperative to move and spend energy as much as possible.

In the theoretical dimension, bodily practices might be capable of mobilising the salutogenic model (see chapter 3) in practice, as they promote human strengths instead of deficits, like connectedness, empowerment, flourishing, resilience, coping, quality of life, among others (ERIKSSON; LINDSTRÖM, 2010).

Bodily practices offer possibilities for HPE professionals to engage in other ways of working that allow them to move away from pathogenic models, in a similar way as salutogenesis. Moreover, bodily practices engender relational practices between HPE professionals and participants, participants with themselves, and with others (ALVES; CARVALHO, 2010). Salutogenesis also emphasizes the strength of being relational in the 'process of becoming' healthier. Hence, bodily practices demonstrate to have a strong connection with salutogenesis. Such theoretical alignment reinforces the importance of HPE professionals integrating the team of health workers and provide specific services in the health sector.

However, it is important to recognise that there are some limitations in using the notion of bodily practices. Some authors say that bodily practices is a concept under construction, because it still lacks stability and consensus within research community (GALVANESE; BARROS; D'OLIVEIRA, 2017; LAZZAROTTI FILHO et al., 2010). The point is that bodily practices do not have the same tradition and recognition as physical activity at the level of research, professional education and service in Brazil (FRAGA; CARVALHO; GOMES, 2013).

Nevertheless, the notion of bodily practices is considered in this study as a powerful tool for activating and establishing a dialogue with theoretical concepts from Collective Health, health promotion framework (WHO, 1986) and salutogenesis (ANTONOVSKY, 1979, 1987, 1996).

2.3 Lessons from Collective Health: a caring dimension

As Campos et al. (2014) proposed, it is important to identify that there is a set of specific professional knowledge and practices corresponding to a **nucleus**, or a specialised area. On the other hand, there is a **field**, a space of intersection that join professions around common practices of health care. Thus, the HPE professionals act in the nucleus of PE and in the field of health.

A health worker has an important function of a 'catalyst' for health promotion action (WHO,1998), by fostering learning about health[10], life skills development[11], community empowerment, change in life conditions and population access to policies and health services.

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[10] Learning about health corresponds to an enhancement of health literacy, which can be explained as people´s ability and motivation to get access to information and improve their capacity to understand and use it in favour of their health development (WHO, 1998).

By means of explaining the work of health professionals, Merhy (2014) uses the notion of technology. By technology, the author refers not only to equipment, instruments and materials, but also to the body of professional knowledge, skills, procedures and tools that indicate how practitioners from specific areas produce and organise their services and/or products. Each profession has a technological knowledge, which is complex and defines the whole productive process (MERHY, 2014).

Merhy (2014) proposes a classification for health technologies into three types: (1) soft, refers to the production of relational processes as acts of care that are constructed through human interaction; (2) soft-hard, it is the case of highly structured knowledge, for instance clinical practices and epidemiological approaches; and (3) hard, those centralised on the use of equipment, machines and strict rules.

The act of producing health services is a 'lived work' (MERHY, 2014) as it embraces human action with one´s personal story, creativity, competencies, abilities and knowledge converged on a professional task. To Merhy (2014), the provision of health care services constitutes a 'lived work' in action, similar to the work developed in the field of education.

'Lived work' is based on 'soft technologies', which operates through building practices of attachment, attentiveness, empowerment and others. If it is possible to say that it has a final product, it is an encounter. The encounter refers to what is constructed through the interaction between health professionals and individuals/communities, and between the individuals with themselves.

The singularity of health services relies on the essential working process: the 'act of care'. Care is conceptualised as a humanised act of health assistance concerned with people´s sense of existence (AYRES, 2004). While delivering services, what health workers intentionally produce is care. Thus, the common object of health professions, whatever is the specialisation, is the production of care (MERHY, 2014).

Merhy (2014) suggests that a model for working with health might be based on possibilities for producing relationships with individuals/communities that would facilitate attentiveness, autonomy and attachment. It would not ignore the specificity of each professional area and knowledge, instead, it would explore multiple possibilities of caring as a common and major dimension among all professions to maximise their actions.

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[11] By life skills, the Health Promotion Glossary means 'abilities for adaptive and positive behaviour, that enable individuals to deal effectively with the demands and challenges of everyday life. (…) Examples of individual life skills include decision making and problem solving, creative thinking and critical thinking, self-awareness and empathy, communication skills and interpersonal relationship skills, coping with emotions and managing stress' (WHO, 1998, p.15).

It is essential to reorient health services towards humanisation, transforming traditional appointments with patients into ‘therapeutic encounters’ (AYRES, 2004). To bring humanisation into practice, it is critical to allow some flexibility in technical procedures with relational and non-technical practices. The encounter privileges a dialogic dimension, paying attention and listening to the other with genuine interest. Listening to refers to an interactional resource, through which people feel comfortable to express their needs, problems and desires. By establishing a relationship with individuals, health workers help people to recover their project of happiness and to make meaning from health services (AYRES, 2004).

Furthermore, Ceccim and Merhy (2009) suggest that a micropolitics rooted in encounters and interactions might constitute resistance against a macropolitical governance in health care. The authors add that in micropolitics, the encounters are pedagogical because they allow knowledge production, enabling learning and creativity.

The ‘pedagogical encounter’ as Armour (2011) indicates, is similarly used as a conceptual element in the field of education to indicate the interaction between teachers, learners and knowledge.

Again, the notions of ‘lived work’, ‘soft technologies’ and ‘production of encounters’ make evident some similarities between the act of teaching and the act of caring. Based on this commonality, this review borrows some elements from Sport Pedagogy as a means to advance the discussion about bodily practices delivery in the health sector, which is presented in the next section.

2.4 Lessons from Sport Pedagogy: a pedagogical dimension

The notion of sport pedagogy[12] can be useful for improving our thinking about bodily practices and health, since it conveys the wide meaning of cultural performances, beyond athletics, as established by German language (ARMOUR, 2011; HAAG, 1989; TINNING, 2008).

In Haag´s (1989) view, sport pedagogy is related to the interaction between curriculum, teaching and learning that occur both in and out of schools. And more importantly

[12] Sport pedagogy is a subdiscipline of the major field of Sport Sciences (HAAG, 1989; ARMOUR, 2011). Considering that all subdisciplines are positioned between sport sciences and another related discipline, in the case of sport pedagogy, it is related to sport sciences and education (HAAG, 1989). Armour (2011) has a similar comprehension that sport pedagogy studies the intersection between sport and education, and it integrates all the other subdisciplines in practice.

for the purpose of this study, it applies to the whole life of a person, not only to children and youth (HAAG, 1989; ARMOUR, 2011).

In this line, Armour (2011) adds that sport pedagogy focuses on learners´ needs in terms of movement, and by consequence, on teachers´ abilities to identify and meet those needs. The author also highlights that sport pedagogy, with its broad scope, can be related to pedagogies for health. In this respect, other scholars reinforced that the notion of pedagogical work is related to movement, bodies, and health (TINNING, 2008), and that instructors should focus on the pedagogical dimension of practices in order to engage more people in forms of movement (CALE; HARRIS, 2011; CARVALHO, 2006b).

As far as the concept of pedagogy is concerned, based on Bernstein (2000), it is possible to assume that the processes undertaken in health-promoting programmes constitute a pedagogical practice, as they have an explicit purpose of influencing people´s knowledge and practices regards their health.

In 'The Handbook of Physical Education' edited by Kirk, Macdonald and O´Sullivan (2006), pedagogy is a central concept and it is defined as a combination of learning, teaching and curriculum that relate to each other in an interdependent way. These aspects interact with each other in the 'pedagogical encounter' of a lesson or session (ARMOUR, 2011). What is central to pedagogy is this interaction between the elements as a multidimensional and 'dynamical system' (ARMOUR, 2011; HAERENS et al., 2011; KIRK; HAERENS, 2014; KIRK; MACDONALD; O´SULLIVAN, 2006; METZLER, 2011; TINNING, 2008, 2010).

As suggested by Kirk and Haerens (2014), it is crucial to give attention to all pedagogical dimensions. In thinking about the context of health sector, it is important to consider: (1) individuals/community´s health needs and conditions; (2) HPE professionals´ knowledge, beliefs, values, behaviour and practices; (3) knowledge and forms of movement developed in health promotion.

In summary, it is possible to learn from the literature that pedagogy is a complex concept. By structure, it is multidimensional as it comprises learners/learning, teachers/teaching and knowledge. By nature, it is dynamic, processual, relational and intentional.

The relevance of this conceptualization in this study is that it helps us to understand the potential of pedagogical dimension for emphasising relational practices, which can be thought of as a possibility for operationalising the theory of salutogenesis through bodily practices in health-promoting programmes. This connection will become clearer in the next section about salutogenesis.

3. SALUTOGENESIS AS A THEORY FOR HEALTH PROMOTION

'The salutogenic approach does not guarantee problem solution of the complex circularities of people´s lives, but at the very least it leads to a more profound understanding and knowledge, a prerequisite for moving toward the healthy end of the continuum.'
(ANTONOVSKY, 1987, p.5)

3.1 Health promotion

Before introducing salutogenesis as a theory for health promotion, I will present the understanding of health and health promotion that guided this study.

The complex and multidimensional conceptualisation of health leads us to realise that the notion of health is as broad as the notion of life (CZERESNIA, 2009). With a comprehensive and positive perspective, health can be defined as a result of multiple factors and forms of social organisation, which require state responsibility in conducting a health public policy integrated to other policies of social and economic nature (CAMPOS; BARROS; CASTRO, 2004).

In Brazil, health is a right for all citizens (BRAZIL, 1990). The state is committed to provide basic conditions to ensure population´s health development. Brazilian legislation (BRASIL, 2013) establishes that:

> The levels of health express the national social and economic organisation, having as determinants and conditioning factors, among others, food, shelter, basic sanitation, physical environment, working, income, education, physical activity, mobility, leisure and access to essential goods and services (Art 3rd, Law nº 8080, 1990, revised in 2013).

Thus, Brazilian legislation recognises that health has social determinants, which is aligned with the health promotion framework.

Health promotion intends to position people at the centre of decision-making processes related to their health (WHO, 1998). Besides participation, other values are essential to health promotion, such as solidarity, equity, citizenship, integrality, collaboration

across sectors and, the recognition of social determinants of health[13] (BRASIL, 2013; BUSS, 2009).

Regarding the term 'health promotion', Buss (2009) tells us that it was initially used by Sigerist, in 1946, to establish the four tasks of Medicine: health promotion, disease prevention, recovery and rehabilitation. The meaning has changed over time, mainly after international conferences (BRAZIL, 2002; WHO, 1986) that built conceptual foundations for health promotion and the new public health (NUTBEAM, 2018). Health promotion emerged as an alternative to the medicalisation of health services.

Currently, health promotion is conceptualised as a set of strategies to produce health, conducted in co-responsibility amongst government, community, individuals and partners (BRAZIL, 2013; BUSS, 2009). The main goal is to create actions for meeting health-related social needs and fostering people´s health development, beyond striving against diseases (BRAZIL, 2013; CARVALHO, 2006b). Additionally, it has a purpose of articulating technical with popular knowledge, and community with institutional resources to modify living conditions towards better health (BUSS, 2000).

In complement to health promotion, disease prevention is also a strategy in primary health care. They are complementary in health services, but theoretically distinct (BUSS, 2009). Health promotion means "the process of enabling people to increase control over the determinants of health and thereby improve their health" (WHO, 1998, p. 1–2). Whereas, disease prevention focuses on detecting risk factors for diseases and establishing mechanisms to control or avoid them (BUSS, 2009).

Despite the theoretical distinction, health promotion and disease prevention are commonly mixed-up. The confusion between them comes mainly from interventions aiming at individuals´ lifestyle change to reduce risk factors for certain diseases, which refers to a preventative orientation, but it is often identified as a health promotion´s programme (BUSS, 2009). Actions that are really committed to health promotion have a wide scope and they integrate people with their communities and local environment, not remaining restricted to individual behaviours.

Thus, it is possible to note that there are different ways for approaching health, which is examined in more detail in the next section, in light of Antonovsky´s ideas.

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[13] By social determinants of health, it is understood that living conditions and ways of living determine individuals' and communities´ health (WHO, 1998). The concept embraces four components that impact on people´s health development: human biology, environment, lifestyle and health services (BUSS, 2009).

3.2 Models of health

Antonovsky (1979) identified three models of health: (1) clinical model – based on the dichotomization healthy nonpatient *versus* ill patient and concerned with diagnosis and cure; (2) public health model – it refers to the epidemiological model of studying the associations between diseases and populational groups, concerned with risk factors and prevention; and (3) continuum model – it considers health as a continuum and it is about how people move towards the desirable side.

The first and second models are related to a pathogenic orientation to health. Although the epidemiological model makes possible early identification of diseases and prevention, Antonovsky (1979) indicated that it has the same dichotomous classification of people as healthy or ill as the clinical model.

The author mentioned three reasons why pathogenesis is not helpful for understanding people´s health issues. First, it focuses only on the disease, which means that who is ill is ignored. Second, it works by what Antonovsky called the 'magic bullet': disease - diagnosis - treatment. Third, it operates with binarism and dichotomization of poles, such as ill *versus* healthy, normal *versus* pathological and inactive *versus* active.

A pathogenic orientation takes the human being as a perfect organism (*homeostasis*), which provides a basis for ideas such as normativity and categorisation (ANTONOVSKY, 1996). Then, who is not perfect is not considered normal, and the person is categorised according to the severity of his/her illness or other criteria. Often, subjectivity is supressed and replaced by a disease name[14].

By contrast, the continuum model is an alternative for each of these aspects. It takes account of who is ill and of what is important to her/him. The continuum model focuses on the entire person rather than disease, and on salutary instead of risk factors (ANTONOVSKY, 1996, p. 18). It endeavours to find out what produces and maintains health. And, instead of binaries, it works with a continuum where a person can be in any point and move towards an ease or 'dis-ease' side, according to life situations.

The continuum model provides the basis for the salutogenic model, which assumes the principle of *heterostasis* and the imperfection of human being, which means that it is natural

[14] Frequently, in Brazilian health services, actions directed at groups are labelled by the illness that participants suffer from (e.g. group of diabetes, pain, high-blood pressure and so on).

and acceptable for all to deal with stressors that adds entropy to our lives, such as illness (ANTONOVSKY, 1987, 1996).

It is important to highlight that Antonovsky (1979) criticised the pathogenic perspective, but he did not reject it. He did not dismiss the importance of knowledge about diseases and risk factors avoidance. The point is that there was a need to provide an alternative model of health that would not put too much weight on risks to be prevented, but on resources to be developed. Then, Antonovsky (1979) proposed the salutogenic model, focusing on experiences that could be salutary for people, which is reviewed in the following section.

3.3 Antonovsky´s salutogenic model

Antonovsky (1996) warned that working with health promotion without a theoretical foundation may put it at risk of not fulfilling its purpose. Without a theory, health promotion actions may not be effective and sustainable. Thus, Antonovsky (1979, 1996) developed the salutogenic model as a theory for health promotion.

Regarding bodily practices delivery, there is little knowledge about theoretical and methodological basis to support HPE professionals for working with health promotion, which partially explains why many Brazilian programmes implement the disease prevention approach. As an alternative to this issue, this study takes salutogenesis as a theory to advance the understanding about bodily practices and health.

Antonovsky (1979) proposed a shift on health paradigm based on his studies about women who lived at concentration camps and kept healthy even after their dreadful experiences. Hence, salutogenesis has a strong evidence base (ERIKSSON; LINDSTRÖM, 2010).

The author introduced the salutogenic orientation as an alternative to the pathogenic perspective to health. In his view, the main difference between these approaches relies on what questions are posed. Instead of asking ‘what are the causes of certain diseases’, he suggested to ask ‘why people keep healthy’.

In addressing different questions, it would be possible to find new answers and contribute to people´s lives. In Antonovsky´s words:

> If, then, we can begin to understand this mystery – the mystery of survival, the mystery of why some people´s health is such that they go through life for some of the time with relatively little pain and suffering – we might begin to think about applying this understanding to reduce pain and suffering among the rest of us. (ANTONOVSKY, 1979, p.36)

Thus, the most important lesson from Antonovsky´s work is that the type of question determines how to gain a better understanding about health. Hence, salutogenesis constitutes a question of what are the reasons that people stay healthy. Antonovsky (1979) used the term 'salutogenesis' to refer to the origins (*genesis*) of health (*salus*). As an answer, Antonovsky presented the concept of sense of coherence (SOC).

Following his first book '*Health, stress and coping'* (1979), it is possible to track a line of questions that leads us to comprehend the concepts of the salutogenic model (Box 1). The model begins with the idea of health continuum.

As mentioned in the previous section, Antonovsky (1979) made a critique to the pathogenic paradigm because it emphasises diseases through a dichotomous idea of disease versus health. The author highlighted that this paradigm is dominant in such a way that he preferred to call health care systems by disease care systems. However, to Antonovsky (1979), nobody is totally ill or totally healthy. To illustrate his point, Antonosvky (1996) used the metaphor of the river and swimmers. Curative medicine tries to rescue swimmers drowning downstream whereas disease prevention works upstream. Health promotion helps people to swim. There is no healthy person standing on the shore. In his words (ANTONOVSKY, 1996, p.14), "we are all, always, in the dangerous river of life. The twin question is: how dangerous is our river? How well can we swim?"

In this sense, the author introduced a notion of health as continuum. Health is more about a process than something that an individual has or has not. To make this clear, he used the breakdown concept of 'dis-ease'. So, in a salutogenic framework there is not an extreme of health and an opposite side of disease. Instead, Antonovsky (1979) suggested that there is an ease/dis-ease continuum. A person can be positioned in this continuum according to her or his life situation. In his words, "(…) all of us, as long as we are alive, we are in part healthy and in part sick, that is, we are somewhere on the breakdown continuum" (ANTONOVSKY, 1979, p.5).

Antonovsky (1996) argued that low/high risk factors are not enough to explain how people move towards the ease or dis-ease side of the continuum. He suggested we focus on salutary factors, those that effectively contribute to promote health.

Box 1. Summary of questions, concepts and definitions of the salutogenic model of health.

Problem of salutogenesis: *How do we manage to stay healthy?*		
Sub-question	Concept	Definition
"How can it be explained that a given individual has not broken down?" (p.55)	*Ease/dis-ease continuum or breakdown*	A multifaceted state or condition of human organism regards pain, functioning limitation, prognostic implication and action implication (p.64).
"What are the factors pushing this person toward this end or toward that end of the continuum?" (p.37)	*Stressors*	A demand made by the internal or external environment of an organism that alter its homeostasis and requires an adaptative behaviour (p.72).
"What, then, is the response of the organism to a confrontation with stressors?" (p.93)	*Tension*	Response to a stressor (p.94).
"What determines whether a person in a state of tension will be pushed in one direction or the other on the health ease/dis-ease continuum?" (p.96)	*Tension management*	Process which problems are solved, and tensions dissipated. (p.96)
"How do we manage tension and prevent it from leading to stress?" (p.98-99)	*Generalized Resistance resources*	It refers to characteristics that facilitate dealing with and overcoming stressors (p.105).
Answer to the problem of salutogenesis: *Sense of coherence* "A crucial element in the basic personality structure of an individual and in the ambiance of a subculture, culture, or historical period" (p.124).		

Source: Compiled from Antonovsky (1979).

Antonovsky (1979) proposed the concept of **breakdown** or the **ease/dis-ease continuum**. The author defined breakdown as a 'multidimensional continuum' that represents the condition of a person. It is comprised of four dimensions: pain, functional limitation, prognostic (degree of severity) and action implication.

Antonovsky (1979) suggested that any person has a breakdown profile, which is identified by a score from 1 to 4, on each of the four dimensions. In his model, there are 384 possible profiles and the most desirable profile of a person would have negative terms, such

as absence of pain, no functional limitation, no acute or chronic condition and no action to be taken[15].

In asking how people move toward the ease side of the breakdown continuum, Antonovsky (1979) indicated that the intervening factors are **stressors.**

Stressors represent a demand for a response that is not ready or automatic for a person, which means that they require certain effort to deal with them (ANTONOVSKY, 1979). The author pointed out several sources of psychosocial stressors: "accidents and survivors; others´ experiences; horrors of history, direct and vicarious; intrapsychic conflicts; fear of aggression; immediate world change; phase-specific crises; other normative crises; conflicts in social relations; and goals-means gap" (ANTONOVSKY, 1979, p. 185). Furthermore, he suggested that stressors have been present in all societies, in all times.

In the salutogenic model, the organism´s response to a stressor is defined as **tension**. Tension can be positive or negative. In the author´s view, stress is understood as the negative consequence of failure in coping with tension. And what is determinant to a person being successful or not in this process of **tension management** constitutes the **generalised resistance resources (GRRs).**

Antonovsky (1979) defined GRRs as any characteristic of a person that is effective in avoiding and/or overcoming stressors. The author indicated major types of GRRs as:

1. Material: money, clothes, food and so on.
2. Cognitive: information and skills to acquire further knowledge.
3. Emotional: ego identity, consisted of a stable sense of the self in relation to context.
4. Coping strategy: rationality, flexibility and far-sightedness, in other words, assessment of stressors, availability of plans and tactics to deal with situations and capacity to anticipate the future effects of present actions.
5. Relational: social support, development of social networks and commitment.
6. Macro-sociocultural: cultural stability, religion, philosophy and art
7. Preventative health orientation: risk-avoidance actions such as balanced diet, regular physical activity and not smoking.

[15] Bauer et al. (2019) made a critique about this, as they considered the negative definition of a desirable profile in the continuum as contradictory to a positive view of health.

Regarding the last one, preventative health orientation, Antonovsky (1979) considered it as a GRR due to its function of avoiding stressors. But the author pointed out some problems with this approach.

In his view, people are affected by discourses that are not supported by empirical knowledge. He warned that "they tend to become true believers, thinking that X is the total, instant solution to the only problem that matters[16]" (ANTONOVSKY, 1979, p.101). He suggested that disease prevention might lead to undesirable consequences, for instance people´s anxiety due to behaviour surveillance; 'medicalization of human existence' and government control.

Antonovsky (1979) indicated that the most important GRR in dealing with stressors is the cognitive aspect, which refers to knowledge-intelligence. It consists of knowledge itself and skills for further knowledge acquisition, for example about citizens´ rights. Another crucial resource is how a person is integrated to a social network that represents her/his interests and needs (ANTONOVSKY, 1979).

By asking what is common among GRRs, Antonovsky (1996) clarified that they provide life experiences that help people to cope with stressors and find meaning from their world. In exploring the nature of and what binds different kinds of GRRs, Antonovsky (1979) presented the concept of **sense of coherence (SOC)**.

SOC is the main concept of the salutogenic model and it provides the answer to the question of how people stay healthy. SOC is defined as:

> a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one´s internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (ANTONOVSKY, 1987, p.19)

Thus, SOC has three components: meaningfulness, manageability and comprehensibility (ANTONOVSKY, 1996). They are related to one´s knowledge, motivation and confidence that problems can be understood and solved. This combination is mobilised when one meets a stressor to cope with. Comprehensibility indicates that the person has enough information to understand her problems and world. Meaningfulness refers to what

[16] Based on this idea and on Fraga´s study (2006), we can think of how the population has incorporated the discourse of 'exercise is medicine', and has begun to believe that exercise is the best solution for the big problem of sedentariness and obesity.

motivates her to get involved in the problem-solving process. By manageability, Antonovsky (1996) means the capacity to recognise which resources are available to deal with a problem.

In summary, the central idea of Antonovsky´s (1979) model is: when a person is confronted with stressors, her/his strong SOC can mobilise available resources to manage tension and avoid it to be transformed into stress and, in so doing, stay healthy.

3.4 Approximations between salutogenesis and physical education

Antonovsky (1979, p.184-85) indicated some key elements in the salutogenic model of health. Three of them are selected here to explore a possible contribution of bodily practices to people´s health: 'life experiences shape the sense of coherence', 'GRRs provide one with sets of meaningful, coherent life experiences' and 'successful tension management strengthens the SOC'.

Major physical activity programmes are focused only on engaging people to be active, then, they restrict possible outcomes and not necessarily promote health. On the other hand, if such programmes aimed at offering meaningful and relevant experiences through movement (HAERENS et al., 2011; MCCAUGHTRY; ROVEGNO, 2001; QUENNERSTEDT, 2008), the participants would, inevitably, become more active.

Beyond that, I would say that bodily practices would contribute to people´s health by providing meaningful experiences that might strengthen their SOC and develop different types of GRRs or 'health resources' (MCCUAIG; QUENNERSTEDT, 2016). Movement has a potential to connect bodily experiences with other aspects of human life (MCCAUGHTRY; ROVEGNO, 2001). Quennerstedt (2008) suggested that meaning in movement can be considered itself a resource for people´s health[17].

Besides meaning in movement, it is very important to provide participants with opportunities to be successful. Kunz (2007) suggested that activities that make possible a feeling of achievement are much more relevant to health promotion than others that focus on energy expenditure, like moderate to vigorous physical activity (MVPA). Furthermore, Kunz (2007) pointed out that physical activity practice concerned with physical aspects does not mean a healthy and longer life. He highlighted that PE can offer many possibilities to develop

[17] About this, Quennerstedt (2008) called for further studies to investigate how empowerment, joy of movement, self-understanding and learning in physical activity can become available health resources.

salutary factors, which means to promote GRRs. He claimed that there is a need to create real possibilities for PE to strengthen participants´ SOC.

Ericson et al. (2017) addressed the question of why older women keep physically active. To do so, the authors explored what health resources were related to physical activity intervention by participants as important for health. The findings showed that physical activity promoted seven health resources: social relations and care, positive energy, self-worth, capability in and about physical activity, the habit of exercising, identity as an exercising person and womanhood related to physical activity.

The study of Ericson and collaborators (2017) confirmed that movement can contribute to people´s health by promoting mainly social and affective benefits. The authors highlighted that the social aspect of caring for others and developing a sense of community was expressed as significant to participants. In promoting health resources, the intervention could be considered as an example of social change (ERICSON et al., 2017).

In this sense, bodily practices are likely to act as a resource that provide people with opportunities to develop personal and collective characteristics to overcome daily life stressors and maintain or enhance health.

In a school context, McCuaig et al. (2013) explored the salutogenic model of health as a strength-based approach within Australian Health and Physical Education Curriculum. The authors drew on a comprehension of health as a dynamic and multidimensional process that constitute a resource for new ways of living rather than a state to be achieved. Through a health literacy´s project with schools, this study showed that students identified joy of movement as a resource for health in PE. According to the authors, this approach was concerned with helping pupils to acquire knowledge and skills to develop resources that were effective for cultivating life.

With a salutogenic perspective, bodily practices might contribute to people´s health by producing different types of GRRs (cognitive, emotional, social, physical) that would be on their disposal when they needed to manage tension in life. Thus, the salutogenic model of health provide a basis for exploring how bodily practices help people´s health development in many ways, beyond engagement in an active life.

Furthermore, salutogenesis allows HPE professionals to activate a complex of conceptual tools that might be useful to expand the breadth of their practices and help them to find a possibility to escape from pathogenic and prescriptive boundaries in the health sector (VARNIER; ALMEIDA; GOMES, 2016).

Therefore, this doctoral dissertation invested on the connection among the notions of bodily practices, sport pedagogy and salutogenesis, in order to advance the analysis of HPE professionals´ practices in working with older adults in health-promoting programmes.

4. METHODS

This chapter will describe the methodological decisions that were made throughout this investigation.

4.1 Worldview

Worldview or paradigm represents a theoretical perspective for inquiry and informs how the investigation is conducted (CRESWELL, 2007). According to Guba (1990, p.17), paradigm is a 'basic set of beliefs that guides action'. It provides a system of thinking about the nature of the reality to be studied (ontology) that specifies forms of gaining knowledge (epistemology), which the researcher conducts in appropriate ways (methodology) (GUBA, 1990; CRESWELL, 2007; DENZIN; LINCOLN, 2011). In other words, a set of concepts constitute a frame that directs the investigator to proper methods and tools for examining a research problem.

This study intended to investigate ways of delivering bodily practices for health and to understand the health development processes that participants related to these experiences. Due to the nature of the research problem, the study adopted a qualitative and constructivist perspective (GUBA, 1990; CRESWELL, 2007; LINCOLN; LYNHAM; GUBA, 2011; GRAY, 2014).

By Denzin and Lincoln´s (2011) definition, qualitative research can be stated as:

> a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. These practices transform the world. (…) qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them (p.3).

Qualitative researches involve an interpretive effort to elaborate, organize and connect concepts from empirical data, emphasizing meaning-making processes within a complex phenomenon (DENZIN; LINCOLN, 2011). The process of doing qualitative research includes the use of theoretical lens, collection of multiple sources of data in natural settings, researcher interpretation and reflexivity, inclusion of participants´ voices in reports and the development of a holistic account (CRESWELL, 2007).

According to Corbin and Strauss (2015), this approach entails three main components: **data**, from multiple sources such as interview, observation, documents, videos and audios;

procedures, which are used to manage and analyse data, like coding, categorizing, sampling and memo-writing; **reports**, in different formats to present findings and interpretation.

Qualitative strategies can be employed to study in detail a wide range of human experiences, behaviours, emotions, organizational processes and many other kinds of social and cultural phenomena (CORBIN; STRAUSS, 2015). In qualitative inquiry, the researcher acts as a '*bricoleur'* (DENZIN; LINCOLN, 2011), bringing world representations together into a montage.

Regarding constructivism, its purpose is 'neither to predict and control the 'real' world nor to transform it but to reconstruct the 'world' at the only point at which it exists: in the minds of constructors' (GUBA, 1990, p.27). So, constructivism focuses on presenting multiple realities from participants perspectives. In this sense, data is not discovered or revealed, instead, it is constructed through interaction between enrolled participants (as interlocutors) and researchers (MINAYO et al., 2014). So, I write about 'data generation' rather than 'data collection'.

By using a qualitative and constructivist approach, it is important to make some assumptions (CRESWELL, 2007; DENZIN; LINCOLN, 2011): I recognise the complex, multiple and socially constructed nature of the reality studied (LINCOLN, 1990), thus, different perspectives from participants were considered; I assume an effort to get closer to the field and overcome a dichotomic relationship researcher-object, in order to better understand reality in context; and finally, I acknowledge that my subjectivity as a researcher interacted with participants' perspectives.

4.2 Researcher reflexivity

Reflexivity involves the observation of the self of the researcher, and of the interaction between researcher and the context under study (MINAYO et al., 2014). Behind the inquiry process stands an investigator who brings values to a study (CRESWELL, 2007; DENZIN; LINCOLN, 2011), and who is also affected by the field of research (MINAYO et al., 2014).

As a researcher, how I tend to look at the context under study depends on where I am looking from. I identify myself as a woman, 31 years old, white, middle class and physically active. I´m a PhD student and a high school physical education teacher, conducting research informed by my familiarity with qualitative methods, gender studies and my personal experience as a HPE professional in a health-promoting programme.

The position from where I approached my object of study during fieldwork was of a visitor who went to see *in situ* and stay for a short period of time in sites where experiences of

older adults´ health promotion related to bodily practices were developed. However, as Minayo (2014) warned, a researcher also becomes an object under study in the perspective of participants. That is what happened during this study´s fieldwork. The participants also investigated me and my story of life.

Thus, my personal experience as a health worker was recruited to build an empathetic relationship with participants. In this way, beyond my association with the university, my position included a new affiliation of a peer, that is, of a health professional who worked within SUS and who was able to understand what the HPE professionals handle because I could imagine what was like to work in that context.

It seems that such recognition influenced participants to believe that my research intention was not related to inspection and evaluation over their practices, in terms of positioning their programmes as good or not. Through interaction during fieldwork, I could express my commitment to learn with them, in a way that we were able to dialogue about bodily practices and health promotion.

I also noted that, as someone from the university, my visit and analysis about the programmes were beneficial to participants. I perceived that the HPE professionals faced barriers to demonstrate the relevance of their work with bodily practices in their institutions. My study may contribute to strengthen their arguments and help them to show how their practices are aligned with health promotion.

To illustrate this, my study was reported in the news section on city halls´ websites, I was invited to give an interview about my visit for a radio show, and to present my study´s findings to health centre´s coordinators. Thus, as a researcher, I could involve HPE professionals into reflections about their role and work in health promotion and help them to intensify and strengthen dialogue about these reflections in their institutional context.

On the other side, my research decisions were also affected by participants. In reason of the empathetic relationship we established, the participants invited me to visit other sessions that were not planned to occur, and I ended up incorporating their suggestions into the study.

To monitor my reflexivity, I took notes during fieldwork to record impressions, thoughts and feelings in relation to events that I experienced in the context of study.

4.3 Grounded theory design

A research design refers to a strategy of inquiry, which allows the researcher to move from paradigm to empirical world. It provides a set of practices that guide data generation and analysis (DENZIN; LINCOLN, 2011).

Grounded theory (GT) is a qualitative approach, commonly used by researchers in the fields of Nursing, Social Sciences and Psychology (CRESWELL, 2007). Regarding the research area of physical activity and health, several studies adopted GT in order to understand a range of topics, for instance: contribution of culturally-based interventions to health (MURDOCH-FLOWERS et al., 2017), older adults´ perceptions of physical activity effects on health (KOMATSU et al., 2017), relationship between physical activity and mental health (CRONE; SMITH; GOUGH, 2005), socio-behavioural mediators of physical activity participation of children (BUCKLEY; WARING, 2009), adolescent girls (LAIRD; FAWKNER; NIVEN, 2018), boys (JACHYRA; GIBSON, 2016), women (HARLEY et al., 2009) and older adults (HARDY; GROGAN 2009).

Originally, GT came from Sociology and it was developed by Glaser and Strauss[18] in the 1960´s (GLASER; STRAUSS, 1967). The methodology was not created based on specific paradigms, however, Strauss gained strong influence from interactionism and pragmatism (CORBIN; STRAUSS, 2015). Thus, for grounded theorists, knowledge is produced in action and interaction, it is cumulative over culture and useful for practice. In GT, analysis can be seen as an interactive and iterative process between researcher and data (CORBIN; STRAUSS, 2015).

GT was considered here as the most effective and appropriate design to generate data to answer the study´s research questions. Specifically, this study followed the constructivist approach proposed by Charmaz (2006). According to the author, GT can be defined as ‘a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data. Hence, the analytic categories are directly 'grounded' in the data.’ (CHARMAZ, 2016, p.188).

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[18] As the methodology evolved, Glaser and Strauss disagreed about certain viewpoints, which led them to finish their academic partnership. Currently, three GT strands are known: classic - as Glaser remained with the original work; Straussian - a modified approached developed by Strauss with Juliet Corbin; and constructivist - which was introduced by Kathy Charmaz (CHARMAZ, 2006; HUNTER et al., 2011; SANTOS et al., 2016).

GT is concerned with gaining knowledge about participants´ conceptualizations of a certain topic and exploring their perspectives towards an emerging theory. The researcher interprets the meaning that others construct about their own reality (CRESWELL, 2007). According to Charmaz (2006), GT logic is abductive, which means it has both components of inductive and deductive work. Instead of testing hypotheses, GT attributes concepts to empirical data, providing material for hypothesis elaboration (CHARMAZ, 2006). After analysis of a particular data set, the researcher generates hypotheses to be confirmed or not, until he or she reaches the best interpretation for data (CHARMAZ, 2006).

GT entails a rigorous, systematic, iterative and interactive process of data generation and analysis in order to develop an emerging theory (SANTOS et al., 2016). It fulfils three functions: a guide to data generation, an analytical process and theory construction (CHARMAZ, 2006).

One important feature of GT is that data generation and analysis are conducted simultaneously (CHARMAZ, 2006). Thus, as data is generated, the researcher produces an analysis of the material before doing fieldwork again. Further data generation takes account of the previous analysis. It is a cumulative process of generating data and analysing it. This dynamic allows the researcher to shape and reshape data generation in such a way that a greater data refinement can be reached (CHARMAZ, 2006).

The result of the use of GT is a theoretical model that explains the relationship among identified conditions, causes and consequences of a given phenomenon (CHARMAZ, 2006). By using GT, the researcher constructs a frame, grounded in data, that integrates concepts through their properties and dimensions (CORBIN; STRAUSS, 2015).

More than generating a theory, the strength of this methodology is that it is grounded in data, so it provides a better understanding on the phenomenon and a guide to practice (CORBIN; STRAUSS, 2015).

4.4 Setting

This project was a multisite study within the context of health-promoting programming where bodily practices were delivered regularly and free of charge to communities in Brazil.

The study included four health-promoting programmes that were carried out as governmental and public initiatives, whether organised by Health or Sports Departments.

The main criterion for sites´ selection was the programme´s relevance to the study. Relevance was defined according to available information about programmes that demonstrated they were successful and of some innovation in balanced health development, focusing on mental, social and/or emotional aspects, beyond the physical dimension. Or, they had an alternative approach to bodily practices that are not limited to disease prevention strategies.

The programmes were identified by exploratory online searches on virtual bases of health experiences such as 'Community of practices - SUS[19]' and 'Health in movement Observatory'[20], on social network when the programme had a profile, and by reviewing the literature, mainly from experiences reports published in conferences proceedings.

The study took place in four disadvantaged communities located in the South and Southeast regions of Brazil. Below, each site is described.

(Pilot study)

Programme 1 – *Núcleo Ampliado de Saúde da Família e Atenção Básica*, *NASF-AB* (Family Health Extended Team and Basic Health Care) - type I

Programme 1 takes place in a socially vulnerable neighbourhood of a city located in the south of *Minas Gerais* state, Southeast of Brazil. The city has an estimated population of 166,000 people (IBGE, 2018) and it has 36 health centres. These health centres count on supporting services from three NASF-AB teams that work in the south, east and middle east areas of the city. Each team delivers weekly services to seven health centres/neighbourhoods, on average.

The NASF-AB Team programme was implemented at the health centre in 2012. The team was comprised of two nutritionists, two physiotherapists, one pharmacist, one social worker, one HPE professional, one occupational therapist and one psychologist.

Once a week, the HPE professional conducted group sessions of low-impact exercise and yoga, for one hour each. Mainly older adults, ranging from 50 to 80 years old, attended the sessions regularly.

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[19] Free translation of '*Comunidade de práticas – SUS'*.
[20] Free translation of '*Observatório Saúde em Movimento'*.

Programme 2 – *Academia da Saúde* (Health Gym)

Programme 2 happens in a city located in Rio Grande do Sul state, South of Brazil. The city has an estimated population of 71,000 people (IBGE, 2018). There are three health gym units in the city and there is one HPE professional working there, with the aid of trainees.

Participants were organised in groups according to schedule and activity type. The main activities conducted in the programme were based on dance, fitness, low impact exercise and on round conversations with a special group *Divas do SUS* (SUS´ divas), focused on women´s empowerment, with sessions once a week.

Programme 3 – *Academia da Saúde* (Health gym)

Programme 3 is carried out in a city located in Rio Grande do Sul state, South of Brazil. The city has an estimated population of 83,000 people (IBGE, 2018). There is only one unit of health gym programme in the city, with a single worker who is a HPE professional. She conducts 25 sessions per week.

It is not a traditional gym as it does not focus on physical activity. It emphasises social, physical and mental development of participants to promote health and prevent diseases. The health gym is located adjacent to a health centre.

The programme had 177 participants, from 7 to 70 years old. Participants were organised into eleven classes (15 people each) and five groups, according to their age and gender: *Jovem Guarda* group - there are two classes composed of older people, over 60 years, both women and men; *Entre damas* group - five classes of women ranging between 20 and 60 years old; *Ciranda cirandinha* group - two classes of children; *Fique esperto* group - one class of adolescents; and *Misto* - one class composed by mixed-aged people who work during the day and have limited time to exercise. For children and adolescents, sessions were delivered once a week, whereas for women, older people and mixed workers there were sessions twice or three times a week.

Programme 4 – Independent programme for healthy ageing

Programme 4 is a healthy ageing and sports-based programme. It takes place in different sites in a city in Santa Catarina state, South of Brazil, such as community centres, gyms, open areas alongside the beach and psychosocial public centres. The city has an estimated population of 138,000 people (IBGE, 2018).

The programme was created in 2009 by a cross-sectorial partnership amongst Sports, Health and Social Inclusion departments. The workforce was comprised of one HPE professional with permanent position more other five professionals that are hired per an annual contract. The programme supported approximately 1,000 participations of people aged from 45 to 100 years old.

It offered adapted sports activities for older people, for instance volleyball, handball, dance, low-impact exercise, walking and recreational events. The groups took part in competitions like the 'Third Age Games of Santa Catarina', which they won the championship of dance, female volleyball and male handball.

4.5 Participants

In order to examine multiple perspectives involved in the selected programmes, three groups were included for interviewing: older adults, HPE professionals and health centres´ coordinators.

Preliminary data were gathered through a pilot study, in which I interviewed three HPE professionals, individually. Early analysis revealed that I would also need to know the perspective of participants and health centres´ coordinators as they were important agents of the process under study.

Participants of this study included six HPE professionals (Table 1), three health centres' coordinators (Table 2) and 34 older adults[21] (Table 3) who attended regularly bodily practices at the four enrolled programmes. A description of participants´ profiles is provided by group in the following tables.

[21] The study characterised participants as older adults, however, some younger adults demonstrated willingness to participate in the research and they were also included. Despite of their younger age, these participants were part of older aged groups engaged in bodily practices.

Table 1. Profile of HPE professionals[22]

	Age	Gender	Type of graduation	Year of graduation	Time of experience in the job (years)
Charles	39	Male	Teacher Education Diploma in PE	2002	Nine
Barbara	43	Female	Teacher Education Diploma in PE	2013	Six
Susan	32	Female	Bachelor in PE	2015	Three
Anne	34	Female	Teacher Education + Bachelor in PE	2012	Six
Michael	40	Male	Teacher Education + Bachelor in PE	2002	Six
Jacob	34	Male	Bachelor in PE	2009	Six

Table 2. Profile of health centres' coordinators

	Age	Gender	Major	Time of experience in the current job (years)
Sarah	51	Female	Nursing	Five
Deborah	30	Female	Nursing	Two
Michelle	41	Female	Nursing	Two

[22] The names are fictitious in order to preserve anonymity of participants.

Table 3. Profile of gym participants[23]

Participant	Age	Gender	
Mary	73	Female	Programme 1
Patricia	64	Female	
Linda	78	Female	
Sandra	68	Female	
Carol	55	Female	
James	76	Male	
Karen	59	Female	
Helen	65	Female	
Nancy	80	Female	
Elizabeth	57	Female	
Emily	57	Female	Programme 2
Teresa	54	Female	
Victoria	52	Female	
Rebecca	57	Female	
Jane	46	Female	
Grace	54	Female	
Catherine	48	Female	
Eve	66	Female	
Alice	52	Female	
Christine	46	Female	
Gloria	62	Female	
Janice	43	Female	
Yvonne	48	Female	
Diana	64	Female	
Kelly	58	Female	
Shirley	Unknown	Female	
Margaret	46	Female	Programme 3
Dorothy	66	Female	
Jennifer	30	Female	
Laura	47	Female	
Sharon	55	Female	
Kimberly	62	Female	
Paul	70	Male	
George	69	Male	

[23] The participants of Programme 4 were not included in the table above because they were not formally interviewed due to their lack of time availability and shyness. I talked with them while I was observing sessions.

4.6 Condensed fieldwork as data generation

In grounded theory, several types of data generation can be used. Charmaz (2006) highlights that whatever the method, the most important point is to generate data that are rich, relevant, adequate and useful for categorization.

For this study, condensed fieldwork, as advocated by Lawrence Stenhouse (1978, 1980, 1981, 1982, 1984), was conducted as the main means of data generation. Condensed fieldwork was chosen because it allows the researcher to access multiple data sources and to enlarge the number of cases in a relatively short period of time.

According to Stenhouse (1980), condensed fieldwork was first used by Rob Walker in 1974. Walker (1980) proposed condensed fieldwork as an alternative to long term immersion in the field (e.g. case study traditions such as ethnography) in order to research with some speed. In Stenhouse´s (1981, p. 224) view, condensed fieldwork was based on 'visiting the case rather than immersing oneself in it'. It means that the researcher spends a limited number of days in the field.

Stenhouse´s (1978, 1980, 1981, 1982, 1984) understanding of condensed fieldwork draw on case study traditions from History and Anthropology. Historians draw evidence from documents and interviews in order to comprehend the past, whereas in Anthropology, ethnographers rely on participant observation, through which they take part in an exotic culture as a way of interpreting how a society works (STENHOUSE, 1981).

In doing condensed fieldwork, data was obtained from three main sources: interview, non-participant observation and documents. Observation served for both purposes of providing insights for interviews and checking information given by participants. Furthermore, interview was conducted as an extension of observation as it captures participants´ experiences of a given situation (STENHOUSE, 1978).

In line with Stenhouse´s (1978, 1980, 1981, 1982, 1984) suggestions, fieldwork was conducted through a short visit of three days, with most time being spent on interviewing, but also on observation and collection of institutional documents and demographic indicators when available.

4.7 Procedures

Multiple data were generated, and they included: 1) in-depth interviews with six HPE professionals; 2) interviews with three health centres´ coordinators; 4) group interviews with 34 older adults/gym participants; 6) fieldnotes from 34 observed sessions of bodily practices;

7) additional demographic information, photos and documents. The data set was produced following several procedures, as described below.

4.7.1 Participants recruitment

The programmes´ coordinators were contacted by email or social network to present the study and to invite them to participate. The purpose of this first contact was to verify if they had an interest in collaborating. For those who did, I sent a formal letter of invitation to join the study. Once participation was agreed, I scheduled my visit to the site with the coordinator or HPE professional.

The most effective way to recruit older adults was by face-to-face contact. The strategy was to observe a session on the first day of visit. At the beginning of the session, I explained the study and invited them to collaborate through participation in a group interview. Then, I scheduled a meeting with those who agreed to be interviewed.

4.7.2 Online meetings

Before visiting the sites, a first online meeting with the HPE professional or coordinator was conducted in order to discuss the research protocol. The intention was to allow participants to clarify any remaining doubt about the inquiry, to check the schedule of sessions and to ensure all research procedures were understood and would be conducted as planned. This meeting was also very important to establish trust between the researcher and key participants.

After the completion of the analysis, a second and final online meeting was conducted in order to discuss the findings with the HPE professionals. The purpose of this meeting was to present the main results for the participants-interlocutors (MINAYO et al., 2014) and to develop a reflection with them. I sought to verify if my interpretations as researcher were coherent and pertinent for HPE professionals.

These meetings were helpful to confirm the analysis and to provide new insights. Beyond this, the HPE professionals expressed their interest in incorporating the results of the study as arguments for demonstrating the importance of their work in their institutions.

4.7.3 Visiting sites

I visited the four programmes in their natural settings to get to know the reality of HPE professionals´ work. The intention was to learn what tasks they do, how they conduct sessions

and if so, how they are integrated into teams of other health professionals. To do so, I spent three days doing condensed fieldwork in each site, observing sessions and talking with participants.

For each visit, I elaborated a plan based on the schedule informed by the HPE professionals. This plan was discussed with the HPE professional during the initial online meeting.

4.7.4 Interviewing

All interviews were carried out at the sites where the programmes´ sessions usually occur, such as health centres, gym and health gym units. The main researcher conducted the interviews and the transcription of relevant sections as well. To ensure a high quality of transcription, all the interviews were audio-recorded, with participants´ agreement. The transcripts were sent to participants for validation.

While interviewing, structured questions were asked in order to identify participant´s profile in terms of personal information, such as age, profession, professional education and experience. Next, open-ended and more complex questions were asked to explore the main research topics, favouring richness of information.

The interview guides (Appendix A) were constructed after a reviewing process from seven studies (WORKMAN, 1996; GEREZ, 2006; PAIVA et al., 2015; MCCUAIG; QUENNERSTEDT, 2016; ERICSON et al., 2017; GALVANESE, 2017; PRAZERES, 2017). McCuaig and Quennerstedt (2016) warned that the pathogenic paradigm is so dominant in Western societies that people, when asked about their health, probably would report about disease or expected behaviours of balanced diet, physically active lifestyle and so on. As a possibility, the authors suggested the strategy ‘health by stealth’. By this, they meant to explore health without employing the word ‘health’. Thus, instead of the word ‘health’ or ‘to be healthy’, I used expressions like ‘good life’ or ‘to live well’.

As suggested by Charmaz (2006), while interviewing, four principles were considered: participant´s comfort level has priority over obtaining data; there is the best moment to probe; to seek to understand the participant´s experience from his or her perspective; and to ask closing questions that lead to a conclusion with a positive response and feeling.

Interviews with HPE professionals

I conducted three sessions (minimum) of individual interviews with the HPE professionals to identify their way of delivering bodily practices for health. For the first interview, the professionals were asked about their professional experiences, the programmes´ history and the communities´ profile. For the second one, what were their main references, goals and aspirations for participants' achievement, contents, methods (if any), monitoring strategies and used resources. For the third interview, what they observed from participants´ health development. All the interviews with HPE professionals had a total duration of approximately 13 hours (Table 4).

Table 4. Duration of interviews with HPE professionals

Programme	Duration (hours, minutes, seconds)	Number of sessions
Programme 1	03h16m14s	5
Programme 2	02h50m07s	3
Programme 3	03h25m56s	4
Programme 4	03h56m24s	3
Total	13h28m41s	15

Interviews with health centres´ coordinators

I conducted individual interviews with coordinators to capture their perceptions about the contribution of bodily practices to communities. The coordinators were asked about the community´s profile, their perception about the impact of bodily practices on their community´s health development, and about strategies for planning and monitoring the programme. All the interviews with health centres´ coordinators had a total duration of approximately 1 hour (Table 5).

Table 5. Duration of interviews with health centres´ coordinators

Programme	Duration (hours, minutes, seconds)	Number of sessions
Programme 1	00h14m53s	1
Programme 2	00h24m48s	1
Programme 3	00h20m42s	1
Programme 4	*	-
Total	01h00m23s	3

*The HPE professional was also the coordinator of Programme 4.

Group interviews with older adults

Participants were identified by the HPE professionals according to length of participation as both I and HPE professionals believed they had more experience with the programme to share. They were invited to participate in the study before or during the first session observed. The interview guide covered topics such as their experience with bodily practices within the programme, their perception about bodily practices´ impact on their lives and learning.

For the group interviews, I followed a slightly different protocol. I invited the participants to sit in a circle, I read in a loud voice the "Agreement Term of Participation in Research" and I asked them to sign it if they agreed. I gave all the participants a copy of the document, containing my contact details. I asked permission for participants to record the interview and, finally, I conducted the interview.

All the interviews with older adults had a total duration of approximately 5 hours (Table 6).

Table 6. Duration of interviews with older adults

Programme	Duration (hours, minutes, seconds)	Number of sessions
Programme 1	01h55m26s	3
Programme 2	01h25m37s	2
Programme 3	01h34m07s	4
Programme 4	*	-
Total	04h55m10s	9

*In Programme 4, I did not interview older adults formally due to their lack of time availability and shyness to be interviewed. I talked with them while I was observing sessions.

4.7.5 Observing sessions

I observed 34 sessions (Table 7) that were delivered by the HPE professionals during three following days, in order to describe how bodily practices were conducted within the programme and to provide insights for interviewing. The observations comprised information focused on instructional aspects like climate and environment, session structure, content, types of activities, HPE professionals´ behaviour and instructional strategies, time allocation, participants' behaviour and response to activities, relationship between HPE professional-participants, and participants-participants.

I used the anecdotal record (RINK, 2009), a non-systematic observational technique, to describe the instructional aspects of sessions. I looked at how the HPE professionals interacted with participants, what type and how much of feedback he/she gave, how participants interacted with each other, how they engaged with activities, what was the session structure and development, activity time and session climate. This technique allowed me to generate data in detail (RINK, 2009). Along with the non-systematic observation guide (Appendix B), I used an observation grid, as suggested by Roller and Lavrakas (2015). The grid (Box 2) enabled to record incidents that were foci of observation (rows) related to the three moments of interest, before, during and after bodily practices´ session (columns). The key points of observation were behaviour, conversation, context, interaction/general mood, sequence of events and positioning.

Table 7. Number of observed sessions

Programme	Duration (hours)	Number of sessions
Programme 1	06h	6
Programme 2	10h	5
Programme 3	14h	14
Programme 4	15h	9
Total	45 hours	34

Box 2. Observation grid for bodily practices

Date:	Site:	Start time:	Stop time:
N. of participants:	Female:	Male:	Activity:
Area of observation	**Before**	**During session**	**After**
Behaviour (what, by whom, where)			
Conversation (what, by whom, how long, where, language)			
Sequence of events (what is happening)			
Positioning (who, how close, where)			
Interaction and general mood (what, how conveyed, by whom)			
Other areas of observation or Reflexive comments			

4.8 Data analysis

Data was analysed through a process called ‘constant comparative method’ (GLASER; STRAUSS, 1967; CHARMAZ, 2006) or ‘constant comparisons’ (CORBIN; STRAUSS, 2015). In summary, the process involved some steps: first, data were systematically broken down into pieces and compared to find similarities and differences; then, similar data were grouped under labels, which referred to identification of concepts through coding; relevant concepts were assembled to form categories, which were developed in terms of properties and dimensions; categories were compared to establish relationships among them, providing the structure of a theoretical explanation (CORBIN; STRAUSS, 2015).

The comparisons were conducted horizontally and vertically across interviews and observations, the four programmes and the three groups of participants.

Along with the constant comparative method, some strategies were employed, such as coding, memo-writing and theoretical sampling. GT strategies lead the researcher to

concentrate on analysis and to construct a substantive theory[24] that explains a particular data set (CHARMAZ, 2006).

The qualitative data analysis software QSR International's NVivo 12 was used by means of facilitating data management, coding and memo-writing.

4.8.1 Coding

The first step of GT analysis is coding, which means to extract data and provide a description of certain incidents, lines or words that are representative of the material (CHARMAZ, 2006).

The codes were constructed by giving names and meaning to what was observed in data through a detailed and complete analysis (CHARMAZ, 2006). Through coding, the main researcher tried to elucidate the empirical content by defining what was observed in data and built the analytical structure to develop a theoretical explanation of the case (CHARMAZ, 2006).

Coding occurred in two phases, an initial and a focused one. Initial coding occurred through a process of naming segments of data. The procedure involved reading with utmost care to capture all theoretical possibilities contained in data and to allow new ideas to emerge. Then, I sought to establish relationships between elements and to provide a comprehensible interpretation of data. As a strategy, I tried to use simple and short codes that reflected actions (in gerund verb form). It helped to understand what was happening in data and prevented from forcing data into existing concepts (CHARMAZ, 2006).

The second phase of focused coding involved the selection of the most relevant and frequent codes to sort and represent the data set. This phase was useful to develop categories by constant comparisons to explain the processes that were implicit and to define them theoretically.

4.8.2 Memo-writing

Throughout the analytical process, I carried out memo-writing to optimise my reflection about data and to make connections within data set and among data, codes and

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[24] Glaser and Strauss (1967) indicated two kinds of theories: substantive and formal. Substantive theory means that it is specific to a given situation and an empirical area. Whereas formal theory is broader and developed for a conceptual area. In this study, salutogenesis was the formal theory.

categories. While writing memos, it was possible to have new insights and to think of analytical frames to develop categories (CHARMAZ, 2006). The strategy of memo writing offered opportunities for writing freely about the meanings I made from data.

4.8.3 Theoretical sampling

The study´s initial sampling included sites that physical activity and bodily practices were delivered by HPE professionals within SUS, through the programmes of NASF-AB and/or '*Academia da saúde'* (Health gym), from all five geographical regions of Brazil. So, initially, sampling would be conducted according to the criteria of geographical distribution (sites located in different regions across the country) and representative population (HPE professionals affiliated to programmes within SUS).

A study conducted by Santos et al. (2015) employed this kind of stratification sampling by Brazilian regions and NASF-AB programme types. The findings showed that there was a predominance of activities related to gymnastics (i.e. low impact exercise, calisthenics) and walking, directed mainly at older people, hypertensive and diabetic patients, and young people. Also, the HPE professionals delivered educational orientations focused largely on the importance of physical activity and on the prevention and treatment of illness. The national survey of Santos et al. (2015) provided evidence that there was a likelihood that the present study would find more of the same in terms of ways of delivering bodily practices, if sampling was approached through regional stratification.

Since this project was interested in ways of delivering bodily practices for health development, it became critical to look at experiences that adopted a comprehensive view of health. For that reason, I shifted the selection criteria and adopted the strategy of theoretical sampling, which purpose is to produce relevant and precise data to explicate categories and the emerging theoretical explanation.

Thus, the notions of bodily practices, wide view of health and salutogenesis guided the selection of the programmes. As theoretical sampling focuses on further data gathering to refine categories and to establish their properties, it links data generation with data analysis in GT (CHARMAZ, 2006). Charmaz (2006) highlights that 'initial sampling in grounded theory is where you start, whereas theoretical sampling directs you where to go' (CHARMAZ, 2006, p.100).

4.9 Trustworthiness

Trustworthiness in this study followed the assumptions made by Lincoln and Guba (1985). According to the authors, trustworthiness is related to convincing readers that research´s findings are worth to pay attention. It can be accomplished by establishing study´s credibility, transferability, dependability, and confirmability.

Credibility refers to what extent it is possible to trust the findings correspond to participants´ perspectives and reality. This study adopted triangulation as a means of establishing credibility. Multiple data source was used to provide a rich and deep understanding. The combination of interviews, observations and documents led to consistency of findings. Moreover, triangulation of sources was conducted as the inquiry compared different points of view from HPE professionals, health centres´ coordinators and older adults. Additionally, HPE member checking was applied to validate transcripts and categories identified through researcher´s analysis.

Transferability expresses the findings can be applied to other contexts. A description was used to provide a detailed account of the programmes´ contexts and experiences, allowing readers to verify to what extent the findings are transferable to other settings.

Dependability demonstrates the consistency of findings if the study is repeated. It was provided an in-depth methodological description to enable other researchers to follow the procedures and replicate the study.

Confirmability shows the study and its findings are not shaped by the researcher´s bias. For this, I adopted the technique of keeping a reflexive journal to record my thoughts related to observational, methodological, theoretical and analytical decisions. Thus, choices made throughout the research process are informed along the dissertation. Also, researcher´s reflexivity is reported, making explicit my position and viewpoint to the object under study.

4.10 Ethical issues

Ethical practice contributes to the quality of the study and it has as guiding principles to avoid damaging participants, to respect their decisions and to generate some positive benefits to them (GIBBS, 2009; FLICK, 2013).

The research procedures guaranteed confidentiality, privacy and other requirements postulated by Resolution n. 466/2012, National Health Council, Brazil. The ‘Agreement Term of Participation in Research’ (Appendix C) was adopted to provide information for participants about the study´s purpose, methods and procedures, possible discomforts and

risks arising from participation, and expected benefits. The document also expressed that the conditions for voluntary participation without costs and payments, and the guarantees for participants to refuse to contribute at any stage of the research, without any kind of penalty.

The project was approved by the Ethics Committee on Human Research, São Paulo State University, Rio Claro, Institute of Biosciences, with approval reports (Appendix D) registered as n.1.548.237, n.2.606.554, n. 2.739.561 and n. 3.573.017.

5. FINDINGS

The findings will be presented in seven themes: (1) a wide view of health; (2) ethics of care; (3) holistic care; (4) community-based approach; (5) community of movers; (6) building GRRs; and (7) shaping SOC. Each theme will be described below.

5.1 A wide view of health

This theme indicates that the investigated programmes adopted a wide view of health to deliver services. This comprehensive perspective on health had an influence on HPE professionals´ decisions regarding the delivery of bodily practices.

The programmes in this study were created with the purpose of health promotion. Susan and Barbara, both HPE professionals, assumed that health promotion was the major aspiration to be attained during the programme.

> SUSAN: That's what I understand the most [about the programme]. (…) First, it is for working on health promotion and disease prevention.
>
> (Susan, HPE professional, age 32, interview session 4 on October 01, 2018)

> HEIDI: What is your main goal in your work at the health gym?
>
> BARBARA: It is health promotion. You promote possibilities for people to observe their lives and to pursue a healthier life. Because nowadays, we see that the person will seek health service only because of illness. People don´t go because they want to not get sick. They go because they need it. Usually, when they come to us, it's because a physician recommended because they need to lose weight or other. They don´t come like this, 'ah, I'm coming because I don´t want to be like that' or 'I'm coming because I'm feeling that I need, on my own I'm seeing that I need to pursue health to not get sick.' Most of the situations are for disease treatment. And we can use tools, especially social networks nowadays, for health promotion. When I made a post about living a physically active life and our capacity to do things. And how it makes people want to be around you to become healthy. They say like, 'Oh I also want to feel this way, I want to be active, I want to feel happy'. And you end up using this medium also for health promotion. So, when you can put together all the possibilities to promote health is fantastic. And the main goal is this: health promotion. Until we get to the point where people will come not because of illness, but because they don´t want to get sick.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Susan and Barbara considered health promotion along with disease prevention to be the primary goals of their work, which is suggestive of a complementary approach. This aspiration for health promotion presented by Susan and Barbara and verified in fieldwork with other HPE professionals as well, points to a likelihood to work through a wide range of

possibilities for improving people´s life situations through the medium of movement, including the use of social media.

Aiming at health promotion constitutes an indication that the programmes enrolled in this study assumed a wide view of health. Other indications of a comprehensive perspective on health will be presented next, through two subthemes: looking at the person, and the ubiquity of stressors.

5.1.1 Looking at the person

The HPE professionals enrolled in this study showed a different way of looking at the older adults. They do not view the older adults as patients suffering from certain disease, but as whole human beings. In other words, the HPE professionals treat the older adults as persons who carry life stories, beyond any disease or injury they may have.

This special way of looking was presented by Barbara, a HPE professional:

> BARBARA: When you have this way of looking within the area of health, within the area of Physical Education, you see the person with a different way of looking. You don´t see his/her just as a human being who has diabetes, knee injury... But she´s Dona Maria who is a widow or she´s the one who never had a boyfriend and who does that whole joke that will take the boyfriend from the others and has all that demand that she´s responsible for her sisters (…) You start to see a whole way of dealing with that person without being just the knee, glucose and overweight. (…) You see possibilities beyond what is being worked on, a human being as a whole, not only a human being and disease, not a human being and his/her body. But a human being with all the story and experiences he/she has.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Barbara acknowledged the diseases/conditions that participants have and may require special care. However, she extrapolated this scope and considered other aspects of participants' lives. Thus, it is important to highlight that disease was not denied as if it did not exist. Rather, it was seen as part of one´s life, but no more than that. In this way of thinking, a disease is not enough to define a person.

Consistent with this perspective, Susan rejected calling groups by the disease´s name that participants suffer from. Susan offered an example of this:

> HEIDI: How did you define the groups?
>
> SUSAN: I thought about grouping by age. Nothing related to hypertensive, diabetic or depressive. No. I didn´t want to discriminate against anyone. (...) Because my idea was

> to try to reach as many people as I could, not to separate them by pathology. And to do something broader, which is hard.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

She did not attribute names to groups like ‘high blood pressure group’, ‘diabetes group’ or ‘group of depression’, which is frequently employed in Brazilian health interventions. She did not want to overemphasise diseases´ negative connotation and label people by a condition they had at that moment. As Susan pointed out, grouping participants by pathology can be viewed as a source of discrimination.

Likewise, a health centre´s coordinator implemented group activities with a similar orientation:

> SARAH: Prior to the arrival of the HPE professional, I was conducting the health groups in the unit. But, I didn´t do with the principle of illness. I had already changed that thing. When I started working here, they called it hypertensive group and diabetic group. First, I replaced the name. I called it health group and we started to share experiences, do other things to increase self-esteem. I used to give them a subject and they brought something. They wanted to talk about teas... they brought their experiences, they shared, they felt important.
>
> (Sarah, health centre´s coordinator, nurse, age 51, interview on September 27, 2018)

From Sarah´s comment, it is noticeable that the group´s name represents a set of beliefs that shape practices conducted by a health worker. Thus, language is very important to communicate which health paradigm the services are based on.

Another way that HPE professionals looked at participants was through getting to know each person with his/her family story, problems, interests, strengths and needs. In the four programmes enrolled in this study, the HPE professionals knew each person who attended their classes.

During fieldwork, I noticed that the HPE professionals called older adults by their first names, they knew about their family issues, age, job, the neighbourhood where they live and their previous (non)experience with bodily practices. They knew very well each group profile, what participants like or dislike doing. Anne and Barbara explained how they managed to know participants´ preferences and needs:

> ANNE: In the first few months, I kind of did an experiment just to feel the participants better, and through that I started to know who would attend the group. (...) And through this regular interaction with them I identified each group´s needs. Through

> that I was able to map. Also, through the conversation with them, because they are very nice, they talk a lot. So, I always set up a stretching class and in the next class I used more conditioning, then in the other class I changed to aerobics. I put on music, then I heard "oh I didn´t like it". So, I changed constantly until I got to the point where I could work and reach everybody. Without hurting one or the other specifically, it was a matter of getting to know one another, experiencing. (...) Then I discovered that they like music very much. So, what I do, after stretching, I usually do some dance activity with them to warm-up, which they like very much. They have a lot of fun. (...) there are people who are more religious and don´t do something, there are people who are lazier...
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

> BARBARA: I used to deliver exercise by counting the number of repetitions. Then, I saw that there was a woman who felt somewhat out of place on the counting issue. She stopped by a colleague and asked to help her. Then one day I thought, 'Oh, she isn´t able to count.' Then you start to have that thing of looking at the other. I thought I had to create a way that she would feel more at ease. And now she stands right in front of me during classes. Now I set a time and use a stopwatch.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Anne and Barbara illustrated how they paid attention to participants and showed genuine interest in getting to know older adults better. This perception of who the participants really are can help HPE professionals to gain knowledge about ways to increase their motivation to engage in bodily practices. Hence, the attitude focusing on the person might attend both interests of participants in being treated warmly and respectfully, as of HPE professionals in maintaining participants´ adherence to the bodily practices' programmes.

For the first contact with new participants in the programmes, HPE professionals adopted a common procedure. They carried out an initial conversation and asked the person to fill in a pre-participation form in order to identify specific conditions and needs. But the strategy that HPE professionals often used to get to know participants was through regular interaction. They identified community´s needs through attentive listening over a long time of contact with them. The temporal dimension of regularity and continuity seemed to be central to enable this process of getting to know each person.

Another strategy that HPE professionals implemented was through setting a relational time in the beginning and/or end of sessions. I observed in fieldwork that during this time, they asked the older adults some checking questions about their day, their mood, if they needed something, about personal issues like a feedback from a medical appointment, exams result and others.

Susan said she never starts a session prescribing exercise. Instead, she starts allocating time for conversation among older adults and between her and them.

> SUSAN: I don´t begin the class with exercise.
>
> HEIDI: Do you always try to stimulate communication?
>
> SUSAN: I always try. I always try to stimulate something of speech. I always ask several things to them. There´s a participant that she used to arrive for the class, stop there and stay quiet with an upset expression. There was no mirror at the time. I said, 'Hey, are you okay? Where are your teeth?' I always speak about smiling.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

Susan added that often trainees did not perceive the importance of relational time for the older adults. She reported an example in which a trainee was too focused on conditioning specific muscles during classes.

> SUSAN: There was a trainee who came here who said to me like this: 'Well, I thought I'd just pull forward because of the deltoids muscle.' I said, 'You can stop. Do you think they want to work out deltoids? Do you think they are worried about it? No!'
>
> HEIDI: What do you say to trainees to be the most important attitude for this job?
>
> SUSAN: I say several things. First it is to try to socialize with participants. I always say this 'you can have the whole group on your side'. There was a trainee the groups loved him. Why? Because he treated people well, he remembered people´s names, he asked questions like 'how are you doing?'
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

From Susan´s example, it was clear that professionals should be aware of and pay attention to what really matters to participants. By getting to know people, a HPE professional might create bonds with participants. And developing attachment to others was meaningful to older adults.

Barbara shared her thoughts on possibilities for how future HPE professionals might develop a caring way of looking at people:

> HEIDI: And how do you think it would be possible to develop this way of looking at people?
>
> BARBARA: I think it has a lot to do with humanization issue. Academic courses should be more focused on viewing the human being as a whole, it´s a matter of humanization. We see that everyone knows what humanization is, but it does not happen. People know what it is, but it seems to stay in theory. I think that it would be necessary to connect theory more with practice, to bring more of undergraduates from

> the university into health service to be in contact with community. Then they will talk. This is very rich.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Thus, looking at people in a special way appeared to be developed from HPE professionals´ qualities of being affectionate, sensitive, and charismatic. When older adults know that the HPE professional really looks at them, they feel that he/she cares about them. This facilitates interaction between the HPE professional and the group, and among group members. Focusing on the person seems to be essential to increase socialisation and to establish relationships with participants.

5.1.2 The ubiquity of stressors

In focusing on the person´s life story, stressors (i.e. diseases and health problems) lose the centrality they commonly have within a pathogenic orientation to health. But it does not mean they are ignored by practitioners.

The older adults, HPE professionals and health centre coordinators of the four studied programmes recognised a list of stressors that existed in the community, for instance: diabetes, high blood pressure, cancer, depression, knee injury, shoulder injury, cholesterol, back pain, osteoporosis, stroke, memory loss, pneumonia, overweight, labyrinthitis, body-image disorder, arthritis, stomach pain, hyperthyroidism, herniated disc and prothesis, restrictions, and even retirement.

The older adults demonstrated their comprehension of their life conditions. Diana, a health gym participant aged 64, asked, ‘Who does not have a problem nowadays? Everybody has one’. According to her, everybody in the community may have a problem, a certain condition or a disease. This thinking suggests that stressors were considered by older adults to be part of living, although requiring some adaptation to deal with.

Thus, stressors were not barriers for older adults to take part in a bodily practices programme. In turn, participation in bodily practices might help them develop new ways of living with the stressors.

Barbara reported an incident in which a trainee dismissed two older women from joining the programme because one of them had diabetes and the other, high blood pressure. After that, Barbara told the women they could participate because the programme´s purpose was exactly to meet the health needs of all, whether they were ill or not.

> BARBARA: It´s precisely because the health gym is for people who, especially those who doesn´t have conditions to go to a regular gym. They will have here a more health-oriented care, physically, mentally and socially speaking.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

This incident suggests that a pathogenic orientation, commonly taught in Physical Education undergraduate courses, conveys an idea that stressors should be avoided and eliminated. Often, there is a discursive effort to blame people and make them feel responsible for controlling their problems and diseases.

In contrast, a wide view of health implies that stressors are part of people´s story of life and they derive mainly from people´s conditions of life. Charles provided an example in which older adults perceived certain diseases as non-stressors for them.

> CHARLES: What is interesting is that they filled in a form informing they take certain medicine. But in the question about diseases, they didn´t answer. It looks like the disease is already there, like a property. Mainly hypertension. They said they took two, three medicines for hypertension, but they didn´t consider they suffered from the disease. [...] In many forms I had to complete myself, because they didn´t put it in this way.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

In the example above, the older adults did not see themselves as hypertensive patients. This probably occurred because they were not identified in this way by others. Contrarily, the sports-based programme in which they participated, emphasised their strengths, calling them by senior athletes. Then, the bodily practices programmes might help people to cope with stressors, perceive themselves positively, and find better ways of living.

5.2 Ethics of care

This theme was developed from data obtained from HPE professionals´ and older adults´ interviews alongside fieldnotes that indicated the HPE professionals´ attitudes and behaviours in relation to the older adults. Overall, the way HPE professionals behaved and related to older adults can be viewed as relations of caring.

The theme ethics of care is related to how the HPE professionals satisfied the older adult´s needs in relationships: by paying attention, demonstrating willingness and respect, listening carefully and responding to them. The theme was divided into three subthemes to communicate how care is provided for older adults in the context of the programmes, as

follows: attentiveness, respect of limitations caused by age and, integration of services and multi-professional work.

The HPE professionals manifested care for the older adults through relational skills, willingness to make a positive contribution, responsibility, responsiveness, attentiveness, affect demonstration and attention to their needs, interests and feelings.

The HPE professionals described some situations, which were considered in this study, as an expression of ethics of care:

> CHARLES: My colleague once said to me: 'I'll get you a planner and start scheduling psychological appointments with you.' They come to me to complain, they need someone to unburden themselves. And they see me a lot in this role, a person who they can count on and trust.
>
> (Charles, HPE professional, age 39, interview session 1 on November 12, 2018)

> SUSAN: Sometimes I have to be a psychologist, sometimes I have to be... I don´t know, I have to think about the mental aspect. Sometimes they cry, they come here and cry, sometimes they cry within the group. And I don´t have much time to talk to them individually.
>
> (Susan, HPE professional, age 32, interview session 1 on October 02, 2018)

I observed in all sessions, mainly in the beginning and/or end, a behaviour pattern of the older adults of getting close to the HPE professional to have a conversation[25].

Charles demonstrated awareness of what the older adults were seeking: 'they need someone to unburden themselves'. Identification and awareness of other´s needs constitute one part of caring. The second part is a response to what was identified. The way Charles responded was by listening to them with patience.

Additionally, Charles´ narrative shows that he was seen in the role of a friend-psychologist, who listens carefully to the older adults. Susan also pointed out this relation, 'sometimes I have to be a psychologist'.

Dorothy, an older adult, reinforced the psychologist role attributed to HPE professionals:

DOROTHY: Susan is very friendly. She's not just our teacher, she's our friend, our

[25] I also experienced this when I was a health worker within SUS. The demand was so high that it was challenging to manage because I did not have enough time for it, similarly to what happened to the HPE professionals in this study.

counsellor. She's everything, you know? She is everything to us.

HEIDI: Do you have a good relationship with her?

DOROTHY: Very, very good. If she perceives that we are sad, she comes to talk, she wants to know what is happening. She is great. At least in my opinion, I'm talking about me, I feel pretty good. And she already knows how I am when I arrive. If I'm not well, she asks. It's because I have diabetes, I have rheumatism, I have a lot of things. I take a lot of medicine. And I already had a diabetes crisis. After I came here, I didn´t have any more.

(Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

Dorothy described how she felt being cared for through perceived HPE professional´s behaviour. She made evident that the HPE professional related to the older adults with sensitivity and responsiveness, demonstrating interest to know when assistance is required and to do something in response to it.

Showing affect was also considered in this study as an attitude of caring. Patricia, an older adult, mentioned how is important to them when the professionals demonstrate some affect:

PATRICIA: We see the affection of the girls, their smile. There is a worker here, she kisses everyone when she arrives. This is very important. So, for me it was very good.

(Patricia, health gym participant, age 64, interview on June 28, 2018)

Another illustration of ethics of care happened during my observations of a volleyball session. One of the participants asked Charles if he could sit because his knee was painful. Charles immediately offered him some ice for pain relief. Moreover, Charles started a conversation with him, warning that he should look for treatment for the knee injury. They continued talking for a while about the situation.

Additionally, Susan reported about her concern in following-up situations the older adults were living. This attitude demonstrates how she provides care for them by showing interest and attention to their daily lives.

SUSAN: I often remember things like: 'ah, you have a doctor appointment', 'you did something, how was it?' Because I think it's very important, they know that someone is looking after them. So, I try my best to do it, even out of my schedule.

(Susan, HPE professional, age 32, interview session 1 on October 02, 2018)

Furthermore, Barbara presented the aspect of willingness, intentions and the use of the self with accumulated knowledge to provoke transformation in people´s lives. Barbara used her experience as a clown artist to look in a different way to the older adults and to meet their

needs. She said that what she gives of herself it is just a little, however, she perceived it means a lot to participants.

> BARBARA: I can say that all the experience, both from academic knowledge and from what we live through our experiences is something that really matches, generating this being that we are. And you end up provoking other things in people´s lives. Sometimes I stop to think how there are opportunities, if you open your eyes to things, to deal with people's lives and transform them. I think transforming people's lives is fantastic, like of those girls of 'the divas'. It is the seasoning of life. (…) And sometimes I think there´s much more I can offer. This is nothing compared to what I can do for them.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Likewise, Michael, a HPE professional, showed commitment and willingness to help others:

> MICHAEL: If I can do something more, there´s no reason to do nothing. So, I try to be always helpful, I´m always doing something to help people.
>
> (Michael, HPE professional, age 40, interview on June 28, 2018)

I recognised Barbara´s and Michael´s intentions to help continuously and increasingly the older adults as an expression of ethics of care.

To summarise, the HPE professionals demonstrated they work with an ethics of care as they take responsibility to identify the older adults´ requirements and to provide them with what they need. As I noted, ethics of care was constituted by three practices. The first of these was attentiveness.

5.2.1 Attentiveness

The subtheme attentiveness is at the core of an ethics of care. It involves warmth and attentive listening, which means listening to others carefully, with respect and interest. Attentiveness is crucial because care requires a recognition of others' needs in order to respond to them (TRONTO, 2005).

A health centre´s coordinator explained that attentiveness provided by health professionals is key to identifying hidden situations that are happening to someone. So, attentive listening alongside careful observation enabled the HPE professionals to recognise participants´ needs.

> MICHELLE: Usually, when the population comes, they never say 'I'm depressed' or 'I'm suffering violence and I'm planning to kill myself'. They always come to us with

> some symptom. That symptom that she is coming every week, once with stomach-ache, next with headache and we analyse and clinically she has nothing. It´s a person who has some situation behind.
>
> (Michelle, health centre´s coordinator, nurse, age 41, interview on October 02, 2018)

To Sarah, another health centre´s coordinator, attentiveness opens a 'channel for closeness with the community'.

> SARAH: And we have experienced a high degree of intimacy with people. In a such way they come here and tell their most intimate things. They tell stories that sometimes I get out of here suffocated. But we try to create this channel for closeness with the community, especially with the elderly, because we know that if we do not listen to them, nobody else will. So, I think this lack within these families.
>
> (Sarah, health centre´s coordinator, nurse, age 51, interview on September 27, 2018)

Sarah confirmed the older adults have a basic need for being listened to. However, they often are not able to satisfy that need at home with their families. Thus, the programmes take responsibility for filling this gap in their lives and offering opportunities for talking and unburdening themselves to them.

Regarding this issue, three HPE professionals described this practice of attentiveness in more detail:

> SUSAN: I understand the SUS [Unified Health System] as a matter of attachment and attentiveness. It´s about getting to know each other and unburdening, having that freedom. And this here at the health gym worked very well. Because it's always me. And only me. And we got to know each other together. (…) I say that I always try to work accordingly to the programme´s principles and guidelines. I understand as this issue of attentiveness and attachment with the population.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018).

> BARBARA: In the group of the divas, we have round conversations. It's always that thing of listening what the other has to say. They say, 'the teacher has affection for us'. In fact, you kind of embrace, welcome them. You show attentiveness, you listen to them. Sometimes you see someone, she arrives, you see that she is kind of weird, then you already talk. Because sometimes the conversation itself already makes the person open up, tell something that is going on or that she is feeling. And this also helps. It strengthens. Or they notice something at home, then they talk and that's the way we can help.
>
> (Barbara, HPE professional, age 43, interview on September 29, 2018).

> CHARLES: Once, it took me half an hour to get into the material room. I was talking to one, when she finished the conversation, I took two steps there, then another one came, she finished the conversation, I took two more steps, another appeared... So,

> they were queueing to be assisted, you know? It took me half an hour to get the material. I would not interrupt their conversation. If needed, they come apart to talk. They say, 'I did not tell this to my son. I'm telling you, but I won´t tell anyone else.' They tell a lot about family situations, they're bad, what happened at home... They complain, they come to tell, they unburden themselves to me.
>
> Heidi: How do you deal with this?
>
> Charles: What I do is to let them speak and listen to them. I have done like this since the beginning. But the point is they use here as an escape valve.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

To Susan, attentiveness and attachment with the community are guiding principles to work with health promotion. This understanding implies that promoting health requires establishing relations of care with those who use the services. In general, HPE professionals developed relational skills to involve people through the medium of movement, which were mobilised by them to provide care for others.

Several HPE professionals´ comments make evident that more than delivering bodily practices, they care for the older adults by being relational, attentive and responsive. They said, for example: ‘it´s about getting to know each other and unburdening’; ‘we have round conversations’; ‘that thing of listening what the other has to say’; ‘you show attentiveness, you listen to them’; ‘they talk and that's the way we can help’; ‘they complain, they come to tell, they unburden themselves to me’; and ‘what I do is to let them speak and listen to them’. And this caring relation was one of the main elements that older adults perceived as a contribution to their lives.

The HPE professionals treated the older adults warmly, carefully and helpfully. I confirmed this during my field observations of sessions. Hence, the older adults found closeness, intimacy and openness in the relationship created with the HPE professionals. In such a way that the older adults begun to see the HPE professional as a key person to satisfy their needs of being listened to, interacting and unburdening of problems to others.

Charles´s perception of ‘they use here as an escape valve’ leads us to understand that the older adults take bodily practices as a resource to escape from problems, whether dealing with or getting distracted from them. They found social support from peers and attentiveness from the HPE professional that jointly enabled them to handle their problems. Thus, the programmes helped the older adults to cope with stress, and consequently, to move towards a healthier life.

In addition, the attentiveness offered by the HPE professionals emerged from participants´ voices:

> HEIDI: Did you notice any difference between the health gym and a regular one?
>
> JENNIFER: I think this thing of attentiveness is very nice. Because in terms of exercise, we do here what any regular gym would do, which is the functional part, aerobic exercise. But the part of attentiveness is what I really like. To be able to talk with the teacher, with colleagues, and have access to the health centre. It´s very much the social aspect.
>
> HEIDI: What do you notice that helps communication skills development?
>
> JENNIFER: I think it's basically this thing of attentiveness. First of all, because if you know you are in an environment that you are welcomed and you will be well received and, you will not be judged, you will automatically talk more about everything. So much I have strong feelings inside of me and I already put it here. And the conversation wasn´t in a sense of judgment, it was in a sense of conversation. In my social network outside the health gym it wouldn´t be like that. So, that attentiveness is very good. It encourages and motivates a lot. I think that's basically what encourages us to exchange experiences like that. We always have freedom because you know that's the proposal. I think that when you understand the health gym´s purpose isn´t only to come here to do the exercise, things are much easier.
>
> (Jennifer, health gym participant, age 30, interview on October 03, 2018)

> DIANA: So, I say if it wasn´t for her charisma and the attention she gives us, maybe there wouldn´t be so many people here.
>
> (Diana, health gym participant, age 64, interview September 29, 2018)

Jennifer pointed out that attentiveness demonstrated by the HPE professional is meaningful to her and it is what distinguishes the health gym from any other regular one. As she indicated, the health gym offers more than just exercise because it fosters participants´ social interaction. Furthermore, from Jennifer´s view, being attentive is not merely listening to someone, but with interest and respect.

More importantly for listening is the absence of judgment. Jennifer explained that what made her feel comfortable and willing to share her thoughts and experiences was the confidence that nobody would sit in judgment over her. Thus, an encouraging environment built upon quality relationships can stimulate one´s confidence in others to unburden oneself.

As well, Jennifer indicated that awareness of the programme´s purpose helped her to increase this confidence because she knew to what extent she was welcomed and expected to

have personal conversations with others. Therefore, it is important that HPE professionals always make clear to participants what are the programme´s goals.

Jennifer expressed how she appreciates the HPE professional´s attentiveness and this ‘encourages and motivates a lot’. Also, Diana said that the HPE professional´s attitudes of being charismatic and attentive to others were motivating factors for the older adults continue engaged in bodily practices.

Overall, this subtheme helps us to comprehend that older adults had a need to unburden themselves to others and the way HPE professionals listened to them carefully and with respect helped them to cope with stress and increase their motivation to persist in the activities.

5.2.2 Respect for limitations caused by age

This second aspect of ethics of care arose from HPE professionals and participants´ voices. It presents how respect for limitations caused by age are critical to preserve older adults´ physical integrity and increase their motivation to engage in bodily practices.

I verified that respect for limitations caused by age has two main components: HPE professional´s sense of responsibility, and competence to balance demands and to set optimal challenges to participants. These two components were seen in Susan and Charles´s interviews:

> SUSAN: In the beginning I found hard working with the elderly and children. There are three older adults who can´t lie down. They have a lot of trouble lying down. They feel dizzy. Nowadays I don´t prescribe any exercise on the floor for them. Because I know that for three people it isn´t comfortable to lie on the floor. (...) And the exercises that are hard to them, I don´t deliver either. As I already know all of them very well, I think there´s a point that I have to know how to balance things. It's the same thing if I'm there performing fast movements with music, there are three, four people stopping because they´re very tired. I'm going to do all the song? No. They're tired, I´ll let them rest, relax. It also happened when I started with fifteen repetitions of an exercise and in the first round, I already saw that it wasn´t fine. They began to feel tired. Then I dropped to twelve, ten. I perceived it. (...) Another thing that is very important it is the matter of respecting them and the group session. Because delivering group session is one of the biggest difficulties. Because the old man is there, everyone is jumping there... The exercise prescribed involves jumping, he cannot jump, but he stays there trying to jump. He gets hurt. It's not going to work. So, it's an older group, most of them have knee pain, have knee injuries. Don´t prescribe it. They will try to do, they will want to do, but they cannot. So, we need to try to perceive people, what they can do, what they cannot and what they need to do. Why are you going to do something you don´t need and you are at risk of getting hurt?

(Susan, HPE professional, age 32, interview on October 01, 2018).

> HEIDI: So, do you work on safety techniques with them?
> CHARLES: That´s right. First thing is physical integrity. It´s the first thing we do here. During a game, I say to them 'let it go, let it go, do not touch it anymore'. Because we seek that from the moment the defence can no longer perform a safe action that they don´t do any more action. But this, insistently, we try to correct so that they can understand this safety in the process. (...) I don´t put Beatriz on the defence because I don´t want her to have contact, a shock, or risk of falling. Because when she's on the attack, she has a way to stay a little further from the defence if she needs to.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

Susan and Charles showed that they took responsibility for older adults´ physical integrity. This consisted in a priority for their work. The HPE professionals warranted respect for limitations caused by age by paying attention to and observing the older adults while they were performing movements. Moreover, they demonstrated a competence to recognise when the older adults were at risk of getting hurt and provided alternatives to adjust movements in a way the participants´ physical integrity would be preserved.

The importance of professional competence in balancing physical demands according to age groups´ features arose from participants as well. Paul and Kimberly talked about how Susan is a professional who respects their limitations caused by age.

> PAUL: And she does the thing accordingly it should be. She knows that at our age, we don´t... She knows how to deliver the thing. She does the work how it should be. She doesn´t require more than we can handle.
>
> KIMBERLY: You do only the exercises you are able to do. When you see that you are at your limit, you can stop. It's not like those gyms where there´s a rhythm and you have to follow it. Not her. With her, you perform according to your body. It´s very good.
>
> (Paul, health gym participant, age 70; Kimberly, health gym participant, age 62; group interview on October 02, 2018)

Paul and Kimberley acknowledged Susan´s responsibility and competence to deliver bodily practices in comments like ‘she knows how to deliver the thing’, ‘she doesn´t require more than we can handle’, ‘when you see that you are at your limit, you can stop’, and ‘with her, you perform according to your body’. Thus, there was a correspondence between what they felt able to do and what they were required by the HPE professional to perform.

In contrast, Kimberly and Paul reported how a trainee who they had contact with did not care about them feeling overloaded. This incident pointed out to a lack of preparation of trainees to work with health promotion[26].

> KIMBERLY: We have a lot of trainees. Every year four trainees come to stay with us.
> PAUL: But there was a boy there, for God's sake, it was impossible with him.
> KIMBERLY: I was terrified of him.
> HEIDI: Why?
> KIMBERLY: Because of pain.
> PAUL: He was a young guy. Then he prescribed exercises and he stayed there pushing pressure on us: 'come on! come on! come on people! come on people!' I said to him: 'But it's not like that. You're a young guy, we are old people. We cannot stand how much you can handle. So, let's slow it down. Give us time to slow down. At least, give us some time to get some water.' Not even this, he didn´t allow.
> (Paul, health gym participant, age 70; Kimberly, health gym participant, age 62; group interview on October 02, 2018)

When Paul said, 'you're a young guy, we are old people', he perceived a lack of empathy by the trainee for them. Furthermore, he presented the trainee´s lack of responsiveness to his requests and complaints. These notes on the trainee´s behaviour emphasise how important are the qualities of empathy, responsiveness and respect for limitations for HPE professionals to work with older adults.

5.2.3 Services integration and multi-professional work

An ethics of care focuses on attending and meeting the needs of others (Held, 2006). By adopting a wide view of health, the others whom health professionals care for are viewed as whole human beings with different sorts of needs. Thus, a wide range of professions might contribute collaboratively to meet others´ demands.

Services integration and multi-professional work are based on the assumption that an individual/community health situation can be approached by multiple areas of knowledge, not only by medicine. This subtheme presents an existing concern within the programmes to deliver integrated and multidisciplinary services.

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[26] As mostly trainees had access mainly to academic and theoretical knowledge, it leads us to think that the professional abilities of perceiving participants´ response to exercise and balancing demands according to participants´ capabilities are developed in the field of practice. Or that the undergraduate course attended by the intern did not convey a wide view of health.

Multi-professional work concentrates the strengths from multiple professional areas that are concerned with a mutual problem or a case. In the way it is adopted by Brazilian health policy, a multi-professional team offers additional support to problem-solving and decision-making in relation to situations experienced by the community.

The HPE professionals indicated that they did collaborative work mainly with nurses, physiotherapists, dietitians, social workers, and community health workers.

> JACOB: There is a physiotherapy´s group. In some units, I work along with them. We deliver activities together, I do the first part and the physiotherapist does the relaxation part. And there is a dietitian´s group that is for weight loss and education on diet. In this one I usually give a speech, or I help her with anthropometrics.
>
> (Jacob, HPE professional, age 34, interview on June 15, 2018)

> MICHAEL: I have direct contact with a nurse, community health agents and nursing technicians. Not so much with the physician because of his schedule. But I see that it isn´t complicated to do teamwork. In terms of methodology, only when there is something very specific that we gather and do that planning, we talk, we see what will be needed. But it depends on each patient and each family health team.
>
> (Michael, HPE professional, age 40, interview on June 28, 2018)

> ANNE: I have more contact with a dietitian and a physiotherapist because we met and organized our schedule so that at least once a week we work together. So, we have a lot of integration. The dietitian formed a group, which I´ve participated too. I´ve got knowledge from her and then I intervene according to my area.
>
> (Anne, HPE professional, age 34, interview on June 17, 2018)

> BARBARA: Once we had a case of a woman. I and the social worker went there to visit her.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Services integration seeks to increase effectiveness in health work. It means to improve communication among all services, to make referrals adequately and to find better and faster solutions to community´s problems within the health system.

Anne provided an example of how she worked with another service to improve attentiveness to community:

> ANNE: We use to select people from the waiting list for orthopaedic appointment, which is very big. Usually, it is huge. We select and see what kind of pain the person has specified. There are people who, before we make a referral to an orthopaedist, we ask them to participate of a physiotherapy´s group. Then a physiotherapist assesses whether or not that person really needs to see an orthopaedist. He identifies if her pain is due to muscle weakness. In that case, he makes a referral to me to include her in a

group.

(Anne, HPE professional, age 34, interview session 2 on June 14, 2018)

Actions carried out by the investigated programmes for services integration included: group discussions among multiple professionals (what Brazilian health workers call as matrix support); implementing collaborative interventions and projects; making referrals to specialised services; providing counselling from a wide range of professionals; organising educational activities to be delivered while people wait for an appointment; planning how to offer attentiveness to community; and, delivering information about available health services.

The HPE professionals explained that:

BARBARA: Sometimes we make a referral to some treatment when it is necessary and the situation requires more than only listening to them, like to the Psychosocial Care Centre.
HEIDI: So, you also make referrals to other services. Do you have an integration with the health centre?
BARBARA: Yes. It's really nice. There's a nurse and I almost always go there for us to talk and when there's something for referral. Or in situations like, 'Look, that person came here to do an exam.'
HEIDI: About the NASF-AB [Family Health Extended Team], what exactly do you do there?
BARBARA: I´m a HPE professional of the NASF-AB and I help to organize and coordinate services and colleagues´ work. We have a dietitian, a psychologist, an occupational therapist, a physiotherapist, and me. Then we work with the family health teams. Like this afternoon, each of us, as there are several family health teams and we are few workers, we make each one responsible for a family health team. I work with only one. I provide matrix support. Every Wednesday afternoon I go there to organize the reception activities, I help to organize something or other of some project that is happening there. And we have the School Health Program that works well. This afternoon, we set up a play about diet. Then, today we will organize for the play, check the characters, have a rehearsal. It is very good.
HEIDI: Do you work with groups?
BARBARA: Each health centre has its own group. It is very characteristic of what was created in that group, in the community. Very characteristic. There was a health centre where nothing was created when I was there. They did not generate any demand. And then, we started to organize something with the community health agents. They are fantastic. They are wonderful allies.

(Barbara, HPE professional, age 43, interview session 1 on September 26, 2018)

ANNE: The person came here, and she perceived she was depressed. She recognised it because she saw other people's behaviour and she acknowledged that there could be a problem with her. Because she was here within the health centre, she already got professional help.
HEIDI: Do they seek for extra help within the same health centre?
ANNE: Sometimes within this health centre, sometimes with a private physician or even a friend. I notice that some people revealed problems during educational

> activities. For example, I give a lot of collaborative talks with a dietitian. Then, the person speaks something that has nothing to do with diet and nothing to do with exercise. But then we are able to link, and we already talk to that person 'hey, it would be interesting in face of the problem that you are presenting that you seek for help from a specific professional. Make an appointment'. It´s more or less like this. So, almost always they find aid within the same health centre. But some look for help outside.
>
> (Anne, HPE professional, age 34, interview session 2 on June 14, 2018)

As Barbara and Anne showed, all actions they carried out were done in order to provide a complete care for community members. Both provided additional illustrations of how they worked collaboratively to care for older adults.

Anne conducted short projects with other health workers. They chose a theme according to a current demand and planned together how to do it. Depending on the topic, certain professionals were invited to join and make a direct intervention.

> ANNE: It [a project] was concerned with weight loss. We announced that every fifteen days, a dietitian would be present, she would come in the gym group. I was always present or physiotherapists and depending on what we needed to talk, we invited another professional. For example, we were always talking about food and exercise. Especially last morning, we brought a psychologist because of the person´s emotional aspect that influences on losing or gaining weight. Fifteen days ago, we brought a pharmacist. Why? For her to explain, for example, how exercise, diet and weight loss influence health in terms of blood pressure, and others. She talked about dangerous medicines that always go around in the market… 'oh this is great for weight loss'.
>
> (Anne, HPE professional, age 34, interview on June 17, 2018)

Barbara and a dietitian undertook a collaborative research project among Departments of Health, Education and Social Service to address a growing problem of obesity in their town. They collected data from populations within health centre units and gathered information of how many people were obese and overweight. Then, they created a working group to referral those people to appropriate services and follow-up their progress.

> HEIDI: And do people also come to the gym through referral?
> BARBARA: Yes, they do. We had a network because we had a high obesity rate. Well, we have it across the country. And we did a collaborative survey with the Department of Health, Department of Education and Social Services. We did an obesity´s survey. We took all the kids. We mobilized health centres and family health teams, so that anyone who went there was evaluated through anthropometry. A NASF-AB´s dietitian and me input all these data together. We were able to input how many obese people of a certain age, everything. We made an overall rating. And we saw that there was a high rate of obesity and overweight, from children to the elderly. Then, we

> began to organize a network of attention to obesity. There were always meetings along with a dietitian coordinator from another city. She came to work with us. Then there was a responsible dietitian at the Medical Care Unit. This dietitian has made referrals to us. And this is nice because she always follows up the service. Sometimes she calls me and asks how the project is going on. I've been there with the group of people who have been waiting to have bariatric surgery. I talked to them, trying to bring them to the health gym. Because all care must be provided within the SUS.
>
> (Barbara, HPE professional, age 43, interview session 1 on September 26, 2018)

Another strategy used by professionals to favour services integration was attentive listening. Within the health centre, a health worker listens carefully to identify the person´s needs and to help him/her at that first moment of conversation. If necessary, the professional makes a referral to appropriate services. Such attentiveness contributes to organise all health services and increase the quality and speed of services delivery. In a similar way, the HPE professionals listened regularly to older adults, offered counselling and made referrals to other services or work in cooperation with other professionals in order to provide all the care they needed.

> BARBARA: So, health workers listen to patients to organize the attendance of that workday. If it is an urgent demand, it is a priority. If it's something that a nurse can already solve there, she immediately solves. If it´s a case for talking to a psychologist, the listener already arranges an appointment or she makes a referral to a network, like the Psychology´s network. And there's that thing of sitting down, listening to and talking, trying to reorganise the whole service.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

In Programme 1 and 2, the HPE professionals spent some time within the health centres. As there are many health centre units, they work in a rotation system. Usually, they go to a different unit each day. Jacob described this routine of HPE professionals:

> JACOB: The HPE professional is usually restricted to these two activities, matrix support meetings and the groups, because we don´t make individual attendance. Besides the group and meetings, we are inside the units, supporting whatever they need.
>
> (Jacob, HPE professional, age 34, interview on June 15, 2018)

Three HPE professionals delivered bodily practices for groups within the health centres. Also, they participated of group discussion meetings. Beyond that, they spent time there and provided support to other professionals in a variety of situations in which their contribution could be valuable.

Group discussion meetings were the main tool adopted by NASF-AB strategy. The

meetings usually happen once a month or every 40/45 days for collaborative discussions on specific individual/family cases, as indicated by Jacob, Michael, Anne and Barbara:

> JACOB: Nowadays there´s a meeting every 40 days with each family health team. We discuss cases and plan activities. Currently it´s working well.
> HEIDI: How is this meeting?
> JACOB: We call it matrix support. The family health team can report cases for NASF-AB´s support. Then, we help to find a solution together. Or it can be about a continuing education organised by the NASF-AB to be offered to the family health team. Or even it can be for planning activities that will occur in that period within the unit. Through these meetings we can plan our work. If we have some more complex cases, we can analyse it there because everyone is there. The professionals can already talk and decide what to do. And the HPE professionals also participate in these projects and case discussions. That part is very nice.
>
> (Jacob, HPE professional, age 34, interview on June 15, 2018)

> MICHAEL: So, once a month, we have a group discussion meeting. Because sometimes the person reports a shoulder pain and asks to see an orthopaedist. If the physician judges that it´s something simple, he will make a referral to the group. If I see that the case it is not suitable for a group, I attend individually. In the city there´s a physiotherapy´s network. After completed the physical therapy, the physiotherapists of the network also make referrals to us, with a prescription saying what therapy the person did and recommending to her to engage in the group for muscle strengthening. (…) There was a case which a patient saw a dietitian, me, a physiotherapist and a psychologist. She had an eating disorder, and anxiety issue. It was built within matrix support. When it´s an urgent case, the physician makes a referral directly, he does not wait for the group discussion meeting. But it is generally through matrix support that we build this teamwork.
>
> (Michael, HPE professional, age 40, interview on June 28, 2018)

> ANNE: We do matrix support every 45 days. Then we choose a specific theme to work with the family health team´s professionals. It's almost always a case study.
>
> (Anne, HPE professional, age 34, interview on June 17, 2018)

> BARBARA: We have meetings among the professionals. We see what we can articulate, whether we are going to pay a visit or to make a referral. So, we discuss together and give ideas. Sometimes we don´t even know the person himself, but we already give an idea of what can be done for him. There are lots of family and social problems in the communities. Once we had a case of a 42-year-old woman, lying down, HIV positive, her daughter who was a crack user left home, a schizophrenic mother, a schizophrenic brother as well. She narrated like this. And she was on a bed with no sheets. She had no clothes. There she expelled excrements, the rats raced over. It was horrifying. Then, we took her to the hospital, we helped, reorganized her house, called her relatives, arranged a meeting with them, took her home again. We bought a mattress and a bed.
> HEIDI: In those cases, does the NASF-AB team meet and discuss?

> BARBARA: We discuss, and we see what we can do. In this case I worked along with the social worker. It was quite complicated.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Practitioners planned together teamwork and decided what to do in response to specific cases that were under discussion. It was common that planned interventions went beyond a therapeutic action, targeting at improving conditions related to social determinants of health, like shelter and sanitation.

Barbara added that mostly, community health agents were those who brought the challenging cases to be considered by the multi-professional team. As community health agents visit families in their homes, they become aware of many problems that the professionals within the health centre do not come to know. They are key workers as they connect community and health services. They take community´s demands, situations and problems into the health centre for future action.

> HEIDI: And do cases come from the community health workers?
> BARBARA: Yes, they bring the cases. Because they visit families and then they start bringing the situations. Each unit has its community health agents who go on visits and come back with demands. Then, they take it to their group discussion meeting. There they see what the NASF-AB can articulate with other networks, what can be done. For instance, we see with the social worker, the Social Assistance Reference Centre and the Specialised Social Assistance Reference Centre. There are all kind of situations.
>
> (Barbara, HPE professional, age 43, interview session 2 on September 26, 2018)

Another strategy endorsed by Brazilian health policy was to approximate community and health services by implementing the health gym nearby a health centre or other public areas. Then, when people engage in a programme, they also find aid easily when necessary within the adjacent health centre. This strategy arose from two participants´ interviews:

> JENNIFER: I like this proposal very much. I have seen more health professionals because I'm close to the health centre. So, I quite like it. (…) here we have the health gym and it is close to the health centre, so access to all services is centralized and closer to the people.
>
> (Jennifer, health gym participant, age 30, interview on October 02, 2018)

> KIMBERLY: There´s also a nutrition service. Hence, dietitians come and teach us how to make juices. We can see a dietitian every Friday if we wish. All this happens through the health gym.
>
> (Kimberly, health gym participant, age 62, interview on October 01, 2018)

So, participants have increased access to health services as they visit the area regularly and become aware of what services are available to them. They realise they do not need to look for treatment far from the community area. Moreover, as another participant reported, they felt safe exercising because the programme occurred nearby a health centre. They knew if something happened to them, the HPE professional would take them immediately to the health centre for aid and treatment.

> PAUL: Besides being treated well, we have here a safe thing. If something happens, she takes us straight to the health centre. There, help is already in hand. We don´t need to go far. Help is right there, on time.
> (Paul, health gym participant, age 70, interview on October 01, 2018)

Similarly, Linda felt she found everything she needed related to her health in only one place:

> LINDA: So, for me here is everything. In sum, for me the health centre is everything. I speak about the attendance as well as friendship. They are all good people to me. I´m very well treated, very well cared. (...) If I feel anything, here I find rescue instantly. For me everything is here. Everything I come here. If it's a medicine, it's here. If I feel pain, it's here. A wonderful physician takes care of us. The girls I love them all, I love. It's like my family. I don´t have... my support is them.
> (Linda, health gym participant, age 78, interview on June 28, 2018)

This geographical proximity between health gym and health centre offered another advantage. From a health centre´s coordinator viewpoint, bodily practices brought the community into the health centre.

> HEIDI: In your opinion, what is the contribution of bodily practices to this health centre?
> DEBORAH: The strength is the population's adherence, leaving a sedentary life. And the good thing is that we bring them into the health centre. We have a closer relationship, we create a bond. They listen to our recommendations better and they are already doing an activity that already helps with those chronic diseases that are more prevalent in the community. They are more present within the health centre (...) As it is a weekly meeting, the person is regularly within the health centre. So, we create a very nice bond. The patient is always here, we can treat him by his name, we know the whole family issue of the patient. So, this is very good. And we can identify when the person is going through some problem. We can observe chronic diseases more closely because they are always here. This is very positive. When we want to provide counselling on a certain subject, we choose, preferably, those schedules when happens the group. Because they already get the population together. Because it´s hard to join them. But since they are already here because they have the group, we can provide counselling for this audience and ask them to disseminate the information. So, it's really good to have them here and always. We always manage to do it. Each month, we have a focus on a theme and we always get them to disseminate our information. It's great.

> HEIDI: Interesting. So, did bodily practices create kind of a meeting place here?
> DEBORAH: It created a space, attachment and friendship. So, we can follow these people who are in the group very well.
> (Deborah, health centre´s coordinator, nurse, age 30, interview on June 17, 2018)

According to Deborah, regular and long-term attendance of older adults to bodily practices´ groups enables health professionals´ attitudes of caring. As it is a regular activity (usually once, twice or three times a week, at fixed times), it favours establishing a relationship and creating bonds between community and health workers. Beyond the physical and physiological aspect of contributing to prevent the most prevalent chronic diseases in the community, the programme works as a meeting point that catalyses service integration.

As Deborah said, other professionals sought to promote interventions as part of bodily practices´ sessions, as they knew they would find the older adults in the health centre, at that specific day and time. It is harder to attract people to health education initiatives if they are not familiar with the health centre and its available services. Hence, bodily practices played an important role in facilitating services´ integration and multi-professional work.

Michelle, also a health centre coordinator, confirmed this by saying that regular contact and closeness between community and health workers is relevant to accomplish health promotion´s goals.

> MICHELLE: I think we should have more incentives to have more health gyms because it is very important. They could be linked, like this one, to a health centre. That is very good, this contact, this closeness that we see it is important. Ideally, one thing we have been fighting for is to have a minimum team of Family Health Strategy as recommended by the Ministry of Health through the National Policy of Primary Health Care. It would include a community health agent, a nurse, a physician and a nursing technician. But we should have those professionals too. We should have a psychologist, a social worker, a HPE professional.
> (Michelle, health centre´s coordinator, nurse, age 41, interview on October 02, 2018)

Although the importance of implementing multi-professional work and services integration is well accepted, it still stands as a big challenge for health professionals to put it in practice.

> BARBARA: But we talk because it´s still hard for us to integrate services in the whole city. It seems like each one takes care of one thing and says, 'now it's not mine anymore, now he is under the care of the Psychosocial Care Centre'. Dialogue is missing. We here still try to do something like that. I, especially as a NASF-AB member have a better view about it. Perhaps they will start seeing that like 'Oh, I have to communicate with another service'.

(Barbara, HPE professional, age 43, interview session 1 on September 26, 2018)

Barbara raised the issue that dialogue is critical for services integration and multi-professional work. Health workers should demonstrate willingness and abilities to engage in team discussions. Although each health professional area constitutes a core of specialised techniques and procedures, all of them share the same field of practice, that of health. Hence, it is important they develop ways of working together in order to provide the most complete caring services to whom they care for.

5.3 Holistic care

The theme holistic care was developed from data generated in this study that suggested that the HPE professionals addressed the physical, psychological and social needs of the participants through the delivery of bodily practices.

A HPE professional made clear her holistic view on the older adults:

> BARBARA: (...) A human being is a whole. He is emotion, he is everything he brings with him. He isn´t just a physical body. When we say physical educator, it seems that we will only educate one´s physical body. And we know that no one educates anyone's physique. A HPE professional has a very rich job within the health area. The participants want to be close to the HPE professional. They join the programme because they want to lose weight, to get fit. But they realize themselves that it was not even what they were looking for. They were looking for a friend, someone to talk with and to unburden themselves, or someone who is able to make a referral to another sector or service.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Barbara commented on the richness of HPE professionals´ work within the field of health. The richness which Barbara mentioned can be viewed as a potential of HPE professionals for providing holistic care through the medium of movement.

Moreover, Barbara pointed out that participants in general joined the programme with a biophysical claim (e.g. weight loss, pain, illness), but they satisfied also their social and psychological needs during the sessions. Afterwards, they perceived that they were actually in need for developing social and psychological health dimensions.

In line with a holistic view, Barbara and Susan presented their programme´s goals:

> BARBARA: A health gym seeks to offer a more health-oriented care, as physical as mental and social care.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

> SUSAN: To focus on participants´ mental, social and physical development, health promotion and prevention of diseases through a variety of activities. That is why it doesn´t focus only on the physical aspect. Thus, people feel good and want to stay in the programme. There are three things that I understand from the programme: first, it is concerned with health promotion and disease prevention; second is its focus on participants´ physical, mental and social aspects. This is the most important thing for me. And third, it aims to show attentiveness to community, which I also think is fundamental. This is a matter of people feeling good and not wanting to leave.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

Susan expressed her approach to health through a triad of elements: (1) health promotion and disease prevention, (2) holistic care and (3) attentiveness. In fact, the second and third elements might indicate pathways to realise the first. Thus, she clearly showed her concern with the development of multiple domains in working with older adults.

Participants´ voices reinforced that the HPE professionals stimulated multiple domains during their classes. To Margaret, the sessions did not only work on the body, but also on the mind along with the new friends they made there.

> MARGARET: It is not just the exercise that Susan works with us. She works on mentality, concentration… and the friends that we make here. That's really good. (…) I think one of the best things the city council did was the health gym. It´s a shame that there isn´t place for everyone. There are people who wait a long time, perhaps they really need it because during the classes we don´t only workout the body, but also the mind. There is a lot of depressed people that physicians make referrals to here for social interaction. It´s not just exercising.
> HEIDI: What kind of activity besides exercise do you do?
> MARGARET: I don´t know how our teacher calls... tasks to exercise our mind, you know? It's really nice because at my age I already have this problem of my mind going on blank.
> DOROTHY: Yesterday I couldn´t answer anything. My mind went on a complete blank. It happened to me several times. And the teacher focuses a lot on that.
> MARGARET: I like this a lot because I'm afraid in the future of losing my memory.
> HEIDI: Did you notice any improvement after doing these activities?
> DOROTHY: Yes.
> MARGARET: Yes.
>
> (Margaret, health gym participant, age 46; Dorothy, health gym participant, age 66; programme 3, interview on October 02, 2018)

As Margaret said, ´it´s not just exercising´. More than that, the older adults indicated that they were also intellectually and socially stimulated during the sessions.

Other participants also acknowledged that socialisation was encouraged through the programmes and they perceived that it contributed to their health development.

> HEIDI: What changes did you perceive in your life after participation in the programme?
> DIANA: Increased health. I think health enhancement is all this together, the friends that we make at the health gym and conversations we have about our problems. We talk and laugh...
> (Diana, health gym participant, age 64, interview on September 26, 2018)

> KIMBERLY: Besides doing physical activity, we interact with our colleagues, we learn to be a better fellow, we learn to offer more support to others.
> (Kimberly, health gym participant, age 62, interview on October 01, 2018)

Kimberly recognised that she and other participants developed personal qualities (e.g. fellowship, sympathy and being supportive) that were relevant for socialisation. So, from the participant´s view, the programme offered opportunities to be physically active as well to interact with others and to foster personal growth.

Another three participants raised a comparison between the health gyms and the conventional ones regarding dimensions of health and wellbeing that are stimulated in each.

> JENNIFER: I liked very much, mainly the social part. So much that I stopped going to a regular gym. Because here was so much better than the regular gym, I chose to stay only here and dedicate my time.
> HEIDI: Do you think the social aspect makes it a unique programme?
> JENNIFER: Yes. Because, for me, if I walk on the street, do sit-ups at home or at the gym, or perform high intensity training, whatever, for me the exercise is the same. But that part of you exercising while laughing, talking, being there listening to a colleague, for me I really liked it. And I´d never had contact with this kind of work. So, for me the social aspect is the most motivating.
> HEIDI: In your opinion, what happens in the programme that enables socialisation?
> JENNIFER: It's very stimulated here. Here you already know that the activities have this purpose. In contrast to a regular gym where you will enrol, they will prescribe you a training plan and interactions will only occur naturally. There, people don´t encourage you to talk and to interact with others. Here, you already know that the health gym´s purpose is different (...) I think when you understand that the health gym´s purpose isn´t only come here to exercise, things get much easier. (...) when the teacher receives us, she already explains what the health gym´s purpose is. That's the first thing she talks about. So, it's always very well explained that there are these social and mental issues, and physical activity.
> (Jennifer, health gym participant, age 30, interview on October 02, 2018)

> HEIDI: You said you've been to a private gym before. What difference did you see between there and here?
> KELLY: A lot of difference. (...) Each one does his own exercise there, the instructor delivers the session and leaves. We don´t talk. There´s no daily interaction. It's not that friendship that we have here. It´s different.
> (Kelly, health gym participant, age 58, interview on September 26, 2018)

> VICTORIA: I have already been to other gyms. I participated, but it didn´t help me much. It helped in the physical part, right? But in the part of self-esteem, this joy, this thing that involves…here we play, we laugh... that is what helped me a lot.
>
> (Victoria, health gym participant, age 52, interview on September 28, 2018)

To Jennifer, Kelly and Victoria, what distinguishes the work carried out in health gyms from that in the conventional ones is the focus on the social domain. In the conventional gyms, participants were not intentionally stimulated to interact with instructors and peers. On the other hand, the health gyms appeared to be meaningful to them because the programmes enabled them to foster their social life.

Participants´ awareness that they would find increased opportunities for social integration drove them to participate regularly in the heath-promoting programmes. It suggests that the physiological benefits resulting from physical activity by themselves were not enough to motivate older adults to a physically active lifestyle.

In addition to participants´ comments, a HPE professional revealed that he firstly thought that physical domain was the most relevant to be developed through bodily practices in health-promoting programmes. Only after working in a programme with older adults, he perceived that social aspect promoted by the activities was the most meaningful to them. Since then, he has assumed that stimulating regular interaction is a priority for healthy ageing, along with diet and a physically active life.

> CHARLES: They have emotional situations. They come, they talk to me, they complain about family, husband, children who are not well…
> HEIDI: How much do they talk to you?
> CHARLES: A lot! I thought this programme was very much about the physical part. Much less the physique, much less. (…) I realized later this story of being less physical and more mental because of three fundamental things that we believe for the elderly: adequate diet, physically active life and hence what I see as the most important is social life. It is about bringing people here who were at home, who sometimes live alone, who sometimes don´t have other occupation, don´t have anything else to do due to a lack of choice. Here, they have contact with other people, who will invite them to travel together, to go for a tour, to play bingo on the weekend. Then, you re-insert them in a social life. This is another very important function of the group.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

Charles demonstrated that he learnt to see the older adults holistically after interacting with them attentively and recognising their social and emotional needs. Charles´ comments imply that the practices of looking at the person and being attentive are critical for the provision of holistic care.

Another HPE professional agreed that it is important to stimulate interaction among participants. She indicated how she did it through play:

> ANNE: I like working through play. Sometimes I look for a different play or game exactly to create this interaction. Because when the person exercises with free weights, she stays in a corner. But I really like including play and ball games. Then she's going to play, it's not just her, it's also someone who is aside. So, I really like bringing things like this. They like and have a lot of fun. It's really fun. They participate a lot.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

One more strategy the HPE professionals adopted to increase socialisation among participants was through recreational events, mainly during special dates. Organising events was an important action that the HPE professionals carried out in the four programmes.

> MICHAEL: When it's a special date, we do a project for that date. For example, we did the elderly week in October, we did the FHST games for the second time. Each health unit had a team and they competed against each other. In the games, the patients participated with the professionals (physician, nurse, health community agent) and we, from the FHST organised the competition. Also, we do the festival *festa junina*. So, on commemorative dates we do a different activity.
>
> (Michael, HPE professional, age 40, interview on June 28, 2018)

> ANNE: Depending on the date, we do a special dance or a play, or a walk, or something.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

> SUSAN: We celebrate all the special dates. What is nice is that, in the same way that I do any activity as an event, there are many of them who also make it an event. There are people who take it very seriously, who likes it very much and there are people who see it as a regular session.
>
> (Susan, HPE professional, age 32, interview on October 02, 2018)

During the fieldwork, Susan showed me many photos they took of the events. Several examples of events they had in the programme included: they decorated the room in pink for Pink October; they took photos of male participants in Blue November; on the children´s day, they remembered games they used to play when they were young, and they played together; they decorated a Christmas tree that they raised money to buy and each one brought an ornament; every year, every group exchanges gifts for Christmas and get together in someone´s house; they also decorated the room for Easter holiday, when Susan organised a treasure hunt, whoever found the chocolate treasure was invited to share it with the others; they celebrated the festival of *festa junina*, the teacher´s birthday, the health gym´s birthday, and the *farroupilha* week.

The HPE professionals demonstrated that their work had a focus on the development of participants' social life. However, they also addressed other health domains such as the emotional one. Through their work, the HPE professionals showed caring for older adults´ emotions and psychological wellbeing.

> BARBARA: Having these experiences and knowing that the HPE professional's job is not just to prescribe exercise, it's not just to plan a training or to organise a session. But a job that also deals with the emotional side of people. Because from the moment you work this relationship with people, you will not only treat their physical part. You will create with them a whole relationship of emotion, of life, and sometimes of provocation.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Barbara explained that holistic care happens when the HPE professional acknowledges the participants as people who have emotions and responds to them with a caring relationship. Then, some ways of delivery of bodily practices might go beyond the physical dimension and provoke changes in participants´ lives.

Mary, an older adult, reinforced the importance of participation in the programme for participants´ emotional health.

> MARY: For me it's everything. Because besides improving the physical part, I think it improves our emotional part. It improves a lot. While doing the activities, we focus on that activity, on what we are doing, and we end up forgetting the problems we have. Everyone has problems in life. So, the emotional part gets a lot better. I was depressed and I always treated. I think physical activity helps a lot. So that's why I come to do.
>
> (Mary, health gym participant, age 73, interview on June 28, 2018)

Mary´s comment suggests that if the bodily experience is entertaining and challenging to participants, it helps them to escape temporarily from problems. Therefore, bodily practices might enable the development of coping strategies, which might shape participants´ SOC (ANTONOVSKY, 1979).

However, it is important to emphasise that bodily practices might foster participants´ psychological wellbeing if sessions were intentionally structured for its purpose.

A HPE professional provided a description of activities she conducted to encourage conversations and work on participants´ mental health.

> SUSAN: When we had messages, it was really nice. They had to bring a message to read at loud. They brought beautiful things. When someone finished the reading, we made comments on what was read. Usually it happened at the beginning of class. (…)

> Once, a trainee came up with a group dynamic, a play which she stood, and the group faced her. She said, 'Guys, I'm going to speak body parts and I'll put my hand in one of them. And you have to put your hand where I say, not in the same body part that I put it.´ She said 'knee' and then they had to put a hand in their knee, but she touched her head. It was very funny. Then I did the same activity. I started, 'Guys, you know that story about do what I say, but don´t do what I do? Do you do it in your lives? For example, you say don´t smoke because it is not good, but then you smoke at the weekend.' There were participants who didn´t know what that was about. Hence, when someone said, 'oh I do', there was already a conversation and interaction. There is a difference between you applying through one way and applying by another. I tried to take advantage of a play and asked them, 'what about your lives'? (...) So I always try to take advantage of the activity that I do exactly for stimulating a conversation and enabling some of them to unburden themselves to the group, if someone wants to. Because I think that's the goal. This is also mental health care, when they unburden themselves on something to someone.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

Furthermore, I identified that HPE professionals employed diversified activities as a strategy to provide holistic care.

> SUSAN: I always want to bring new things to escape from physical activity. (...) Every day is a different class. (...) At least once a week, I try to do an activity that takes a little longer. Next time, there will be a different warm-up, for example running/walking around cones, running, picking up and throwing a hula hoop, passing the hula hoop to colleagues, something different. And next, there will be something in pairs, maybe a circuit training.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

> ANNE: In fact, my classes are always very varied. One day is an exercise for breathing, concentration, memory, strengthening, cardio workout. (...) And every two months I bring a play. That varies too. For example, sometimes I reduce the time spent on conditioning and I use a play at the end. But there are classes, when they are very excited, that I like delivering the whole class through playing. Why? Because the play that I use, in fact, is through exercising. They just do the exercise in another way, in a more playful way. Anyway, it's exercise and they feel it. They are able to realize that even through a simple ball game, they work their body. They perceive it.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

> BARBARA: I always seek inspiration in several lines. As we work with many people, we know someone who works with the thing of spirituality, another has knowledge in Psychology, another has more the issue of gymnastic work, the physical part...
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

The older adults demonstrated that the social and mental health development are the most meaningful aspects stimulated by the programmes. Nevertheless, the participants required that exercise or some form of movement should be present in their practices. Holistic

care thus should be provided through the medium of movement, a requirement the HPE professionals attended to willingly and competently.

> ANNE: I always split the session into parts, only today that it wasn´t possible to do it. I split the session into a part of exercise and another of counselling to not discourage them because they come to exercise. (...) Each month we choose a theme for a speech. We usually give short talks because we take advantage of the group, but they don´t like missing their exercise routine. Indeed it´s not good. So, depending on what the project is about, what the talk is, we use less time. It takes about fifteen minutes, only in terms of providing information to them.
> HEIDI: Do they have this need to come here and exercise?
> ANNE: Yes.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

> SUSAN: For example, if I told them that a physiotherapist will come in the next class to talk about posture, they would ask, 'but is there going to take the whole class?' I say no, only fifteen minutes. (...) HEIDI: So, the exercise for them is fundamental? SUSAN: Yeah, I guess that's what they like the most. Certainly not in the sense that 'I need to exercise because I need to lose weight' or because 'I ate too much yesterday'. I don´t think it's in this sense. I understand it's because they really enjoy exercising, which is good. Sometimes I take some chairs because I to use them for exercising. Then they ask, 'Oh, are we going to sit down today?' There is this kind of comment.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

The participants´ requirement for active sessions may not be attributed only to their physical claims. Furthermore, they expressed their appreciation of movement.

> CAROL: What makes me feel good is when I walk and exercise, I release all my energy...
>
> (Carol, health gym participant, age 55, interview on June 14, 2018)

> ALICE: It is very enjoyable to do this. We have no idea that... there are a lot of people who could do a practice like that and they are missing this opportunity. It certainly brings many benefits for health.
>
> (Alice, health gym participant, age 52, interview on September 28, 2018)

> GEORGE: We enjoy coming here and exercising.
>
> (George, health gym participant, age 69, interview on October 01, 2018)

Still regarding the physical domain, the HPE professionals described how they organised sessions to attend to participants´ physical needs:

> CHARLES: I usually do the physical part of the training from January to March. Everybody comes in the morning, every day. I do a physical part as if it were a pre-season. Then I worry a lot more about the physical part, of waking up the muscles again. I work with them on strength, endurance, power, I work everything. And I work on that starting power for them to move. (...) I already did, for example, I put two big

> boxes there in the pitch line, and they had to push the boxes up the other line, three meters apart. It was a specific task to make them move their feet off the ground and get the ball that is there at a step.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

> BARBARA: I do twenty seconds of vigorous exercise and ten seconds of moderate exercise, that is a block. Then I give a break for some water. I wait to lower their heart rate. Then I do it again to have this heart rate shock. The way I organize classes depends on the day. Today, it´s a session focused on lower limbs combined with abdomen. Then it will only be upper limbs combined with abdomen. Then only the abdomen at the end. Because they have a lot of posture problems. So, we workout abdomen through some exercises. Yesterday, for example, it was a class with more dynamics, more cardio, jumping, jogging.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

> ANNE: I really enjoy mixing the class, including stretching, warm-up and muscle strengthening. And within that I start to merge. This month I´ve worked a lot in this area, so next month I'll try to work out another. It may even be the same area, but it´ll be done in another way because it stimulates a little. Most classes are organised like this: I always have about two or three classes a month that are standardized. What I call a standard is stretching, strengthening, and relaxation. Then, within that pattern that I vary the activities. If this week I did exercise for this part, next week I´ll do an exercise for another part. I think it's not good that thing of always hitting the same key, of saying that the exercise has to be that way and it's only that specific exercise. This is tiring. So, in my sessions I really like diversifying, even being an exercise, but there are different ways to do it. (…)
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

Hence, the HPE professionals demonstrated that they took account of participants´ social, mental and physical needs. I noted that they considered that all aspects of one´s life were of importance to develop balance in health and wellbeing.

When the HPE professionals believe that multiple domains might contribute to health development, they tend to be more committed to stimulate it through their work.

To summarise, the data generated in this project showed that the HPE professionals enrolled in the four programmes were not focused only on increasing participants´ physical activity levels. They believe that prescribing exercise it is not sufficient by itself for attaining health promotion goals. Besides the physical dimension, they sought to enable participants´ social and emotional development through bodily practices.

However, it is important to highlight that social and mental aspects were not viewed by the HPE professionals as side products of bodily practices. They noticed that participants valued more the improvement of social and psychological aspects than the changes in their physical bodies. Thus, they prioritised the participants´ social and psychological needs in their

work, without detriment to the biophysical ones. In this way, the HPE professionals enabled participants to improve four interrelated dimensions of health through the medium of movement: social, physical, cognitive and emotional.

5.4 Community-based approach

The data set from the interviews with the HPE professionals, health centre´s coordinators and participants pointed out that the approaches applied by the programmes enabled the involved communities to build capacities and mobilise resources towards better health. The fourth theme was developed from these data, referring to the elements identified in this study as building blocks of a community-based approach.

The programmes enrolled in this project addressed the concerns of the community members by creating an inclusive environment that stimulated them to participate effectively and to assume control over decisions that influenced their health and lives.

A HPE professional acknowledged that the bodily practices programme does not belong to anyone in particular, but to everyone who participates in its construction on a daily basis.

> SUSAN: I used to say in the beginning that the health gym wasn´t mine, it didn´t belong to the city hall. I'm not the teacher who commands. No. We're all only one thing. We talk and we understand each other. Everyone has the right and freedom of expression, to express their opinion. I always made it very clear. (...) Because I've never been like this, 'I'm the teacher and you have to obey me'. No.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

Susan recognises the older adults´ voices, suggesting that the programme is co-constructed with them. Importantly, she shares her authority of a health promoter in charge with the older adults, which might contribute to transform power relations between her and the community and foster community empowerment.

Similarly, another HPE professional indicated that she does not see the participants under her authority of professional. Instead, she considers them as ‘knowing subjects’ (STANDAL, 2015).

> ANNE: What I've always had with me is in terms of knowledge. Because I think it's very important. In my sessions I always seek to eliminate that idea in which they think that because I´m a teacher, I'm God at that moment, I know everything, I can do everything, and the rest is just someone who will repeat movements. I don´t really like that line of reasoning. So, what I do in my classes is to bring information. (...) I think it´s important for the teacher to provide knowledge. Why are you doing this

> movement? We don´t have to, of course, deepen in detail like 'we're using such muscle'. But I find it interesting and I realised that they perceived this difference in my classes. They aren´t treated as ignorant persons that imitate me. They are like me and they may know why they are doing certain movements.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

Anne emphasised that participants should have awareness regarding their bodily practices. The knowledge acquired by the members during the programme was critical for developing autonomy and community empowerment.

In addition, a health centre´s coordinator recognised that the work conducted by a HPE professional encouraged older adults to assume the programme as a community asset and to preserve it. Michelle´s comment suggests that the HPE professional carried out a community-based approach.

> MICHELLE: In the beginning it didn´t work well because it took a while for people to understand that this was a community asset. At first this was almost unbearable. People, especially the youth, came, destroyed, and stole whatever they could sell. Then, with the teacher´s work and her persistence, also of the people who were participating, they began to persist in occupying this space. It was mainly the older people who came because they had available time. When they began to come, they began to position themselves and actually assume ownership, 'no, this is ours'. And they started, encouraged by the teacher, to participate, to maintain. Today, our health gym doesn´t have that problem anymore. Thereafter, an important part of the community adopted the health gym. And they come, enrol and participate in a variety of activities they find in the programme.
>
> (Michelle, health centre´s coordinator, nurse, age 41, interview on September 27, 2018)

From Michelle´s observations it became clear that collective ownership is crucial for the maintenance of community-based programmes. Since the older adults have appropriated the health gym as a community area, they have protected it from vandalism and stealing.

Other elements were verified in this project as determinants for a community-based approach. I acknowledged them as the interrelated subthemes of age-friendly environment, participation and empowerment, which I present next.

5.4.1 Age-friendly environment

The findings indicated that the HPE professionals conducted certain practices which can be identified as a concern with creating an age-friendly environment for sessions. An inclusive climate might foster older adults´ health and participation in community life (WHO, 2007).

The HPE professionals´ practices were acknowledged in this study as contributors to a positive atmosphere, which included: being enthusiastic, charismatic and supportive with older adults; adapting the ways the sessions were designed to suit participants´ needs; the way performance was evaluated disregarding mistakes; opportunities provided for maximum practice time; and, adequacy of language while communicating with older adults.

Beyond that, I consider that such practices are interrelated with social support that older adults received from peers and HPE professionals, and of ethics of care, through which the HPE professionals showed respect for limitations caused by age and attentiveness. Together, all practices helped HPE professionals to build an optimal motivational climate for bodily practices.

During fieldwork, I perceived an inclusive climate in the four programmes. I observed that the HPE professionals were enthusiastic and charismatic in the way they greeted and talked with participants. The HPE professionals encouraged the older adults throughout sessions, saying motivational words and praising them for completing tasks. Furthermore, the HPE professionals demonstrated support for older adults. They showed a willingness to help them when required, for example by having conversations or adapting tasks.

Three participants´ interviews corresponded with these fieldwork observations. They spoke of their perception of being involved by the HPE professionals´ energy.

> KELLY: Actually, it´s also a bit of the teacher, who has that energy that seems to involve us. Her energy.
> DIANA: 90% comes from the teacher. 90% we owe her. She arrives cheerful, happy, and we joke, we scream, and she is always with us.
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; interview on September 26, 2018)

> CHRISTINE: If there isn´t someone to encourage us, if there isn´t the group, if there isn´t a teacher who helps, who has that energy that involves us... because the teacher seems to be an electric light and she transmits a very good energy to us. She transfers an energy that I think that's what makes everyone stay. I would like to have class with her every day. Because when she teaches, in her way, her energy involves us.
> (Christine, health gym participant, age 46, interview on September 28, 2018

These participants appeared to be motivated also by the HPE professionals´ behaviours. Christine mentioned a willingness to stay close to the HPE professional due to her positive energy. In this respect, a HPE professional shared that she believes that practitioners within the PE area have a relational characteristic that is appealing to people.

> BARBARA: The HPE professional is very dear to people. Whether intentioned or not, we have a way of dealing with people that they get close to us. They want to be close to the HPE professional.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

In addition to the enthusiasm, charisma and support showed by HPE professionals to participants, the way they designed bodily practices seemed to contribute to an age-friendly environment.

Although sports activities involve a standardised performance and the use of body techniques, the HPE professionals demonstrated empathy and responsiveness for older adults´ needs in learning and playing sports. The way the HPE professionals adapted tasks and games design appeared to be critical for ensuring that competitive sports would be a healthy experience for older adults.

> CHARLES: We, teachers, are more flexible with the rules. We provide an orientation to whoever referees our games to not be so strict in the sense of official rules. This [game situation being observed] here would be a penalty. But here's a game, let's them play. No one is going to blow the whistle for this situation in our game. (…) In our game, women over age 70 or who have a problem with their arm are allowed to enter the court to serve. It's an adaptation that we make so that the game can happen. There is a participant who is 70 years old and she does an overhand service. Another one serves underhand almost close to the attack line. Whoever can serve in the service zone, does it there. But whoever needs to get in the court to serve, gets closer as much as she needs. All this was a creation... the rules were adjusted by the teachers who work with them. In the beginning of the year a group of teachers who work in this region meet to discuss what is necessary to change and we see the rules that we need to adjust. Before they could not jump, then we allowed jumping. It wasn´t allowed to serve overhand, now it´s accepted when the person is able to do it. Before, whoever did not have enough strength to serve, could throw the ball. But this caused more accident because the ball went into spin and sometimes the person who tried to catch it, let it slip and the ball went in her face. In this way, there was much more accident than letting someone get on the court close to the net to serve. So, it's much better to let them get on the court to serve than throwing the ball. (...) Moreover, they can take as many steps as they want until they recover their balance. If someone catches the ball and gives five, six, seven steps, that's okay. From the moment the person stabilizes her body, then she can only take one more step.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

The HPE professional conducted his work focused on older adults´ learning to play sports. He created new rules with other professionals to facilitate older adults´ involvement and learning, warranting their safety. The rules, moreover, were adjusted continuously and accordingly to the extent to which the older adults´ evolved in their sport practice.

The flexibility in the practices allowed some high-skilled older adults to exert their well-developed skills and abilities. At the same time, other participants had the chance to acquire skills respecting their specific needs in playing as well.

Charles acknowledged that older adults have the capacity to fully participate in sports. He did not look them through deficit lens, hence, he saw the older adults beyond the loss of functioning capacity and frailty, in so far as these existed. He recognises strengths and resources among older adults that enable them to engage in sports.

Furthermore, the HPE professional´s approach to evaluate older adults´ performance disregarded the mistakes they made. Charles encouraged participants not to worry about errors and faults while playing, even if they were blamed by other colleagues in team sports. He used his authority to reduce the burden of low performance on participants and to create a friendly atmosphere.

> CHARLES: I had to interfere several times and talk to the people who were pushed by others on the court. I said to them 'your reference here is me. The others will charge you, they will demand of you, but let them aside, it´s me who will talk to you about what you need to correct. Don´t give attention to them.' (…) People who come here and are a little shy or who do not expose themselves so much, slowly they let themselves learn sports and be exposed to others. There is a participant that I have to insist on to take her to competition. She comes to play here, but if she has to get out of here and go to a crowed gym or come to play here with people cheering, she will not play. She exposes herself here because she feels safe, it is her comfort zone. But, if she has to leave here to expose herself to others... it's like, 'I'm not going to show that I make mistakes.' And she plays well. She has understood the game better. But this is a thing of how she was raised. Her parents didn´t allow her to make mistakes. And she brought it with her until her third age. I said to her: here you can make mistakes, here you have permission, I let you go wrong, there´s no problem at all.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

Charles perceived that some older adults did not like being exposed because they were afraid of making mistakes and being judged by others. Then, he insisted on convincing them that in the programme it was acceptable to commit errors. Charles described that these group of participants gradually got involved in learning a new sport and they no longer cared about being exposed to others.

Besides the way bodily practices were designed, also the way the programmes were shaped had an influence on the motivational climate. The programmes enrolled in this study are governmental, public and entirely free of charge initiatives for community participation. Hence, the programmes welcome all, no matter people´s social class, gender or ethnicity. In a

low-income context like Brazil, this format of programmes is particularly important to include those people who cannot afford to join a private gym or sports facilities. Thus, the way the programmes were designed created an environment that was equitable, inclusive, safe, and supportive to older adults.

A participant expressed her feeling of being equal to the others.

> DIANA: The good thing here is that people are equal. In a private gym, there are those show-off people as if there was only them and nobody else. Not here. Everybody is equal.
>
> (Diana, health gym participant, age 64, interview on September 26, 2018)

This perception of equality among participants is important to make them feel that the health gym is a right place for them, where they might find peers with the same age and social status.

Another strategy that Charles adopted to create an inclusive climate was by providing opportunities for maximum practice time of team sports.

> CHARLES: It's by time. Fifteen minutes to each side, for everyone to play the same period of time. If it was by points, it would take longer. When it is fast is because one team is better than the other. If the best team won, the other would play less. So, it's all by time, then everyone plays the same. It does not matter who wins and who loses.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

In his programme, Charles emphasised the experience of moving and playing rather than the final result of defining winners and losers. He showed his concern with offering equal opportunities for practice to all participants, which is pertinent to enable enjoyment of play and a friendly environment.

Finally, I identified that HPE professionals used a strategy of adequacy of language while communicating with older adults to create a positive atmosphere within the programme. While observing bodily practice sessions, I noted that HPE professionals employed appropriate language to reach participants. Consistent with observations, a HPE professional spoke about it during her interview:

> SUSAN: About my language... every time a trainee arrives here, I already warn him because at the university we learn that we should speak correctly the names, like extension, flexion, everything right. There is no such language here. So, it starts with my language because I speak the way they understand. Many of the people who participate here, they have never done physical activity. Never.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

Susan´s comment on her language during sessions indicated that she intended to communicate in a way that was comprehensible to the older adults. There was an effort to enable them to comprehend the situation they were in. This practice of adequacy of language might also contribute to build an age-friendly environment.

In turn, an age-friendly environment favours the older adults to meet their needs, to engage continuously in a variety of learning processes, and to increase their participation in community activities.

5.4.2 Participation

Participation refers to the involvement of the older adults in decision-making processes and activities during the programmes. Meanings of older adults´ participation ranged from making decisions about their practices, identifying their needs, making suggestions of activities to be done in group, finding opportunities to contribute to the community to, joining activities and experiencing new practices.

The level of participation depends on how inclusive the environment is, how encouraging and attentive is the HPE professional in charge and how rewarding the older adults find the experience of being enrolled in the programme (UNHCR, 2008).

The three features of inclusive environment, attentive mediator and rewarding experience were identified in the four studied programmes, that jointly engendered the older adults´ participation in different forms.

An illustration was provided by a HPE professional who explained how a group was formed with a basis on active participation of members.

> BARBARA: I started bringing some themes to talk to them and they brought other demands. It's that kind of thing to get together with no commitment. It´s not a lecture, a formal speech. It´s a free and spontaneous demand. If there´s a dynamic or a play to do with them, I do. If not, no. There´s no plan or agenda. It´s not that there´s a need to have a schedule like 'oh, today we are going to work on diet'. No. Sometimes some issues arise and many of them make suggestions. What I find potent in this group is that it doesn´t exist a thinking like 'what the teacher says is the truth, what someone says, or what the speaker came and said'. It´s their knowledge that they exchange and talk about. They organise themselves. They expose what they experience and share with their colleagues. It´s not just a matter of knowledge of a specialised and trained person, but knowledge that comes from them and their lives. I think it's really nice.
> HEIDI: So, is it spontaneous?
> BARBARA: It's very spontaneous. And I think this is the success of the thing. As soon as they complete the exercise routine, they take a chair to sit. We sit there on a circle. If we have *chimarrão*, we do it. Once we had tea. There was so much food. They

> brought chopped fruit, whole grain cake, cookies. It came from them. I didn´t say at any moment 'let's bring food'. They just brought.
> HEIDI: So, they bring a lot of ideas...
> BARBARA: They do.
> HEIDI: What themes usually come up spontaneously from them? What do they usually talk about?
> BARBARA: They talk a lot about food and diet, which I see it´s something they have a concern with. So, they frequently talk about food, family daily life, problems with parents, children, husband... There are several issues. Also, they talk about their anguish at feeling older. Some of them think that their husband will not like them anymore.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Some of Barbara´s comments like ‘they brought other demands’, ‘many of them make suggestions’, ‘it´s their knowledge that they exchange and talk about’ and, ‘it came from them’, made evident that the older adults had willingness and abilities to freely express their priorities, requirements and preferences in the presence of the HPE professional and peers.

To make it possible, it was essential that the HPE professional listened to them and treated their requirements as important. They were not constrained to manifest their thoughts, interests and needs in the context of the programmes.

Barbara highlighted that the group´s biggest strength was that the members valued their own knowledge and experiences. They found and mobilised resources to meet their needs among themselves. They did not believe that knowledge was valid only if it came from someone in authority. They assumed themselves a position of authority over issues related to their lives. The community itself carried out the identification of problems and the design of an action plan to solve it. Thus, the community members became protagonists of their own practices and showed spontaneously their preferences and needs to others.

The HPE professionals described cases in which older adults had initiative to raise ideas and make suggestions to the programme and to the community.

> SUSAN: A participant was who gave the idea of creating a charity board for people look for support of what they were in need for. And she cares very much about the social part, of trying to bring people together... She understands very well what the program is about.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

> HEIDI: Are they who ask to do these things?
> BARBARA: It comes from them. One day they asked me to arrange a visit to an orphanage. I said okay, I just need to see if it´s allowed and to whom we should ask permission. A person that I knew was an art teacher at an orphanage. Then I asked her what the orphanage needed. They were in need of arts supplies. Then the group went there to deliver the donation. Now, they want to give a dance performance in a rest

> home for the elderly. As I´m a member of the City Council of the Elderly, I sought for information. The rest home coordinator said there would be a flash back party, so she told us to go there and dance. So, they will dance with the elderly from the rest home.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

Participation requires that the HPE professionals listen to older adults instead of deciding for them, like Barbara reported. The HPE professional´s role is to facilitate discussions and arrangements with participants so that they can identify and satisfy their needs and interests. In the given example, the HPE professional nurtured the community by acting as a link between the group and external resources.

Another example of how the older adults showed their initiative was of a garden that they created in the area where the programme took place.

> CHARLES: They are planning to create a garden here behind the gym, which the group will adopt.
> HEIDI: Did it come from them?
> CHARLES: Yes, it did. There is one participant, the one I told you is very shy, who started a cooperative for organic farming there in the town where she lived. She started the process there. Then she came here, brought seed and planted something here. Sometimes she brings more seeds to plant. A passion fruit tree grew up here. Then the group will take care of this space here.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

The community garden is illustrative of the older adults´ intention to take care of the public place they occupy. Furthermore, the existence of actions like that supported by the participation of community members indicated their ability to mobilise resources.

The rewarding experience of being cared for during the programme seemed to lead them to reciprocate with their knowledge, participation and caring. They demonstrated ownership in relation to the programme and its spaces, which is key to community development. They found in the programme an opportunity to contribute to their community environment.

I observed in another programme that a garden was created too. However, in this case it was an initiative of a trainee. Still, the older adults got involved and helped to design the new garden. Moreover, their level of participation in the activity increased as they maintained the area.

In situations like that, Susan said she required the older adults to participate and experiment, because often they have never done it before, then, they are not able to decide if they like or not.

> SUSAN: A strategy I use is to make them experience what will happen. For example, the class you observed today. I did a drawing activity and many of them said they didn´t know how to draw. But they all did. It may be that I´ll help the person to do the activity if necessary, but she´ll try. But she won´t escape from doing it. This isn´t going to happen. So, they experience things because they´re in a place that they know they have to respect the teacher, colleagues, space and material.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

To Susan, participation in activities is a matter of respect since the programme involves other people and a structure to assist them. In the same way that she requires participation from the older adults, she also thanks them for their involvement.

> SUSAN: I always say, 'thank you for participating, for bringing things, if you didn´t like something you can tell me'. I thank them, especially when it is a different activity.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

Susan´s recognition of older adults´ participation might reinforce their willingness to participate continuously in the programme. The way the HPE professionals respond to their efforts to be fully involved in the programme might determine their subsequent level of participation, if it will increase or decrease.

In this study, the HPE professionals demonstrated that they provided support to older adults and opportunities for them to participate increasingly and contribute effectively to their community. Therefore, meaningful participation might foster older adults´ autonomy and empowerment, which I will present through the next subtheme. Through effective participation, group members can comprehend their reality and act on issues of concern to the community (LAVERACK; LABONTE, 2000).

5.4.3 Empowerment

The subtheme of empowerment emerged in this study as an important element of the community approaches employed by the programmes and, as a long-term goal to be achieved during bodily practices.

Empowerment refers to enabling people to increase control over their life decisions (LAVERACK; LABONTE, 2000).

Data from HPE professionals´ interviews indicated that autonomy and empowerment were established in their work towards health promotion goals. The programmes sought to improve the community capacities rather than to develop particular behaviours among participants as a health outcome. Two HPE professionals provided a description of how

autonomy and empowerment were operationalised (as an approach) and pursued (as a goal) through bodily practices.

> CHARLES: At the beginning of my work, a participant said, 'but we can´t play without the teacher'. I said to her, 'you should play without the teacher. I'm here to teach you so that you can play by yourselves. If I´m not present on Sunday, Saturday or anytime when you get together to play, if you have twelve players, a net and a ball, you´ll play. You don´t need me to play. I'm going to teach you to play alone.' And that was the intention since the beginning. (...) And it was this autonomy they developed that led them to take volleyball from here to play outside.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

> HEIDI: What outcomes do you seek to achieve with them?
> ANNE: The main outcome I always want to achieve is autonomy. In my classes I always say that each one is responsible for itself. And the idea to provide knowledge about exercise is precisely because when they don´t have access to knowledge, they end up being very dependent on another person. It happens with most of them. If they don´t know something, it serves anything that others say. I don´t find this interesting. So, in my classes my main goal is to bring this autonomy to participants. I want them to think 'I have an understanding so that I can evaluate. Is this really right for me?' Another thing that I always seek to work with them is that thing that they should be independent, they can be autonomous, but mainly, their health and the self is what matters.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

Charles pointed out his intention for the group members to build capacities to carry out their own practices whenever they want to. Learning to play enabled the older adults to develop autonomy and gain control over their leisure time and social life.

The HPE professional emphasised that if they had the material, an available area, and the number of players who know how to play, then, the game would be possible to happen. The HPE professional´s role was to help them learn how to play the game.

Therefore, his work was concerned with developing community members´ capacities towards autonomy and empowerment so that they can make decisions and take actions which will influence positively their health. Then, it became evident that the HPE professional´s work was not directed at health behaviour change (with a pathogenic orientation), but at enabling participants to make decisions impacting on their health.

By saying that ‘it was this autonomy they developed that led them to take volleyball from here to play outside’, Charles meant that many older adults created organisational structures to come together through the form of civil associations, a way they found to socialise and mobilise resources to meet their needs.

The existence of these type of organisation is an indication of community empowerment. Within these associations, the older adults get together for leisure time, events, supporting others and addressing all kinds of problems the members may have. Several older adults who were also affiliated to these associations learned to play volleyball during the programme and included the game to their regular activities within the associations.

Hence, they developed skills within the programme and managed their new resource in a way that maximised their opportunities for practice on their own initiative. If they played volleyball only once a week in the programme, they began to play twice or three times a week considering their practice time in the associations. They became autonomous in relation to their volleyball practice and mobilised their resources to meet their interests.

Correspondingly, Anne´s comments on her work indicated that she aimed at developing independence and autonomy among participants as a means to enable them to gain confidence about their comprehension of their situation and their ability to analyse and decide what is better for their health. Anne considered knowledge as a condition for developing autonomy, therefore, she sought to provide information about exercise to participants during sessions.

Indeed, developing specific health knowledge is viewed as an action to improve health literacy[27] and consequently, empowerment (NUTBEAM, 2008). Acquiring knowledge and putting it into practice might lead participants to make their own decisions and become autonomous and independent from others, which is desirable in health promotion programming.

Also, in an endeavour to improve community empowerment, Barbara co-created with a group of older women an activity through which they could have freely conversations about issues they chose spontaneously. They called it the group of SUS´ divas.

The divas´ group meet every Friday to have round conversations about their daily hassles, needs, interests and achievements as a means to address women´s empowerment. Additionally, they dance together and give dance performances in local events which they are invited to participate. Barbara explained how the group was formed.

HEIDI: How was the group of divas created?

[27] Health literacy is defined as ‘the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health’ (WHO, 1998, p.10).

> BARBARA: It began one day when they were joking, 'oh, we're beautiful and hot.' And on that day arose something like 'we´re divas!'. Then they kept joking, 'we´re the divas of the SUS, let's make a calendar, we´ll be on magazines...' That thing of a willingness to empower themselves. Then I said, 'guys we always come here, and we never have a day of conversation without commitment, without having to come for exercising. Let's do it every Friday which is the day you usually do the cleaning. You're going to leave the cleaning, which will stay there waiting for you to be done.' Friday was kind of a dead day, when almost no one came. Then, they agreed, 'That's right, let's stop cleaning, let´s leave the brooms, and we´ll come.' Thus, they began to get together. And it got stronger and stronger. They created a name for the group: divas of the SUS. Because we always commented about it in class.
>
> (Barbara, HPE professional, age 43, interview on September 26, 2018)

The diva´s group was structured around the concerns of disadvantaged women, such as body image, matrimonial life, motherhood. The idea of forming a group of women for increasing interaction and social support among them represented an enterprise of empowering the community members. The new activity was appealing to them, probably due to the social elements already under development during the programme (i.e. connectedness, friendship, attachment).

The HPE professional encouraged them to exert control over their time, hence, to not have their own time regulated by the obligations that were attributed to them. Therefore, they interrupted their domestic chores to have some time for self-care. Their decision on the use of their personal time was a sign of empowerment.

This type of initiative might support older women to transform power relations, such that they might assume increasing control over their lives. Indeed, the participants of the diva´s group confirmed they improved self-perception, self-esteem, self-worth, perceived power and beauty.

> KELLY: My family praised me. They said, 'how you´re empowered! We´re happy just to seeing you. By being close to you, you already transmit joy to us, you laugh, you make jokes, you aren´t that person anymore.' (...) Because I was very depressed. Due to all the health problems I have, I continue in treatment. So, I didn´t really like making myself up. I stayed at home and went out the way I was dressed. Not anymore. Sometimes I go out at the weekend and I dress well, I wear lipstick. I find myself more beautiful. It is the expression of being happy, of feeling good about myself, and of being able to say 'no' at certain times, because there were things that I accepted in the family, everything was for me and I couldn´t refuse. I failed taking care of myself to do the household. No, we have to have some time for us, some time to exercise and stay well.
> HEIDI: You commented on being empowered...
> KELLY: I feel very empowered. I feel young. I may be old at age, but not in my mind now. (...) I used to look at dresses in shop windows, but I didn´t wear any dress. I thought how I wanted to have a body that I could wear that dress and look good,

> beautiful. I wanted to buy it, but I thought I would get huge, fat, ugly. Then, once we did an exchange of clothes here, as if it was a second-hand shop, that each one brought a useless piece of clothing. Then I saw a dress and said, 'I always pass by a store and look at a dress like that, and I wonder that I wanted to wear a dress.' Then the teacher told me to try it. I was in doubt, but I had a go. I tried it, felt comfortable and took the dress home. (...) As long as I can come and walk, I'll keep coming. That's what makes me feel good. I feel powerful to be here and to have the strength I have today and I didn´t have before... a strength to live, to move forward because when we have many health problems, surgeries, we get very sad and think it's the end of life. And no, then we're here... now I know that every day is a gift for me.
>
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; interview on September 26, 2018)

The shift on the way that Kelly cared about her appearance and gained confidence to wear a dress reflects her experience of being empowered. It demonstrated that the programme also addressed immediate concerns of participants such as body image.

Kelly associated an increased ‘strength to live’ with her participation in the group. Such personal strength for coping, as expressed by Kelly, corroborates with SOC concept, which refers to one´s confidence that situations are manageable along with one´s willingness to take action (ANTONOVSKY, 1979).

Another participant offered an example of how she experienced empowerment through learning to dance within the programme.

> EVE: For me, the best thing is to give dance performances. I thought that at my age, 66, I wouldn´t dare to stage. Even though I make many mistakes, they go left and I go right, I do it. I enjoy the recognition, fellowship, and joy from my colleagues and the teacher as well. She elevates a lot our self-esteem.
> BARBARA: At the beginning, when we started performing, she didn´t want to participate at all. Now I'm surprised she talked about the dance presentation.
> EVE: Yes, it was very important to me.
> GLORIA: Her daughter always said, 'don´t go mum, you´ll be a disaster!'
> GRACE: The first presentation that we gave, she was hidden back at the stage.
> EVE: It's very important. I believe I won´t leave here anymore.
>
> (Eve, health gym participant, age 66; Gloria, health gym participant, age 62; Grace, health gym participant, age 54; Barbara, HPE professional, age 43; interview on September 28, 2018)

The programme allowed Eve to continue developing her abilities and skills through time, like dancing. To Eve, the experience with dance was rewarding and meaningful, as it led her to take pride about herself in her unexpected achievement. She found support and encouragement within the programme to challenge herself to do things she did not know she was able to do.

Similarly, Diana acknowledged that she was surprised at her new ability to dance in public. By posing challenges, the programme helped the older adults to recognise their capacity for lifetime learning and personal development. Such self-recognition of their strengths appeared to be rewarding for participants.

> DIANA: We gave a dance performance to 600-700 people. It was the first time we presented. At our age, we didn´t think it was going to happen. On the contrary, we raise the public every presentation that we make. This is empowerment. It's women who can do what they want. Our group is powerful because of that. Empowerment is to do things I didn´t do before, i.e. going out, staying in public, dancing, having fun. I was ashamed to do because I was too fat. Now, I feel like Gisele Bündchen. I feel empowered, now I'm not ashamed. If there´s an opportunity to dance, I dance, if I have to speak, I speak. I'm on top of the world.
>
> (Diana, health gym participant, age 64, interview on September 28, 2018)

Diana pointed out that ‘empowerment is to do things I didn´t do before’. Problems with body image in the past constrained her to experiment new activities and to be in situations she could feel exposed. She perceived that she improved self-confidence, self-esteem and competence to do things (like dancing) during the programme.

Other participants went on to say how they felt about being a diva:

> HEIDI: What's it like to be a diva?
> VICTORIA: For me it's joy, it´s everything. It changes self-esteem, I feel better. I had very low self-esteem and now I feel good.
> YVONNE: It's about feeling important. I feel empowered.
> DIANA: Diva is being willing to face everything that lies ahead. We show our face, but we move on, and we´re happy to stage a dance performance.
> JANICE: Diva is to get my motorcycle and ride 5 kilometres every day with mud, dust and come here to see this wonderful group. I live in a cologne, I was shy to come, but now I love it.
> GRACE: When we talk about divas it means to be beautiful, hot, powerful... to look at the mirror and say, 'oh my God, how my life changed after I became diva because since then I feel I´m beautiful and perfect. Before we didn´t have that notion. We had no idea. I think being diva means to feel good about ourselves.
> CATHERINE: Also, in the divas group there's something very special about our empowerment. Because people have a pattern of beauty that, unfortunately, they think everyone has to be fit... and here, each one is in her own way, if she has 5kg more, 5kg less, here we all treat each other in the same way and we´re all equally powerful.
>
> (Victoria, health gym participant, age 52; Yvonne, health gym participant, age 48; Diana, health gym participant, age 64; Janice, health gym participant, age 43; Grace, health gym participant, age 54; Catherine, health gym participant, age 48, interview on September 28, 2018)

The participants overcame inner barriers (e.g. shyness, low self-esteem) and developed confidence to join the group activities, mainly dance performances. They made clear they experienced empowerment by saying that: ‘I feel empowered’**,** **‘**there's something very special about our empowerment’, and ‘we´re all equally powerful’.

The participants´ comments such as ‘diva is being willing to face everything that lies ahead’ and ‘diva is to get my motorcycle and ride 5 kilometres every day with mud, dust and come here’ pointed out that the group stimulated them to develop motivation to deal with and take action over life events and daily hassles.

This increased motivation is considered as a crucial element for developing one´s health literacy (NUTBEAM, 2008) and strengthening one´s SOC (ANTONOVSKY, 1979).

Moreover, they demonstrated to be critical about dominant discourses such as beauty ideals. I noted that the HPE professional´s mediation within the group engendered critical thinking among participants, which helped them to build awareness of the constraints and patterns that shaped their self-perception and consequently, to gain autonomy over their bodies. In this way, the diva´s group acknowledged the strengths and welcomed the particularities of each woman.

The HPE professional expressed her beliefs regards women empowerment that shaped her critical approach to working with the diva´s group.

> BARBARA: I'm very grateful to have each one of them every day here with me, because I learn a lot. Sometimes I´m at home watching a video, an interview or something and I got inspired to talk with the divas. For example, the issue of empowerment, about feeling more alive, more woman, more active in our daily lives. It´s very important to be active in our lives. Not only to be a housewife-woman, mother-woman, but to be a woman who fights for her rights. Many times, we sat here and talked about feeling bad for sometimes being looked at in a different way, for hearing jokes in the traffic... Besides they strengthen themselves, I strengthen myself a lot with this group as well.
>
> (Barbara, HPE professional, age 43, interview on September 28, 2018)

The HPE professional demonstrated how to give attention and support to participants who were disadvantaged women, positioned out of power structures due to their gender and low-income status. Barbara encouraged the group members to assume authority and active participation in their personal lives. Furthermore, she stimulated them to develop motivation to strive for their rights. All these HPE professional´s practices represented an effort to strength participants as a community and to foster their empowerment.

The older adults´ experiences of empowerment were accommodated within the programmes in terms of the improvement of self-identities. The HPE professionals assisted the community members to develop a sense of capacity and to rebuild self-esteem. They experienced a greater sense of control over body image and a more positive self-evaluation on their qualities.

In conclusion, I verified that the HPE professionals enabled participants to empower themselves through learning to play sports, learning to dance, acquiring knowledge about exercise and having conversations with others. Such activities related to bodily practices helped the participants to address their concerns (e.g. body image, lack of abilities), to build capacities and to gain control over their lives.

5.5 Community of movers

A central theme developed in this study was community of movers. The HPE professionals facilitated the formation of a group of older adults that experienced movement together. Older adults expressed they were motivated by the lived experience of moving with others in a friendly environment.

The community of movers was directed at older adults´ social needs. Bodily practices worked as a tool for bringing the older adults together. In so doing, the formation of a community took the programmes far beyond regular exercise. It added relevance and meaningfulness to older adults´ bodily practices as it allowed the development of a sense of belonging and socialisation.

The word ‘movers’ is meant to capture the subjective experience of older adults in relation to different forms of movement (STANDAL, 2015). The lived experience foregrounds the objectified act of moving systematically parts of the body. It intends to overcome the biological and reductionist definitions of exercise or physical activity.

The formation of a community of movers indicates that the programmes addressed the question of ‘how to move’, emphasising the experiential dimension (quality) of movement in replacement of the quantitative and imperative discourse of ‘move!’ that recommends increasing physical activity levels.

I asked the older adults how they came to take part in the programme. Ten older adults told me that they received a medical referral or recommendation to engage in lifetime physical activity. They were told to exercise as a way to control diseases like diabetes, high

blood pressure, cancer and conditions such as overweight. Another four older adults assumed exercise as necessary for them.

HEIDI: How was your story with the programme?

DOROTHY: I've always been hyperactive. Because of my age, 62, I'm fine... but since I have a problem with hyperthyroidism, I have high cholesterol. Then I saw a doctor and she said - 'Do you want to take medicine?' I said no. I'm not much of taking medicine, no. And she said – 'Then, go to a gym. It's going to open a public health gym. Sign up.' In the beginning I thought it would demand a lot, that I would have to lose weight, to reach a goal. I did not want this. One the day I was commenting on that and Susan heard. She said – 'No, the health gym is for integration. We seek people who have problems. There are people who were depressed, and they got better.' She invited me to come in for a trial. After I started, I loved it. There´s that quality of friendship. In the group, we respect each other. That´s very good. We learn to share what we have of best. I try not to miss any session. Three years. It will be three years next April. I think most people like it that way. The others do not want to leave. There are lots of people waiting to participate, but there is no vacancy. Because it's a lot of people.

(Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

HEIDI: How did you engage in the programme?

KELLY: The oncologist who indicated water aerobics or to go to a gym. And she recommended seeing a dietician because I needed to lose weight due to knee injury. And the dietician referred me to here. A dietician from the Unified Health System. Then I came to the public health gym. The oncologist thought that I had to do water aerobics along with the activities at the health gym... for impact, to strengthen my bones. So, I do water aerobics and go the health gym. But I come more to the health gym than doing water aerobics.

(Kelly, health gym participant, age 58, programme 2, interview on September 26, 2018)

CATHERINE: Well, I have been in the group for two years. I also love coming here. I came after I had surgery for a cancer treatment. I had had two surgeries and I needed to exercise. My muscles weaken very fast. I need exercise. So much that if I do not exercise for a couple of weeks, ten days or so, the situation gets difficult for me and I end up at the hospital to get treatment against pain, how strong are my muscular pain.

(Catherine, health gym participant, age 48, programme 2, interview on September 28, 2018)

JENNIFER: A friend of mine participated and she liked very much. Then, I decided to come also because I needed to engage in some physical activity.

HEIDI: What made you feel you needed physical activity?

> JENNIFER: I've always been overweight, so I always needed to exercise. By the time I started, I was inactive for a long time. So, I saw an opportunity like that to start.
>
> (Jennifer, health gym participant, age 30, programme 3, interview on October 02, 2018)

Five subthemes are related to the overarching theme community of movers: sense of belonging, positive experiences, friendship, attachment and social support. They are interrelated.

5.5.1 Sense of belonging

From my fieldwork observations, I noted that it was not about a number of older adults merely exercising at the same room, at the same time. I understood it as a group of older adults who became friends by moving together and hence, they shared an enjoyment for movement in the presence of each other.

> Anne: They come here, they share and exchange experiences. They create such a great intimacy that as soon they arrive, they exchange things about life, home, what they are going to do in the afternoon, what they are going to do tomorrow, what they have bought, what someone has said... They create this affinity and exchange experience in a way that strengthens themselves in terms of human beings.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

In the studied programmes, the participants (HPE professionals, health centre´s coordinators and older adults) talked about the existence of groups, referring to collective bodily practices´ sessions. While doing fieldwork, I found groups instead of sessions. The notion of group conveys the relational nature of the encounter between older adults with bodily practices. It also carries the idea of connectedness among people and belonging. Whereas the term sessions denote an instrumental dimension.

The groups were considered as fixed because the number of participants was limited, and they involved always the same people. Each group had its scheduled time and place to perform activities.

In Programme 1 there was a single group. In Programme 2, there were eight groups and they were first organised according to participants´ age. In Programme 3, there were two main groups, differing in participants´ age. Programme 4 offered eighteen groups, according to the type of activity and participants´ age. Some of the groups had names for identification, for instance: ‘the divas’, ‘on the waves’, ‘the workers’, ‘in-between ladies’, and ‘the elderly’.

Or the health professionals and participants called the groups by the activity type, like the volleyball group, the handball group, and so on.

During the interviews, older adults recurrently mentioned the expression ‘our group’. The use of the possessive pronoun shows a relation of belonging in a broad sense. Speaking in this way, the older adults demonstrated they feel part of the group.

> LAURA: Our group, I can say is great, 100%. Very friendly, you know? There is no one that remains aside. We are all friends.
>
> SHARON: Everything we do, everybody... like that tea afternoon, everybody is going. Nobody can stay out of the group. Our group is very close.
>
> GEORGE: Sometimes the group meet to visit someone who is ill. One of ours is at home.
>
> PAUL: There is another one that had a surgery. So, there are two in recovery. But in a few days, they will be back and complete all.
>
> (…) At least for me, I liked the government brought this good thing for us. For our group, by the age we are in.
>
> (Laura, health gym participant, age 47; Sharon, health gym participant, age 55; George, health gym participant, age 69; Paul, health gym participant, age 70 programme 3, interview on October 01, 2018)

> DIANA: It is like… the closeness of our group. (…) Strong and solid. Solid. A close group. About twenty people every time, it is a lot.
>
> GRACE: It is a group like… we don´t have words to express. Because it is wonderful to work with this group, to listen each one.
>
> DIANA: This group is amazing! (...) As ‘divas’, we are a group of powerful women that it is hard to find like us. (…) Our group is on the internet, Facebook, those channels...
>
> (Diana, health gym participant, age 64; Grace, health gym participant, age 54; programme 2, interview on September 26, 2018)

Sense of belonging is an important human need. It becomes even more relevant to older people, as they commonly experience loneliness due to changes and events in life (e.g. retirement, their children leave home to build their own lives, loss of a family member). Thus, taking part in a bodily practices programme meant an opportunity for older adults to be part of a social network and to establish a connection with others.

Sense of belonging is crucial to increase one´s purpose in life and to cope with emotionally challenging situations. So, older adults found belonging through engagement in

bodily practices. They met other people, accepted each other, became friends and recognised themselves as members of a group. By joining the group, they constituted a new identity, of being a mover.

5.5.2 Positive experiences: 'we talk, laugh and have fun'

This subtheme elucidates the older adults´ experiences with bodily practices within a group. Their narratives showed they experienced bodily practices positively. They described that while performing activities in the programme, they found enjoyment, pleasure, fun, joy and happiness.

> HEIDI: What does the group mean to you?
> LINDA: The meaning is that in addition to learn something we don´t know, we have fun and exchange ideas. One brings an idea and shares with the other. It´s enjoyable. (...) It is a good thing. I love it, I love it. I like doing it because I like having fun. It's a fun! You get together with friends, among people you know... we talk, we laugh... isn´t great?
> PATRICIA: For me is a joy.
> (Linda, health gym participant, age 78; Patricia, health gym participant, age 64, programme 1, interview on June 28, 2018)

> DOROTHY: After coming here, I made friends. I talk more, I laugh, I feel very well here.
> MARGARET: It isn´t just exercise. We talk, we laugh, we play.
> DOROTHY: We talk and talk. There´s always something.
> (Dorothy, health gym participant, age 66; Margaret, health gym participant, age 46; programme 3, interview on October 02, 2018)

> VICTORIA: They help me. We talk, play, laugh. That thing that really involves. It helped me a lot to increase my self-esteem.
> (Victoria, health gym participant, age 52, programme 2, interview on September 28, 2018)

> JENNIFER: The group helps a lot with integration, because we play, we talk, we say silly things.
> (Jennifer, health gym participant, age 30, programme 3, interview on October 02, 2018)
> KAREN: For me, this here is sacred. When I can´t come, I go crazy. Because you talk to people, you know?
> JAMES: Exercise is medicine for us. Thanks God, it keeps friendship. For me it´s a fun, wonderful.
> (Karen, health gym participant, age 59; James, health gym participant, age 76, programme 1, interview on June 14, 2018)

Their perceptions suggest that engagement in bodily practices induced positive feelings. And this appeared to be a motivational component for older adults valuing the experience of being physically active. Having this positive human experience through movement appeared to be meaningful to them. When bodily practices are rewarding, entertaining and enjoyable, they have additional value to the movers.

Bodily practices enabled the older adults to find fun, pleasure and enjoyment in moving with others. In view of this, bodily practices showed that there are possibilities to promote hedonic aspects not only for children, but also for old aged groups.

During the interviews, I observed that some of them talked about having fun as an unexpected situation. They appeared to be overwhelmed by the fact they experienced fun at their age. Having fun is generally associated with play and children. An example of this was provided by George, 69, a participant who compared his experience in the programme to that of children in kindergarten:

> GEORGE: This here for us is more or less than kindergarten for children. Children enjoy kindergarten to stay with the other children. We like coming here to exercise. And we also like coming here to talk, to exchange some ideas, sometimes speak some funny and silly things, but without offending anyone.
>
> (George, health gym participant, age 69; programme 3, interview on October 01, 2018)

His words help us to understand that stimulating socialisation and fun is meaningful to the elderly and it should be considered to increase their motivation to lifelong bodily practices.

Fun is a subjective experience and each person perceives it in a different way. However, having fun does not only involve the individuals themselves. It depends on one´s set of skills, attitudes and ideas along with the environment and relationships between individuals. Thus, we can see the importance of HPE professionals working as facilitators of a community of movers.

In two programmes, the HPE professionals directed actions at building a friendly environment for bodily practices. Charles said he was always watching to avoid situations in which one person undermine another´s participation. As a strategy, he worked with some constructs, like self-acceptance, acceptance of others and selection of feedback, helping the older adults to select the information that they should focus on. He said about how his work was concerned with participants having positive experiences:

> CHARLES: My goal is to make them have fun. I always ask to them – 'Have fun. If it isn´t for that, there´s no sense to do'. To get stressed? No! It should be for fun. (…) Enjoyment of play is what motivates them to stay engaged in the programme.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

From Susan´s perspective, another HPE professional, bodily practices involve integration and fun. Having an atmosphere of fun while exercising is an important element. The excerpt below from Susan´s interview describes some of her attitudes to enable it:

> SUSAN: I love they talk. For me they can talk all the time. They can talk whenever they want. Not listening to me, making me wait, I don´t mind. I want them to talk. So much so that the silence of one of the groups makes me uncomfortable. The fact they don´t talk to each other bothers me. There´s a group that they talk a lot. Sometimes I have to ask, 'let's start'. This doesn´t bother me at all. I think because I always have many groups, 25 sessions a week and all crowded. And they laugh, have fun... because there´s no way to say we don´t have fun.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

During my fieldwork I identified that another strategy adopted by Susan to create a friendly environment was to include some play as a content of the sessions. The older adults confirmed that in the interview:

> HEIDI: Today I saw that you played.
> MARGARET: Yes, we're kind of lost at the time.
> HEIDI: How often do you play?
> GEORGE: Constantly.
> KIMBERLY: We play like children. There is Carnival, Gaucho´s day, Farroupilha´s week, pink October then we wear pink, yellow September hence, we wear yellow.
>
> (Margaret, health gym participant, age 46; George, health gym participant, age 69; Kimberly, health gym participant, age 62; programme 3, interview on October 01, 2018)

Bodily practices can be analysed by its potential to induce fun and provide older adults with opportunities for enjoyment. Even if bodily practices are not done for fun, they enable participants to have positive and pleasing experiences during the process of moving.

While I was observing a volleyball training session, two participants came to me to talk. They told me that when they are playing volleyball, they 'feel life running in the veins', 'you feel you are alive, it´s a joy'. Charles talked about this enjoyment of play of the older adults as a factor that increases their motivation.

> HEIDI: In your opinion, what makes them continue engaged?

> CHARLES: Pleasure of game. It isn´t a predictable thing, although the game is the same every day. I don´t know previously how the ball is coming, so this surprise, I believe it´s also interesting for cognition. Because for you to do something you don´t know how it will happen, how do you solve your problem in the game situation? If I'm being blocked here, blocked there, then I have to build in my mind a way to solve my problem, I have to change the way to play. And that change in the way you play, I believe there´s something for cognition.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

More importantly to older people, bodily practices encouraged them to interact with others. In this way, the activities fully involved them. By consequence, it led to a distorted perception of temporality and escapism from reality. Bodily practices worked for older adults as a distraction and an entertainment to escape from problems. While exercising, they had fun, lost the track of time passing and forgot their problems. In other words, bodily practices became a catalyst for older adults´ coping strategies.

> HEIDI: What does the group mean to you?
> DIANA: What I like the most is joy, sincerity… because here the person is sincere and happy. So, how don´t you take all this to your whole life? It´s an example of life like my colleague, of partnership, simplicity, happiness, it´s all good.
> HEIDI: Would you say the uniqueness of the group is joy?
> VICTORIA: It is important... friendship.
> DIANA: We forget about things. We talk, we laugh, we tell funny stories… We always make jokes.
> EMILY: It´s a reason that makes me come. Time flies, you know? If you have a problem at home…
> DIANA: We forget.
> TERESA: It´s a time for pleasure, joy.
> REBECCA: It´s our time.
> JANE: I already participated of other gyms and there wasn´t such integration.
> KELLY: On Friday it happens 'The divas'. We exercise and after we talk. We have *chimarrão*, we talk, sometimes we have tea, we get together… It's really fun. We've already become a family because we spend all our time playing and time flies. We forget everything, even our pain.
>
> (Diana, health gym participant, age 64; Victoria, health gym participant, age 52; Emily, health gym participant, age 57; Teresa, health gym participant, age 54; Rebecca, health gym participant, age 57; Jane, health gym participant, age 46; Kelly, health gym participant, age 58; programme 2, interview on September 28, 2018)

The concept of flow (NAKAMURA; CSIKSZENTMIHALYI, 2014) helps us to understand what happened to older adults during their experience with bodily practices. Being in flow is a state in which one gets fully involved in a moment of intense concentration in what one is doing.

Because attention is wholly invested in the activity, one´s perception of time is distorted. An example of this is shown in the excerpt of older adults´ interviews, when they mentioned that ‘time flies’ when they are exercising. Another consequence of attention being taken up fully by the activity is that nothing else comes to one´s awareness other than the momentary interaction the person is part of. This process explains what older adults meant by: ‘we forget everything, even our pain’ and ‘we forget about things’. Flow is likely to arise in activities that are intrinsically rewarding. It happens in such a way that often the activity´s goal becomes an excuse for one to enter into the process.

This was verified with older adults when I asked them how they took part in the programme. Mostly, they referred to diseases, health problems and chronic conditions that required special care. However, when asked about the meaning of the programme to them, they revealed elements (e.g. enjoyment, fun, socialisation) that qualify positively their experience.

So, they frequently mentioned the diseases, but it does not mean they were focused on them. In this case, the diseases were a pretext to justify their long-term participation in a health-promoting programme. The fulfilment achieved during the process is what encouraged them to persist in the activity. The experience itself is satisfying for them. Then, the flow concept becomes crucial to comprehend that older adults´ motivation to continue in the programmes arose out of the positive experience itself.

Both person and environment shape the state of flow. How one perceives the balance between one´s capacities and opportunities for action determines the quality of experience (NAKAMURA; CSIKSZENTMIHALYI, 2014). In general, bodily practices offered optimal conditions in the form of challenges, goal setting and feedback provision that favoured the emergence of flow. But to stay in flow, the challenges should be progressive. Otherwise, the person would get bored. As stimuli were given continuously for older adults, they developed their previous skills and abilities. By consequence, the flow experience fostered personal growth over time.

5.5.3 Friendship

Friendship arose as a result from moving with others and it became itself an essential factor to motivate older adults to continue to be engaged in the programmes. Positive

relationships are essential for engendering positive experiences. It is common that positive experiences take place in the presence of other people.

The subtheme of friendship emerged when I asked participants about the meaning of the group to them and the most important contribution of bodily practices to their life.

> HEIDI: What does this group mean to you?
> LAURA: Oh, friendship, the main thing.
> SHARON: Besides being good for us, good for our health, it is the friendship that we have with everyone.
> LAURA: If there's one that is absent for a while, we miss her. There is a colleague who has changed her schedule, so it seems that she is missing from our group. She changed to another group because of her schedule, but that person seems to be missing, you know? We become attached to people. That's really good.
> SHARON: In this group here I didn´t know anyone. The friendship arose here, at the health gym.
> LAURA: We make friends here.
>
> (Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

> MARGARET: Friendship and fellowship. I think that's it. It's not just physical exercise that Susan [HPE professional] works with us. The work involves mentality, concentration and the friendships that we make here. That's really good. Even we get sad when we get used to someone who is here, and the person moves to another group or leave. We miss the person.
> DOROTHY: Yeah, I guess that's it. And Susan is very friendly. She's not just our teacher, she's our friend, our counsellor... she's everything, you know? She is everything to us.
>
> (Margaret, health gym participant, age 46; Dorothy, health gym participant, age 66; programme 3, interview on October 02, 2018)

> GRACE: We get out renewed every time. It's such a friendship I don´t know how to express. It's a friendship that we just feel, inside our hearts.
>
> (Grace, health gym participant, age 54, programme 2, interview on September 28, 2018)

> JENNIFER: Now I like telling, but before coming here I had a very restricted circle of friends. Indeed, very restricted. I count five friends, maybe. With the health gym, I got better in this sense of integration.
>
> (Jennifer, health gym participant, age 30, programme 3, interview on October 02, 2018)

Based on the older adults´ interviews, I considered that making friends was an important aspect stimulated by bodily practices. Friendship conveys a meaning of being part of a social network. The older adults had the chance to establish connections with others and to find acceptance in a social structure.

The programmes demonstrated to offer possibilities for building social ties to them. Participation of a social network like the 'community of movers' engendered older adults´ satisfaction, which, in turn, stimulated them to persist in the programmes. Being integrated to a social network can also be beneficial for the attainment of psychological states of wellbeing, self-worth and sense of purpose (KAWACHI; BERKMAN, 2001).

I verified that the group of bodily practices did not merely consist of a structural aspect of a social network. In other words, the programme did not merely provide a means for people to turn up in the same place at the same time. There was affect and meaning in these meetings because they cared about each other. Everybody matters in the group.

Laura and Margaret demonstrated this when they said, 'it seems that she is missing from our group', 'we miss the person' and 'we become attached to people'. They established a positive relationship with each other.

Beyond that, Laura experienced increased motivation to participate in bodily practices in moving with friends. Having social ties constituted a motivator to her participation in the programme:

> HEIDI: Have you done any kind of physical activity before?
> LAURA: Very little. Sometimes walking. But we are lazy at home, it doesn´t happen, you know? And here it´s something that seems to attract. It seems that we miss the friends we made. It's a partnership. (...) At home is alone, it´s not motivating. Here is a different, everything is organized.
>
> (Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

As I pointed out previously (in the section 5.5.1), developing social ties seems to be even more relevant to older people. The elderly commonly has smaller social networks, lower social support and fewer close relationships due to life events.

After an interview I made with older adults, two of them said to me they liked participating of the interview and listening to other colleagues´ stories. They told me there was no chatting at their home. Their family members spoke few words with them and preferred conversations on social media. They like talking with other people and the group provided an opportunity for it. Other older adults described situations of loneliness and isolation, and they saw the programme as a resource for social integration:

> MARY: For me it's contact with other people. Because if you stay at home, you stay isolated. Because it´s over that time when we used to visit our neighbour. It doesn´t exist anymore. I would like very much this to happen nowadays, because I was raised in that way. So, if you stay at home, you are isolated. If you come here, you meet new people, you have contact with different people, you make friends.
>
> PATRICIA: It was great for me too. I used to live at a crowded home. There was my mother, siblings, so many people. I moved here and it´s just my husband, my son and I. I became friend of my neighbours, but I´m not used to go to their houses. But here... wow! Here, we exchange food recipes, we exchange ideas. We see the affection of the girls, the smile ... there is an agent here that kisses everyone when she arrives. This is very important. So, for me it was very good. (...) Here we meet everyone.
> LINDA: Exactly. Here we make friends, a group of friends.
> (Mary, health gym participant, age 73; Patricia, health gym participant, age 64; Linda, health gym participant, age 78; programme 1, interview on June 28, 2018)

> SANDRA: I used to spend much of my time at home. I was very alone. I almost didn´t go out, I didn´t walk. I started attending the programme, it got much better. I go out, I talk to people, I have more willingness to go out. Now I go to the market and come back by walking. At first, my husband had to take me everywhere. Now I do a lot of things by myself.
> (Sandra, health gym participant, age 68; programme 1, interview on June 14, 2018)

From a HPE professional´s viewpoint, the older adults found in the programme an opportunity to reconstruct social relationships they had in the past and they no longer have due to changes in life.

> HEIDI: In your opinion, what makes them continue engaged in the programme?
> CHARLES: (...) Another reason is that situation of regular and social integration. They come here, they meet friends they no longer have in the neighbourhood but when they lived elsewhere they had, or from their work when they had a job. Because they find here... soccer fellows to make jokes when the team was defeated. They don´t play only here. From here they started practising in other places. Two or three times we made a barbecue here... I took them to play, then we spent the day here, we had lunch, we played... Outside there was some music, peteca... It´s social integration that creates a bond. People who didn´t know each other became friends. (…) They make jokes with each other on the pitch and it favours the creation of friendship.
> (Charles, HPE professional, age 39, interview on November 14, 2018)

Making friends means that acceptance both of and by others occurred. Everybody has a minimal need to find acceptance in a social world (HEWITT, 2002). When one satisfies that need, one responds positive and affectively to it. Therefore, membership in a group produces changes in one´s mood towards a positive state. A person who was reserved, quiet and reluctant tends to become more sociable, active and ready to form new relationships.

Moreover, there is an increased expectation for future affect, that influences one´s mood (HEWITT, 2002).

That process can be seen in Dorothy´s and Nancy´s interviews:

> HEIDI: How does participating in the programme contribute to your life?
> DOROTHY: I'm a person who almost never gets out. I'm kind of reserved. And coming here, I made more friends.
> HEIDI: Did your family perceive any change in you?
> DOROTHY: Oh, they did. They commented too. They always support me to come.
> HEIDI: What did they say?
> DOROTHY: I was very, as they say... quiet, on my own. I didn´t talk to anyone. I wasn´t used to visit my neighbours. Here I come and I even have a neighbour that I go every day to her house to have chimarrão. It's very good. Very, very good.
> (Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

> HEIDI: What changes did you perceive in yourself?
> NANCY: I learned to talk with everybody and to make friends.
> (Nancy, health gym participant, age 80, programme 1, interview on June 14, 2018)

She said she was 'kind of reserved', 'quiet, on my own', 'I didn´t talk to anyone'. After engaging in the programme, she made friends, became more willing and started having *chimarrão*[28] with a neighbour. The changes she perceived on her reveal that she responded to bodily practices participation with elevated mood. Likewise, Sharon said that she started going out with friends from the health gym:

> SHARON: After I started coming here, I started going out a lot. We have lunch, we have dinner, then we make more friends. Because Laura is my neighbour, but we almost never had a chimarrão.
> LAURA: We did not talk very much before.
> SHARON: Very little. Then, we are close friends.
> (Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

The social integration emerged from engagement in bodily practices and it extrapolated to other contexts and moments. This is an indication that the social network they built has more than a structural dimension of grouping older adults who exercise together. It has a functional feature as they indeed developed ties of friendship.

> HEIDI: From here, did they start doing other activities outside?

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[28] *Chimarrão* is a traditional drink of the culture of South America. It is made of yerba mate and hot water.

> CHARLES: Yes, yes. Here it roots and extrapolates to other relationships. Then they meet to prepare dinners for associates´ birthday parties. That is social life among them. (…) They meet here, they meet to play cards, they meet to play bingo, so those extra networks were created. Maria and two other guys started cycling around. Then, cycling around the area started here.
>
> (Charles, HPE professional, age 39, interview on November 12, 2018)

The older adults frequently organise meetings outside and parties. They go out together, they have lunch/dinner and do other activities. Several examples of those extra activities were given by the older adults:

> SHARON: We did *galinhada*, we made the sausage barbecue. Each one brings some food, vegetables, juice...
> LAURA: Here or we go to someone´s house.
> SHARON: A woman has a farm and we went there once. On Gaucho's day, we made it outside. Then everyone brings the vegetables they have at home, everyone has a garden.
> HEIDI: So, do you frequently celebrate something?
> SHARON: Always, always, always. We celebrate our birthdays.
> SHARON: That's good. We go out, we meet.
>
> (Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

> KIMBERLY: We get together to have dinner, to have lunch, to throw parties. It's very good.
> PAUL: In our group, when it´s someone´s birthday, the one organises a small party.
> HEIDI: Do You frequently get together to celebrate? ...
> GEORGE: Yes, yes. A lady in our group has a place for events. Sometimes we go, we arrange all the group. The session finishes and we go there to cook chicken or to make a barbecue.
> KIMBERLY: Yeah, but that's always after the exercise time.
> GEORGE: Susan goes there too, she has lunch with us and go back to work again. But we can stay there.
> KIMBERLY: Besides, we made a very beautiful friendship.
> KIMBERLY: We split the costs for lunch. A person goes and buys and then we split the bill.
>
> (Kimberly, health gym participant, age 62; George, health gym participant, age 69; Paul, health gym participant, age 70; programme 3, interview on October 01, 2018)

The examples above showed that the older adults got involved in a social life through the bodily practices´ programmes. They were integrated into a community of movers and established bonds of friendship with each other in such a way they expanded their social activities.

5.5.4 Attachment: 'it´s like a family'

The subtheme of attachment refers to how older adults related to each other and to the HPE professionals. It is about the quality of participants´ connection with others in the context of the studied health-promoting programmes. The older adults´ feelings related to others seemed influence positively their mental health and psychological wellbeing.

In fieldwork, I observed in all the four programmes that session climate was built upon a sense of warmth. As participants arrived for the session, they greeted each other and the HPE professional and, they had conversations. The environment of the four programmes was full of affection.

> KELLY: We became a family.
> YVONNE: I perceive that it's a family for us to feel good every day.
> GRACE: I love this group. I love them all, each one in your own way.
> (Kelly, health gym participant, age 58; Yvonne, health gym participant, age 48; Grace, health gym participant, age 54; programme 2, interview on September 28, 2018)

> KAREN: When it's time for me to exercise, I stop my chores, close my house and come. Because I love meeting with the people and coming to exercise with my group. We are like a family too. So that's why I like it.
> LINDA: Everybody already knows me. I like everyone. Everyone treats me well, I treat everyone well. And then I continue, because to me it's the same as a family. I already consider the people here as if they were a family for me. So, everything I need, I run into them there and they help me. (...) I live alone and God, so I don´t lose anything. Everything that I´m invited to do, I'm there. It´s my life.
> (Karen, health gym participant, age 59; Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

Some of the older adults identified the group as having a family dynamic. The representation of a family alludes to the existence of a structure, bonds and patterns of interaction among members.

In comparing the group with a family, participants meant that the group had similar relatedness and affection as if it was a family. They made this comparison as a strength that helped all of them. In general, a family provides support, safety and love to a person. Families also form close connections and offer comfort and assistance in all kinds of situations, mainly in the hardest ones.

Some elements emerged as central for older adults developing attachment to others: continuity, receptivity, intimacy, and provision of emotional and physical care.

The relationship established within the groups presented a temporal component of a sense of continuity that was experienced by the older adults through enduring and regular interaction with others in the programmes. They met twice or three times a week, configuring regularity and consistency for their social connectedness. Participants mentioned this through expressions like ‘to feel good every day’ and ‘daily interaction’.

> HEIDI: You said you've been to a private gym before. What difference did you see between there and here?
> KELLY: A lot of difference. (...) Each one does his exercise there, the instructor delivers the session and leaves. We don´t talk. There´s no daily integration. It's not that friendship that we have here. It´s different.
> DIANA: Here it's a family.
> KELLY: If we're doing it wrong in another gym, we get all hurt, all bad and they don´t pay attention.
> DIANA: The good thing here is that people are equal. In a private gym, there are those show-off people as if there was only them and nobody else. Not here. Everybody is equal. Everybody is a family. If I have a problem, she suffers, he suffers, everyone suffers together. When it's Friday, we speak about all our problems from home. Then the teacher provides her advice, and a colleague, another and so on. We get out of here a new person. (...) My life has changed 99% and I thank God and my teachers, my colleagues, because my family is from home, but my second family is this one. And this one has given me a lot of good things. I just have to thank. (...) It is the love that we feel for the colleagues. They give you a hug, a kiss, and smile. It's that joy.
> EVE: I love this group. I live in a cologne, I was ashamed to come, but now I love it. I see that everyone like each other, everyone is simple, and everyone loves each other. It's wonderful, it's very good. I miss when I can´t come, when it rains a lot. Because the road is made of mud. But sometimes I come dirty of mud and dust. I'm the only one that gets here all dirty. Then I say 'look here how dirty I am', but everyone says to me: 'It doesn´t matter.' So, I know they don´t mind about this. The important is to come and see them, because I love them.
> CATHERINE: Here, we don´t look at measures, size, colour, nothing… It is the person, his/her strengths, self-esteem.
>
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; Catherine, health gym participant, age 48; programme 2, interview on September 26, 2018)

Linda, Diana, Eve and Catherine pointed out there was receptivity in the group when they said: ‘everyone treats me well’, ‘everybody is equal’, ‘everyone is simple’, ‘I know they don´t mind about this. The important is to come and see them’ and ‘we don´t look at measures, size, colour, nothing… It is the person’. So, they felt comfortable in relation to the others. Such warmth appeared to contribute to older adults be attached to each other.

A receptive environment favours increased intimacy among group members. I observed in fieldwork that the participants and the HPE professional greeted each other with a

smile, a hug and/or a cheek kiss. Diana confirmed that saying, ‘they give you a hug, a kiss, and smile’. I also noted they made jokes and laughed most of time. I considered there was intimacy both within the group and between the group with the HPE professional.

Kelly, Diana, Linda and Grace talked about the provision of emotional and physical care from HPE professionals. They referred mainly to HPE professionals´ behaviours of observing, correcting and adjusting their performance of movements. They also perceived support from others, like Diana said, ‘the teacher provides her advice, and a colleague, another and so on’. How people perceive attachment influences both how they perceive support from other and their inclination to look for additional support.

The older adults demonstrated a strong affection for the HPE professionals. They described feelings of love and gratitude to their teachers.

> LINDA: Our teacher is wonderful too. He´s a lovely person. That's why I say, I have nothing to complain about it.
>
> (Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

> EVE: I love our teacher very much. She's everything to us. It's wonderful. It's very good.
> GRACE: (...) And the teacher encourages in such a way, she encourages us more and more. And she doesn´t allow us to give up. On the contrary, she encourages, encourages and encourages us to participate more and more. It´s wonderful. I love it.
> KELLY: Actually, it´s also a bit of the teacher, who has that energy that seems to involve us. Her energy.
> DIANA: 90% comes from the teacher. 90% we owe her. Because it's not all teachers who have this affection, they have with us. She arrives cheerful, happy, and we joke, we scream, and she is with us. So, I say if it wasn´t for her charisma and the attention she gives us, maybe there wouldn´t be so many people here. And my teacher, she knows that I love her with passion. You see a person like her dedicating, donating her life to come here to promote our health. It's a gift, it's a blessing.
> KELLY: Because we can´t exercise in a way, then she helps us to perform the movement. Little by little, we get it right.
> DIANA: And she is concerned with teaching. With us not doing wrong movements and not hurting ourselves. So, this is very important to us. I don´t think I can live without her anymore. It's a love. I say, I love my teacher and my colleagues.
>
> (Grace, health gym participant, age 54; Eve, health gym participant, age 66; Kelly, health gym participant, age 58; Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

The older adults attributed to the HPE professionals a crucial role in the maintenance of the programmes due to their enthusiasm, energy, charisma and attentiveness. Beyond that,

in Programme 3, older adults revealed that the HPE professional played a role of peacekeeper, mediating conflicts and reducing tension when necessary.

> GEORGE: There was never a discussion between us.
> KIMBERLY: Nor in our group. Sometimes there is one or other more agitated, but we take as a joke.
> GEORGE: Everyone jokes with each other. It's even better than in family. Sometimes within the family, it arises a conflict. Here, it doesn´t happen. I've never seen an argument here.
> KIMBERLY: That´s why the teachers knows how to work well. Our teacher has pulse for that.
> HEIDI: So, there's a good relationship between you and the teacher.
> GEORGE: Yes, and with teacher.
> PAUL: Yes, yes. She´s able to manage situations. She's very clever, she knows everything. She's a brilliant person, out of the ordinary.
> (Kimberly, health gym participant, age 62; Paul, health gym participant, age 70; George, health gym participant, age 69; programme 3, interview on October 02, 2018)

In conclusion, attachment to each other and to the HPE professional was also an important element for the maintenance of older adults in the programmes. It was relevant for their perception of care, social support and social connectedness.

5.5.5 Social support

The subtheme of social support emerged as the main functional aspect of the community of movers. In other words, provision of social support was the central purpose of the communities of movers.

Perceived attachment reinforces the likelihood of social support. And, seeking for social support requires a relation of trust. People usually trust one another when they are attached to them and have some degree of intimacy.

> KELLY: I think health enhancement comes from all together. The participation of everything, the friends that we make at the health gym, coming and talking, talking about the problems. And we talk and laugh.
> (Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

The way the older adults received and offered support was through talking and listening to others about their problems. When they talked about their problems, they unburdened themselves. As they had fewer opportunities to talk about their problems at home, the group gained relevance because the colleagues and the HPE professional offered this attentiveness to them.

When the older adults listened to their peers, besides helping their colleagues, they benefited from the perception that they were not the only people with problems and there were more complex problems than those they had. Thus, the older adults got some emotional comfort both in unburdening themselves and in comparing their problems with those of the others.

> CATHERINE: So, for me, this here is essential. It's great. It makes me feel very good. It transforms our lives. And the psychological part is very important. Because here, in fact, we often become psychologists of each other. One helps another to solve problems. Sometimes you have an emotional or family problem or like at the moment I am facing a serious illness problem with my father. Sometimes I get here upset, then I talk to a friend, I talk to another. That conversation already helps me. It already makes me feel better. For me it is being great, great. The group is wonderful. They are good people. They are people who come with an open heart because this is very important. Because if you want to join a group, you have to be open to make a difference, you know, to transform. They are all very good people. I love them all.
> GRACE: This round conversation here that we do on Friday, we tell our problems. Each one has a problem and it's good because sometimes they have their problem, but they don´t talk at home or to a friend. Here, we tell, we unburden, we cry. These days, I told a case that happened to me that I cried. Some of them cried with me. So, we leave here a new person every time. Because I held this problem for years and years. Although it happened many years ago, it was so good to speak and tell. And there are many colleagues here who do the same thing.
>
> (Catherine, health gym participant, age 48; Grace, health gym participant, age 54; programme 2, interview on September 28, 2018)

When a person talks about a problem, she names and interprets the situation. This cognitive process helps one to gain some comprehension about the problem and to find some possibilities to solve it. Beyond that, when one exposes his/her situation to others, one allows the others to provide advice based on their own experience.

> HEIDI: How does coming here help you to deal with problems?
> DIANA: Because sometimes, at home, you have no one to talk to. In my case, I have two older sisters. If I have a problem, I transfer my problem to them. It won´t solve anything. I come here and say: 'Look, I'm going through this...' Then, I receive an opinion from outside that will help me much more. So, I go back home feeling my head is lighter. I think: 'Oh, I was told to do like this and that. So, I'll do it like this, I'm sure it will work.' And it really does.
>
> (Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

They also paid visits to colleagues who were ill as a way to show solidarity. Furthermore, they carried out acts of charity, by engaging in community action, making donations and helping other people.

HEIDI: What do you do besides the exercise?
LAURA: If there´s someone ill in the group, we visit the person at home. Three times a year we donate blood. We are donors. The whole group.
SHARON: If someone needs something, it seems like we're always ready to help. I'm like this. I totally changed.
LAURA: You become more willing to do things and help others. If there´s someone that isn´t very good, there´s always one that has a tip to give, a tea, a recipe. We always try to help.

(Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

KIMBERLY: We learn to share too. To share the good things we have.
HEIDI: Do you acts of charity?
KIMBERLY: Yes. We donate blood, we visit those who have problems like one of our group that had depression and left. When someone is missing in the group because of illness, we get together and go to the person´s house. So, one helps the other, one shares with the other what one has. We bring clothes to donate, whatever we have at home and don´t use anymore, we bring here.
GEORGE: If someone needs something, there´s a board over there. There, what we need, we write it there. And the person who has that thing and if it´s available, she brings to that other. Even when the person isn´t from the same group. From another group.

(Kimberly, health gym participant, age 62; George, health gym participant, age 69; programme 3, interview on October 02, 2018)

The participants developed a feeling of confidence, through which they knew that in case they needed some support, they would find help there, within the group. Jennifer expressed she likes having this confidence:

JENNIFER: If I have a problem, I know I can talk here, for example. Or the colleagues know they can unburden themselves if they need it. So, I think this is great. And it´s very stimulated because Susan always asks if we are well or if we need anything related to our health. (…) I like knowing that I have a group that I can share things, for example now I'm in the process of losing weight and many of them have already helped me with some recipes, some tips. I already helped them a lot. So, it´s good to know that you have this available exchange nearby. Before being here at the health gym, if I had these situations, maybe I wouldn´t have anyone to tell or I'd have to find a specific person to help me.

(Jennifer, health gym participant, age 30, programme 3, interview on October 02, 2018)

Jennifer also referred to social support of the group as an ‘available exchange nearby’. This expression shows that reciprocity is a feature of the support they give to each other. Mutual help keeps all members involved and makes them participate actively in the community life. Active participation, in its turn, is essential for the development and

maintenance of community programmes. In sum, by providing social support to one another, the older adults strengthened themselves as a community.

5.6 Building generalised resistance resources

Within the salutogenic model of health, Antonovksy (1979) proposed the notion of generalised resistance resources (GRR). The author defined GRR as any characteristic of a person or community that facilitate the process of coping with stressors and tension generated in everyday life. A GRR could be built from one´s inner and external world, such as child rearing patterns, personality, culture, social roles and environment. In terms of categories, a GRR could be material, cognitive, social, emotional, cultural, ritualistic, religious, philosophical, genetic, and preventive (ANTONOVKSY, 1979; IDAN; ERIKSSON; AL-YAGON, 2017).

Bearing this notion in mind, I consider bodily practices as a GRR. The data obtained from the programmes enrolled in this project demonstrated that engagement in bodily practices helped older adults to handle stressors, to ameliorate symptoms of illness, and to experience improved health and wellbeing.

Additionally, the data showed that the impact of bodily practices on participants´ lives was broader than their physical effects, such as fitness. Moreover, the programmes maximised health benefits by supporting the development of further GRRs among participants. Accordingly, bodily practices expanded, or at least activated, the older adults´ personal set of GRRs to be mobilised whenever they needed to cope with stressors.

Thus, the theme building GRRs refers to the resources perceived by the older adults as having been developed during the programmes. The resources identified by the older adults as factors for coping and living better lives included sense of belonging, positive experiences, friendship, attachment, and social support, all related to the creation of a community of movers, as presented in the previous section. Moreover, other GRRs were recognised in this project, namely: physical fitness, functional capacity, knowledge, lifelong learning, self-esteem, self-regulation, vitality, social ties, communication skills, self-confidence, mood enhancement, self-care, autonomy, solidarity and open-mindedness.

5.6.1 Physical fitness and functioning capacity

The older adults participated of regular sessions of bodily practices that were systematically structured in terms of load balance and practice time. The sessions´ design

enabled them to enhance their physical fitness and functional capacity, which helped the older adults to maintain their daily activities.

Several participants pointed out that they lost weight and improved their conditioning, cardiorespiratory endurance, flexibility, agility, balance, posture, mobility and quality of sleep.

> SHARON: I lost 8 kg.
> LAURA: I lost 14 kg. But I feel much better now.
> SHARON: My God, I lost weight, now I do everything, I dance all afternoon in the ball room, and I don´t get tired. I used to walk a little bit and I got tired. I couldn´t stand it.
> LAURA: In addition to losing weight, it seems that it strengthens the body. The body changes completely. Because if you're inactive at home, your body is soft. And here, with the exercises, the muscles firm, you feel different, you get firmer. Aside from exercising, I was conditioning and losing weight. At first, my family was surprised with me. They asked, 'What are you doing? Are you sick? You're losing weight, you're different.' I said I was doing the health gym. We change totally. My God!
> GEORGE: The belly was swollen. The big belly is gone. Because with this activity here I lost weight. I lost weight, but not exaggerated like that. A little, a little.
> KIMBERLY: My posture improved a lot.
> PAUL: But a lot has changed. I was rusty. Now I can move my legs back and forth.
> HEIDI: Did your mobility improve?
> PAUL: Yes, and how it got better. It's a great thing. For us it is excellent. Very, very good.
> KIMBERLY: The classes helped me a lot. You know, memory, sleep, agility, balance, all that has improved a lot. Before, I did this [lifting her arms], and it ached. Now I can move my arms, squat.
> (Sharon, health gym participant, age 55; Laura, health gym participant, age 47; George, health gym participant, age 69; Paul, health gym participant, age 70; Kimberly, health gym participant, age 62; programme 3, interview on October 01, 2018)

> DOROTHY: Now I can walk. Sometimes I feel so light. I said these days to my sister that I was willing to run when I was walking.
> (Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

Increased physical fitness allowed the older adults to do other activities they had interest in and need for, without fatigue. Experiencing an improved physical fitness was related to a growing feeling of physical competence. As some participants said, ‘now I do everything’, 'now I can move my legs back and forth’, ‘now I can move my arms, squat', ‘now I can walk’. Paul expressed the meaningfulness of physical wellbeing to their lives, ‘It is a huge thing. To us it is excellent’.

Likewise, Kelly, a participant who went on a treatment for breast cancer, acknowledged that she recovered a sense of physical competence during the programme.

> KELLY: With physical activity, with the walks I do, I lost weight. I lost 18 kg without dieting. I can´t go on diet because it can lower my immunity. And I improved my health a lot by exercising. Because I couldn´t do the chores at home. I didn´t have that strength. I can do it now, slowly, but I can. Because I couldn´t move the arm that I had mastectomy. I had some moves that I couldn´t do. And now I can do it. It has already improved, I would say about 99%.
>
> (Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

The participants perceived changes in their body size with satisfaction, which appeared to lead them to positive body image.

The programmes contributed to shape new ways for participants experiencing their bodies, activating perception and evaluation of the selves. Moreover, the older adults found opportunities to reduce body image disturbance that some of them suffered from in the past.

Two participants described feeling a sensation of lightness of the body:

> DIANA: When I started doing it, I was a lot fatter. I lost 10 kg and more. My body seems to have become more flexible. I can squad and move. Because before, my body seemed to be rigid, the joints... And now not, I feel very good. I sleep better, I feel my body lighter, and the pains I felt seem to have gone.
>
> (Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

> ALICE: I really enjoy it. I already noticed difference in my body because I lost 2kg in two weeks. I feel lighter, more agile because when you lose a little of weight, your body becomes lighter. And I love it. When I got here, I tried to touch my foot and I almost couldn´t. In the end, I felt a lot easier. For health this is very important.
> GRACE: I lost 12 kg. So, my self-esteem is up there.
>
> (Alice, health gym participant, age 52; Grace, health gym participant, age 54; programme 2, interview on September 28, 2018)

Additionally, two participants and a HPE professional recognised that the development of physical fitness facilitated carrying out daily activities, such as dressing, hair brushing, cleaning, riding the bus, walking, and handwriting.

> ELIZABETH: I lost a lot of weight.
> KAREN: I did not get on and off the bus anymore. I was going to get off the bus and I almost fell. I couldn´t stand, I fell while the bus was moving. I had no balance anymore. I was rigid. I was very stiff, you know? I did not move my arms anymore. I couldn´t dress alone. I couldn´t brush my hair because of pain in the joints, in the arms. It´s over. I have nothing else.
> (Elizabeth, health gym participant, age 57; Karen, health gym participant, age 59, programme 1, interview on June 14, 2018)

> LINDA: I signed in and started doing it. I started feeling better, better and better. I feel my health better. Thank God I have conditions to walk, do my service at home... I feel more independent.
> (Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

> HEIDI: Do you perceive physical and physiological outcomes with them?
> ANNE: I do. I notice more in the part of greater autonomy of the person to do simple activities. Because I saw people who came into the group who could barely move. And nowadays, of course they don´t have the energy of an athlete, but I see that they can improve mastery of tasks of day to day. There's a woman, Lisa, who I remember the first day she arrived in the group. She has a motor problem that she shakes all the time. So, for her to sign her name, my Goodness... so much so that in the beginning, the first few times she was, I signed her name because she couldn´t held the pen to try to do some scribbling. And she has been here with me for two years. Nowadays, if you get the signature of the first few days she came and her signature now, you see total difference. So, it seems to be a simple thing, but it's not. It´s motor domain. You can´t do anything and then you can do it. But someone would say she just signed her name. But this for her or for anyone is very important.
> (Anne, HPE professional, age 34, programme 1, interview on June 14, 2018)

The improvement of physical fitness related to bodily practices enabled the participants to increase their levels of independence. In improving balance, Karen was able to get on a bus and not depend on her husband anymore to take her to the city centre; in strengthening muscles, Linda improved her mobility and capacity to do the chores by herself; and in developing motor control, Lisa was able to sign her name.

The effects of bodily practices on participants´ bodies also involved the amelioration of illness and chronic conditions they suffered from. A HPE professional provided an illustrative case of a participant who had a heart attack.

> CHARLES: [...] An older man who is not here today was ill and he went to the hospital. He had a 100% closed carotid and another 80%. The physician did not know how he arrived at the hospital. [...] The physician asked him: 'How is your life?' He said, 'I play volleyball, I run, I play volleyball on the beach, I play tennis.' Then the physician said to him, 'If you were not playing sports, you would not be alive. The sport kept you in the least condition of having survived the adverse conditions of your cardiovascular system. If you were not active, you probably would not be here.'
> (Charles, HPE professional, age 39, interview on November 12, 2018)

Thus, participation in sports-based activities was protective and salutary for the older men´s health. It diminished the magnitude of negative consequences that may have occurred due to the heart attack.

Several older adults acknowledged that they experienced pain relief, reduction in the amount of medicine intake and disease control.

> CAROL: Because I feel pain in the whole body. I have already done several treatments, and I have no rheumatism. So, I have to do it because if I stay inactive my body gets rigid. It hurts here, there. What I know is that it hurts everything, all my joints. If I am depressed, it hurts even more my tired body. But I say, it's the exercise that's putting me on my feet. If I exercise, I sleep better. I feel another person. And what helps me is the exercise. I have a serious problem with my spine. It's what helps me control the pain because I can´t take medicine. And there are days that it doesn´t move and I have to stretch, slowly, breathing. I remember the teacher saying: breathe. It hurts, but it has to move.
> NANCY: I get up with a pain in my body that I say if I don´t exercise, I'm nobody during the day. It hurts everything. I don´t know what it is that I have in the body that the pain is so intense.
> KAREN: I had panic syndrome. I´m cured. I have nothing else. I'm great. But it's the exercise. I'm sure it's the exercise.
> NANCY: When I started, my cholesterol reduced. And I didn´t know I had high blood pressure either. In the health gym, she measured my blood pressure after the exercise. It was 13/6. And it stuck in my mind that the exercise was doing well for me. I do have to exercise.
>
> (Carol, health gym participant, age 55; Nancy, health gym participant, age 80; Karen, health gym participant, age 59; programme 1, interview on June 14, 2018)

> LINDA: Some people think that it´s not true, but this exercise is great. If the person thought well about what exercise is, everyone would look for a way to do. It's good for weight loss, it's good for pain, for the brain because we're in an age that our brain is likely to slow down. It is good for activating it.
> MARY: And for our bodies, we feel better. You feel more willing, you feel less pain. I have bursitis and tendinitis on both shoulders, so, especially now in the winter season, I feel a lot of pain. And with the activity, this improves. It improves a lot.
>
> (Linda, health gym participant, age 78; Mary, health gym participant, age 73; programme 1, interview on June 28, 2018)

Through bodily practices, the older adults learned relaxation techniques (e.g. breathing and stretching) to relieve the chronic pain they had. Moreover, they perceived that by moving they lubricated the joints that were stiff and painful.

The existence of pain tends to influence how one perceives one´s state of health. In Antonovsky´s theory of salutogenesis (1979), pain and functional limitation refer to factors that impact on one´s moving along the health continuum, towards the ease side (absence of pain and limitations) or dis-ease side (presence of pain and limitations).

Furthermore, when a person experiences a condition or illness that requires therapeutic action through medicines, this person is inclined to perceive herself with lower health. On the other hand, when the person´s organism respond well and she is recommended by practitioners to reduce the amount of medicines, she is likely to move towards the ease side of the health continuum. In this project, the older adults associated the participation in bodily

practices with the reduction in medicines. To them, the use of medicines serves as an indicator of health status.

> KELLY: Besides improving my health because it reduced my diabetes medications that I took a lot. In cancer, the metastasis I had in the spine decreased. It's still only in the femur. I make an effort and I come because I know it's for my health. It´s to improve health and reduce treatment and medicine.
> HEIDI: Did you manage to reduce medication?
> KELLY: I reduced my diabetes medicine. My diabetes is well controlled. Because before I took three pills, now, sometimes I don´t even take it. I just check to see if it's okay. And my cancer treatment also gained more break time between applications.
> DIANA: I was... I'm hypertensive and diabetic, but now my blood pressure is like a 20-year-old girl. My diabetes doesn´t. Unfortunately, my metabolism is lazy.
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

> GEORGE: I have proof. Clinically, I can prove it. I had high blood pressure and today I don´t have it. I have diabetes but controlled. Before I had no control. My blood glucose stabilized, it didn´t increase. More controlled. And high blood pressure, that it´s over. I used to take two pills a day and today I take none. It happened through this programme here.
> (George, health gym participant, age 69, programme 3, interview on October 01, 2018)

> VICTORIA: After I joined the group, I saw that I changed a lot in that part of self-acceptance. I took medicines. I was taking an anti-depressive pill. Today I take only a half. I´ve seen that I've changed. My physician said I'm going to end up not needing to take any more medicine.
> JANICE: For my health it was very good because I was taking medicine for high blood pressure and I stopped taking it. My health has changed 100%.
> (Victoria, health gym participant, age 52; Janice, health gym participant, age 43; programme 2, interview on September 28, 2018.)

> KAREN: It's for my health, it's being very good to me. I got better, I'm great. The blood pressure was high, now it's good, 10/6. I took three medicines, now I take only a half.
> JAMES: Exercise is medicine for us, right?
> KAREN: It's medicine and take the medication. My medication is almost zero since when I started exercising. And I took lots of medicine.
> CAROL: It has to be on the menu, exercise is important for medicine, for everything.
> (Karen, health gym participant, age 59; James, health gym participant, age 76; Carol, health gym participant, age 55, programme 1, interview on June 14, 2018)

James, Karen and Carol went on to talk about exercise as medicine. Indeed, they recognised exercise as a resource that provoked physiological adaptations, ameliorating diseases and culminating in the reduction of the use of medicine.

Some would argue that this representation of exercise as medicine among participants may be a result of a pathogenic paradigm of health. However, I observed during fieldwork and all through the interviews that this view was not prevailing among them[29].

A participant raised the issue of financial burden of medicines to low-income people. After engagement in regular bodily practices, Margaret stopped spending money on medicines.

> DOROTHY: It's because I have diabetes, I have rheumatism, I have a lot of things. I take a lot of medicine. And I already had diabetes crisis. Since I came here, I haven´t had crisis anymore.
> HEIDI: Regarding medication, has anything changed?
> DOROTHY: Yes, it has. It's already gone down a lot. I stopped with many pills. I took almost nine pills a day, now I take only three.
> MARGARET: I have a stomach problem, reflux. When I started, I was spending a lot of money on medication. And the physician had already recommended me to exercise. Then I started to come here. My stomach problem was very acute that and I had to do a treatment. I spent three hundred Brazilian *reais* a month. That's when I did the treatment during a month and I came to the gym too. I came to the health gym and the symptoms that I was feeling stopped. I had already seen a physician three times and it didn´t solved. I didn´t know anymore what I was going to do. And then, just after I started here at the gym... Now I don´t take any more expensive medicine. So, when I went back to visit the physician, I said to him, 'I don´t know if it was the medication or if it was the health gym that helped me.' He said, 'you can keep going to the health gym, it surely helped you.'
>
> (Margaret, health gym participant, age 46; Dorothy, health gym participant, age 66; programme 3, interview on October 02, 2018)

The reduction in the amount of medicine intake is even more important for disadvantaged people who do not have enough money to afford a drug treatment. Somehow, bodily practices allowed the low-income older adults to ‘get their money back’ and reallocate the amount they used to buy medicines to satisfy other material needs.

Although the SUS provides a range of medicines for free to the Brazilians, it is not sufficient to cover the whole population and all kinds of medicines. Within the scope of SUS, medicines are distributed to the population via health centres. A health centre´s coordinator confirmed that the bodily practices programme had an impact on the distribution of medicines to patients.

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[29] This finding corroborates the study conducted by Jette and Vertinsky (2011), which identified that older women´s voices mobilised diverging discourses related to Western medicine and health promotion, but in fact they expressed their experience with movement as an art of life cultivation.

> MICHELLE: A decrease in the use of medicines can already be seen in some patients who take a certain number of medicines and can now reduce the medication after the implementation of exercise, this regular activity. So, we realize this already in the population that is attended here.
>
> (Michelle, health centre´s coordinator, nurse, age 41, interview on September 27, 2018)

In sum, the participants perceived that they developed several components of physical fitness during the programmes (i.e. weight loss/body composition, cardiorespiratory endurance, muscle strength, flexibility, agility, and balance). Furthermore, they recognised the improvement in physical fitness to be interrelated with their experiences of greater mobility, quality of sleep, posture, physical competence, positive body image, physical wellbeing, independence to perform life activities, disease control, pain relief and reduction in the use of medicines. All these experiences constituted GRRs for older adults´ health maintenance and development.

5.6.2 Knowledge and lifelong learning

The bodily practices programmes fostered the development of a cognitive GRR in terms of the provision of knowledge and opportunities for older adults´ learning continuously in life.

Advancing knowledge is related to increased capacity of comprehension, which is crucial for appraisal of stressors and, thus, coping (ANTONOVSKY, 1979; 1987).

The participants recognised that they acquired knowledge related to nutrition, diet, posture, cooking, gardening, and how to exercise for health. The provision of knowledge occurred throughout the sessions and through lectures of invited health professionals.

> SHARON: After I started here... even eating and diet. I learned to eat.
> LAURA: I ate very wrong. I used to have dinner at eight, nine o'clock and I filled my stomach. And this is wrong. The health gym helps to find the times for eating.
> SHARON: The teacher arranges lectures with dietician, physiotherapist... Last year there was that of the Cancer League. We learn a lot. That's really good. Last week we had the physiotherapist teaching to sit, things related to posture. We do everything wrong. There are many lectures. That's really good.
> HEIDI: What important things have you learned here?
> LAURA: Important... can I say everything? Vegetables that are beneficial for some types of diseases. Every fruit or vegetable she showed, she spoke of the disease that it controls. I was very interested in it. Because there were vegetables I didn´t even know what they were for.
> SHARON: We also had a lecture they did about bladder. Exercises to keep the bladder stronger.

LAURA: Because many of us have a bladder problem.
SHARON: They came and did exercises with balls. Very good. All this we learn from day to day. Everything that we have learned so far and will still learn, because every day we learn more.
MARGARET: There was a lecture with a nurse. She put things that I had no idea about. A dietician too taught things we did not even know that could be good for health. And how well that juice did that day.
LAURA: And we made that juice thing a while ago. Each of us brought something different. We made juice here. We brought blender and made natural juice with vegetables mixed with fruit. And it's delicious. I loved it. We made a jar and each one tried and commented what she thought, whether it was good or bad. That's why we learn everything. Like that juice, I made natural juice at home, but not with these vegetables. And it isn´t bad. It's good.
LAURA: And the teacher made the recipe and gave to everyone.
DOROTHY: I keep making natural juice. And we learned here. She gave the recipes.
HEIDI: Do you like when you have these activities with lectures?
SHARON: It's very good.
LAURA: Because there is always something new for you to learn.
SHARON: New things. You can never say that you know everything. No. You're always learning.

(Sharon, health gym participant, age 55; Laura, health gym participant, age 47; Margaret, health gym participant, age 46; Dorothy, health gym participant, age 66; programme 3, interview on October 01, 2018)

The programme provided them with opportunities to re-produce knowledge about common topics like eating and diet. By acquiring new information, they could make comparisons with their prior habits and they perceived that they could do things in a different way. They constructed with the health workers new ways of living. Importantly, the participants acknowledged themselves as ‘knowing subjects’.

Other participants confirmed they had increased access to learning through the programme.

KIMBERLY: There are a lot of things that we come to know through the health gym.
GEORGE: Last week we had a physiotherapist. She taught us about posture, and everything related to the spine. So, there's a lot of interesting stuff that we learn.
PAUL: How to walk, how to sit...
KIMBERLY: We had the cancer league, they came too.
GEORGE: There was another activity that taught how to create a garden.
PAUL: We learn to do many things. And we're well informed.
KIMBERLY: Sometimes there are activities like learning how to build a terrarium. Another group created a garden. Each group does one thing. There is also the part of nutrition. They came and taught how to make juice. All through the health gym. There are many things, and this all came with the health gym.
PAUL: In sum, we learn a lot, we enjoy it a lot. We learn and enjoy. Because we learn some things like she said, then we memorize.

(Sharon, health gym participant, age 55; Laura, health gym participant, age 47; George, health gym participant, age 69; Paul, health gym participant, age 70; Kimberly, health gym participant, age 62; programme 3, interview on October 01, 2018)

I verified that the health gym functioned as a health education strategy. The participants´ voices also corroborated this idea. Paul expressed a confidence that participants had continuous access to information within the programme. Moreover, he said, ‘we learn and enjoy’, indicating that they had positive experiences of learning during the sessions.

> NANCY: I learned a lot. Things I did not know. I've learned even more. I think it was very good for me, in favour of my health. What I can, I explain to my husband too. I learn here and teach him there. I say to him, let's go to do physical activity, there we will learn what is good for our body. I like having lectures. I like learning. Because I did not have this opportunity to learn. Neither reading, nor school. I did not even complete the first grade.
> KAREN: With the lectures here I learned about food, which is better for us. So, for me it was very good.
>
> (Nancy, health gym participant, age 80; Karen, health gym participant, age 59; programme 1, interview on June 14, 2018)

From Nancy´s comments it was possible to infer the meaningfulness of lifelong learning to disadvantaged people who often are illiterate in the Brazilian context. The programmes challenged inequalities experienced by participants through fostering health education. Knowledge acquired through bodily practices became a resource that the older adults might mobilise to improve their life conditions and health.

Regarding the provision of information, a health centre´s coordinator confirmed that the programme intentionally focused on creating opportunities for learning for older adults.

> DEBORAH: We always do not only physical activity, but there is always some orientation within the group, i.e. on hypertension, diabetes, nutrition. So, it's not just focused on physical activity. They are very interested in this counselling. Several questions arise. You see they get really involved.
>
> (Deborah, health centre´s coordinator, nurse, age 30, interview on June 14, 2018)

Two HPE professionals reinforced this intention of advancing knowledge with the older adults.

> ANNE: When I don´t have a specific project, I try to bring some talk anyway. Because I think knowledge is very important. This awakening of 'I know about it', this is very nice. So, for example, once I brought a lecture that I found interesting that was about the importance of sleep. (...) Some of them said to me, 'Anne, I like your class because you explain why we're doing things. In other places it wasn´t like that. We jumped

> there, here, stretch and pull and leave... but we didn´t know why we were doing that movements. We did it because someone said it was good.' They said that my work is different because I explain, for example, that exercise is good for people with diabetes, but what happens in the organism for exercise being beneficial? Why can exercise control high blood pressure? The person needs to know what is happening to her.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

> SUSAN: I always bring an activity that is more for thinking. I always try to tell them why I'm doing it. I always try to talk about why I'm doing such a thing. Because I also think if it is for me to bring an activity that they don´t understand, they are doing it just for doing. They don´t even know what they're doing. So, I always try to talk.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

The HPE professionals showed a commitment to developing participants´ capacity of comprehension of their bodies' functioning. Anne and Susan believe that knowledge is important for the older adults bringing consciousness to movement, which might be much more beneficial for health than just moving without reasoning.

I have presented findings indicating that the participants acquired health-related knowledge during bodily practices programmes. Beyond that, they also developed what Standal (2015) called 'embodied knowledge', which involves a practical dimension of actions, activities and practices.

The older adults enrolled in the Programme 4 demonstrated their capacity for learning sports later in life. A participant approached to me during my fieldwork observations and she told me she had never played volleyball before. She learned to play through the programme. Another participant said he took part in volleyball when he was 61. Also, Charles (HPE professional) told me about an older woman who learned to play volleyball when she was 60. She was a seamstress and she had never had contact with ball games previously.

Charles pointed out how the older adults played volleyball, which evolved in terms of quality and dynamism due to sports learning.

> CHARLES: Although this game is different from a high-performance game, this was unthinkable a few years ago in the way they played before. We kept training, teaching, and encouraging them to do. They didn´t play like that. Their game was like this: serve, catch, take a step, get closer, throw, turn to the attacker, take a step towards the attacker. And today they are playing like that, jumping, blocking, attacking effectively... That was unthinkable.
> HEIDI: How did they evolve in this way?
> CHARLES: Learning. It makes us think about the motor learning that happens in childhood. They learn to play here. I was talking about that man who plays basketball and tennis. He was hitting out. Then I talked to him, 'Do the same thing you do in tennis, that spin, bring the ball to the ground, start to use your wrist'. The ball began to fall inside. So, they know how to create resources, how to learn. There is a woman

> who plays with the men nowadays, but before she didn´t know how to dig and set. She played handball but had never played volleyball. And today she plays a game like that.
> (Charles, HPE professional, age 39, interview on November 14, 2018)

Charles´ comments reflect his observations throughout eight years of professional practice that sports learning occurs among older adults, even those who did not have prior experience with sports. And it is not that the older adults played in the past and got back to sports practice. They started learning to play volleyball and handball when aged 60 or older.

Engagement in learning at this stage of life was meaningful for the older adults, as it allowed them to feel capable and active, and to increase their sense of purpose in life. Furthermore, Charles believes that the process of sports learning stimulates the older adults´ cognition, which is helpful for the maintenance and development of their intellectual capacities.

> CHARLES: For cognition is also interesting, because for you to do something that you don´t know how it will happen... How will I solve my situational game problem, if I´m being blocked here, blocked there? So, I have to build in my mind a way to solve my problem, I have to change the way I play. And that change in the way you play, I believe that occurs something for cognition, perhaps untested, I don´t know. Since you have to solve situational game problems, if you can´t overcome a block, you have to change the way you play. This construction in mind, how do I defend from the guy who is hitting like that, this construction of the different, what I have to reformulate at each movement is what changes in team sports.
> (Charles, HPE professional, age 39, interview on November 14, 2018)

Thus, in learning sports, the older adults are stimulated to develop their abilities of problem-solving and decision-making. In playing team sports, the older adults interact with the environment, which is not always predictable. Hence, they need to create resources to reformulate their actions constantly. They experience cognitive processes that guide them to build a repertoire of actions to be applied in situational game problems.

Although sports learning happened later in life, it had some requirements as highlighted by Charles:

> CHARLES: There were some older adults who didn´t give themselves the patience of time to learn. Because it requires persistence, it takes a while. That woman who was playing with the men here, I took six months to correct her hitting. So, she changed the movement, did it like that, tried it another way, and she built this information little by little until today she can hit the ball to the ground. But you have to give yourself the time for learning. I say this to them, 'you have to be patient and give yourself time to assimilate the information here'. Usually, when someone new arrives, I say 'listen to what I say to you'. Because whoever is on the court wants to guide a lot, saying do it, do that, you can´t do it, you can´t do that. That's a lot of information for beginners.

> Then I say to them, 'look, today you'll take care of it. I want you to focus only on the leg position.' Fixed this, next session we´ll take care of something else. I add information continuously. Because if there is too much information on the first day, he goes away. Slowly, one piece of information at a time, the I wait and gradually add others. Little by little, he understands that this is possible for him. I give the information he can understand today. Then he keeps building. Otherwise it arises that situation of 'I can´t make mistakes'. And here is just the opposite, we want to make the guy who started playing volleyball with 61, come in and enjoy the game.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

According to the HPE professional, sports learning requires time and willingness from participants to go through the process. To facilitate this learning process, Charles indicated that he adopted the practice of controlling the amount of feedback provided to participants, mainly with beginners.

Importantly, Charles showed a concern with how sports learning is experienced by the older adults. He expressed an intention to allow them to find enjoyment in play, which might sustain their motivation to persist in the learning process.

Overall, this data showed that the older adults found opportunities in the bodily practices to activate and/or build a cognitive GRR. The health-related and embodied knowledge acquired by them and the learning occurring continuously in their lives were considered to be strengths that might support them in developing a greater capacity of comprehension towards life situations, and increased motivation to deal with them.

Furthermore, the experience of learning is likely to increasing the older adults´ feelings of accomplishment, competence, efficacy and sense of purpose. In turn, it might foster the development of emotional skills, which I will present next as another GRR.

5.6.3 Emotional skills

The older adults perceived that they developed emotional skills after engagement in the programmes. The development of emotional skills (e.g. self-esteem, self-regulation, positive mood, resilience and vitality) might facilitate stress management and health maintenance. For that reason, emotional skills can be viewed as GRR activated during the programmes.

Several older women perceived that they increased self-esteem through participation in bodily practices.

> HEIDI: What changes did you perceive in yourself?

> KIMBERLY: It changes that we have more pleasure. More pleasure of... we count the hours to come here, we have a very good group, we interact. It's very good. We get more cheerful as well. Because I think it enhances our self-esteem.
>
> (Kimberly, health gym participant, age 62, programme 3, interview on October 01, 2018)

> VICTORIA: I'm 52 years old. It was hard to me to accept my age. And I was depressed due to the death of my husband who was sick for ten years. I went to other gyms and I participated, but it didn´t help me in this way. It helped in the physical part. But in the part of self-esteem, this joy, this enthusiastic thing which we play, we laugh... that helped me a lot. And my friends here help a lot in this part of accepting my age, my way of being. This all helped me a lot. At home, my daughter saw that I changed my way of thinking. Because I was even afraid to look myself at the mirror. Because I knew that ageing was coming, and I had to accept that. And it contributed a lot to better accept myself. Because they help me, we talk, play, laugh. This thing that involves that helped me a lot to enhance my self-esteem. It was too low. My daughter said, 'Mother, you have a very low self-esteem. You have to think and accept that things are changing.' And they help me a lot in that part. Mainly the teacher who always says that we have to accept ourselves as we are and that there's no point in trying to be like others or like other people want us to be. We have to be the way we are, right? That helped me a lot. In this part, the group helped me a lot and it continues helping me, always. I had very tough phases. After I joined the group, I saw that I changed a lot in that part of acceptance. This joy involves. You go to other gyms like I participated, but it's not the same thing. You exercise and go home. It's not like here in the group that we become friends, we share things, we talk, we get together and do activities like the tea we had few days ago. So, all this helps to enhance our self-esteem.
>
> (Victoria, health gym participant, age 52, programme 2, interview on September 28, 2018)

> KAREN: Exercise makes you feel good about yourself. Because it did it to me. Because I didn´t feel well. Now I feel good. I think exercise is everything.
>
> (Karen, health gym participant, age 59, programme 1, interview on June 14, 2018)

Self-esteem is a socially constructed emotion as it is a situated experience (HEWITT, 2001). This means that it is influenced by the culture and social relations around a person. It can be enhanced when the person acts effectively on his physical or social environment (HEWITT, 2001). Then, social activities like participation in bodily practices offer possibilities for elevating or lowering one´s self-esteem.

The practitioners observed from day to day interaction that participants experienced increased self-esteem. A health centre´s coordinator commented on that:

> MICHELLE: We notice several people that self-esteem has improved a lot, a lot, a lot, a lot. They are the divas of the SUS, so they are very well, especially this group.
>
> (Michelle, health centre´s coordinator, nurse, age 41, interview on September 27, 2018)

In this regard, a HPE professional described a case of a woman who did not smile, take photos, nor interact much with others. She had a body image disturbance because she was overweight. Throughout the programme, she was encouraged by the HPE professionals and colleagues. Then, she changed her behaviour, suggesting an increase in her self-esteem.

> SUSAN: Lucy barely spoke. She didn´t smile. She didn´t like her smile and she didn´t take photos. Sometimes she took pictures, but she hid behind everyone. I used to say, 'Lucy is hidden, we're just going to take it when she shows up.' And she started changing, and so were the others. When she turned fifty last year, she invited everyone to go to her house. And she smiled taking pictures. Then she did a profile on Facebook, WhatsApp, and she started posting photos, sometimes even alone. She began to answer questions and to speak some funny things, of which everyone laughed. She also lost weight considerably. And she had a body image problem because her sister used to call her fat. When she moved to another state, she came here to say goodbye to her colleagues and brought a cake. I told her, 'Oh my God Lucy, you arrive one person and someone else is leaving.' She's a new person. And it wasn´t just me who noticed it. It was everyone.
>
> (Susan, HPE professional, age 32, interview on October 03, 2018)

The case above shows how the participant found opportunities within the programme to have an experience of self transformation. She elevated her mood, developed social skills and improved self-perception. It is important to emphasise that such emotional outcomes did not occurred by chance or as a consequence of exercising. They were related to an intentional and pedagogical practice carried out by the HPE professional. For instance, Susan described two activities she used to foster participants´ emotional skills:

> SUSAN: I did an activity that was really nice. There was a box and a person would take the box and open it to see the gift inside. The person opened and it was a mirror. Then, she would look at herself. She could not tell her colleagues what was in the box, but that she had to describe what she was seeing so people could guess what was inside. My God, there were people who cried. It was beautiful! My God, the day of the box was the most beautiful thing. And the box affected a lot of people. Because there are many of them with problems of low self-esteem and who don´t look at the mirror. There was a woman who had this kind of problem and she thought she was awful. And she opened the box and said, 'Oh my God, what a horrible thing.' She broke up with herself. And she was very sorry she'd done it. She got really bad. She came more than once to talk to me about the box, 'how silly I am, there are so many people who are ill and face difficulties in life. I have health, look what I did to my image, look what I said to people.' But there were also those who said,' My God, it's a very beautiful thing.' There were all sorts of reactions. That's why it was really nice. So, sometimes and somehow, we touch people. (…) This other activity was very nice. I slipped a piece of paper on each one's back. And they had to write on someone´s back. Everyone had to write on everybody's back and say what they thought of the person. Then, they took the paper.
>
> (Susan, HPE professional, age 32, interview on October 01, 2018)

As Susan pointed out, the participants responded to activities in different ways.

In terms of efficacy, bodily practices enabled the older adults to challenge themselves and develop new abilities. Thus, they had chances to experience success and they took pride in their achievements. This was particularly clear among the older women from Programme 2 who formed the group SUS´ divas. The divas engaged in an enterprise of giving dance performances during public events.

> KELLY: We gave a dance performance at the Forum of Education. We were scared because we thought we wouldn´t be able to do. We were kind of shy. We were afraid of what it was going to be like. We went there and there were a lot of people watching. After the song, everyone got up and kept dancing together. It was fun, it was very good.
> DIANA: They applauded and shouted.
> HEIDI: How do you feel when you give these presentations?
> KELLY: We feel younger.
> DIANA: Happy! Happy to know that at this age we're taking something for the younger people to see. I'm very proud. I'm proud to know that I can do it. Imagine, dancing funk in the midst of 500, 600 people. Oh, it´s not for everyone. We get a lot of praise. There is a 80-year-old diva and a 3-year-old girl that is our little diva. Then, everyone sees that there are old people. How do they dedicate so much to exercise? People want to know why. We talk, this is good for the mind, for the body, for everything. With the compliments we feel even more excited to do the exercises.
> HEIDI: And within the family, do people comment?
> DIANA: Yeah. My sisters said like that, 'I never said that you were fat, but how you were fat. But look now how you are, you're getting thin. Colleagues also spoke that.
> KELLY: And my family was impressed. My sister said, 'Instead of getting older, you rejuvenate yourself more.'
>
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

The activity of the dance group led the older women to accept challenges, invest energy in a collective endeavour, and experience success throughout the process. All this is important because it appeared to culminate in a greater sense of competence and efficacy, which were key to sustaining the older adults´ motivation to participate in bodily practices. It was evident in Diana´s comments like, ‘I'm proud to know that I can do it’, and ‘with the compliments we feel even more excited to do the exercises’.

Besides developing efficacy, the older adults also showed an ability to recover from tough situations. Kelly, in particular, demonstrated resilience in the face of a breast cancer.

> KELLY: My relatives are very surprised how I have such strength... how I overcame... to not stress and laugh at everything and make jokes. I don´t take anything seriously

anymore. I don´t argue, I don´t say that someone is wrong. Each one has their problems and does in the way they think it´s the best.
HEIDI: Did you change your behaviour?
KELLY: I've changed a lot.
HEIDI: How participating here contributed to this change?
KELLY: Because we talk to everyone. We meet every Friday in the divas' group. So, we see that we are not the only people who have a problem. There are people with a lot of things, right, if we observe more the problem of others. You look at people with much more serious problems than we have. Why will we complain? We should be very happy to be able to walk, to eat, to have a shelter to live. Then, there's no point thinking that we have bigger problems than the others. There are people with a lot of things, if we look more at others.

(Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

While exercising in a group, Kelly and the others were exposed to evaluation from peers and self-evaluation. The programme provided them with opportunities to be in contact with other older adults and compare their life situations.

ALICE: It's good for our health, for our souls too because here we know people with many problems, and we see that our problem is nothing.
DIANA: And mine is sometimes so small in relation to the other´s problem.

(Alice, health gym participant, age 52; Diana, health gym participant, age 64; programme 2; interview on September 28, 2018)

MARGARET: By talking, we see that there are different problems.

(Margaret, health gym participant, age 46, programme 3, interview on October 02, 2018)

Such occasions allowed the older adults to reflect on how well they were and to improve their optimism and state of mood in daily life.

KELLY: Even the mood changes at home. Because sometimes I was in a bad mood because I believed that everything was for me to do and nobody collaborated to help. And now I do what I can. But I don´t stop coming to the health gym and the group.

(Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

PATRICIA: We already get up thinking like 'today I have physical activity. So, it will make my day better'.

(Patricia, health gym participant, age 64, programme 1, interview on June 28, 2018)

SHARON: My son said that after I started here, I became another person. He said I was angry because I was at home most of time. And now, after I started coming here, I started going out a lot. So that my son said, 'You're not angry anymore, you calmed down'.

(Sharon, health gym participant, age 55, programme 3, interview on October 01, 2018)

KIMBERLY: There are people who had depression. And everyone got better after being here.
(Kimberly, health gym participant, age 62, programme 3, interview on October 01, 2018)

DOROTHY: I feel very good. This health gym was a blessing for me.
(Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

Anne´s observations corroborated the participants´ comments above. In her perception, the older adults became more sociable after their participation in the bodily practices group.

HEIDI: Do you perceive changes in the older adults?
ANNE: I realized that, in most groups, it is much in this part of relationship with others. Because what happens is, everyone who arrives on the first day in the group, you look at the person and she seems to be the most closed person in the world. She arrives really reserved, that thing. When people get into a new environment, they kind of created a barrier in relation to that environment. And I realize that, session by session, a person who seemed extremely nervous and angry on the first day, she changes totally. Everyone who is frequent in the group with me, I realize that they are much more communicative, open to new ideas, more enthusiastic. Usually those who participate of the exercise group are the people who participate in all other activities that happen at the health centre.
(Anne, HPE professional, age 34, interview on June 14, 2018)

Anne noticed that the older adults changed their mood from nervousness and shyness to enthusiasm and open-mindedness. Regulation of mood along with a sense of physical energy, mastery and interest in life enabled participants to develop another GRR, namely emotional vitality (BARBIC et al., 2013).

During my observation of volleyball training sessions in Programme 4, two participants talked to me about their love for sports. They commented that playing was priceless to them. One of them used the expression ‘sports is life’.

In alignment with this feeling, participants from other programmes also connected exercising with a sense of living, willingness, mood and energy.

CAROL: If I exercise, I sleep better. I feel another person. I feel alive again. That person I was before is coming back, but it isn´t easy. And the exercise does it. It makes me feel alive. I like freedom, I like living. I want to live. Exercise is living. For me it is living. And I thank all, God and exercise.
KAREN: It was very good for me. I think it was great. Everything. With physical exercise, we learn to live. It teaches us how to live the present.

(Carol, health gym participant, age 55; Karen, health gym participant, age 59; programme 1, interview on June 14, 2018)

LINDA: I feel relieved, it gives me more energy, it gives me more courage to continue.
(Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

HEIDI: How does participation in the programme help you deal with problems?
SHARON: Elevated mood. Good mood. Because I sometimes did not have willingness to do something at home. Now it's totally different. I have more willingness to do things. Even to be with people, I don´t know, it changes totally. We become more sociable and joyful.
(Sharon, health gym participant, age 55, programme 3, interview on October 01, 2018)

GEORGE: My energy to do things and work is back.
(George, health gym participant, age 69, programme 3, interview on October 01, 2018)

DOROTHY: I have changed a lot, I have more willingness.
(Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)

Thus, the participants talked about how they modified the way they felt because of engagement in the programmes. Furthermore, the participants associated their involvement with bodily practices with a greater ability to manage emotions and behaviours, which can be identified as self-regulation.

Some participants commented on feeling calmer, stopping worrying about events, coping with negative emotions, avoiding stress, and keeping their temper after joining the programme.

KIMBERLY: It helps because I sleep better and don´t get so agitated. I´m calmer now.
(Kimberly, health gym participant, age 62, programme 3, interview on October 02, 2018)

DIANA: I changed completely. I was a very angry person. If someone looked at me in a strange way, it was a reason for me to argue. And after I joined here, I changed completely. You have no other reason but joy. When we arrive here every day, the teachers come saying 'good morning, and everyone screaming. So, I'm not that person anymore. I say I changed 99%. Nowadays, in order to stress me, my God, you have to do a lot of things. I don´t stress anymore.
(Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

MARY: It seems that you become a calmer person because the activity relaxes us. At the same time that it requires strength, it also relaxes. So, for me it's very good.
(Mary, health gym participant, age 73, programme 1, interview on June 28, 2018)

KAREN: My nervousness and crying is over. I don´t cry anymore. I was only crying. Anything that someone said I cried. Do you know that when you get very sensitive? It healed up. Nothing makes me sad or stressed anymore. It can be anything I can handle now. My husband says things to me now and I don´t care. I don´t want to know. It's great, there's nothing better. And this happened after I started doing exercise and walking. It's great for me. I come because I like. Because it's good for me. It's good for my mind. I'm not nervous anymore. I was in a lot of pain, I was very tense. Everything had to be in my way. No, not now. Before, I was just working and worried about things. I was too focused on cleaning. Nowadays, I make the beds, I close the house, and come. When I go back, I finish the job. Before, I didn´t leave behind a single glass into the sink. I was too anxious. For example, I'm going to travel tomorrow. I packed yesterday. Before, I would pack a month earlier. I was sick because of desperation, with having things to do, that hurry. It´s over. I became another person. Even I don´t recognise myself. I was very agitated. I think it was stress. Now it's very good.
CAROL: There are times I even bite my hand, so I don´t blow up at anyone. And what helps me is the exercise. I have a lot of bans. And I hate it. These are things that exercising helps me to have a catharsis, to feel good.
HEIDI: How does the group help you deal with these problems?
CAROL: It helps me relax, think better, think before I talk because before I didn´t think, I would blow up. It helps me to open up to people.

(Karen, health gym participant, age 59; Carol, health gym participant, age 55, programme 1, interview on June 14, 2018)

Diana and Karen perceived themselves as new persons. From the participants´ perspective, the bodily practices programme and its environment provided them with opportunities for relaxation, catharsis, joy and reflection. These experiences contributed to them to better regulate their emotions and change their behaviours, thus optimising their mental health and wellbeing.

Another GRR identified among participants in this study was self-care. Actually, in strict terms, this is more like an attitude than an emotional skill. It refers to the way the older adults feel and behave towards the maintenance of their health. Many of them, mainly the women, appeared to dedicate most part of their time to caring for others (i.e. husband, children, grandchildren and relatives). Enrolling in a bodily practices programme represented to them the adoption of an attitude of prioritising their own interests and wellbeing.

HELEN: My focus is now forward, to take care of my health and continue exercising.
(Helen, health gym participant, age 65, programme 1, interview on June 14, 2018)

KAREN: For me it was great. I didn´t take care of myself. I liked taking care of everything but me. Only now I take care of myself. Now I drink water, I changed my diet. Every two hours I remember to eat something. I could not do that before. But after I started doing it here, I don´t stop for anything. Only if I can´t really do it.

(Karen, health gym participant, age 59, programme 1, interview on June 14, 2018)

> MARY: You live with problems, but I think health is everything. And to have health I think we have to take care of it. And what we do here is this, caring for our health. We do this activity to have a better quality of life.
>
> (Mary, health gym participant, age 73, programme 1, interview on June 28, 2018)

A HPE professional compared the bodily practices group to a type of psychological therapy. She perceived that some older adults treated mental health problems during the sessions, and they realised the importance of self-care to their lives.

> ANNE: I realize that the group is kind of therapy. Because there are people who have a lot of inner ghosts. They come to the group and even if they don´t speak openly about their problems, they can handle with it somehow. In my groups I have the habit of putting a song or we're always talking, joking, and that's what treats them a little bit. I feel that they have somehow been treated within the group. Even if it was a very small portion of this treatment, but the group was the trigger for them to seek further help as well. (…) I noticed that they created that consciousness that they need to take care of themselves and from the moment that they do, problems don´t come so often or with a high intensity.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

The findings in this section showed that the older adults experienced greater self-esteem, self-efficacy, resilience, mood, vitality, self-regulation, and self-care through participation in groups of bodily practices. From participants´ perspective, the programmes contributed to the development of emotional skills, which constitute an important set of GRRs to support them in coping and in maintaining their mental health and wellbeing.

5.6.4 Socialisation and communication

The last group of GRRs refers to the social aspects that were developed among participants in bodily practices sessions. The older adults emphasised that the social GRRs were meaningful to them. Moreover, socialisation experienced by them appeared to have a strong influence on their emotional resources.

The creation of a community of movers was considered in this study as a GRR within the scope of social dimension. Because it emerged as an overarching theme, it was presented in a separate section. So, it is important to emphasise to the reader that social GRRs also include the subthemes of sense of belonging, positive experiences, friendship, attachment and social support, all related to the creation of a community of movers.

Interrelated with that, the programmes appeared to represent for the older adults an activity to occupy their minds and a reason to go out of home. Bearing in mind that many

older adults are retired and spend most of their time at home, the practice of going out allowed them to increase socialisation with others. Charles commented on that:

> CHARLES: They then find here and in other activities of the programme options to occupy their mind. They filled that space they had with their friends when they had *chimarrão* in the afternoon, with the prayers´ group, the mothers' group, or the job that occupied all day. They stopped working and came here. Some of them told me that if they didn´t have it here, they would have gone back to their city.
> (Charles, HPE professional, age 39, interview on November 14, 2018)

While I observed a session delivered by Charles, a participant came to me, and similarly to Charles´ perception, she said that the programme helped her to interact with friends, learn and do different things. Then, she forgot about the fear and the panic syndrome she had at that time. The socialisation with peers in the programme supported her to overcome her mental health problem.

Likewise, other participants talked about the importance of going out of their homes and attending bodily practices for improving mental health.

> KAREN: If you stay at home, you stay eating, nervous and working. I come to the group because it is for my health. Because I have my own experience, for me it was very good.
> SANDRA: I spent a lot of time at home, very alone. I almost didn´t go out, I didn´t walk. I started attending exercise, then it got much better. I go out, I talk to people, I have willingness to go out. Now I go to the market and come back by walking. At first, my husband had to take me everywhere. Now I do a lot of things by myself.
> (Karen, health gym participant, age 59; Sandra, health gym participant, age 68; programme 1, interview on June 14, 2018)

> KIMBERLY: For people of our age, over 60, we change the sedentary lifestyle. Because we stayed at home, we were no longer useful. It's not that we don´t work, but it´s only domestic work. And all this came to improve, to take us from this stage that we were.
> HEIDI: And what is the meaning of the health gym for your life?
> GEORGE: Even this the health gym enabled, because we're talking to you on an equal basis. I talk to you and to anyone else on an equal basis. We became more uninhibited. So, for me it was very good. At that point, in the matter of not being ashamed and shy in a corner. Here, I talk, I speak silly things... and what I talk here, I talk outside too.
> PAUL: It is the regular interaction, the day to day with the colleagues. We learned to... I was shy, I stayed at home, I didn´t go out, just a little. Now we come here almost every day. And now it's gone. It improved our communication and we continue evolving.
> (Kimberly, health gym participant, age 62; Paul, health gym participant, age 70; George, health gym participant, age 69; programme 3, interview on October 02, 2018)

As George and Paul said, they developed communication skills within the programme,

which allowed them to socialise more. Sharon pointed out that the HPE professional stimulated them to communicate through a variety of activities.

> SHARON: Every day is different, she changes. Another thing is that she asks questions a lot. She makes us read message. Each one had to bring and read a message for the others. She does games for us to write, to discover things, to open the mind. This is very cool.
> (Sharon, health gym participant, age 55, programme 3, interview on October 01, 2018)

Indeed, the HPE professional confirmed that she delivered many activities with the purpose of fostering participants´ communication skills. She provided an example:

> SUSAN: And I love doing activities on the whiteboard. For example, to write what they like and dislike in winter. At the beginning of the year we did what we wanted for the new year. On the woman's day, we did about what means to be a woman. I write and each one has to say a word. But they can´t repeat any word.
> (Susan, HPE professional, age 32, programme 3, interview on October 01, 2018)

Therefore, communication and socialisation were stimulated with participants within the programme. Importantly, the older adults´ perception of their communicative and social skills changed from a status of deficit to be a resource which they might draw upon to improve their psychological wellbeing.

In conclusion, through participation in bodily practices, the older adults experienced increased physical fitness and functioning capacities, knowledge acquisition, lifelong learning, greater emotional skills, socialisation and, increased communication skills. All these experiences can be viewed as powerful GRRs that are at the older adults' disposal to support them to manage tension in life and to sustain their health and wellbeing.

5.7 Strengthening the sense of coherence

According to the theory of salutogenesis (ANTONOVSKY 1979; 1987), the GRRs provide life experiences characterised by consistency, participation in decision-making and underload-overload balance. Recently, emotional closeness was indicated as an additional type of experience (IDAN; ERIKSSON; AL-YAGON, 2017).

Antonovsky (1987) clarified that the experiences provided by the GRRs are connected with SOC components, namely comprehensibility (cognitive element), manageability (behavioural element), and meaningfulness (motivational element).

In Antonovsky´s theory (1979; 1987), comprehensibility refers to one´s abilities of making sense of the stimuli that one is offered by the internal and external world. Comprehensibility is related to seeing life events as coherent. Manageability refers to one´s capacity of recognising the resources that exist at one´s disposal, and mobilising them to manage the situations that one is in. And meaningfulness refers to one´s capacity to embrace stimuli as challenges rather than burdens. Meaningfulness is related to motivation to act regarding life situations. The person with a strong SOC has high levels on these three components (ANTONOVSKY, 1979; 1987).

According to Antonovsky, a GRR provide all types of experiences and the three components are intertwined. By taking bodily practices as a GRR, it was expected that they provided participants with experiences of comprehensibility, manageability and meaningfulness.

Indeed, based on the empirical data, I verified that participation in bodily practices helped the older adults seeing their world as comprehensible, manageable and meaningful. Furthermore, it became apparent that the older adults were high on the three components. Thus, they are considered in this study as strong-SOC persons, like the example of Kelly with her resilience to handle breast cancer (‘My relatives are very surprised how I have such strength... how I overcame’[30]*).*

Eight categories grounded in data supported the recognition of the older adults as strong-SOC persons: (1) manageability, (2) problem-solving, (3) commitment, (4) sustaining a physically active life, (5) reduction in medical appointments, (6) comprehensibility, (7) self-perception, and (8) meaningfulness. They are described in sequence.

(1) Manageability: The engagement of older adults in a health-promoting programme can be viewed as an indication of older adults´ ability to perceive bodily practices as available GRR to them, and to activate them in favour of their health enhancement. The engagement of older adults refers to the SOC component of manageability existing among them. In being confronted with life stressors such as the death of a family member, spine injury, cancer treatment, and family issues, some of the respondents indicated that their decision of enrolling in a bodily practice programme was a means of handling such situations.

> KAREN: My mother died. I asked God to make me be myself again. First of all, I came to the health gym. And now I am myself, afterwards starting to exercise.

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[30] Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018.

> CAROL: When I wanted to explode, walking relieved that tension. And I have a serious problem with my spine. If it was not for the exercise, I think I'd be in a wheelchair.
> SANDRA: I had two surgeries for the spine. Then I started to exercise, and it improved a lot.
> (Karen, health gym participant, age 59; Carol, health gym participant, age 55; Sandra, health gym participant, age 68; programme 1, interview on June 14, 2018)

> CHRISTINE: I came after I had surgery for a cancer treatment. I had had two surgeries and I needed to exercise because my muscles weakened very fast. If I´m inactive for a couple of weeks, the situation is so difficult that I end up going to the emergency to take medication for pain, so intense that it's my muscle ache. So, for me, this here is essential.
> (Christine, health gym participant, age 46, programme 2, interview on September 28, 2018)

(2) Problem-solving: Throughout the interviews, the participants showed that they created strategies for problem-solving. They found support among their peers and HPE professionals to talk about their problems and to escape temporarily from them.

> EMILY: Not long ago I went through another problem in my family, my brother was depressed. And if it were not for this group here... it's an escape valve that we have. We forget.
>
> DIANA: We come here with a problem and we leave like, where's my problem? It's gone. Then you forget that you have a problem, you forget that you have pain.
>
> (Emily, health gym participant, age 57; Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

Because of the attachment and friendship that they cultivated through the community of movers, the older adults developed a feeling of confidence that they could unburden themselves with the group members. Participation in bodily practices and feeling listened to by others made their problems bearable and their daily lives more pleasant. So, when bodily practices are structured in a way that they stimulate social interaction and support, they also contribute to elevating participants´ capacity of problem-solving, which is related to manageability.

(3) Commitment: The older adults demonstrated a concern with setting priorities regarding their choices and use of personal time. They were committed to attending bodily practices although they were required to give less attention to domestic work. They showed commitment to taking responsibility for themselves and putting their lives in first place in order to then experience better health and psychological wellbeing.

KAREN: I like doing something good for me. But I didn´t because I didn´t have time. Now it's my time. When it's time for me to exercise, I stop my chores, close my house and come. When I come back, I'll finish the housework. I've never done anything in my life. I didn´t take care of myself. I liked taking care of everything but me. Only now I take care of myself. I'm living for myself now. Now I'm going to do everything I can.

ELIZABETH: This is my time. We have to have time for us! Things stay there, clothes, everything ... the machine washes for us. We have to have time for ourselves. I do exercise. Time is ours.

(Karen, health gym participant, age 59; Elizabeth, health gym participant, age 57; programme 1, interview on June 14, 2018)

LAURA: You have to take this one hour of time. Either you advance the housework a bit or you leave it for later because that's only one hour. That one hour it´s good for you. This time is for your wellness.

SHARON: I say that the housework waits. It can be done later, at night. My commitment is here.

(Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

KELLY: (…) [I became] able to say 'no' at certain times, because there were things that I accepted in the family, everything was for me and I couldn´t refuse. I failed taking care of myself to do the housework. No, we have to have some time for us, some time to exercise and stay well.
TERESA: Here is time for pleasure, joy…
REBECCA: It´s our time.

(Kelly, health gym participant, age 58; Teresa, health gym participant, age 54; Rebecca, health gym participant, age 57; programme 2, interview on September 26, 2018)

(4) Sustaining a physically active life: By setting time for participation in bodily practices as a priority, the older adults increased their capacity to manage the resources that are available to them. Furthermore, they found alternatives for maximising their practice time and sustaining a physically active life. The older adults acknowledged that bodily practices were helpful for their health and wellbeing, so that they managed to create or engage in additional activities in order to be physically active during longer periods over the week.

LAURA: I have a treadmill at home. Then when I don´t walk outdoor, I do it there.
DOROTHY: When I don´t come here, I walk.
(Laura, health gym participant, age 47; Dorothy, health gym participant, age 66, programme 3, interview on October 02, 2018)
KELLY: I do water aerobics, and here, in the health gym.

(Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

> KAREN: I work out here on Tuesday and Thursday. On Monday and Wednesday, I do there with another programme. We go everywhere. Everywhere that offers an activity, we participate.
>
> (Karen, health gym participant, age 59; programme 1, interview on June 14, 2018)

> CHARLES: Who participates here is invited by an association to play there. They go there and play more times, and they come here and play too. What happens in the association is that there´s no teacher there. So, they get together and play on their own.
>
> (Charles, HPE professional, age 39, programme 4, interview on November 14, 2018)

(5) Reduction in medical appointments: In terms of the older adults´ health behaviour, there was a reduction in medical appointments that were required by them. Afterwards being engaged in the programmes, the older adults reduced the number of visits they made to physicians in the health centre. In a public health system like SUS in Brazil, this is important to diminish queuing for services delivery. The older adults were aware they had access to medical services to assist them. However, while activating bodily practices as GRR, they chose to use it regularly to cope with their problems and improve their health, which in turn, reduced their need of seeing a doctor.

> MICHELLE: We realize that there is an improvement. The people who come here [health centre] don´t participate regularly there [health gym]. And vice versa, the people who are there, don´t come here so much. The matter of seeing a physician is to have something different to do, not necessarily a health problem.
>
> (Michelle, health centre´s coordinator, nurse, age 41, interview on October 02, 2018)

> SARAH: I realize clearly that during this period many people who were always here crying in my room, they don´t come anymore. They are there. And I look at the street and they're leaving. They used to come to see the physician very often. There was no month that they were not here. And now they don´t come. It [health gym] decreases medical appointments, nurses' appointments, demands for being listened to, people complaining, because they already have that space to speak. I think that she [HPE professional] reduced the demand of patients coming repeatedly to the health centre.
>
> (Sarah, health centre´s coordinator, nurse, age 51, interview on September 27, 2018)

(6) Comprehensibility: Regarding the element of comprehensibility, there was a recognition among the older adults regarding the aging process and the changes it brought along (‘*because we're in an age that our brain is likely to slow down*’[31]). Events in life were seen by them as experiences that could be bearable. They showed awareness about their life conditions, mainly about the health problems they had to deal with. Moreover, they demonstrated a sense of reality (‘*Each one has their problems and does in the way they think*

[31] Linda, health gym participant, age 78, programme 1, interview on June 28, 2018

it´s the best'[32]*, 'Everybody has problems in life'*[33]*).* They seemed to understand what was happening around them and showed confidence to deal with the life situation ('*If you are well, this is logical, it will pass'*[34]).

> KELLY: I get up at 6am or sometimes, even before. To get here early [laughs]. And my husband said, 'But at this time?' And I say 'yes, I feel good and I won´t stop going'. As long as I can come and walk, I'll keep coming. That's what makes me feel good. I feel powerful to be here and to have the strength I have today and I didn´t have before... a strength to live, to move forward because when we have many health problems, surgeries, we get very sad and think it's the end of life. And no, then we're here... now I know that every day is a gift for me.
>
> (Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

> LINDA: I live in this way, as much as possible. I´m under treatment for my spine, I take pills. I come to get my medicine here. So, I'm fine, I feel good. I feel better in health. Thank God I can walk and do my housework.
>
> (Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

> KAREN: I was with panic syndrome. I was cured. I'm great. But it's the exercise ... I'm sure it's the exercise.
> NANCY: We were born and raised in the countryside. My parents had eleven children, so it was a great suffering. There was nothing. There was no one to give clothes... when a child was born, there wasn´t what to put on the child. We cut a piece of cloth and of an old blanket to dress the child. I tell you, in my raising situation, I just didn´t starve. Neither dresses, it was one for a week and another for another week. And a dress to go to service in the church. I wasn´t healthy. At the end of the year, my father sold what he had, what was left, to buy medicine for us. Life wasn´t easy. Today I don´t even want to remember that life that I passed. Thank God, I'm here. What we have to suffer, we suffer, even when God wants. And then, raise your head and... I'm fine, thank God. Today I have my house, I have my children who love me. My children work, everyone has their home.
>
> (Karen, health gym participant, age 59; Nancy, health gym participant, age 80; programme 1, interview on June 14, 2018)

They recognised that they have been offered opportunities for continuous learning through the programmes *('there is always something new for you to learn'*[35]*, 'you're always learning'*[36]*, 'we learn a lot and we´re well informed'*[37].) Thus, there was a recognition that learning occurred, which contributed to improving the older adults´ cognitive capacities.

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32 Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018
33 Mary, health gym participant, age 73, programme 1, interview on June 28, 2018
34 Emily, health gym participant, age 57, programme 2, interview on September 28, 2018.
35 (Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)
36 (Sharon, health gym participant, age 55; programme 3, interview on October 01, 2018)
37 (Paul, health gym participant, age 70; programme 3, interview on October 02, 2018)

> MARY: I think we learn the importance of the activity. Because sometimes we think, why will I exercise? But when you start doing it, you feel better, you feel good. So, you learn to value this activity. You even learn to drink water. At the time while you are doing physical activity, it is important for you to drink water. Not only here, it´s important to continue also at home. Especially when we get older, we forget to drink water. And the elderly needs more water than the younger person. Not that we need more, it's more important to us. We can´t drink little water. Hydration is very important, even for the brain. I think the activity group teaches you how to educate yourself, how to educate your body and everything. Physical activity teaches you everything.
>
> (Mary, health gym participant, age 73, programme 1, interview on June 28, 2018)

(7) Self-perception: In addition, the older adults were able to have an experience of self-perception. Because they were in contact with others, they were able to observe and compare their own behaviour with that of peers. While interacting with others, they experienced a reappraisal of situations they were facing and tried to be more optimistic about their lives.

> KELLY: You look at people with much more serious problems than we have. Why were we complaining? We should be very happy to be able to walk, to eat, to have a shelter to live. Then, there´s no point thinking that we have bigger problems than the others. There are people with a lot of things, if we observe more the others.
> ALICE: It's good for our health, for our souls too because here we know people with many problems, and we see that our problem is nothing.
>
> (Kelly, health gym participant, age 58; Alice, health gym participant, age 52; programme 2, interview on September 26, 2018)

In this regard, there was a realisation that participation in bodily practices led them to personal changes and health development. The participants demonstrated a comprehension of the benefits that engagement in bodily practices brought to their lives. With an increased perception of themselves, they showed awareness of the inner processes that happened to them.

> LAURA: I think it is everything for our health. Since I came here, it helped me a lot.
> SHARON: My Goodness, my health improved 100% after coming here. Besides making me feel well, bringing benefit to health, it´s such a friendship we have with all.
>
> (Sharon, health gym participant, age 55; Laura, health gym participant, age 47; programme 3, interview on October 01, 2018)

> KELLY: I improved my health a lot by exercising.
> DIANA: E depois que eu entrei aqui, eu mudei completamente.
>
> (Kelly, health gym participant, age 58; Diana, health gym participant, age 64; programme 2, interview on September 26, 2018)

> MARY: For me it's everything because besides improving the physical part, I think the emotional improves a lot.
>
> (Mary, health gym participant, age 73, programme 1, interview on June 28, 2018)

> KAREN: I had something. It was depression. In the afternoon there was something inside here that seemed to be a hole. You know that emptiness that didn´t fill for nothing. I was feeling so alone. It seemed that my husband and my two children no longer liked me. There was none of it. It was me.
>
> (Karen, health gym participant, age 59; programme 1, interview on June 14, 2018)

Overall, there was a recognition among the older adults that life situations could be handled. The programmes directed stimuli at an increased capacity of understanding regarding the older adults internal and external environments, which facilitated their perception of events in life as possible to deal with.

(8) Meaningfulness: The component of meaningfulness was related to how older adults´ experience bodily practices and their motivation to persist in the programmes. They perceived the experience as rewarding and relevant. The strong-SOC older adults, while confronting life events (e.g. retirement, moving to a new city, children and grandchildren leaving home), could overcome the sensation of emptiness through engagement in new activities such as bodily practices ('This here became their occupation too[38]', 'I think this strengthens this matter of purpose in life, pleasure of living'[39]).

> KELLY: If there are invitations to dance... there are several performances of the divas... We feel good in participating. (...) we feel more willing to exercise, to come to the health gym, to make an effort because if we are isolated at home, we have no willingness. The happiness that I also feel of being together with the group is very good.
>
> (Kelly, health gym participant, age 58; programme 2, interview on September 26, 2018)

> KIMBERLY: We count the hours to come here. We have a very good group, we interact. It's very good.
>
> Kimberly, health gym participant, age 62; programme 3, interview on October 02, 2018)

> LINDA: I don´t like missing because I feel good. For me it means everything ... how can I explain this, for me, I'm great. I feel good. I've improved a lot. I'm happy.
>
> (Linda, health gym participant, age 78, programme 1, interview on June 28, 2018)

> KAREN: The exercise makes us feel good about ourselves. Because it did to me. Because I didn´t feel well. Now I feel good. I think exercise is everything.
> ELIZABETH: I don´t live without the exercise. It seems like... the rice and beans aren´t essential, but the exercise is for me. Exercise is very essential for me.
> CAROL: It occupied the empty space that was missing.

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[38] Charles, HPE professional, age 39, programme 4, interview on November 14, 2018.
[39] Barbara, HPE professional, age 43, programme 2, interview on September 26, 2018.

(Karen, health gym participant, age 59; Elizabeth, health gym participant, age 57; Carol, health gym participant, age 55; programme 1, interview on June 14, 2018)

Additionally, the participants perceived the activities related to bodily practices as challenges, such as the dance performances in public. They put effort into it and experienced satisfaction while meeting the challenge (‘For me, the best thing is to give dance performances. I thought that at my age, 66, I wouldn´t dare to stage’[40], ‘It was the first time we presented. At our age, we didn´t think it was going to happen’[19]) Furthermore, they felt they became an example for others (‘I´m happy to know that in our age we bring something to young people to see’[41]).

Bodily practices demonstrated a potential to challenge participants, mainly those who were very shy, to overcome limitations and develop new abilities towards personal growth.

> CHARLES: That's what I say is the power of the sport. The people who come here who are shy or who do not expose themselves so much, slowly they are letting themselves know the sport and they expose themselves.
>
> (Charles, HPE professional, age 39, interview on November 14, 2018)

> ANNE: This thing of you forcing yourself to be in a different place, doing a different thing, is what will... even in such tiny, almost imperceptible ways, will bring that change. I find it very interesting when people notice these changes.
>
> (Anne, HPE professional, age 34, interview on June 14, 2018)

In general, bodily practices appeared to be subjectively important to older adults (‘it´s everything for me[42]’, ‘it´s essential[43]’, ‘it´s wonderful[44],[45]’). The health-promoting programmes were seen by the older adults as rewarding and worthy of commitment. The maintenance of participants’ attendance over years along with their comments on their willingness to continue suggest that they are highly motivated to sustain their involvement in bodily practices.

Overall, following Antonovsky´s definition and based on the data set, it was possible to infer that the older adults enrolled in the four programmes have a strong SOC. It became apparent that they did not feel victimised by life events and conditions as a weak-SOC person was expected to be. On the contrary, they showed confidence in confronting stressors because

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[40] Eve, health gym participant, age 66, programme 2, interview on September 28, 2018.
[41] Diana, health gym participant, age 64; programme 2, interview on September 26, 2018.
[42] Mary, health gym participant, age 73, programme 1, interview on June 28, 2018.
[43] Catherine, health gym participant, age 48, programme 2, interview on September 28, 2018.
[44] Janice, health gym participant, age 43; programme 2, interview on September 28, 2018.
[45] Grace, health gym participant, age 54; programme 2, interview on September 28, 2018.

they saw their problems as comprehensible and they recognised that they had strengths that could support them with coping. They perceived that bodily practices were one of these strengths.

To summarise, I identified that the older adults engaged in bodily practices as a means of addressing health problems. The fact that older adults joined a programme voluntarily suggests that they already had some degree of manageability. The bodily practices programmes were activated by them as GRR to handle life. While going through the experience of moving with others as a community, they found opportunities for personal development in multiple dimensions: social, emotional, cognitive and physical. Hence, they could build up further GRR interrelated with the four dimensions, which reinforced their capacities of comprehensibility, manageability and meaningfulness.

In conclusion, participation in bodily practices enabled the older adults to activate additional GRRs, thus, strengthening their SOC and improving their health and wellbeing.

6. DISCUSSION

The present study provides evidence that salutogenic approaches to working with bodily practices for older adults might foster the development of cognitive, physical, emotional and social dimensions of health and wellbeing among participants. The study confirms that older adults recognise bodily practices as GRR that assist them to cultivate life.

This project took as a starting point the expectation raised by health agendas worldwide that PE might play a key role in health promotion. This study addressed the research problem of a lack of knowledge about how HPE professionals might help older adults from a disadvantaged context in the 'process of becoming' healthier (QUENNERSTEDT, 2019) through the medium of movement.

In addition, the study considered the growing number of the elderly population in Brazil and globally, who have lived a longer but not necessarily a healthier life (WHO, 2015). This project recognised the need for advancing our understanding about the role of bodily practices as a factor that might facilitate healthy ageing, beyond disease prevention (PNUD, 2017).

This inquiry was concerned with investigating alternative explanations for the relationship between PE practices in a broad sense (including public health settings) and health, without being restricted to the mediating notions of physical fitness and physical activity (KIRK, 2019). The investigation began with the assumption that pathogenic and preventative practices are not sufficient to enable individuals and communities to fully experience health development to the extent they might have a potential to do.

In view of this context, two main research questions guided the study. First, I posed the question of how HPE professionals have delivered bodily practices for older adults as means of health promotion. In other words, what practices HPE professionals have mobilised to help older adults in becoming healthier?

The findings point to the answer of caring practices, connected with what Kirk (2020) called 'pedagogies of affect'. Kirk used 'pedagogies' to refer to 'the organization and alignment of curriculum, teaching, learning and assessment in ways that render physical education inclusive, fair, and equitable as an embodied experience for young people, in order to empower them.' (KIRK, 2020, p.105); and, the author adopted the term 'affect' to refer to the affective domain, including constructs such as motivation, caring, body image, self-

esteem, resilience, coping, happiness, among others. I acknowledge that Kirk thought of 'pedagogies of affect' for PE school context, however, I consider that this notion can be extrapolated to older adults´ lifelong learning of bodily practices.

Second, I raised the question of how participation of older adults in bodily practices contribute to their health development. The findings confirm that bodily practices function as GRR that help older adults to manage stress and experience life positively, which in turn shapes their SOC. Importantly, the results provide an insight into bodily practices´ role of boosting further GRRs through multiple dimensions of health and wellbeing (social, emotional, cognitive and physical), towards personal growth.

Through constant comparisons among the four programmes, the key findings of this study indicate four elements that the HPE professionals adopted as practices for working with older adults for health development: a wide view of health, ethics of care, holistic care and community-based approach.

Furthermore, the results suggest that the integration among these practices helped older adults to build up cognitive, physical, emotional and social GRRs, such as the creation of a community of movers. The empirical data show that HPE professionals provided older adults with bodily experiences that assisted them to see their life as comprehensible, manageable and meaningful, thus, to maintain their SOC.

The discussion will be presented in five sections. First, the four elements that were identified as the HPE professionals´ practices will be discussed. Second, the discussion will focus on how the integration of these practices can be connected with older adults´ health development. Third, the idea of bodily practices as a medium for connecting people will be developed. Fourth, based on the identified practices, I suggest the development of an approach - community of movement for life cultivation. Finally, the discussion will emphasise the importance of context for mobilising salutogenic and pedagogical practices.

6.1 The HPE professionals´ practices

As presented above, the HPE professionals´ practices were formed in this study by four elements: a wide view of health, ethics of care, holistic care and community-based approach.

A wide view of health was identified through the HPE professionals´ practices of looking at the older adults as persons, and of recognising the ubiquity of stressors in life.

Aligned to this orientation to health, the HPE professionals adopted practices of ethics of care, showing attentiveness to the older adults and respect for limitations caused by age. Holistic care refers to the way the HPE professionals provided care for the older adults in multiple dimensions (physical, social, emotional and cognitive). Still, the results suggest that the HPE professionals carried out a community-based approach, as they showed a concern with the creation of ageing-friendly environment to foster older adults´ participation and empowerment.

A wide view of health

A paradigm for health consists of a set of beliefs about what is understood by health and a set of practices towards developing and maintaining health. Quennerstedt (2019) emphasises that we should know what assumptions about health are adopted by any research or practice in order to understand what is said and done in name of health.

The findings indicate that the four programmes adopted a wide view of health, which influences the HPE professionals´ practices regarding the delivery of bodily practices for older adults. This theme was likely to emerge because theoretical sampling directed the selection of programmes, having the concepts of bodily practices, salutogenesis and comprehensive health as a guidance.

As expected, the results confirmed that the programmes were directed primarily at health promotion, although the HPE professionals considered their role in disease prevention as well. With a salutary focus, the HPE professionals did not look at the older adults as patients suffering from certain diseases, but as persons carrying life stories. Thus, the actions were not centralised on diseases or injuries that the older adults may have.

Working with the complexity and all aspects of the person instead of focusing on particular diseases or risks was one among other points made by Antonovsky (1987, 1996) as the core of salutogenesis. For Antonovsky (1996, p.14), it was ‘impermissible to identify a rich, complex human being with a particular pathology, disability or characteristic’. The author explained that it is needed to give attention to the human being who has a pathology not only because it is a matter of moral, but also because it leads to better understanding of ‘the person´s state of health’ and to increased access to a richness of information through the ‘story of the person’.

In this line of thinking, Federici et al. (2014), based on Spinoza´s ideas of joy, argued that the HPE professionals´ work with bodily practices encourages action in contrast to passivity. Then, beyond establishing a relationship physician-patient surrounded by notions of deficits, diseases and death, the HPE professionals can focus on the person, and indeed, see her as a human being.

The three groups of participants (HPE professionals, health centre´s coordinators and older adults) recognised the ubiquity of stressors in life. However, they did not put diseases, injuries and limitations at a central place in their experiences.

A wide view of health implies that stressors are considered to be part of living, which means the stressors are influenced by life conditions. As Antonovsky (1979) noted, everyone is swimming in the river of life, somewhere, on the ease and dis-ease continuum.

Thus, the HPE professionals did not attribute responsibility to the older adults for their life stressors. Instead, they stimulated the creation of new ways of living through community participation and empowerment. The study shows that the programmes served as GRRs and catalysts for personal and community change.

The study indicates that the adoption of a wide view of health induced the mobilisation of HPE professionals´ relational qualities (i.e. being affectionate, sensitive and charismatic with others) and shaped a set of practices, which can be summarised as attentive listening, regular interaction, relational time, collection of information through pre-participation forms, and the suggestion of positive names for group identification. The HPE professionals got to know each older adult, including their name, age, job, family issues, interests, likes, dislikes, neighbourhood and experience with bodily practices.

The study confirms that when the older adults´ groups are not labelled by disease names (e.g. hypertensive, diabetic) and they participate in the choice of alternative names such as senior athletes, divas or learners, they perceive themselves positively rather through the deficit lens of diseases.

With a wide view of health, the HPE professionals also carried out a practice of looking at the older adults with interest. This way of looking at the person is characterised by the presence of humanisation.

As emphasised by the National Policy of Humanisation in Brazil (BRAZIL, 2013), humanisation is related to the appreciation of participants as autonomous, co-responsible and

protagonist subjects in the ‘process of becoming’ healthier along with health professionals and managers who provide health care services.

Humanisation operates through an ethical logic that involves stakeholders´ attitudes of being inclusive and attentive, and sharing responsibilities within the scope of health care services (BRAZIL, 2013).

The practice of focusing on the person enables the HPE professionals to gain knowledge about how to increase the older adults´ motivation to persist in bodily practices. In turn, the older adults´ awareness of the HPE professionals´ genuine interest in their lives is associated with a feeling of gratitude and willingness to maintain their participation.

Moreover, looking at the older adults was a form of operationalising the concept of humanisation that facilitated the development of relatedness between the HPE professionals and participants through the creation of a relationship of trust, commitment and attachment.

In this regard, a review of studies grounded on self-determination theory (SDT) indicates that relatedness is one out of three basic psychological needs (along with autonomy and competence) that shape one´s motivation to engage and persist in sports, physical activity and physical education (VAN DEN BERGHE et al., 2014). Thus, the practice of focusing on the person is relevant for identifying the health needs of older adults and fostering their motivation to engage and persist in bodily practices.

As claimed by some researchers (such as Yara Carvalho, Alex Fraga, Mikael Quennerstedt, David Kirk, Louise McCuaig and others), this study confirms that there are alternative ways for HPE professionals to work with health promotion, which is possible to be carried out by a comprehensive perspective on health. Importantly, the findings indicate that the adoption of a wide view of health is connected with other practices, like an ethics of care.

Ethics of care

Ethics of care is the second theme generated by this study. Ethics of care relates to moral concerns for the responsibility to meet the needs of others (HELD, 2006). It is essential for any health promotion initiative since the main goal of health work is to provide care (MERHY, 2014).

Using the lens of salutogenesis, the findings provide an insight into the HPE professionals´ attitudes of caring that functioned as GRR for the older adults to develop their

health. The HPE professionals operationalised an ethics of care mainly through three practices: (1) showing attentiveness to older adults, (2) respecting their limitations caused by age, and (3) conducting multi-professional work with other health professionals. The HPE professionals mobilised their abilities of being relational, affectionate, supportive, and attentive in order to provide care for the older adults.

The HPE professionals themselves served as GRR for the older adults by recognising the psychological needs of participants and, responding to these needs through listening carefully to them. Attentive listening enabled the older adults to unburden themselves and handle tough life situations. Hence, the HPE professionals assisted the older adults when they played a role of a friend, listener or counsellor who was willing to help whenever the older adults may need support.

Corroborating this finding, McCuaig and Quennerstedt (2019) explored Australian teachers´ health work and they found that the health-related caring behaviour of teachers was a resource to promote health and wellbeing not only among students, but also for the teachers themselves.

In the present study, the ways in which the HPE professionals cared for the older adults reveals an act of embrace of whatever the participants presented as health needs. The HPE professionals responded to these needs through the creation of affectionate relationships.

Attentiveness represented the main form of how the HPE professionals embraced the older adults´ health needs. It referred to inquiring older adults about their daily life, listening to, observing and responding to them with genuine interest and attention.

The data support the finding that the existence of an ethics of care is associated with the creation of bonds between who is caring for and who is being cared for. Furthermore, the caring behaviour of the HPE professionals appeared to influence on how the older adults themselves showed empathy for peers and adopted an attitude of caring for others too.

The findings that HPE professionals´ behaviours were based on showing interest, attention, willingness to help, responsiveness, awareness and attentiveness to participants fit with physical education literature describing a caring climate and teachers´ caring behaviours.

For instance, Larson and Silverman (2005) suggested that personal biography, similar beliefs and interests have a strong influence on teachers adopting a caring behaviour. Larson (2006) emphasised that students noticed the attention, recognition, respect and help provided

by teachers. This perception influences on how students saw the quality of relationships. Gano-Overway (2013) pointed out that students´ perceptions of a caring climate was associated with greater empathy for others and predicted positively prosocial behaviours.

In the context of undeserved youth, a study by Newton et al. (2007) examined the difference between caring-based and traditional interventions to a physical activity programme in relation to the participants perceptions of a caring climate, motivational climate, enjoyment, future expected participation, and empathetic concern. The authors found that the youth participating in a caring-based physical activity program perceived their situation to be more caring and they indicated greater empathy as well as higher expectations about future involvement than participants in the traditional group.

In the context of the present study, another form of care that the HPE professionals´ provided for older adults was showing respect for limitations caused by age. Participants perceived that the challenges and tasks set by the HPE professionals as optimal. They acknowledged that they were involved in a safe and balanced-load practice. The HPE professionals showed responsibility and competence to find a good balance in terms of physical demands and older adults´ capabilities for performance.

It is well established in physical education literature that offering optimal challenges is key to meaningful experiences and to increasing participants´ motivation (VAN DEN BERGHE et al., 2014). If the challenge is too big for participants, they get frustrated and demotivated. On the other hand, if the task requires lower capabilities, the participants get bored and demotivated too. Hence, it is crucial that HPE professionals have the competence to balance demands with participants´ capabilities. This is even more important with older adults, who are more susceptible to injury than younger people.

It is important to highlight that the regular and long-term attendance of participants in the context of bodily practices programmes favoured opportunities for HPE professionals to adopt an ethics of care and stimulate multiple dimensions of health and wellbeing, by means of holistic care.

Holistic care

Connected with an ethics of care, the third theme generated in this study was holistic care. The results indicate that holistic care might occur when the HPE professionals consider

participants entirely as a person and recognise their emotions by establishing with them a caring relationship.

Holistic care is mainly used within nursing as a comprehensive model of caring, which acknowledges the person as a whole human being and the interdependence among physical, physiological, psychological, social and spiritual aspects of one´s life (MCEVOY; DUFFY, 2008). Holistic care has its philosophical basis in holism, which views an individual as a bio-psycho-social unity (PAPATHANASIOU, 2013). In holism, the person is not seen as a sum of body parts, but as an entire unity of body, mind and soul (PAPATHANASIOU, 2013).

The findings point out that bodily practices enabled participants to experience care holistically, not only physically as usually happens in pathogenic, disease-focused interventions. In other words, the participants perceived that they made improvements in four dimensions of health and wellbeing: social, emotional, cognitive and physical.

Of particular interest of this study, this result suggests that bodily practices might be a relevant tool for realising multiple potentialities of older adults when conducted with salutogenic and pedagogical approaches. This assumption finds in the physical education literature the argument that human movement offers a wide range of possibilities to foster learning through the interaction of the cognitive, psychomotor and affective domains (METZLER, 2011). Even when one domain is prioritised, the others might be developed through bodily practices.

The data confirm that, in general, participants join bodily practices programmes prompted by a biophysical need (e.g. weight loss, pain, illness). However, throughout the programme, the HPE professionals stimulated multiple dimensions of health and wellbeing through diversified activities, contents and recreational events.

Hence, what the findings suggest is that the older adults´ motivation to continue in the programmes is associated with the integration of the four dimensions. Therefore, the physical aspect appeared to not be the most important for older adults. Participants´ perceptions indicated that the social aspect promoted through bodily practices was the most meaningful for them. This finding confirmed the results of other studies that indicated that older people persisted in bodily practices/physical activity due to experiences of friendship, pleasure, caring, joy, happiness, wellbeing and social interaction (CARVALHO et al., 2016; PINTO; GOMES; ALMEIDA, 2018; SANTANA; CHAVES MAIA, 2009)

Furthermore, the data support the finding that the HPE professionals cared about the older adults´ emotions and psychological wellbeing. Besides their caring attitudes, the HPE professionals planned and delivered activities directed at the enhancement of self-esteem, self-regulation, body image, self-perception, among others. Also, the HPE professionals had a concern to encourage interaction among participants as much as possible. Thus, the findings confirm that more than offering opportunities to be physically active, the bodily practices programmes enabled the older adults to experience continuously socialisation and personal growth.

Community-based approach

The fourth theme grounded in data was the use of a community-based approach throughout the programmes. A community-based approach is concerned with enabling communities to analyse their reality and to carry out solutions to local development problems (UNHCR, 2008).

The findings indicate that the HPE professionals played a role as facilitators of community empowerment. The practices they carried out favoured the development of a sense of community among older adults. The HPE professionals addressed community concerns by creating an inclusive environment that stimulated the older adults to participate effectively and to assume control over decisions that influence their health and lives. Moreover, they adopted other practices like sharing responsibilities and authority with participants, providing information, co-creating opportunities for participation, encouraging ownership of community spaces, creating an age-friendly environment, and stimulating decision-making.

Overall, these HPE professional´s practices represented an effort to strengthen the older adults as a community and to foster their empowerment. The identified practices suggest that the HPE professional´s work was directed at enabling participants to build capacities and make decisions that impact on their health, instead of focusing merely on participants´ health behaviour change (as with a pathogenic orientation).

It is important to highlight the relevance of such findings as older adults are likely to experience vulnerability (GRUNDY, 2006). To illustrate this, Barbosa et al. (2017) found a high prevalence (52%) of individual vulnerability among older adults attending primary health care programmes in a Brazilian city.

Vulnerability can be understood as socially constructed (SCHRÖDER-BUTTERFILL; MARIANTI, 2006). It is shaped by inequalities, lack of empowerment and of resources to

deal with risks and threats to health and wellbeing (SCHRÖDER-BUTTERFILL; MARIANTI, 2006).

Schröder-Butterfill and Marianti (2006) developed a framework for understanding vulnerability among older people. They considered the existence of four domains of vulnerability: exposure, threats, coping capacities and outcomes. In this framework, an individual or group are more or less exposed to certain threats. Depending on the coping capacities the individual/group has for dealing with the threats, the individual/group may face negative outcomes. In general, older people are exposed to a complex of contingencies and risks, such as frailty, disability, physical limitation, health problems, social exclusion, reduced income, dependence, loneliness, harm and violation, among others (BARBOSA et al., 2017; SARVIMÄKI; STENBOCK-HULT, 2016; SCHRÖDER-BUTTERFILL; MARIANTI, 2006).

Thus, the HPE professionals´ practices of recognising older adults´ strengths and creating with them opportunities for lifelong development of capacities through bodily practices might contribute to challenge the vulnerability faced by them and move towards personal and social change.

Changes may occur in older adults´ lives in small forms, but still significant, like they become more independent and more integrated to a community that provide social support to each other, and they become more able to manage individually and collectively the risks and threats they are exposed to. For instance, the community helped its members who were unemployed to find a job by sharing information about vacancies. Another example was that they created a community library for all participants to have access to knowledge and culture, as many of them did not complete basic formal education.

In this sense, we can say of a ‘group SOC’, as Antonovsky (1987) suggested. A group can have a common way of seeing the world and it can serve as a social environment that provides experiences and shapes the SOC of its members. Group SOC is even more relevant because there are some challenges in life that can only be addressed collectively, not by individuals (ANTONOVSKY, 1987). For example, in Programme 3, the participants initiated a community mobilisation to strive for the maintenance of the HPE professional, who was temporarily at risk to be fired. Hence, the context of bodily practices programmes seemed to be empowering for older adults.

6.2 Connecting HPE professionals´ practices with older adults´ health development

The four themes (wide view of health, ethics of care, holistic care, and community-based approach) identified in this study as HPE professionals´ practices in health-promoting programming might be considered as pedagogical and salutogenic. The practices can be viewed as pedagogical in the sense they focus on instructional behaviours based on caring for participants alongside bodily practices as subject matter and the active participation of older adults in lifelong learning. Additionally, the practices can be considered as salutogenic due to their focus on older adults´ strengths and potentials for coping with life events.

As suggested by Antonovsky (1979), this study confirms that the ways that the HPE professionals´ practices linked to older adults´ health development is related to building GRRs and strengthening SOC.

The findings support the conclusion that bodily practices serve as GRR themselves by means of enhancing physical fitness and functional capacity. More than this, the impact of bodily practices on participants´ wellbeing is broader than their physical effects. The programmes facilitated older adults´ health development by supporting the advance of further GRRs, such as the creation of a community of movers, knowledge and lifelong learning, self-esteem, self-regulation, resilience, vitality, self-confidence, mood enhancement, and self-care. With a salutary focus, the bodily practices programmes expanded the older adults´ set of GRRs to be mobilised whenever they needed to cope with stressors and maintain their health and wellbeing.

In the physical dimension, the older adults perceived positive benefits in terms of weight loss and improved conditioning, cardiorespiratory endurance, flexibility, agility and balance. Participants´ perceptions indicated that experiencing an improved physical fitness was related to a growing feeling of physical competence, higher levels of independence to perform life activities, greater mobility, quality of sleep, posture, physical wellbeing, pain relief, reduction in the use of medicines, and positive body image.

A review conducted by Rhodes et al. (2017) on physical activity and health benefits showed that musculoskeletal fitness was positively correlated with functional independence, bone health, mobility and quality of life. Also, the review pointed out that routine physical activity participation leads to reduction of depression and fall risk, and improvement of cognition and psychological wellbeing of older adults.

In the present study, the participants perceived changes in their body size with satisfaction, which appeared to lead them to reduce body image disturbance that some of them

suffered from in the past. Grogan (2006) highlighted that weight loss tends to impact on the extent to which a person experiences satisfaction of her body. In this respect, Varnier, Almeida and Gomes (2016) highlighted that a fat body carries a moral and physical burden, then weight loss represents an opportunity for the person to rebuild identity and social acceptance.

Studies have shown that positive body image is associated with health benefits, such as lower depression and higher self-esteem, thus being an important predictor of one´s mental health (CULLEN et al., 2004; GILLEN, 2015; GROGAN, 2006). In this regard, within the school context, it has been argued that HPE professionals might play a role in providing opportunities for the development of positive body image among participants (KERNER; HAERENS; KIRK, 2018).

In the social dimension, the community of movers was generated as an overarching GRR. The findings point out that HPE professionals served as facilitators for the creation of a community of older adults who shared an interest in learning together about health through the medium of movement. This study shows that bodily practices encouraged older adults to interact regularly with others. This interaction enabled them to experience a sense of community that added meaning to their involvement with the programmes.

This study reinforces the idea that bodily practices programmes provide older adults with opportunities for finding belonging to and integrating into a social network, as also suggested by other studies (HWANG et al., 2019; JOSEPH; SOUTHCOTT, 2018).

Regarding this social dimension, being part of a community seems to be particularly important for older adults who may experience life conditions that lead to social exclusion, isolation and loneliness (e.g. reduced contacts with friends/neighbours, low socioeconomic status, low competence; PINQUART; SORENSEN, 2001). Making new friends at an old age appeared to be meaningful to participants. The bodily practices programmes offered them possibilities for building new social ties. The older adults perceived that the development of their social dimension was the main contribution to their lives and wellbeing.

Similarly, Pinto, Gomes and Almeida (2018) noticed that sociability was an important element for participants who attended bodybuilding/resistance training sessions in a public gym. Hwang et al. (2019) found that community-dwelling older adults perceived that a group-walking program provided a sense of belonging that motivated them to socialise and reduced their feelings of loneliness.

The older adults in this study acknowledged the community of movers as a family. The regular interaction among participants throughout the long-term programmes enabled

them to develop attachments to one another as if they were family members. They had contact on a weekly basis, which facilitated connectedness among them.

Attachment to others is associated with the provision/reception of social support to/from others. The way the older adults received support from and offered to peers was through talking and listening to them about their problems. When they talked about their problems, they unburdened themselves. Thus, by providing social support to one another, the older adults developed collectively coping strategies, and strengthened themselves as a community.

The meanings of bodily practices to the older adults were connected with experiences of enjoyment, fun, socialisation, and creation of new relationships, which qualify positively their participation in the programmes. The older adults perceived bodily practices as positive experiences because the programmes provided increased opportunities for talking, having fun, and laughing with peers.

Thus, fun and enjoyment also appeared to be motivational factors for older adults to persist in bodily practices. Corroborating this idea, another study suggested that team sport training rather than resistance training was associated with a higher degree of enjoyment and intrinsic motivation mainly due to social interaction during the activity (PEDERSEN et al., 2017).

The concept of flow (NAKAMURA; CSIKSZENTMIHALYI, 2014) also helps us to comprehend that older adults´ motivation to continue in the programmes arose out of the positive experience itself. While moving with others, the older adults had fun, got fully involved in the activities, lost track of time passing and forgot their problems. It might be suggested, then, that they experienced a flow state, which was beneficial for them to regulate their emotions and cope with daily hassles.

In the cognitive dimension, the older adults found opportunities for knowledge acquisition and learning continuously in life. Health-related knowledge (i.e. nutrition, diet, posture, cooking, gardening, and how to exercise for health) acquired during the programme was a resource that older adults might mobilise to challenge inequalities, improve their life conditions and health.

Cognitive aspects are linked to health through the concept of health literacy[46] (NUTBEAM, 1998, 2000, 2008, 2009), which can be considered as a ‘health resource’

[46] According to Nutbeam (1998, p.10), health literacy ‘represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health.’

(MCCUAIG; QUENNERSTEDT; MACDONALD, 2013). Learning experiences among older people are connected with their feelings of accomplishment, competence, efficacy and sense of purpose in life.

In Japan, Saito, Kai and Takizawa (2012) developed a community-based educational programme to prevent social isolation by improving community knowledge and socialisation. The programme had a positive effect on older adults´ life satisfaction, social support, and familiarity with services, and a negative effect on loneliness.

In the emotional dimension, the older adults´ participation in bodily practices was related to increased self-esteem, self-efficacy, mood, resilience, vitality, self-regulation and self-care. While moving with others, the older adults were exposed to evaluation from peers and self-evaluation. Moreover, the HPE professionals´ practices provided them with meaningful experiences of relaxation, catharsis, joy and reflection.

These types of experiences are relevant for emotions regulation and psychological wellbeing maintenance. For instance, Yang and Conroy (2019) conducted an interventional study and the findings supported the efficacy of a mindful walking programme for reducing stress, anxiety, depression and displeasure among community-dwelling older adults.

According to Hewitt (2002), self-esteem construct is formed by four components: acceptance, evaluation, comparison and efficacy. In the context of the bodily practices, the four components were identified when older adults had opportunities to find acceptance as members of a community of movers. In addition, they received positive evaluation from others, made favourable comparisons with others perceiving that they all have problems in life, and felt satisfaction for activities performed (e.g. dance presentations, participation in senior games).

Overall, the study´s results support the conclusion that in the river of life, regular participation in bodily practices is a GRR that generates other GRRs (such as community of movers, self-esteem, vitality, among others) which, in turn, strengthen SOC and help individuals to stay closer to the ease side of the health continuum.

According to Antonovsky (1987), the importance of GRRs is the provision of the life experiences of consistency, participation in shaping outcomes, underload-overload balance, and emotional closeness (SAGY; ANTONOVSKY, 2000). The empirical data support the conclusion that the GRRs identified in this study provide these experiences, which are interrelated with SOC components of comprehensibility, manageability and meaningfulness.

For instance, as identified in this study, bodily practices promoted knowledge acquisition and lifelong learning among older adults. The experiences that emerged from

increased knowledge and engagement in learning were perceived by older adults as factors that enhanced their cognitive capacities (comprehensibility). This corroborates Antonovsky´s salutogenic model, in which cognitive GRRs provide consistent experiences that lead a person to seeing the world as comprehensible.

Consistency of experiences is expected to shape one´s capacity for comprehension of life situations, as structured and predictable. A good load balance constitutes the basis for the manageability element. Additionally, participation in decision-making alongside emotional closeness shape one´s capacity of judging if life events are worthy of investment, which refers to the meaningfulness component. Therefore, nurturing GRRs is likely to shape one´s SOC.

The findings indicate that participation in bodily practices helped older adults to see their world as comprehensible, manageable and meaningful. Throughout the programmes, the older adults found opportunities to unburden themselves, to develop coping strategies, to get social support and to develop new abilities that might assist them in handling life stressors. These experiences were related to older adults´ increased confidence in confronting stressors because they understood their problems and recognised that they had resources to support them with coping. The data set indicates that the older adults acknowledged bodily practices as one of these resources.

The HPE professionals supported SOC in older adults by nurturing their individual and community GRRs. The HPE professionals provided meaningful and enjoyable experiences to older adults by setting optimal challenges and stimulating interaction, socialisation, fun, self-perception and learning processes towards personal and community growth.

In explaining the dynamics of SOC, Antonovsky (1987) affirmed that adulthood would initiate a ‘downward trend’ in one´s SOC. To the author, an adult faces more stressors across the lifespan and life becomes more chaotic, in a manner that the person may not succeed to manage the challenges. Hence, a decrease in SOC levels would be expected at old age. Antonovsky (1987) said that ‘new pattern of life experiences’ (e.g. new group of friends, new job) could improve one´s SOC in adult life, but this would be rare to occur.

In contrast, Koelen, Eriksson and Cattan (2017) presented evidence from previous research that did not support Antonovsky´s assumption about SOC stability in middle and old age. The review demonstrated that SOC increases with age and develops over the lifespan. In line with the idea of SOC development in old age, this study has showed that bodily practices programmes helped older adults to initiate new experiences that enabled them to develop GRRs and cope with stressors.

I agree with Antonovsky (1987) that one or few encounters between a person with health professionals are not sufficient to make an impact on one´s SOC. So that, short interventions are not likely to improve participants´ SOC and health. Indeed, the findings suggested that long-term programming and structured and regular interaction among participants are crucial for enabling the emergence of new relationships, the development of affects, and the advance of GRRs.

Thus, what is central to help older adults to improve their SOC and health is to offer them new life experiences. Among a range of health professions, PE has a unique role to play in the health sector due to its potential to provide consistent, balanced and meaningful life experiences for people through the medium of movement, what Antonovsky (1987, p.126) called 'SOC-enhancing experiences'.

The extent to which participants will experience health benefits from participation in bodily practices depends on the quality of experiences that are provided by HPE professionals.

This study suggests that salutogenic and pedagogical approaches to bodily practices focused on holistic care might be an alternative for ensuring this quality. On the other hand, a technical and instrumental approach to exercise prescription, as adopted by pathogenic approaches, might not be sufficient for developing multiple dimensions of health and wellbeing.

Salutogenic and pedagogical practices are relevant for disadvantaged contexts like Brazil, where the population lives with serious inequalities. The relevance relies on the idea that salutogenic and pedagogical practices might be powerful forces for enabling people to comprehend their life situations and to identify and mobilise the resources that are available to them to strive for transformation in their ways of living towards life cultivation, social justice, happiness, health and wellbeing.

In sum, grounded in empirical data, an explanation of how bodily practices programmes might assist older adults in developing their health was generated by this study. During the programmes, older adults found opportunities to have meaningful experiences, including socialisation, lifelong learning, attachment, social support, enjoyment, participation, and empowerment. Through the medium of movement, they experienced a caring relationship with the HPE professional, themselves and peers. Moreover, they were stimulated to develop personally and collectively in the social, emotional, cognitive and physical dimensions of health and wellbeing.

The positive experiences of moving with others shaped older adults´ motivation to persist in bodily practices. The regular and long-term participation enabled them to continuously develop GRRs, which assisted the older adults to challenge social and old-age vulnerability.

6.3 Bodily practices as a medium for connecting people

In analysing the similarities across the four health-promoting programmes enrolled in this study, the findings showed that bodily practices enabled connectedness among older adults in such a way they became a community of movers. The programmes provided meaningful experiences of interaction, socialisation, fun and enjoyment for participants. Thus, bodily practices appeared to be a powerful means for facilitating encounters among people, and in turn producing caring relationships.

In the philosophical thinking of Spinoza (2016), to connect with other bodies means to open possibilities for experiencing affects. The philosopher emphasised the social dimension of the origins of affects. To him, an affect is what a body produces in relation to another body, that is, the variation between what a body is and what a body might be in the encounter with another body. Depending on the affects we produce, our 'power of acting', which corresponds to a tendency for persevering in existence, is increased or reduced (CORREIA, 2017). Thus, a greater 'power of acting' can be associated with life cultivation.

Spinoza (2016) explained that when one´s 'power of acting' is increased, the person experiences joy; on the other hand, when it is decreased, the person experiences sadness. In confronting sadness, the person tends to seek for new possibilities for experiencing joy, what involves a new effort to be affected and elevate 'power of acting'. In this pursuit, the person creates possibilities for discovering her/his body and has new experiences.

Interpretations based on Spinoza´s ideas help us to think that bodily practices can be a means for facilitating encounters, generating affects and enabling people to increase their 'power of acting'. Bodily practices are helpful as they can help a person to construct and widen her/his power of acting (CORREIA, 2017). Thus, bodily practices can be viewed as an 'art of life cultivation that might help to regain balance' by improving one´s vitality' (JETTE; VERTINSKY, 2011, p. 283).

Then, the challenge for HPE professionals is to create possibilities for people to connect with bodily practices and with others, pursuing the construction, widening and sharing of power of acting and movement (CORREIA, 2017). In this sense, the task of HPE

professionals might include helping people to increase their capacities to experience affects by moving with others.

In this endeavour, it does not matter the form of movement, but the experiences that each practice might offer. Bodily practices have a potential for giving continuity and fluidity to movement, in a way that 'playing soccer does not hinder playing basketball, surfing does not hinder dancing or trying gymnastics, or Le Parkour' (CORREIA, 2017, p.92).

Different forms of movement have a potential to induce interaction and enjoyment. PE has developed contents based on interaction, cooperation, competition, rhythm, expression, techniques and gestures, which are relational and culturally constructed (FEDERICI et al., 2014). Playing is a good example of a relational and 'soft technology of care' that cannot be prescribed as therapy, since it starts from the desire of the other (FEDERICI et al., 2014). So, playing cannot be delivered in a top-down way, it involves the perception of others and the ability of playing with them (FEDERICI et al., 2014).

Overall, PE can be considered a unique professional area that has a potential for nurturing people´s vitality and power of acting in multiple dimensions (social, emotional, cognitive, physical). Movement can be experienced by the integral human being, as a lived experience (STANDAL, 2015). Bodily practices can be pleasant, enjoyable and joyful. They can favour positive experiences when there is a clear intention of 'production of encounters'. They can help people to interact and increase their capacity to be affected by others, then to experience joy.

6.4 Community of movement: a way of working with bodily practices for life cultivation

In the school context, Pühse et al. (2011), argued for the development of a framework showing the ways in which HPE professionals might influence people´s health. Armour and Harris (2013) argued that 'PE-for-health pedagogies' are needed in order to qualify HPE professionals and enable them to work with health. McCuaig, Quennerstedt and MacDonald (2013) also advocated for the development of alternative ways for teaching and learning about health in PE. The authors showed a possibility for using salutogenesis pedagogically, in a manner that the work would focus on how to enable students to use physical activity as a resource to improve their lives.

The present study also adopted salutogenesis as a theoretical orientation, and it sought to identify what practices are critical for promoting health among older adults. And, based on these practices, to begin the development of an approach for working with bodily practices for life cultivation, what I suggest naming as community of movement.

By community of movement I mean the formation of a group in which connectedness emerges from people who move together. Community of movement emphasises movement as a medium for connecting people and helping them to experience affects and increase their capacity of being affected while moving with others. It is not just about moving to expend energy, but about moving with others in a way that it is pleasurable, relevant and meaningful. Also, community of movement opens possibilities for community action, which is central for transforming life conditions, thus, influencing health.

For the development of this approach, I found useful to draw on the requirements for designing PE pedagogical models, as suggested by Kirk (2013). According to the author, a pedagogical approach must have an alignment between learning outcomes and, the teaching strategies and subject matter that would enable the learners to achieve the former. Furthermore, there are 'non-negotiable features' in teaching and learning that must be present in practice to increase the likelihood of achieving the learning outcomes. However, the 'non-negotiable features' are not rigid, and they should allow some degree of flexibility, in a manner that they can assume different forms, depending on the context.

To best fit the context of this study, that is the health sector, I prefer to use the terms aspirations as suggested by Luguetti (2014) instead of learning outcomes, professional practices instead of teaching strategies, and subject matter.

In salutogenesis, the SOC concept is considered as crucial for a person moving towards the ease side of the health continuum. So, in the 'process of becoming' healthier, a strong SOC is desirable. In alignment with SOC´s structure and definition, the central theme of this approach can be described as seeing life as comprehensible, manageable and meaningful.

The aspirations of community of movement can involve:

- being capable of recognising and mobilising GRRs that are available to a person/community for cultivating life and becoming healthier;
- being capable of developing new GRRs;
- being able to perceive and motivated to engage in a multitude of ways that one can experience affects in connection with others through the medium of movement;
- and, being able to construct, widen and share power of acting and movement with others (CORREIA, 2017).

To realise such aspirations, there are some professional practices that might be more likely to help older adults. The constant comparative analysis across the four health-

promoting programmes enrolled in this study (which are different in context, format and structure), enabled the generation of four themes. These themes aligned the four programmes in terms of way of thinking and aspirations. What I suggest is that these four themes might be considered as 'non-negotiable features' for working with bodily practices for life cultivation. These features should be present in any programme that intends to promote health in multiple dimensions through a community of movement. They are described as:

(1) Focus on the person, not the illness: approach health as a continuum and explore the strengths, potential and resources participants have for coping with stressors that are ubiquitous in life. Focus on the person´s story of life instead of the illness or health condition one may have.
(2) Ethics of care: prioritise a caring behaviour that encourages participants to develop self-care and to build a caring relationship with others. Create opportunities for relational time and encounters.
(3) Holistic care: offer bodily experiences that stimulate multiple dimensions of health and wellbeing (social, emotional, cognitive, physical). Create opportunities that stimulate integration and connection among participants, development of self-perception and self-awareness, lifelong learning and knowledge acquisition, development of physical fitness, and 'felt experience of moving' (STANDAL, 2015). Avoid the focus only on the physical dimension.
(4) Community-based approach: facilitate the creation and sustaining of a community of movers that enable members to experience belonging, friendship, joy, attachment and social support through the medium of movement. Create an inclusive environment that respects limitations and differences among participants in a manner that favours them to feel comfortable with and equal to one another, and that encourages them to participate actively in decision-making processes regarding their own lives and community practices.

Additionally, professional practices might include listening to people and showing attentiveness to them, and being affectionate, sensitive and charismatic with participants.

In terms of subject matter, Haerens, Cardon, De Bourdeaudhuij, & Kirk, (2011) raised a question about what type of activity should be more effective for a health-based physical education pedagogical model.

The findings of this study showed that, in the context of health-promoting programmes with older adults, multiple types of activities (i.e. sports, fitness, low impact exercise, dance,

play) can enable participants to experience health development. So, there is no one best or most effective activity for strengthening SOC and developing health.

For example, Pinto, Gomes and Almeida showed (2018) how bodybuilding/resistance training supported participants to improve sociability. The authors add that the activity itself does not always correspond to the main factor related to health development, it works closer to the image of a bridge that guides participants to a range of possibilities for encounters and relationships (PINTO; GOMES; ALMEIDA, 2018).

Some would argue that sports might not contribute to older adults´ health due to possible psychological negative consequences attributed to competition (e.g. peers accusing each other for making mistakes, and experience of being defeated).

In this regard, Baker et al. (2010) highlighted the paradox in sport participation for older people, as it has a potential for positive development as for negative consequences. On one hand, several studies pointed that sport participation can provide older adults with support, empowerment, encouragement, constructive use of time, commitment to learning, positive values, social competencies, positive identity, perseverance, sense of achievement, personal growth, and social network (BAKER et al., 2010; DIONIGI, 2005; HEO et al., 2013; SEIPPEL, 2006; TAMANINI DE ALMEIDA, 2011). On the other hand, Baker et al. (2010) argued that further research on the negative consequences of older adults´ sport participation is needed. The authors raised issues about the potential of training to be excessive for older adults and put them at an increased risk of injuries. Also, when an older adult is not able to continue sports participation, he/she can experience negative feelings of shame, guilty and worthlessness (BAKER et al., 2010).

Seippel (2006) analysed how sports function as a social good in light of how people experience sport activities differently. The author identified seven meanings that people attach to sports, namely: joy and fun, keep fit (physical health), mental recreation, social integration, competition and achievement, expressivity, body and appearance. Hence, the meanings that people attribute to sports are not only oriented towards competitive achievements. Seippel (2006) showed that age is a factor that influences how people experience sports. The author indicated that mental recreation, fun, social integration and a desire to keep fit are central for older people in playing sports, more than competitive reasons.

In contrast, Dionigi (2006) revealed that competition was meaningful to older Australian athletes, who used sport activities as a means for negotiating meanings of old age, as well for empowerment and resilience during ageing process. Dionigi (2005, 2006) provided

another way of thinking about ageing and sport participation that considered older people´s willingness to compete to win and how sport context can be empowering for the elderly.

However, the author recognised the existence of contradictions, tensions and complexities surrounding older people´s participation in competitive sports. Dionigi (2005, 2006) found that older adults connected four meanings with their sport practices, which are: friendship and fun, competition, youthfulness, and a way to resist the aging body. To the author, the conflicting discourses mobilised by the older adults moved between friendly participation (as age-appropriate) and serious competition (as problematic).

In the salutogenic model, competitive sports could be a GRR or a stressor. It depends on how HPE professionals ensure an emotionally safe environment and create conditions for all participants to experience positive development in competing. It can be a stressor if aging process are denied by participants and professionals, if physical demands are overloaded and do not respect limitations caused by age, and/or if sport participation provides mostly negative experiences, such as failure and breakdown. On the other side, it can be a GRR if it offers optimal challenges and opportunities that allow older adults to experience an increased purpose in life, sense of achievement, resilience, empowerment, and capacity of coping.

Therefore, subject matter in this approach would be similar to what Standal (2015, p.159) argued about the model of movement literacy, ‘it is not so much a matter of specific activities, but more how the activities are practised’. What is important is to experience and find forms of movement that relate to the community´s culture and meet participants´ interests and needs.

Thus, bodily practices are indicated as a notion that involves a range of possibilities and activities that are culturally rooted and might be helpful in facilitating encounters and care.

Furthermore, bodily practices allow the exploration of what a body can do (Spinoza, 2016) instead of prescribing what a body should do. In this way, HPE professionals might help older adults to discover and explore their bodies´ possibilities through different forms of movement (CORREIA, 2017; FEDERICI et al., 2014).

In conclusion, community of movement might be one possibility for mobilising salutogenesis, pedagogy and bodily practices in practice. It might be a useful approach for helping older adults to cultivate life, focus on their strengths and develop their health in multiple dimensions beyond the physical aspect.

6.5 How is our river? The context matters

When Antonovsky (1987) suggested the metaphor of the river of life, he acknowledged that there are different types of rivers that facilitate or hinder the way the swimmers navigate. Some rivers are more dangerous than others and require different skills for swimming. And, swimmers may find more pleasure in swimming in a certain way rather than other. The relationship between a group of swimmers and the river differs from area to area. Thus, the context matters, and we need to take this into consideration.

There is no 'one-size-fits-all' model (KIRK, 2013) for delivering bodily practices for health. This study did not intend to provide recommendations to be adopted and followed by HPE professionals in their workplaces. Instead, it suggested one possibility that might be negotiated in the context of communities for helping older adults in the 'process of becoming' healthier.

Community of movement was generated from evidence based on four programmes, from different contexts. Each programme had its own way of conducting bodily practices with older adults, although they shared a similar way of thinking and aspirations. The professional practices were constructed in context, which appeared to be central for creating and sustaining a community of movement.

The context of the four programmes was different in terms of natural environment, place, political organisation, format, structure, type of activity, and community´s interests and needs. To illustrate, three programmes were affiliated to the health sector and one to the Sports department. Two programmes had the format of '*Academia da Saúde'* (Health gym), one was part of the actions of NASF-AB Team, and one was an independent health-promoting initiative from the city council. In terms of activities, Programme 1 used mainly chair-based or low impact exercise; Programme 2 was based on fitness, low impact exercise, dance and round conversations; Programme 3 used a diversity of recreational activities, group dynamics and low impact exercise; Programme 4 was sports-based, and included dance and low impact exercise. About place and environment, one programme took place in a small room within a health centre in a deprived neighbourhood, two programmes had their own space for the health gym adjacent to a health centre, and another one occurred in different places, such as gymnasium, community centres and also by the beach.

As described, the four programmes were different from each other. The HPE professionals´ practices assumed different forms in each one, also with the different groups they had within each programme. So, the way HPE professionals worked with older adults

was adaptive and flexible. Depending on the context, the professional strategies were modified to fit specific group needs.

We could learn from data that it is important to HPE professionals to know about older adults´ lives and the community and family context where they live. Observing them and listening to them were the ways the HPE professionals used to gain knowledge about older adults´ lives. It is also relevant to know their motivations, likes, interests, and preferences in terms of movement.

Also, it is important to gather information at community level, to understand it historically (with the socio-political, economic, educational and work context) and the natural environment in which it is based, in order to know the factors that influence people´s experiences in the community (VINLOVE, 2012).

Understanding the socio-cultural backgrounds is key to find potent ways for the 'production of encounters' among people and bodily practices. And, to gain understanding about the context, the HPE professionals should establish a meaningful and trusting relationship with participants, listening carefully to them and observing (VINLOVE, 2012).

6.6 Final comments

This doctoral dissertation took as a starting point the problem of how physical education can help older people to become healthier. It addressed the questions of: (1) how HPE professionals deliver bodily practices for older adults as means of health promotion and, (2) how participation in bodily practices contributes to older adults´ health development.

Hence, this study sought to investigate the responses that HPE professionals have developed in practice to the health sector, in terms of how to assist older adults to experience ageing positively and move towards the ease side of the health continuum through bodily practices.

The findings of the study confirmed that HPE professionals have a potential to respond to health challenges due to their professional capability for mobilising a salutogenic view of health. With the support of bodily practices, and pedagogical practices consistent with a salutogenic perspective, the HPE professionals demonstrated their capacity to facilitate health development among older adults.

In other words, HPE professionals showed their capacity to move away from a pathogenic orientation to health, by carrying out pedagogical practices consistent with salutogenesis with a focus on the provision of meaningful bodily experiences that might

enable participants to develop GRRs (such as the creation of a community of movement) and SOC components of comprehensibility, manageability and meaningfulness.

The study allowed us to perceive in what ways PE can contribute to the health sector that other professional areas may not, which refers to the mobilisation of relational skills in facilitating encounters between participants with themselves, and among them with peers, professionals, through multiple forms of movement in particular environments (FEDERICI et al., 2014).

Also, the findings indicated that pedagogical practices consistent with a salutogenic perspective enabled older adults to have positive experiences (socialisation, sense of belonging) that can be recognised as GRRs that might sustain older adults´ SOC and help them to live ageing positively.

Overall, this study suggested that PE might widen the contribution to older people´s health in multiple dimensions focusing on the creation of communities of movement. In this way, the focus of HPE professionals´ work would be directed at life cultivation (JETTE; VERTINSKY, 2011).

6.6.1 Limitations of the study

This study has some limitations, among these, the problem of not involving HPE professionals and health-promoting programmes from other Brazilian geographical and cultural areas, like the north, northeast and middle east regions.

Although the study indicated problems in the context of Brazilian initial professional learning in PE regarding the preparation for working in the health sector, this topic was not addressed due to methodological decisions, time constraints, and the fact that other studies already explored this issue.

Furthermore, it is important to recognise that the study characterised participants as older adults, however, some middle-aged adults who demonstrated willingness to participate in the research were also included. Despite their younger age, these participants were part of older aged groups engaged in bodily practices.

Finally, the inquiry did not examine the negative aspects and consequences of older adults´ participation in bodily practices, nor in relation to how the health-promoting programmes are organised and conducted. The barriers the older adults encounter to engage in the programmes were not analysed either. The study presented a mainly positive view of the work of HPE professionals with bodily practices in the health sector.

6.6.2 Future directions

This work sought to contribute to increased reflection in the areas of research, professional education and professional practice related to the fields of health and physical education. The practices identified in this study might be taken into consideration for future health-promoting interventions and programming, and for the preparation of future HPE professionals to work in public health settings.

In examining the HPE professionals´ practices associated with participants´ health development processes in the four programmes, the findings suggest some strategies to be prioritised by health-promoting initiatives, as follows: supervision of HPE professionals, high frequency of contact (long-term programming), age-friendly environments and community-based settings. These strategies appeared to be crucial to enable the development of caring relationships and the transformation of ways of living that influence older adults´ health.

In terms of future research, studies may focus on developing communities of movement with other HPE professionals and programmes in the field of professional practice and/or with students in the context of initial professional education. I suggest the development of action research to advance the proposed practices in dialogue with other realities. Additional studies may be concerned with the possibilities for learning to activate and contextualise pedagogical practices consistent with salutogenesis for health development in different settings and age groups, such as adolescents and high schools.

Another possibility would be to try out the salutogenic orientation in professional learning as means of investigating learning experiences for developing and activating relational skills and caring behaviours, which are at the core of salutogenic work.

For future interventions, this study suggests that PE´s role in health promotion might be to develop GRRs and strengthen people´s SOC. This is related to facilitating encounters, to help people to connect with others and to boost their capabilities for cultivating life. This might be also valid for the work of PE teachers. Then, a pedagogical approach for learning about health could be developed focusing on enabling students to comprehend their world, recognise and mobilise GRRs that are available to them, build new GRRs, and to see their lives as more meaningful, manageable and comprehensible.

7. CONCLUSION

This study was designed to advance the knowledge about how HPE professionals can promote health and make a realistic contribution to addressing the challenges the health sector has faced, such as the rapid growth of the population aged 60 or older. It is well known that people experiencing longer lives does not mean healthier lives. Thus, further knowledge about how to promote healthy ageing has been required.

In this context, this doctoral dissertation intended to find, in the field of professional practice, answers for the question of how physical education can assist older adults 'to swim in the river of life'. With this study, I sought to address the topic by investigating *in situ* the practices and experiences of four Brazilian health-promoting programmes that were considered to have a wide focus to health and to use bodily practices as a medium for health promotion among older adults, beyond disease prevention. So, this study offers an insight into ways of working with bodily practices for life cultivation in a disadvantaged context.

The study´s intent was to move beyond the biomedical view of health, and the idea of exercise as a medicine with a good cost-benefit that, taken in the recommended doses, would eradicate risk factors (e.g. sedentariness, obesity) for non-communicable diseases.

As an alternative to overcome the limitations of biomedical approaches, this study was informed by salutogenesis as a theory of health promotion, an orientation that shifts the focus from diseases to the origins of health. Alongside this perspective, the inquiry drew on the notions of bodily practices and pedagogy, which reinforced the sociocultural and humanistic perspectives of the research.

The aims of the study were to investigate the practices adopted by HPE professionals to deliver bodily practices for disadvantaged older adults in four health-promoting programmes, and to understand what health development processes the older adults experienced and perceived as related to their participation in bodily practices.

The findings indicated that HPE professionals carried out a combination of four practices that were considered to be pedagogical and consistent with a salutogenic perspective: wide view of health, ethics of care, holistic care and community-based approach. The practices included caring attitudes, focusing on the person instead of illness, listening carefully to older adults and showing attentiveness and responsiveness to them, offering optimal challenges, respecting limitations caused by age, stimulating active participation, among others.

The ways the HPE professionals delivered bodily practices were connected with two main health development processes experienced by the older adults: the development of multiple GRRs (physical fitness, functioning capacity, knowledge, lifelong learning, emotional skills, socialisation and communication); and the strengthening of SOC components of comprehensibility, manageability and meaningfulness. The health-promoting programmes supported the older adults to recognise the personal and community GRRs that were available to them, and to build new ones.

Based on the empirical data of the four programmes along with Antonovsky´s metaphor of the river of life (ANTONOVSKY, 1987), this study led to the following key findings:

- The HPE professional served as a resource by being a friend/counsellor, providing meaningful experiences, teaching older adults how to 'swim in the river of life', and demonstrating a caring behaviour;
- The community of movers served as a resource by providing a sense of belonging, attachment, new relationships and social support;
- Bodily practices served as a resource by enabling learning to swim towards the ease end of the river of life, enabling increased satisfaction with their bodies, providing relaxation and catharsis, favouring a state of flow, and engendering pleasure, fun and enjoyment.

Therefore, this study helped us to understand the role of bodily practices in older adults' health and wellbeing. The older adults recognised bodily practices as a GRR to cultivate new ways of living. Bodily practices demonstrated a potential to provide older adults with enjoyable, entertaining and rewarding experiences.

The main idea supported by this investigation was that physical education has a potential and a richness of possibilities to contribute effectively to health promotion, and not only to disease prevention. It might enable older people to improve their lives in multiple dimensions of health and wellbeing (i.e. social, emotional, cognitive and physical). This might be possible through a wide view of health and the development of pedagogical practices consistent with salutogenesis that facilitate encounters and connect people through the medium of movement.

In order to help people to become healthier, we need to do more than encourage them to move, we need to construct with them meaningful bodily experiences that might serve as

GRRs for them to widen their ‘power of acting’ and move to the ease side of the health continuum, towards life cultivation.

To conclude, I have suggested that the HPE professionals´ role in working with bodily practices for health might be assist people to build up multiple GRRs, realise their potentialities and strengthen SOC. Secondly, in order to play this role, HPE professionals might draw on ‘pedagogies of affect’ as suggested by Kirk (2020), or alternative approaches that focus on salutogenically inspired pedagogical practices, like communities of movement, as suggested by this study.

There are possible alternatives to approach health positively, and this study provided evidence of this through examples of four programmes that supported older adults to experience health development in the social, emotional, cognitive and physical dimensions. Based on practice, this study showed that pedagogical practices consistent with salutogenic approaches might offer powerful alternatives to lead participants to meaningful experiences of holistic care, resulting in greater perceived health and wellbeing.

8. REFERENCES

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9. APPENDIXES

9.1 Appendix A: interview guides

HPE PROFESSIONALS (INSTRUCTORS)

Identification

a. Age
b. Marital status
c. Gender

Initial professional education

d. Major
e. Diploma (Teacher Education/Bachelor)
f. Year of graduation
g. Type of higher education institution (public/private)
h. Modules that covered health contents during graduation studies

Continuous professional learning

i. Postgraduation studies
j. Attendance to conferences and events related to Health and Physical Education

Current job

k. Workload/week
l. Contract type (temporary/ permanent job)
m. How long have you worked here?
n. Additional job

Open-ended questions

Session 1

2. Please, tell me about your previous professional experiences.

3. Please, tell me about your history with your current job.

    a. How long have you worked here?
    b. How did you get this job?
    c. Did you have any initial training?
    d. How did you approach the community?
    e. Can you compare your earlier expectations with your current thinking about this job?

4. Please, tell me about this physical activity/bodily practices (PA/BP) programme´s history.
    a. When was it created? By whom? With what purpose?
    b. How was the design process?

5. How would you describe this community?

a. How did they get to know about the programme?
b. Any specific needs, interests and/or problems?
c. What reasons lead the community to participate in the PA/BP programme?

Session 2

6. What is the main goal of your work?
    a. What aspirations do you establish to pursue with this community?
    b. What do you find important to teach in your sessions?

7. How would you describe your way to deliver PA/BP for health?
    a. Is your work inspired by any specific reference? How do they inform your professional practice?
    b. How do you plan the sessions?
    c. How do you define the type of PA/BP to teach?
    d. What kind of resources do you use? How do you manage with available resources?
    e. How would you describe your way of teaching? What strategies do you find important to use? What techniques do you find effective? Why?
    f. How would you describe your relationship with participants?
    g. What do you find positive about your way of teaching?
    h. How do you believe your teaching could be improved?

8. What are the limitations of your work? What difficulties do you have?

Session 3

9. In your opinion, how this PA/BP programme helps participants to live well?
    a. Do you perceive any changes in participants? How do you perceive?

10. How do you monitor participants´ health development?

11. In your opinion, what is the role of HPE professional in health promotion?

***Additional questions about professional learning*

12. How do you perceive the contribution of your professional education in supporting you to work with health promotion?
    a. What modules/disciplines/knowledge?

13. Bearing in mind this job, what changes to initial professional learning would you recommend?

14. Do you use any resource for continuing professional learning? If so, which resources?

Would you like to say anything else?
Thank you!

OLDER ADULTS

Identification

a. Age
b. Marital status
c. Gender
d. Profession
e. Educational level

Open-ended questions

1. Please, tell me about your experience with this physical activity/bodily practices (PA/BP) programme.
    a. How long have you attended?
    b. How and why did you take part in it?
    c. Any other (earlier) experiences with physical activity/bodily practices?

2. How this PA/BP programme has helped you to live well?
    a. Do you perceive any change in yourself after your engagement with the programme? How do you perceive?
    b. Why do you continue participating of the programme?

3. What this PA/BP programme means to you?
    a. What do you like the most about it?
    b. What means to you exercising with this group? How would you describe the group relationship?

4. Would you say that you learn to live well through this programme? Please, tell me about what you have learned so far.
    a. Any behaviour changes? Any new knowledge/information?
    b. Did you change your mind about any topic?
    c. Did you change your attitude toward PA/BP?

Would you like to say anything else?

Thank you!

HEALTH CENTRES´ COORDINATORS

Identification

a. Age
b. Marital status
c. Gender
d. Profession
e. Educational level

Current job

f. Workload/week
g. Contract type (temporary/ permanent job)
h. How long have you worked here?
i. Additional job

Open-ended questions

1. Please, tell me about your history with your current job.
    a. How long have you worked here?
    b. Did you have any initial training?
2. How would you describe this community?
    a. Any specific needs and/or interests?
    b. What reasons lead the community to participate in the PA/BP programme?
3. In your opinion, how this PA/BP programme helps participants to live well?
    a. Do you perceive any changes in participants? How do you perceive?
4. What do you find important about this PA/BP programme for the health centre?
5. Is there any kind of monitoring of the PA/BP programme?
6. Can you compare your earlier expectations with your current thinking about PA/BP delivery for health promotion?
7. In your opinion, what is the role of HPE professionals in health promotion?
8. In your opinion, what are the strengths of PA/BP delivery? How might it be improved?

Would you like to say anything else?

Thank you!

9.2 Appendix B: observation guide

Observational Notes

Programme _____ Site location _____

HPE professional _____ Session content _____

Number of participants _____ female _____ male ____ total

Date ___/___/____ Start time: ___:___ End time: ___:___

Describe how bodily practices have been delivered for health.

9.3 Appendix C: Agreement Term of Participation in Research

(Portuguese version)

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO - (TCLE)

(Conselho Nacional de Saúde, Resolução 466/12)

Prezado (a) Sr./Sra.,

Eu, Heidi Jancer Ferreira, RG 13.786.730, aluna do curso de Pós-Graduação em Ciências da Motricidade da Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus de Rio Claro e pesquisadora responsável sob orientação do Prof. Dr. Alexandre Janotta Drigo, convido o Sr. (a) para participar como voluntário (a) no estudo intitulado "PROPOSTA DE FORMAÇÃO E CAPACITAÇÃO PROFISSIONAL NA ÁREA DE EDUCAÇÃO FÍSICA PARA O NASF: UM ESTUDO A PARTIR DE PROFISSIONAIS ATUANTES". Esta pesquisa de doutorado tem como objetivo compreender a atuação de profissionais de Educação Física (EF) no Núcleo de Apoio à Saúde da Família (NASF).

Se o Sr. (a) concordar em participar dessa pesquisa, a sua participação será através da concessão de uma entrevista. A entrevista se iniciará com perguntas de identificação e em seguida será aplicado um roteiro de perguntas abertas sobre o tema da pesquisa. O participante poderá utilizar o tempo que achar necessário para expor suas opiniões. Se estiver de acordo, essa entrevista será registrada através de gravador de áudio digital. Após a gravação, as entrevistas serão transcritas com a utilização de códigos para identificar os participantes, garantindo o anonimato. As transcrições e os arquivos de áudio das entrevistas ficarão armazenados sob responsabilidade da pesquisadora responsável. As informações obtidas serão utilizadas apenas para fins acadêmicos.

Como benefício, a pesquisa proporcionará aos participantes um momento de reflexão e avaliação sobre o trabalho desenvolvido e poderá fornecer subsídios para mudanças na prática que serão vantajosas para o aumento da qualidade dos serviços oferecidos à comunidade pelo Sistema Único de Saúde. A sua participação será de grande importância, podendo contribuir ainda para a identificação de problemas no processo de formação acadêmica dos profissionais de Educação Física, propiciando, consequentemente, melhores cursos oferecidos.

A execução da pesquisa não apresentará risco físico aos participantes. O risco e, ou desconforto previsto em decorrência da sua participação na nossa pesquisa é a possibilidade do Sr. (a) se sentir desconfortável ou constrangido ao compartilhar informações pessoais e/ou profissionais, ou em alguns tópicos que possa sentir incômodo em falar. Caso sinta desconforto em falar, o Sr. (a) poderá deixar de responder a qualquer pergunta ou parte de informações. O Sr. (a) terá liberdade para pedir esclarecimentos sobre qualquer questão, bem como para desistir de participar da pesquisa a qualquer momento que desejar, mesmo depois de ter assinado este documento, e não será, por isso, penalizado de nenhuma forma. Caso

desista, basta avisar à pesquisadora e este termo de consentimento será devolvido, bem como todas as informações dadas pelo Sr. (a) serão destruídas.

Os voluntários (as) da investigação não terão nenhuma despesa e não serão remunerados para participar da mesma.

Informo que os resultados deste estudo serão submetidos para publicação e posteriormente encaminhados aos participantes por email. Comprometo-me em manter sigilo de todos os seus dados pessoais e indenizá-lo (a), caso sofra algum prejuízo físico ou moral decorrente do mesmo.

Se o Sr. (a) se sentir suficientemente esclarecido sobre essa pesquisa, seus objetivos, eventuais riscos e benefícios, convido-o (a) a assinar este Termo, elaborado em duas vias, sendo que uma ficará com o Sr. (a) e outra com a pesquisadora.

Local/data:

Assinatura da Pesquisadora

Responsável

_____

Assinatura do participante da pesquisa

Dados sobre a Pesquisa:

Título do Projeto: Proposta de formação e capacitação profissional na área de Educação Física para o NASF: um estudo a partir de profissionais atuantes.

Pesquisador Responsável: Heidi Jancer Ferreira

Cargo/função: Aluno-pesquisador

Instituição: Universidade Estadual Paulista “Júlio de Mesquita Filho”, Rio Claro

Endereço: Rua Major Martinho Mourão, 330/21 - Poços de Caldas, MG

Dados para Contato: fone 35 9 99592803

e-mail: heidi.ferreira@ifsuldeminas.edu.br

Orientador: Alexandre Janotta Drigo

Instituição: Universidade Estadual Paulista “Júlio de Mesquita Filho”, Rio Claro

Endereço: Avenida 24 A,1515 - Rio Claro, SP

Dados para Contato: fone 19 3024-1576 e-mail: aj.drigo@uol.com.br

CEP-IB/UNESP-CRC

Av. 24A, nº 1515 – Bela Vista – 13506-900 – Rio Claro/SP Telefone: (19) 35269678

Número do parecer: 1.548.237 e 2.606.554

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO - (TCLE) PARA PROFISSIONAIS DE EDUCAÇÃO FÍSICA

(Conselho Nacional de Saúde, Resolução 466/12)

Prezado (a) Sr./Sra.,

Eu, Heidi Jancer Ferreira, RG 13.786.730, aluna do curso de Pós-Graduação em Ciências da Motricidade da Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus de Rio Claro e pesquisadora responsável sob orientação do Prof. Dr. Alexandre Janotta Drigo, convido o Sr. (a) para participar como voluntário (a) no estudo intitulado "PROPOSTA DE FORMAÇÃO E CAPACITAÇÃO PROFISSIONAL NA ÁREA DE EDUCAÇÃO FÍSICA PARA O NASF: UM ESTUDO A PARTIR DE PROFISSIONAIS ATUANTES". Esta pesquisa de doutorado tem como objetivo compreender a atuação de profissionais de Educação Física (EF) no Sistema Único de Saúde (SUS).

Se o Sr. (a) concordar em participar dessa pesquisa, as sessões de atividade física/práticas corporais que ministra serão observadas pela pesquisadora. A sua participação também se dará através da concessão de entrevista. A entrevista se iniciará com perguntas de identificação e em seguida será aplicado um roteiro de perguntas abertas sobre o tema da pesquisa. O participante poderá utilizar o tempo que achar necessário para expor suas opiniões. Se estiver de acordo, essa entrevista será registrada através de gravador de áudio digital. Após a gravação, as entrevistas serão transcritas com a utilização de códigos para identificar os participantes, garantindo o anonimato. As transcrições e os arquivos de áudio das entrevistas ficarão armazenados sob responsabilidade da pesquisadora responsável. As informações obtidas serão utilizadas apenas para fins acadêmicos.

Como benefício, a pesquisa proporcionará aos participantes um momento de reflexão e avaliação sobre o trabalho desenvolvido e poderá fornecer subsídios para mudanças na prática que serão vantajosas para o aumento da qualidade dos serviços oferecidos à comunidade pelo Sistema Único de Saúde. A sua participação será de grande importância, podendo contribuir ainda para a identificação de problemas no processo de formação acadêmica dos profissionais de Educação Física, propiciando, consequentemente, melhores cursos oferecidos.

A execução da pesquisa não apresentará risco físico aos participantes. O risco e, ou desconforto previsto em decorrência da sua participação na nossa pesquisa é a possibilidade do Sr. (a) se sentir desconfortável ou constrangido ao ser observado e ao compartilhar informações pessoais e/ou profissionais, ou em alguns tópicos que possa sentir incômodo em falar. Caso sinta desconforto em falar, o Sr. (a) poderá deixar de responder a qualquer pergunta ou parte de informações. Caso fique constrangido com a observação da pesquisadora, ela se dispõe a deixar o local da prática. O Sr. (a) terá liberdade para pedir esclarecimentos sobre qualquer questão, bem como para desistir de participar da pesquisa a qualquer momento que desejar, mesmo depois de ter assinado este documento, e não será, por isso, penalizado de nenhuma forma. Caso desista, basta avisar à pesquisadora e este termo de

consentimento será devolvido, bem como todas as informações dadas pelo Sr. (a) serão destruídas.

Os voluntários (as) da investigação não terão nenhuma despesa e não serão remunerados para participar da mesma.

Informo que os resultados deste estudo serão submetidos para publicação e posteriormente encaminhados aos participantes por email. Comprometo-me em manter sigilo de todos os seus dados pessoais e indenizá-lo (a), caso sofra algum prejuízo físico ou moral decorrente do mesmo.

Se o Sr. (a) se sentir suficientemente esclarecido sobre essa pesquisa, seus objetivos, eventuais riscos e benefícios, convido-o (a) a assinar este Termo, elaborado em duas vias, sendo que uma ficará com o Sr. (a) e outra com a pesquisadora.

Local/data:

_____ _____

Assinatura da Pesquisadora Responsável

Assinatura do participante da pesquisa

Dados sobre a Pesquisa:

Título do Projeto: Proposta de formação e capacitação profissional na área de Educação Física para o NASF: um estudo a partir de profissionais atuantes.

Pesquisador Responsável: Heidi Jancer Ferreira

Cargo/função: Aluno-pesquisador

Instituição: Universidade Estadual Paulista "Júlio de Mesquita Filho", Rio Claro

Endereço: Rua Major Martinho Mourão, 330/21 - Poços de Caldas, MG

Dados para Contato: fone 35 9 99592803

e-mail: heidi.ferreira@ifsuldeminas.edu.br

Orientador: Alexandre Janotta Drigo

Instituição: Universidade Estadual Paulista "Júlio de Mesquita Filho", Rio Claro

Endereço: Avenida 24 A,1515 - Rio Claro, SP

Dados para Contato: fone 19 3024-1576 e-mail: aj.drigo@uol.com.br

Dados sobre o participante:

Nome:_____

Doc. de identificação: _____ Data de nascimento: ___/___/____

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Av. 24A, nº 1515 – Bela Vista – 13506-900 – Rio Claro/SP Telefone: (19) 35269678

9.4 Appendix D: approval reports by Ethics Committee on Human Research

PARECER CONSUBSTANCIADO DO CEP

DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Sáude da Família - NASF: um estudo a partir de profissionais atuantes

Pesquisador: HEIDI JANCER FERREIRA

Área Temática:

Versão: 2

CAAE: 52527616.1.0000.5465

Instituição Proponente: UNIVERSIDADE ESTADUAL PAULISTA JULIO DE MESQUITA FILHO

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 1.548.237

Apresentação do Projeto:

Trata-se de uma pesquisa de doutorado de HEIDI JANCER FERREIRA que corre sob a orientação do prof. Dr. Prof. Dr. Alexandre Janotta Drigo no Programa Pós-Graduação em Ciências da Motricidade da Universidade Estadual Paulista “Júlio de Mesquita Filho” - Campus de Rio Claro. O projeto de pesquisa tem como temática “Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Sáude da Família - NASF: um estudo a partir de profissionais atuantes”.

Objetivo da Pesquisa:

“Esta pesquisa buscará compreender como tem se dado a atuação dos profissionais de Educação Física nos NASF do sistema único de saúde brasileiro e a partir dessa análise, elaborar uma proposta de intervenção em consonância com os princípios e diretrizes para o NASF e SUS.”

“- Identificar e analisar os modelos de trabalho utilizados por profissionais de EF atuantes em NASF.

- Identificar as dificuldades para a atuação em NASF dos profissionais de EF.

- Identificar a contribuição da formação inicial para a atuação dos profissionais de EF em NASF.

- Verificar a percepção dos coordenadores de unidades de saúde sobre a forma de atuação dos profissionais de EF em NASF.”

Avaliação dos Riscos e Benefícios:

- Quanto aos Riscos a pesquisadora informa:

“A execução da pesquisa não apresentará risco físico aos participantes. Entretanto, existe risco de que o participante possa se sentir desconfortável ou constrangido ao compartilhar informações pessoais e/ou profissionais, ou em alguns tópicos que ele possa sentir incômodo em falar. Como forma de minimizar esse risco, a pesquisadora deixará claro que o participante pode deixar de responder a qualquer pergunta ou parte de informações, se sentir desconforto em falar.”

- Quanto aos benefícios salienta:

“Como benefício, a pesquisa proporcionará aos participantes um momento de reflexão e avaliação sobre os métodos de trabalho utilizados, e poderá fornecer subsídios para mudanças na prática profissional da população estudada, contribuindo para o aumento da qualidade dos serviços oferecidos à sociedade brasileira pelo Sistema Único de Saúde. Os voluntários (as) da investigação não terão nenhuma despesa e não serão remunerados para participar da mesma.”

Comentários e Considerações sobre a Pesquisa:

- Participantes da pesquisa: 10 profissionais de Educação Física vinculados formalmente como trabalhadores de equipe NASF e 05 coordenadores das unidades de saúde vinculadas aos NASF;

- Quanto aos participantes, a pesquisadora informa: “a amostra será composta por profissionais de EF atuantes em equipe NASF e coordenadores de unidades de saúde de todas as regiões do Brasil: norte, nordeste, centro-oeste, sudeste e sul. Em cada região, serão selecionados três profissionais em função do município de atuação, sendo dois profissionais de EF e um coordenador de unidade de saúde.”

- Critérios de inclusão para seleção da amostra: “1) Municípios que possuem cadastrados no Sistema de Cadastro Nacional de Estabelecimento de Saúde - SUS um mínimo de cinco profissionais da ocupação de código 2241E1- Profissional de Educação Física na Saúde; 2) Modalidade de equipe NASF tipo 1; 3) Profissionais de EF com atuação mínima de 1 ano na equipe NASF.”

- Instrumento de coleta de dados: “entrevista, em dois momentos diferentes: a) Entrevista de identificação: composta por trinta questões estruturadas para caracterização dos participantes; b) Entrevista semi-estruturada: composta por um roteiro de dezoito questões abertas para obter

dados em profundidade sobre a atuação profissional. Os roteiros serão encaminhados para pesquisadores da área para apreciação e será realizado uma entrevista piloto para adequação." "As entrevistas serão realizadas em sessão única nas unidades de saúde de lotação dos profissionais e serão conduzidas pela pesquisadora responsável pelo estudo."

- Os roteiros para a entrevista estruturada e semiestruturadas com os profissionais de EF e para os coordenadores das unidades de saúde se encontra no corpo do texto do projeto de pesquisa.

- Há a apresentação de novo TCLE com as correções indicadas em parecer anterior;

- No cronograma que consta nas IBP a pesquisadora informa que o recrutamento dos participantes acontecerá a partir de Janeiro de 2017 e a coleta de dados a partir de Março de 2017;

Considerações sobre os Termos de apresentação obrigatória:

- a pesquisadora redigiu um TCLE para os participantes da pesquisa. Esse termo se encontra em linguagem clara e acessível, de acordo com as orientações da resolução 466/12;
- Há explicações suficientes para entender a finalidade da pesquisa, seus objetivos, riscos, benefícios, metodologia e os termos da participação voluntária entanto;

Em parecer anterior o CEP indicou alterações no texto do TCLE quanto à exposição dos riscos da pesquisa e procedimentos de minimização dos mesmos. As alterações foram realizadas e estão de acordo;

Recomendações:

Não há.

Conclusões ou Pendências e Lista de Inadequações:

O CEP REFERENDA O PARECER DO RELATOR:

"Recomendo aprovação deste protocolo de pesquisa".

Considerações Finais a critério do CEP:

O projeto encontra-se APROVADO para execução. Pedimos atenção aos seguintes itens:

1) De acordo com a Resolução CNS nº 466/12, o pesquisador deverá apresentar relatório final.

2) Eventuais emendas (modificações) ao protocolo devem ser apresentadas, com justificativa, ao CEP de forma clara e sucinta, identificando a parte do protocolo a ser modificada.

3) Sobre o TCLE: caso o termo tenha DUAS páginas ou mais, lembramos que no momento da sua assinatura, tanto o participante da pesquisa (ou seu representante legal) quanto o pesquisador responsável deverão RUBRICAR todas as folhas , colocando as assinaturas na última página.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_634236.pdf	03/04/2016 18:10:08		Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEcorrigido.pdf	03/04/2016 18:08:37	HEIDI JANCER FERREIRA	Aceito
Projeto Detalhado / Brochura Investigador	Projeto.pdf	17/01/2016 23:51:48	HEIDI JANCER FERREIRA	Aceito
Declaração de Pesquisadores	declaracaoresponsabilidade.pdf	17/01/2016 23:50:15	HEIDI JANCER FERREIRA	Aceito
Folha de Rosto	out.pdf	17/01/2016 23:45:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLE.pdf	13/01/2016 12:15:15	HEIDI JANCER FERREIRA	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

RIO CLARO, 17 de Maio de 2016

Assinado por:
Débora Cristina Fonseca
(Coordenador)

Continuação do Parecer: 1.548.237

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br

PARECER CONSUBSTANCIADO DO CEP

DADOS DA EMENDA

Título da Pesquisa: Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Sáude da Família - NASF: um estudo a partir de profissionais atuantes

Pesquisador: HEIDI JANCER FERREIRA

Área Temática:

Versão: 3

CAAE: 52527616.1.0000.5465

Instituição Proponente: UNIVERSIDADE ESTADUAL PAULISTA JULIO DE MESQUITA FILHO

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 2.606.554

Apresentação do Projeto:

Trata-se de uma emenda da pesquisa de doutorado de HEIDI JANCER FERREIRA que corre sob a orientação do prof. Dr. Prof. Dr. Alexandre Janotta Drigo no Programa Pós-Graduação em Ciências da Motricidade da Universidade Estadual Paulista “Júlio de Mesquita Filho” - Campus de Rio Claro. O projeto de pesquisa tem como temática “Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Sáude da Família - NASF: um estudo a partir de profissionais atuantes”.

Objetivo da Pesquisa:

Não se aplica.

Avaliação dos Riscos e Benefícios:

Não se aplica.

Comentários e Considerações sobre a Pesquisa:

Não se aplica.

Considerações sobre os Termos de apresentação obrigatória:

A nova coleta de dados está prevista para acontecer de Junho a Dezembro de 2018, conforme informações registradas na nova IBPs.

Recomendações:

Não há.

Conclusões ou Pendências e Lista de Inadequações:

O CEP referenda o parecer do relator:

"A emenda aqui em pauta consiste apenas na inclusão de um novo grupo de participantes a serem entrevistados: adultos que participam de atividades físicas/práticas corporais orientadas por profissionais de Educação Física. O motivo da alteração é o entendimento de que os praticantes constituem parte integrante das atividades e têm muito a dizer sobre a experiência deles com as práticas da Educação Física na área da saúde. Com uma nova categoria de participantes, será necessária somente a inclusão de um roteiro de entrevista específico (apresentado em documento anexado, intitulado "Emenda1.pdf"). O Termo de Consentimento Livre e Esclarecido, assim como os demais procedimentos de pesquisa já aprovados, serão os mesmos a serem utilizados com o grupo adicional.

Tendo em vista o exposto, considero a emenda aprovada".

Considerações Finais a critério do CEP:

O projeto encontra-se APROVADO para execução. Pedimos atenção aos seguintes itens:

1) De acordo com a Resolução CNS nº 466/12, o pesquisador deverá apresentar relatório final.

2) Eventuais emendas (modificações) ao protocolo devem ser apresentadas, com justificativa, ao CEP de forma clara e sucinta, identificando a parte do protocolo a ser modificada.

3) Sobre o TCLE: caso o termo tenha DUAS páginas ou mais, lembramos que no momento da sua assinatura, tanto o participante da pesquisa (ou seu representante legal) quanto o pesquisador responsável deverão RUBRICAR todas as folhas , colocando as assinaturas na última página.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_1108597_E1.pdf	12/04/2018 10:27:38		Aceito

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br

Outros	Emenda1.pdf	12/04/2018 10:24:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEcorrigido.pdf	03/04/2016 18:08:37	HEIDI JANCER FERREIRA	Aceito
Projeto Detalhado / Brochura Investigador	Projeto.pdf	17/01/2016 23:51:48	HEIDI JANCER FERREIRA	Aceito
Declaração de Pesquisadores	declaracaoresponsabilidade.pdf	17/01/2016 23:50:15	HEIDI JANCER FERREIRA	Aceito
Folha de Rosto	out.pdf	17/01/2016 23:45:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLE.pdf	13/01/2016 12:15:15	HEIDI JANCER FERREIRA	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

RIO CLARO, 18 de Abril de 2018

Assinado por:
Flávio Soares Alves
(Coordenador)

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br

PARECER CONSUBSTANCIADO DO CEP

DADOS DA EMENDA

Título da Pesquisa: Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Sáude da Família - NASF: um estudo a partir de profissionais atuantes

Pesquisador: HEIDI JANCER FERREIRA

Área Temática:

Versão: 4

CAAE: 52527616.1.0000.5465

Instituição Proponente: UNIVERSIDADE ESTADUAL PAULISTA JULIO DE MESQUITA FILHO

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 2.739.561

Apresentação do Projeto:

Trata-se de uma emenda da pesquisa de doutorado de HEIDI JANCER FERREIRA que corre sob a orientação do prof. Dr. Prof. Dr. Alexandre Janotta Drigo no Programa Pós-Graduação em Ciências da Motricidade da Universidade Estadual Paulista “Júlio de Mesquita Filho” - Campus de Rio Claro. O projeto de pesquisa tem como temática “Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Saúde da Família - NASF: um estudo a partir de profissionais atuantes”.

Objetivo da Pesquisa:

Não se aplica.

Avaliação dos Riscos e Benefícios:

Não se aplica.

Comentários e Considerações sobre a Pesquisa:

Não se aplica.

Considerações sobre os Termos de apresentação obrigatória:

A pesquisadora solicita a inclusão de uma nova fonte de dados: a observação não-participantes de atividades físicas/práticas corporais orientadas pelos profissionais de Educação Física que serão entrevistados. O protocolo de pesquisa original já previa a aproximação da pesquisadora com o

campo para a realização das entrevistas, portanto, a modificação consistirá apenas no fato que a pesquisadora observará a sessão de atividades físicas/práticas corporais a ser realizada na pesquisa. A pesquisadora informa que: "O motivo da alteração é o entendimento de que a observação proporcionará a triangulação dos dados, aumentando a qualidade do estudo. Além de que ela proporcionará o enriquecimento dos dados qualitativos e o levantamento de tópicos a serem explorados durante as entrevistas."

A pesquisadora inclui nesta emenda um novo TCLE, no qual inclui a observação não-participante que agora propõe acrescentar em seu estudo.

Conclusões ou Pendências e Lista de Inadequações:

Tendo em vista que a emenda proposta não descaracteriza o método inicialmente proposto, tampouco os objetivos firmados pelo pesquisador, recomendo a aprovação desta emenda.

Considerações Finais a critério do CEP:

O projeto encontra-se APROVADO para execução. Pedimos atenção aos seguintes itens:

1) De acordo com a Resolução CNS nº 466/12, o pesquisador deverá apresentar relatório final.

2) Eventuais emendas (modificações) ao protocolo devem ser apresentadas, com justificativa, ao CEP de forma clara e sucinta, identificando a parte do protocolo a ser modificada.

3) Sobre o TCLE: caso o termo tenha DUAS páginas ou mais, lembramos que no momento da sua assinatura, tanto o participante da pesquisa (ou seu representante legal) quanto o pesquisador responsável deverão RUBRICAR todas as folhas , colocando as assinaturas na última página.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_1157060_E2.pdf	12/06/2018 13:40:49		Aceito
Outros	Emenda2.pdf	12/06/2018 13:11:39	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEV2.pdf	12/06/2018 13:08:20	HEIDI JANCER FERREIRA	Aceito
Outros	Emenda1.pdf	12/04/2018	HEIDI JANCER	Aceito

Outros	Emenda1.pdf	10:24:07	FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEcorrigido.pdf	03/04/2016 18:08:37	HEIDI JANCER FERREIRA	Aceito
Projeto Detalhado / Brochura Investigador	Projeto.pdf	17/01/2016 23:51:48	HEIDI JANCER FERREIRA	Aceito
Declaração de Pesquisadores	declaracaoresponsabilidade.pdf	17/01/2016 23:50:15	HEIDI JANCER FERREIRA	Aceito
Folha de Rosto	out.pdf	17/01/2016 23:45:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLE.pdf	13/01/2016 12:15:15	HEIDI JANCER FERREIRA	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

RIO CLARO, 27 de Junho de 2018

Assinado por:
Flávio Soares Alves
(Coordenador)

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br

PARECER CONSUBSTANCIADO DO CEP

DADOS DA EMENDA

Título da Pesquisa: PRÁTICAS SALUTOGÊNICAS E PEDAGÓGICAS DE PROFISSIONAIS DE EDUCAÇÃO FÍSICA NO TRABALHO EM SAÚDE COM IDOSOS

Pesquisador: HEIDI JANCER FERREIRA

Área Temática:

Versão: 5

CAAE: 52527616.1.0000.5465

Instituição Proponente: UNIVERSIDADE ESTADUAL PAULISTA JULIO DE MESQUITA FILHO

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 3.573.017

Apresentação do Projeto:

A presente solicitação trata de emenda, solicitando duas alterações considerando a proposta original:

1 – Alteração do título de “Proposta de formação e capacitação profissional na área de Educação Física para o Núcleo de Apoio à Saúde da Família – NASF: Um estudo a partir de profissionais atuantes” para “Práticas salutogênicas e pedagógicas de profissionais de Educação Física no trabalho em saúde com idosos”.

A justificativa para alteração de título é de que o título proposto reflete um melhor entendimento e amadurecimento da proposta do projeto.

2 – autorização para identificar os programas públicos de promoção de saúde que participaram do estudo, constando os mesmos na redação do texto principal e nas publicações decorrentes do estudo.

A justificativa é de que os programas de promoção de saúde, participantes do estudo, são de caráter público e que a divulgação dos programas ajuda no reconhecimento e valorização dos serviços prestados e fortalecimento de políticas públicas relacionadas a estes programas. Finalmente, o anonimato das pessoas envolvidas será mantido e os responsáveis pelos programas se manifestaram de acordo com a divulgação dos programas.

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br

Objetivo da Pesquisa:

Não se aplica.

Avaliação dos Riscos e Benefícios:

Não se aplica.

Comentários e Considerações sobre a Pesquisa:

Não se aplica.

Considerações sobre os Termos de apresentação obrigatória:

Não se aplica.

Conclusões ou Pendências e Lista de Inadequações:

O CEP REFERENDA O PARECER DO RELATOR:

"A solicitação de emenda não apresenta qualquer prejuízo e/ou implicação de alteração nos procedimentos aprovados. Dessa forma, o parecer é pela aprovação da mesma".

Considerações Finais a critério do CEP:

O projeto encontra-se APROVADO para execução. Pedimos atenção aos seguintes itens:

1) De acordo com a Resolução CNS nº 466/12, o pesquisador deverá apresentar relatório final.

2) Eventuais emendas (modificações) ao protocolo devem ser apresentadas, com justificativa, ao CEP de forma clara e sucinta, identificando a parte do protocolo a ser modificada.

3) Sobre o TCLE: caso o termo tenha DUAS páginas ou mais, lembramos que no momento da sua assinatura, tanto o participante da pesquisa (ou seu representante legal) quanto o pesquisador responsável deverão RUBRICAR todas as folhas , colocando as assinaturas na última página.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_1405105_E3.pdf	30/07/2019 13:57:39		Aceito
Outros	Declaracoes.pdf	30/07/2019 13:54:22	HEIDI JANCER FERREIRA	Aceito
Outros	Emenda3.pdf	30/07/2019	HEIDI JANCER	Aceito

Outros	Emenda3.pdf	13:53:12	FERREIRA	Aceito
Outros	Emenda2.pdf	12/06/2018 13:11:39	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEV2.pdf	12/06/2018 13:08:20	HEIDI JANCER FERREIRA	Aceito
Outros	Emenda1.pdf	12/04/2018 10:24:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEcorrigido.pdf	03/04/2016 18:08:37	HEIDI JANCER FERREIRA	Aceito
Projeto Detalhado / Brochura Investigador	Projeto.pdf	17/01/2016 23:51:48	HEIDI JANCER FERREIRA	Aceito
Declaração de Pesquisadores	declaracaoresponsabilidade.pdf	17/01/2016 23:50:15	HEIDI JANCER FERREIRA	Aceito
Folha de Rosto	out.pdf	17/01/2016 23:45:07	HEIDI JANCER FERREIRA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLE.pdf	13/01/2016 12:15:15	HEIDI JANCER FERREIRA	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

RIO CLARO, 13 de Setembro de 2019

Assinado por:
José Angelo Barela
(Coordenador(a))

Endereço: Av.24-A n.º 1515
Bairro: Bela Vista **CEP:** 13.506-900
UF: SP **Município:** RIO CLARO
Telefone: (19)3526-9678 **Fax:** (19)3534-0009 **E-mail:** cepib@rc.unesp.br